

**ARTICLE/ARTÍCULO**

# Indirect Digital Capital and the Ambivalent Home Effect: Skills and Digital Action Searching for Health Information

Capital Digital Indirecto y el efecto ambivalente: habilidades y acción digital en la búsqueda de información sanitaria

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## ABSTRACT

The research analyses the factors that influence the search for health information online in Andalusia. The survey on digitisation and the use of personal data conducted by the Institute of Statistics and Cartography of Andalusia (2021) was used. Through binary logistic regression analysis, the results show how the intensity and diversity of internet use, as well as the level of self-efficacy and the perception of risks associated with privacy, condition searching for health information on the internet. Finally, these results suggest that digital divides should be analysed from a relational perspective, showing the ambivalence of the phenomenon. Indirect access to digital capital within the home can mitigate the digital exclusion of its members, but without eliminating previous inequalities.

**KEYWORDS:** digital divide; digital self-efficacy; family; digital capital; digital health literacy.

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## RESUMEN

La investigación analiza los factores que influyen en la búsqueda de información sanitaria *online* en Andalucía. Se ha utilizado la encuesta sobre digitalización y uso de datos personales realizada por el Instituto de Estadística y Cartografía de Andalucía (2021). Mediante análisis de regresión logística binaria, los resultados muestran cómo la intensidad y diversidad de usos de internet, así como el nivel de autoeficacia y la percepción de riesgos asociados a la privacidad, condicionan la búsqueda de información sanitaria en internet. Finalmente, estos resultados sugieren que las brechas digitales deben analizarse desde una perspectiva relacional, mostrando la ambivalencia del fenómeno, ya que el acceso indirecto al capital digital dentro del hogar puede mitigar la exclusión digital de sus miembros, pero sin eliminar las desigualdades previas.

**PALABRAS CLAVE:** brecha digital; autoeficacia digital; familia; capital digital; literatura de salud digital.

## 1. Introduction

Building on the theoretical framework, determining the causal direction of digital divide impacts remains complex. Identifying key factors that influence digital inclusion across all three levels is essential. This study posits that digital engagement depends on access, digital competency, and the ability to derive tangible benefits from internet use (Ragnedda, 2018). Health-related internet searches serve as an indicator encompassing all three dimensions, particularly considering the COVID-19 pandemic (Tezanos, 2022).

This article focuses on Andalusia, with one objective in mind: to understand the factors that influence the search for information on health issues in the Andalusian population. We explore the way in which Andalusians access, use and take advantage of the internet in relation to health issues. Through a detailed analysis, we aim to shed light on digital disparities in Andalusia, identifying challenges and opportunities for improving equity in access to health information. In the digital era, access to information via the Internet has become a crucial element for the promotion and maintenance of health. However, the capacity to take full advantage of this resource is not uniform (Ragnedda, 2018; Méndez-Domínguez *et al.*, 2023), as can be seen in the statistical data that show unequal access to and use of the Internet according to the Autonomous Communities (INE, 2024).

George *et al.* (2013) report a knowledge gap in telehealth use that reflects personal and cultural barriers, which converge to shape the effective use of digital health resources. Rather than focusing solely on access, recent studies (e.g., Goto *et al.*, 2021; Kontos *et al.*, 2014; Goggin and Ellis, 2020; Fang *et al.*, 2018; Ragnedda *et al.*, 2019; Park and Feng, 2023) document the importance of how individuals engage with, understand, and value digital health tools. Here is where familist way of life of Andalusian people comes to play as a crucial role (Pérez Yruela, 2002; Bericat, 2002; Gobernado, 2009).

Using the health information available on the public data in the Social Survey 2021: Digitalization and Use of Personal Data—Capabilities and Attitudes of the Andalusian Population, conducted by the Institute of Statistics and Cartography of Andalusia in 2021, allows us to accurately study the digital divides conceptualized in the literature in an almost complete way. The fieldwork was conducted between October and December 2021, a period that coincided with the post-pandemic era, thereby influencing the search for health information. At that time, telemedicine and the utilisation of digital health resources were prevalent in Andalusia. In this sense, the search for this information is influenced by: the frequency of internet use, perception of the risk involved in providing personal data on internet and the type of household in which one lives.

This study explores three hypotheses on online health information search. The Second Digital Divide Hypothesis suggests that Digital skills and “digital habitus” (De Marco, 2022) influence the bridging of the second digital divide. Therefore, people who use the Internet more frequently and for non-medical purposes are more likely to search for health information (De Marco, 2022; Rubin, 1984; Rojas, 2004). The Informational Hypothesis postulates that a greater perception of the risks involved in providing personal data on Internet hinders to search for health information (Venkatesh, Davis, and Davis, 2003; Rose and Fogarty, 2006). Lastly, The Third Digital Divide Hypothesis highlights that shared households foster digital skills and capital, increasing health information searches (De Marco, 2022; Coleman, 1988; Granovetter, 1973; Ragnedda, 2018; Ragnedda, 2022).

Logistic regression analysis confirms that frequent Internet use for non-medical purposes, increases health information searches, while a greater perception of the risks involved in providing personal data on Internet reduces them and shared households promote these searches through social support. These findings highlight the intersection between technology, access to information and social inequalities, highlighting the role of family and intergenerational ties in the use of technologies. They also call for new perspectives on digital divides, health, and intergenerational ties in familial settings such as Andalusia (Pérez Yruea, 2002), illustrating the significance of both online and offline support networks (Bericat, 2002) as a form of capital (Bourdieu, 2015; Willekens *et al.*, 2022).

Based on the literature on digital capital, social capital, and the third-level divide, searching for health information online can be seen as a practice where access, skills, and, above all, meaningful use of digital technology converge. This approach allows us to link individual profiles (gender, age, educational level, and usage patterns), domestic contexts (household structure and dynamics, availability of time and privacy), and subjective dispositions toward the digital environment (such as the feeling of understanding and managing privacy rules). Considering these dimensions together helps to understand the search for health information not as an isolated act, but as the result of digital socialization pathways and family and social configurations that mediate the use of technology.

## 2. Theoretical framework

### 2.1. Internet use in Andalusia

The binary logic of the first-level digital divide (Di Maggio *et al.*, 2004) is now just one aspect of the broader study of the three-tiered digital divide (De Marco, 2022; Dodel and Mesch, 2018; Ragnedda, 2022; van Deursen and van Dijk, 2015). Data from the Survey on ICT Equipment and Use in Households (INE, 2024) and MINECO (2022) confirm that Andalusia's high level of digitalization —despite persistent rural inequalities— has largely closed this gap. Over the past decade, broadband access in Andalusian households has risen from below 75% to 96.8% (INE, 2024). Additionally, 90.74% of households now have fiber-optic internet (FTTH), surpassing the Spanish national average (MINECO, 2022).

However, disparities persist between daily internet use and access to digital tools (MINECO, 2022), particularly in digital skills. Over 30% of Andalusia's population lacks the basic digital literacy necessary to use the internet and ICTs, five percentage points below the Spanish average but still above the European average (INE, 2024). Reports such as ONTSI (2022) also highlight gender disparities in digital skills. While Spain ranks sixth in the EU for women with basic or advanced digital competencies, men continue to outperform women. Meanwhile, younger generations are the most internet-proficient (De Marco, 2022; Ragnedda, 2018), whereas older adults experience significant digital skill gaps (Chá, 2020; De Marco, 2022). This generational divide exemplifies the second-level digital divide, where exclusion arises from a lack of digital proficiency.

Empirical studies emphasize the consequences of this second-level divide, considering variables such as social class, age, education, gender (Robles, Torres and Molina, 2010), occupation, and place of residence (Ragnedda *et al.*, 2020; van Deursen and Helsper, 2015). In Spain, digital divides are shaped by socio-demographic factors and broader attitudes toward internet use (Torres, 2017; Pizzi *et al.*, 2023), reinforcing disparities in digital participation.

### 2.2. Contributions to the study of the digital divide

The social dimension of the Fourth Industrial Revolution is marked by the deep integration of technology into daily life, shaping contemporary social structures and interactions (Piedad and Machueca, 2019). These transformations have catalyzed the emergence of Network Society within the Digital Age (Castells, 1997), offering analytical keys to understanding the dynamics of globalization and interconnectivity in modern societies (Sassen, 2001). Present-day societies are increasingly characterized by global economic expansion facilitated through networked structures, individualized experiences, and the flexibilization of labor and consumption (Beck, 1999).

Within these evolving social configurations, digitalization has adapted lifestyles to technological affordances and has reconfigured everyday life itself (Castells, 1997). Digitalization has been identified as playing a crucial role in improving health service delivery (Shaw and Glover, 2024). However, the same authors also highlight that digital health technologies have the potential to deepen health inequities, introducing the term “health-related digital divide” to describe how some populations benefit more than others. They therefore stress the need for public health policies that integrate equity into digital health strategies, particularly as the pandemic widened these gaps (Goggin and Ellis, 2020). This perspective is consistent with prior efforts to institutionalise digital participation in public administration, as evidenced by initiatives in countries such as Estonia and Spain that have sought to enhance citizen engagement through digital platforms. These initiatives have demonstrated the transformative potential of technology in the social sphere which we try to improve through a family as an offline capital (De Marco, 2022; Park, 2017) focused perspective.

This shift was starkly reflected during the COVID-19 pandemic, which underscored the emergence of new social risks and transformations within digital societies (Moreno, 2010). Goto *et al.* (2021), Kontos *et al.* (2014) or Park and Feng (2023) exposes that one of the most significant areas of impact was telematic healthcare. This encompasses with both the limitations of public health infrastructures and the adaptability of populations to new digital health models in Spain (Tezanos, 2022). Additionally, new social vulnerabilities have emerged, particularly among older populations, who face barriers in effectively navigating digital tools and information (De Marco, 2022; Ragnedda, 2020). These challenges highlight the intersection between technology and social inequalities in the pursuit of enhanced quality of life and healthcare access (Chá, 2020).

The rise of ubiquitous digital media and online communities has engendered a new cultural paradigm described as “real virtuality” (Castells, 1997), influencing contemporary modes of socialization, cognition, and emotional expression. This transformation has led to novel forms of interaction, transcending geographical constraints and fostering previously unimaginable social engagements. However, these developments have also intensified social stratifications, particularly in relation to the unequal distribution of digital resources. This digital disparity, embedded within the broader framework of the information society (Crampton, 2003), perpetuates existing cultural and social structures. In this context, digital inequalities mirror traditional mechanisms of exclusion, reinforcing the divide between “the included and the excluded” (García Canclini, 1990, p. 180). Consequently, investigating the social and digital processes underpinning these disparities necessitates critical engagement with the concept of the “digital divide”.

The digital divide is framed in the literature as a multi-dimensional phenomenon encompassing disparities in access to technological tools, information, and digital competencies. These aspects are conceptualized as the access gap, the usage and skills gap (Crampton, 2003), and the exploitation gap (De Marco, 2022; Ragnedda, 2020). The first level of the divide, as highlighted by the European Council (2000),

pertains to the binary distinction between users and non-users of Information and Communication Technologies (ICTs) (Varela, 2015). This divide translates into socio-economic exclusion, where those without internet access face barriers to economic and social mobility (Hoffman and Novak, 1998; Katz and Aspden, 1997). However, reducing the social implications of the digital divide to mere access neglects the broader socio-structural factors at play. This is particularly relevant given that basic internet access has become nearly ubiquitous, with 96.8% of Andalusian households having daily connectivity (INE, 2024).

A second-level digital divide (Di Maggio *et al.*, 2004) extends beyond mere access, incorporating socio-economic and demographic variables that shape digital engagement. This perspective emphasizes disparities in frequency of use, digital literacy, and technological competencies (Dodel and Mesch, 2018; van Deursen and van Dijk, 2015; Hargittai and Hinnat, 2008). Older populations, in particular, encounter pronounced barriers due to their lack of digital fluency or “digital habitus” (De Marco, 2022), relegating them to a position of instrumental technology users (Rubin, 1984). This generational disparity has been conceptualized through the metaphor of “digital immigration” (Prensky, 2001; Román, Almansa and Cruz, 2016), reflecting the broader sociological dynamics of technological adaptation and exclusion within digital societies.

In contexts where technology is embedded in everyday life, digital exclusion is particularly evident among those who lack regular competence in using electronic devices. This disparity is shaped by factors such as age, educational level, and household income (Hargittai and Hinnant, 2008; Peter and Valkenburg, 2006). Addressing this gap has been a crucial aspect of social policy in developed nations, as it significantly impacts the well-being of vulnerable populations (Cabero-Almenara, Barroso-Osuna and Rodríguez-Gallego, 2020; Selwyn, 2010; Sancho, 2012).

At this second level, theoretical approaches emerge that, while acknowledging structural determinants, aim to explain how individuals engage with ICTs. The Technology Acceptance Model (TAM) (Venkatesh, Davis and Davis, 2003) posits that an individual’s interaction with technology is influenced by their perception of its ease of use and utility (Rose and Fogarty, 2006), making access to information and resources crucial for adopting or rejecting technological tools. Likewise, the Uses and Gratifications Approach (UandG) suggests that technology use is driven by motivation and personal preferences (Park, 2010; Rosengren, 1974; Park *et al.*, 2007), framing engagement as a rational cost-benefit calculation where knowledge of ICTs shapes motivation and need fulfillment. Taking this into account, we assume that self-efficacy has two dimensions relevant to the digital divide: perceived awareness of personal-data risks and perceived clarity of digital norms and policy within institutional pages, both fostering mastery of the technological environment (Gatti *et al.*, 2017) and predicting greater online activity even under perceived risk (Eastin and LaRose, 2006).

Finally, at a third level, scholars highlight the issue of digital exploitation (De Marco, 2022; Ragnedda, 2020), which extends beyond digital competencies to examine

the offline resources individuals possess (De Marco, 2022). Through the concept of digital capital, researchers emphasize how social capital shapes access, competence, and the capacity to utilize digital tools effectively (Park, 2017). This framework underscores the interconnectedness of digital inclusion and broader socio-economic structures, revealing how digital inequalities perpetuate existing social hierarchies. Considering our research purpose, the understanding of how all these divides work is crucial to deepen into what authors like Lambert *et al.* (2009) or Zimmerman and Shaw (2020) called “Information-Seeking Behavior”.

### 2.3. Digital capital and families

Digital capital encompasses both access to technological devices and the competencies required for effective digital engagement (Pizzi *et al.*, 2023). A defining characteristic of digital capital is its convertibility, as it facilitates access to other resources through technology (Ragnedda, 2018). Thus, participation in and use of the internet depend not only on an individual’s social capital but also on the availability of infrastructure and digital skills (Ragnedda *et al.*, 2020).

The autonomy of digital capital is framed within a distinct digital field (Ragnedda, 2018), where cultural and social spaces are differentiated (Jordan and Taylor, 1998; Thomas, 2003). While class dynamics plays a role, digital expertise (Goldfarb and Price, 2008) and the ability to translate it into tangible offline benefits are the predominant factors (Ragnedda, 2018).

To further delineate this concept, we distinguish between “subjectified digital capital”, referring to internalized knowledge (second divide), and “objectified digital capital”, which pertains to material access (first divide) (Pizzi *et al.*, 2023). This distinction allows for an analysis of the knowledge available for digital use and exploitation, influenced by internet subcultures (Holt, 2010; Thomas, 2003) and digital user profiles (Dutton and Blak, 2013). However, digital capital is embedded in social relationships, meaning offline social capital conditions but does not entirely determine digital capital (Calderón Gómez, 2020; van Deursen *et al.*, 2017; Ragnedda and Ruiu, 2022; Helsper and van Deursen, 2015).

Among various forms of social capital, the family emerges as a particularly significant factor in Andalusia (Lopez and González, 2008; Ussel and Ruiz, 1999). It plays a crucial role in either mitigating or perpetuating digital barriers within the region (Vazquez, 2017; Bericat and Menchón, 2006). The family functions as a network of relationships (Coleman, 1988; Granovetter, 1973) that grants access to cultural capital (Bourdieu, 1984; Erikson, 1996; Chen, 2013), facilitating the intergenerational transmission of technological knowledge and devices (Chen *et al.*, 2022).

Intergenerational interactions within families can significantly impact digital inclusion. Younger, more technologically adept members (Calderón, 2019a) often play an educational role for relatives with fewer digital skills (Rojas *et al.*, 2004). As Torres (2017, p. 20) notes, “the dynamics of intergenerational relationships within

the family constitute one of the ways in which the resistance of certain groups to the use of ICTs is broken". This perspective highlights the potential for alternative socialization pathways to disrupt patterns of digital inequality (De Rivera *et al.*, 2021), with family relationships serving as a mechanism for overcoming them (Rojas *et al.*, 2004).

In this context, family influence —understood as offline social capital— becomes a crucial factor in overcoming the three digital barriers: access, competence, and exploitation. Nonetheless, it should be pointed that there could be an ambivalence of social interactions within families could also act as catalyst for reproducing phenomena such as genderized delegation of digital tasks (Ragnedda *et al.*, 2022; Holmes *et al.*, 2025).

Cultural aspects, such as internet attitudes and usage patterns, operate independently of material constraints (Alexander, 2000). By examining internet cultures that shape digital practices (Dutton and Reisdorf, 2019; Gonzales *et al.*, 2021), we can better understand the diverse meanings attached to digital engagement (Dutton and Blank, 2015; Lindell *et al.*, 2021). This recognition underscores the coexistence of multiple digital cultures within households, fostering intergenerational exchanges that can help reduce entrenched digital inequalities (Robles, Torres and Molina, 2010).

## 2.4. Hypotheses

- H1: Second Digital Divide Hypothesis – Individuals who use the internet frequently more likely to search for health-related information online. Digital skills and “digital habitus” (De Marco, 2022), such as using the internet for non-medical purposes influence the bridging of the second digital divide.
- H2: Self-efficacy perceived Hypothesis – The greater perception of being informed about the risks of personal data use, coupled with perceived clarity in digital standards and policies within institutional websites, leads to increased searching for health information on the Internet. Information awareness conditions users’ willingness to engage with technology (Venkatesh, Davis and Davis, 2003). Acceptance or rejection of digital tools depends partly on perceived ease of use, which is shaped by prior knowledge (Eastin and LaRose, 2006; Rose and Fogarty, 2006).
- H3: Third Digital Divide Hypothesis – Individuals in shared households are more likely to search for health information online. Families function as a catalyst for social capital, influencing digital adoption (De Marco, 2022). Households with extensive interpersonal networks (Coleman, 1988; Granovetter, 1973) facilitate skill acquisition and digital capital development (Ragnedda, 2018; Rojas, 2004). These dynamics are further conditioned by family-based cultural resources (Bourdieu, 2015; Willekens *et al.*, 2022).

### 3. Methodology and data

This study utilizes data from the *Social Survey 2021: Digitalization and Use of Personal Data—Capabilities and Attitudes of the Andalusian Population*, conducted by the Institute of Statistics and Cartography of Andalusia (IECA) in 2021. This public domain survey covers the entire Autonomous Community of Andalusia and targets residents aged 16–75 living in family dwellings. We may justify that using this secondary source can give some major information we can introduce in future self-conducted surveys. Collective households (hospitals, residences, military barracks) and those with nine or more residents were excluded. Data collection was conducted through computer-assisted telephone interviews (80.7%) and web surveys (19.3%).

A stratified simple random sampling method was applied, differentiating 24 geographical zones. Provincial allocation was proportional to population size within urbanization strata. Everyone within a stratum had an equal probability of selection. The theoretical sample size was 8,750, with a final achieved sample of 4,675 respondents. Fieldwork was conducted between October 18 and December 31, 2021. Estimator reweighting was performed using population data on sex, age, nationality, and province from the Longitudinal Population Database of Andalusia (BDLPA).

#### 3.1. Variables

The variables have been treated in a systematic way, extracting from them the answers that distorted the parsimony of the data. To this end, responses that did not provide significant information were removed, eliminating don't know and no answer. In addition, missing value analyses have been discarded as the responses were not sufficiently numerous to generate significant interpretations. Finally, the collinearity tests carried out on the independent variables show that they can be incorporated into the same logistic regression model.

##### 3.1.1. *Dependent variable*

The dependent variable used in the model is *searching for information on health topics in the last three months*, which appears as a battery item in question 2g. of the *Social Survey 2021: And in relation to the following health-related activities, in the last three months have you used the Internet to...?* Whose response categories are: Yes, No, Don't know, No answer. This variable has been dichotomized into (1) Yes and (0) No.

##### 3.1.2. *Independent and control variables*

The independent variable included in H1 refers to the *frequency of use of internet in daily life*. It remained untouched but made dummy. Its categories are (1) Daily, at least 5 days per week, (2) Every week, but not daily and (3) Less than once a week. The reference category is (1).

**Table 1**  
*Variables used in the logistic regression model*

	N	Min.	Max.	Media	SD
<b>Independent variable</b>					
<b>H1. Frequency of internet use</b>					
Daily, at least 5 days per week (Ref.)	4409	0	1	0.9190	0.27282
Every week, but not daily	4409	0	1	0.0703	0.25569
Less than once a week	4409	0	1	0.0106	0.10270
<b>Control variables</b>					
<i>Male</i>	4409	0	1	0.4601	0.49846
<b>Age</b>					
16-29 (Ref.)	4409	0	1	0.1998	0.39990
30-44	4409	0	1	0.2996	0.45814
45-59	4409	0	1	0.3406	0.47398
+60	4409	0	1	0.1599	0.36655
<b>Educational level</b>					
Primary or less (Ref.)	4369	0	1	0.0938	0.2916
Secondary	4369	0	1	0.2721	0.44511
Baccalaureate/Medium Vocational Training	4369	0	1	0.2549	0.43589
University degree or higher	4369	0	1	0.2327	0.42264
Master's or Doctorate	4369	0	1	0.1462	0.35340
<i>Obtained information from government websites or applications (proxy H1)</i>	4376	0	1	0.6236	0.48453
<i>Carrying out banking formalities (proxy H1)</i>	4401	0	1	0.7191	0.44946
<i>Have ever bought products or services over the Internet (proxy H1)</i>	4403	0	1	0.7220	0.44806
<b>H2. Consider yourself as a person informed about the risks of providing personal data</b>					
Highly knowledgeable	4393	0	1	0.0994	0.29933
Fairly informed	4393	0	1	0.3601	0.48008
Uninformed	4393	0	1	0.4693	0.49911
Not at all informed (Ref.)	4393	0	1	0.0710	0.25689
<i>Clarity and simplicity of information and privacy policies in websites (continuous)</i>	4409	0	10	3.8970	3.05155
<b>H3. Household type</b>					
Single Person Household (Ref.)	4410	0	1	0.1036	0.30484
Lone parent living with a child	4410	0	1	0.1016	0.30216
Couple without children living together in the household	4410	0	1	0.1911	0.39329
Couple with children living in the household	4410	0	1	0.0703	0.25569
<b>Dependent variable</b>					
<i>In the last three months, have you used the Internet to search for information on health issues?</i>	4400	0	1	0.7038	0.45660

Note: Digitalisation and use of personal data. Skills and attitudes of the Andalusian population (IECA 2021).

Note: All categorical variables have been treated as dummies and the reference category is indicated in parenthesis.

With this variable we add three control variables which serve as a *proxy* for a better understanding of the phenomena that is not only the frequency of use, but for what purposes do we use internet tools. Those variables refer to three different questions about *having use the internet to obtain information from government websites or applications, for carrying out banking tasks and for ever bought products or services over the Internet*. These three variables are all dichotomous where (1) Yes and (0) No. These functional uses are taken as indicators of cross-cutting operational skills and digital self-efficacy, in line with the notion of third-level utilization.

For the 2nd hypothesis, a dummy variable representing *perceived self-knowledge about the risks of providing personal data* is added. The response categories are: (1) Very informed, (2) Fairly informed, (3) Not very informed and (4) Not at all informed. As with the first hypothesis, we add a control variable which serves to understand that the perceived self-efficacy may be intermediated by the perception of ease in websites. This variable is a continuous representing the degree of agreement from 1 to 10 with the statement *Clarity and simplicity of information and privacy policies offered by websites*.

For the H3. The *household type* variable has been treated with its original coding: 1 (Single person household), 2 (Single parent living with a child), 3 (Couple without children living together in the household), 4 (Couple with children living together in the household). The last category (other type of household) is deleted due to the scarcity of cases collected.

Sex has been treated as a control variable, changing its numbering, but not its codes: 0 (Female) and 1 (Male). Age has been recoded into four groups, simplifying the analyses and ensuring that the heterogeneity of the variable is reflected. Thus, age is grouped into 16-29, 30-44, 45-59 and over 60. On the other hand, the level of studies has been recorded to make the analyses more parsimonious. Thus, the resulting categories are primary, secondary, baccalaureate and vocational training, university degree or higher and master's or doctorate. These five new categories group together the different levels of study without significantly influencing the original codings.

### 3.2. Method of analysis

The sample for the analyses arises from applying the dependent variable as a discriminating criterion. The characteristics of this variable allow us to distinguish two groups of data: those who have sought information on health issues in the last three months and those who have not. The dichotomous nature of this information makes it suitable for logistic regression analysis in terms of the other explanatory and control variables (Everitt and Dunn, 2001). Using this method, we extract the probabilities associated with the events recorded in the dependent variable and specify the profiles of the actors involved in this phenomenon (Escobar, 2012).

Through the dependent variable, the analysis of the digital divide is made possible, making it feasible to get the explanatory factors that determine the overcoming of all the digital barriers mentioned in the theoretical framework. Seeking information

on health issues via the internet implies overcoming the gap of a) access to the internet, as the question requires its possession, b) use and skills needed to access the information, and c) overcoming the barrier by taking advantage of it, developing strategies that enable a beneficial use, such as seeking information on health.

## 4. Results

In response to the question of which factors most influence the probability of having used the internet to search for health topics, we will highlight the explanatory power of the selected variables contained in table 1, which summarises the results obtained. For a better interpretation of the data, we will refer to the presentation of the results by *odds ratios*<sup>1</sup>, where we can see the magnitude of the probability of using the internet to search for information on health issues.

*Model I* which controls for sex, age groups and educational attainment (the control variables). It shows a Pseudo R<sup>2</sup> of 15.5%, which does not extrapolate to the explanatory power of the model at 100%, but does indicate a few explanatory power of the model. The model suggests that men are less likely than women to have used the internet for health issues. As shown by its *odd ratio*, 2 women for every man are more likely to have used the internet for these purposes when all other variables are equal in relation to the reference category. Age has a significantly negative and linear influence. As age increases, the likelihood of using the Internet for health-related searches decreases dramatically. Similarly, as educational level increases, so does the likelihood of using the internet to search for health topics.

In *Model II*, the Pseudo R<sup>2</sup> rises to 22.4% when controlling for the variables in on frequency and use of the internet. Daily internet use positively influences the likelihood of using the internet to search for health information, compared to those who are not so accustomed to its use (0.325\*\*). Similarly, people who make medical appointments and obtain information about other administrations are more likely to use the internet to search for health information. In addition, those who access other medical services via mobile apps are 6.84 times more likely to access health information on the internet than those who do not use *apps*.

In *Model III*, keeping the rest of the variables, we control for those contained in H2. on the perception of being informed about the risks of the Internet and the clarity and simplicity of the information and privacy policies perceived on websites. Incorporating these variables we see an increase in Pseudo R<sup>2</sup> to 23.2%. This model reflects the importance of having information, indicating a certain linearity in the results and pointing out that the probability of using the Internet to search for health issues is greater in people who perceive themselves to be more informed. In addition, those who perceive greater clarity and simplicity in the information and privacy policies offered by websites are more likely to use the internet for health information. Nonetheless, being well informed about the risks of using personal data seems to have a greater influence than simplicity or clarity.

**Table 2**  
*Factors influencing the use of the internet to search for health information*

	Model I	Model II	Model III	Model IV
<b>Independent variable</b>				
<b>Frequency of internet use</b>				
Daily, at least 5 days per week (Ref.)	---	—	—	—
Every week, but not daily	0.607***	0.781	0.750**	0.713*
Less than once a week	0.272***	0.415*	0.403*	0.387*
<b>Have obtained information from government websites or applications</b>				
No (Ref.)	---	—	—	—
Yes	3.171***	3.437***	3.383***	3.494***
<b>Carrying out banking formalities</b>				
No (Ref.)	---	—	—	—
Yes	1.948***	1.908***	1.903***	1.901***
<b>Have ever bought products or services over the Internet</b>				
No (Ref.)	---	—	—	—
Yes	2.037***	1.688**	1.675***	1.720***
<b>Sociodemographic</b>				
<b>Sex</b>				
Female (Ref.)	---	—	—	—
Man	---	0.301***	0.288***	0.269***
<b>Age</b>				
16-29 (Ref.)	---	—	—	—
30-44	---	1.012	1.090	1.091
45-59	---	0.634***	0.701**	0.699**
+60	---	0.457***	0.494***	0.474***
<b>Level of education (Reconfigured)</b>				
Primary or less (Ref.)	---	---	---	---
Secondary	---	2.379***	2.292***	2.445***
Baccalaureate/Medium Vocational Training	---	3.182***	3.078***	3.347***
University degree or higher	---	2.340*	2.270**	2.431***
Master's or Doctorate	---	2.628***	2.500***	2.570***
<b>Consider yourself to be an informed person about the risks of the internet.</b>				
Highly knowledgeable	---	---	1.156	1.150
Fairly informed	---	---	1.860***	1.898***
Uninformed	---	---	1.438*	1.486*
Not at all informed (Ref.)	---	---	---	---
Clarity and simplicity in the information and privacy policies offered by websites (continuous)	---	---	1.060*	1.064*
<b>Household type</b>				
Single Person Household (Ref.)	---	---	---	---
Lone parent living with children	---	---	---	0.567*
Couple without children living together in the household	---	---	---	0.691*
Couple with children living in the household	---	---	---	0.717*
Constant	0.8065**	0.9700	0.5258**	0.6800
N	3829	3797	3797	3780
Pseudo R2	0.155	0.224	0.232	0.243
Aic	3493.02	3189.69	3162.97	3095.63
Bic	3530.52	3277.08	3275.32	3232.86

Note: Own elaboration based on Digitalisation and use of personal data. Skills and attitudes of the Andalusian population (IECA 2021). [\* p<0.05; \*\* p<0.01; \*\*\* p<0]

In the last model (*Model IV*) we add the variable household type and the Pseudo R<sup>2</sup> rises to 24.3%. Living alone increases the likelihood of seeking health information compared to living with a partner or family.

## 5. Discussion

In the creation of the logistic regression model, some significant variables have been incorporated for research relevant to the digital divide. Territory is a key aspect for internet access in Spain (Robles, Torres and Molina, 2010) as well as in Andalusia (Bericat and Lopez, 2006). However, in our modelling, places of residence and their degree of urbanisation had no influence on internet use.

Higher digital engagement—whether habitual (Rubin 1984) or skill-based (Rojas 2004)—is most common among younger users. Sex and level of education corroborate in Andalusia the evidence presented in the recent literature on Spain (Ragnedda *et al.*, 2020): the profiles that most use the Internet to search for information are young women, highlighting the role of education as something transversal to these categories. Likewise, the importance of these specific socio-demographic variables (Bericat and Lopez, 2006) for using the Internet and using it for health and medical purposes is once again reiterated.

In the literature, the *offline* social capital contained in the family is said to allow for technological and social inclusion of subjects on the internet (Calderón Gómez, 2020; van Deursen *et al.*, 2017; Ragnedda and Ruiu, 2017; Helsper and van Deursen, 2015). In our case, we can see how the family may act as a support network through which cultural capital circulates (Bourdieu, 1984; Erikson, 1996; Chen, 2013) that inhibit access to and use of technology in an individual way.

This should be taken as within families there is an ambivalence in social interactions. First, it is seen that people living alone are more likely to use internet for health information. However, this does not mean that usage is lower in shared households because the help within families does not necessarily fix digital inequalities (Rojas *et al.*, 2004). The phenomenon could be altered by social norms and the implicit roles that the family institution reproduces in the digital world (Ragnedda *et al.*, 2022; Holmes *et al.*, 2025).

Therefore, slightly modifying the approaches of Pizzi *et al.* (2023) and Ragnedda (2018; 2020), we could highlight a type of indirect digital action through the resources contained in social relationships. Where we assume that such action is indirect because it served as a source of interactions that exceed the instrumental and could be linked to care. The family institution manages to take charge of aspects relevant to digitalisation and digital transition, which mainly affects older populations (Calderón Gómez, 2019a; Robles, Torres and Molina, 2010).

Furthermore, it allows us to demonstrate contemporary family dynamics, new family models and how this is linked to the implementation of technology in relationships. It is recognized that the family can have ambivalent effects. On the one hand, it can promote intergenerational support or greater functional autonomy in single-person households. But it can also lead to the delegation of digital tasks or care overload. It is imperative that these results are interpreted in the context of the pandemic of 2021, as this may have had a significant impact on the general trend of seeking health information. Subsequent replications will facilitate the verification of the persistence of these effects in scenarios that are not characterised by crisis.

The results may lead us to propose future lines of research that consider the influence that occupations have on internet use skills and the devices associated with it (Helsper and Reisdorf, 2017). In addition, research on digital roles will be explored as a means of diversifying virtual competencies in the digital society. The investigation would encompass the frequency of performance of digital tasks by family members, as well as the functionality of these tasks within family networks.

## 6. Conclusions

The objective of this study was to identify the factors influencing the search for health-related information among the Andalusian population. To achieve this, three hypotheses were proposed and subsequently tested.

The findings confirmed the second digital divide hypothesis, indicating that individuals who use the Internet more frequently—and for purposes beyond strictly medical concerns—are more likely to seek health-related information online. Additionally, the study revealed that engagement in various online activities, such as purchasing goods and services, conducting banking transactions, and accessing public administration websites or applications, significantly influences the likelihood of using the Internet for health-related purposes.

The second hypothesis suggested that individuals with greater self-efficacy and less risks perceived with disclosing personal data online would be more likely to seek health-related information through this medium. This was supported by evidence showing that subjective perceptions of the clarity and simplicity of information, as well as the degree of understanding of website privacy policies, are key factors. Both aspects were found to have a significant impact on the Andalusian population's approach to searching for health information online.

In our third hypothesis, we argued that it was by seeking more information on health issues how you overcome the third digital divide. Instead, if we look at it from a critical point of view, the phenomenon should be investigated within a group. This is because seeking less information does not necessarily have to be associated with digital disconnection. Rather, it may be associated with indirect use of the digital capital of the person seeking information or the delegation of digital tasks (Ragnedda *et al.*, 2022; Holmes *et al.*, 2025).

Digital divides are not overcome within the family, but their consequences are minimized, and they can still reproduce offline social roles. We call this ambivalence digital capital paradox, in line of what has been called before *household digital divide* (van Deursen *et al.*, 2017; Ragnedda, 2018). If we analyse it from an individual perspective, it may seem that those who benefit more are those who use it more. But when we look at it within a group, the indirect benefit plays a big role in addressing social inequities, giving the opportunity to study digital indirect action as a matter of genderized or generational delegation of tasks.

## 7. References

- Annick, P. and Savage, M. (2013). Emerging forms of cultural capital. *European Societies*, 15(2), 246–267. <https://doi.org/10.1080/14616696.2012.748930>
- Bericat Alastuey, E. (2002). Valores tradicionales, modernos y posmodernos en la sociedad andaluza. In Moyano, E. and Pérez-Yruela, Y. (eds.), *La sociedad andaluza* [2000] (pp. 45–64). IESA.
- Bericat Alastuey, E. and López Menchón, A. (2006). La brecha digital en Andalucía: Equipamiento y uso de las tecnologías de la información y de la comunicación. Idus.us.es. <https://idus.us.es/handle/11441/96126>
- Blumler, J. and Katz, E. (1974). *The uses of mass communications*. SAGE Publications.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Harvard University Press.
- Bourdieu, P. (2015). Los tres estados del capital cultural. *Sociológica México*. <http://www.sociologiamexico.azc.uam.mx/index.php/Sociologica/article/view/1043>
- Cabero-Almenara, J., Barroso-Osuna, J. and Rodríguez-Gallego, M. (2020). La competencia digital del profesorado. *Aula Abierta*, 49(4), 363–372.
- Calderón Gómez, D. (2019). Technological capital and digital divide among young people: An intersectional approach. *Journal of Youth Studies*, 22(7), 941–958. <https://doi.org/10.1080/13676261.2018.1559283>
- Calderón Gómez, D. (2020). The third digital divide and Bourdieu: Bidirectional conversion of economic, cultural, and social capital to (and from) digital capital among young people in Madrid. *New Media and Society*, 23(9), 146144482093325. <https://doi.org/10.1177/1461444820933252>
- Castells, M., Alborés, J. and Martínez, C. (2008). *La era de la información: Economía, sociedad y cultura*. Alianza Editorial.
- Comisión Europea. (2004). Andalucía contra la fractura digital. [https://archive.ph/20180216203239/http://ec.europa.eu/regional\\_policy/es/projects/s\\_pain/andalusia-against-the-digital-divide](https://archive.ph/20180216203239/http://ec.europa.eu/regional_policy/es/projects/s_pain/andalusia-against-the-digital-divide)

- Chá, G. and Mercedes, M. (2020). Telemedicina: Su rol en las organizaciones de salud. *Revista Médica Del Uruguay*, 36(4), 185–203.
- Chen, W. (2013). The implications of social capital for the digital divides in America. *The Information Society*, 29(1), 13–25. <https://doi.org/10.1080/01972243.2012.739265>
- Chen, W., Li, X., Huang, G. and Straubhaar, J. (2021). If you built a sandbox: How children, network diversity, and community interventions are related to Google Fiber signup in disadvantaged urban communities. *Telematics and Informatics*, 60, 101580. <https://doi.org/10.1016/j.tele.2021.101580>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(1), S95–120. <https://www.jstor.org/stable/2780243>
- Crampton, J. W. (2003). *The political mapping of cyberspace*. University of Chicago. <https://doi.org/10.1145/1753171.1753182>
- De Marco, S. (2022). El comercio electrónico en España (2019): Un ejemplo de tercera brecha digital. *Revista Internacional de Sociología*, 80(2), e206. <https://doi.org/10.3989/ris.2022.80.2.20.98>
- De Rivera, J., Gordo López, Á. J., García-Arnau, A. and Díaz-Catalán, C. (2021). Los factores estructurales e intervinientes de la socialización digital juvenil. Una aproximación mediante el método Delphi. *Revista Complutense de Educación*, 32(3), 415–426. <https://doi.org/10.5209/rced.70389>
- Di Maggio, P., Hargittai, E., Celeste, C. and Shafer, S. (2004). From unequal access to differentiated use: A literature review and agenda for research on digital inequality. In K. M. Neckerman (Ed.), *Social Inequality* (pp. 355–400). Russell Sage Foundation.
- Dodel, M. and Mesch, G. (2018). Inequality in digital skills and the adoption of online safety behaviors. *Information, Communication and Society*, 21(5), 712–728. <https://doi.org/10.1080/1369118x.2018.1428652>
- Dutton, W. and Blank, G. (2013). *Cultures of the Internet: The Internet in Britain*. Oxford Internet Survey 2013 Report.
- Dutton, W. H. and Reisdorf, B. C. (2017). Cultural divides and digital inequalities: Attitudes shaping internet and social media divides. *Information, Communication and Society*, 22(1), 18–38. <https://doi.org/10.1080/1369118x.2017.1353640>
- Eastin, M. S. and LaRose, R. (2006). Internet Self-Efficacy and the Psychology of the Digital Divide. *Journal of Computer-Mediated Communication*, 6(1). <https://doi.org/10.1111/j.1083-6101.2000.tb00110.x>
- Erickson, B. H. (1996). Culture, class, and connections. *American Journal of Sociology*, 102(1), 217–251. <https://www.jstor.org/stable/2782191>
- Fang, M., Canham, S., Battersby, L., Sixsmith, J., Wada, M. and Sixsmith, A. (2018). Exploring privilege in the digital divide: implications for theory, policy, and practice. *The Gerontologist*. <https://doi.org/10.1093/geront/gny037>

- García González, F. (2008). *La historia de la familia en la Península Ibérica (siglos XVI-XIX)*. Universidad de Castilla La Mancha.
- Gasca-Hurtado, G. P. and Machuca-Villegas, L. (2019). Era de la cuarta revolución industrial. *RISTI*, 34(10), 9–14. <https://doi.org/10.17013/risti.34.0>
- Gatti, F. M., Brivio, E. and Galimberti, C. (2017). “The future is ours too”: A training process to enable the learning perception and increase self-efficacy in the use of tablets in the elderly. *Educational Gerontology*, 43(4), 209–224. <https://doi.org/10.1080/03601277.2017.1279952>
- George, S., Moran, E., Fish, A. and Ogunyemi, L. (2013). Understanding the Digital Divide in the Clinical Setting: The Technology Knowledge Gap Experienced by U.S. Safety Net Patients during Teleretinal Screening. *Studies in Health Technology and Informatics*. <https://doi.org/10.3233/978-1-61499-289-9-946>
- Gobernado, R. (2009). Andalucía en su contexto: España y Europa. In *La modernización regional en España* (pp. 15–54). Civitas.
- Goggin, G. and Ellis, K. (2020). Disability, communication, and life itself in the COVID-19 pandemic. *Health Sociology Review*, 29(2), 168–176. <https://doi.org/10.1080/14461242.2020.1784020>
- Goldfarb, A. and Prince, J. (2008). Internet adoption and usage patterns are different: Implications for the digital divide. *Information Economics and Policy*, 20(1), 2–15. <https://doi.org/10.1016/j.infoecopol.2007.05.001>
- Goto, R., Watanabe, Y., Yamazaki, A., Sugita, M., Takeda, S., Nakabayashi, M. and Nakamura, Y. (2021). Can digital health technologies exacerbate the health gap? A clustering analysis of mothers’ opinions toward digitizing the maternal and child health handbook. *SSM – Population Health*, 16, 100935. <https://doi.org/10.1016/j.ssmph.2021.100935>
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360–1380. <https://www.jstor.org/stable/2776392>
- Hargittai, E. and Hinnant, A. (2008). Digital inequality: Differences in young adults’ use of the internet. *Communication Research*, 35(5), 602–621. <https://doi.org/10.1177/0093650208321782>
- Holt, T. J. (2009). Examining the role of technology in the formation of deviant subcultures. *Social Science Computer Review*, 28(4), 466–481. <https://doi.org/10.1177/0894439309351344>
- Holmes, H., Karampour, K., Richardson, R. and Burgess, G. (2025). Housing, poverty, and digital exclusion: the multiple ways in which digital inequalities and housing inequalities intersect. *Housing Studies*, 1–21. <https://doi.org/10.1080/02673037.2025.2577727>
- Instituto Nacional de Estadística. (2023). Población que usa internet (en los últimos tres meses). Tipos de actividades realizadas por internet. [https://www.ine.es/ss/Satellite?L=es\\_ES&dc=INESeccion\\_Candcid=1259925528782&dp=1254735110672&pagename=ProductosYServicios%2FPYSLayout](https://www.ine.es/ss/Satellite?L=es_ES&dc=INESeccion_Candcid=1259925528782&dp=1254735110672&pagename=ProductosYServicios%2FPYSLayout).

- Kontos, E., Blake, K. D., Chou, W.-Y. S. and Prestin, A. (2014). Predictors of eHealth Usage: Insights on The Digital Divide from the Health Information National Trends Survey 2012. *Journal of Medical Internet Research*, 16(7), e172. <https://doi.org/10.2196/jmir.3117>.
- Márquez Fernández, J. M. (2023). Competencias digitales. In J. M. Márquez Fernández (Ed.), *Colección Monográficos España Digital 2023* (pp. 1–27). Observatorio Nacional de Tecnología y Sociedad.
- Méndez Domínguez, P., Carbonero Muñoz, D., Raya Díez, E. and Castillo, J. (2023). Digital inclusion for social inclusion. Case study on digital literacy. *Frontiers in Communication*, 8. <https://doi.org/10.3389/fcomm.2023.1191995>
- Ministerio de Asuntos Económicos y Transformación Digital. (2022). Cobertura de banda ancha en España en el año 2022. In *Informe de cobertura banda ancha a 30 de junio de 2022*. Gobierno de España.
- Moreno, L. (2010). Reformas de las políticas de bienestar: Contexto y nuevos riesgos sociales. Csic.es. <http://hdl.handle.net/10261/28912>
- Moyano Estrada, E. and Pérez Yruela, M. (1999). *Informe social de Andalucía (1978–98): Dos décadas de cambio social*. Instituto de Estudios Sociales Avanzados de Andalucía (IESA). <https://dialnet.unirioja.es/servlet/libro?codigo=574898>
- Park, N., Lee, K. M. and Cheong, P. H. (2007). University instructors' acceptance of electronic courseware: An application of the Technology Acceptance Model. *Journal of Computer-Mediated Communication*, 13(1), 163–186. <https://doi.org/10.1111/j.1083-6101.2007.00391.x>
- Park, N. (2010). Adoption and use of computer-based Voice over Internet Protocol phone service: Toward an integrated model. *Journal of Communication*, 60(1), 40–72. <https://doi.org/10.1111/j.1460-2466.2009.01440.x>
- Park, S. (2017). *Digital capital*. Palgrave Macmillan UK. <https://doi.org/10.1057/978-1-137-59332-0>
- Park, J. and Feng, Y. (2023). Trajectory tracking of changes digital divide prediction factors in the elderly through machine learning. *Plos One*, 18(2), e0281291. <https://doi.org/10.1371/journal.pone.0281291>
- Parlamento Europeo. (2006). Consejo europeo en Viena 11 y 12 de diciembre de 1998. Conclusiones de la presidencia. [https://www.europarl.europa.eu/summits/wie1\\_es.htm](https://www.europarl.europa.eu/summits/wie1_es.htm)
- Peter, J. and Valkenburg, P. M. (2006). Adolescents' internet use: Testing the 'disappearing digital divide' versus the 'emerging digital differentiation' approach. *Poetics*, 34(4–5), 293–305. <https://doi.org/10.1016/j.poetic.2006.05.005>
- Pizzi, A., Pecourt, J. and Rius-Ulldemolins, J. (2023). De la 'brecha digital' al control de internet: Usos, actitudes y participación digital en España. *RES*, 32(3), a178–178. <https://doi.org/10.22325/fes/res.2023.178>

- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1–6. <https://doi.org/10.1108/10748120110424816>
- Ragnedda, M. (2017). *The third digital divide: A Weberian approach to digital inequalities*. Routledge.
- Ragnedda, M. (2018). Conceptualizing digital capital. *Telematics and Informatics*, 35(8), 2366–2375. <https://doi.org/10.1016/j.tele.2018.10.006>
- Ragnedda, M., Ruiu, M. and Addeo, F. (2019). Measuring digital capital: an empirical investigation. *New Media and Society*, 22(5), 793–816. <https://doi.org/10.1177/1461444819869604>
- Ragnedda, M., Addeo, F. and Ruiu, M. L. (2022). How offline backgrounds interact with digital capital. *New Media and Society*, 0(0), 146144482210826. <https://doi.org/10.1177/14614448221082649>
- Ragnedda, M. and Mushert, G. W. (2017). *Theorizing digital divides*. Routledge.
- Rojas, V., Straubhaar, J., Spence, J., Roychowdhury, D., Okur, Ö., Piñón, J. and Fuentes- Bautista, M. (2012). *Communities, cultural capital, and digital inclusion: Ten years of tracking techno-dispositions and techno-capital*. University of Texas Press EBooks, 223–264. <https://doi.org/10.7560/728714-010>
- Román-García, S., Almansa-Martínez, A. and Cruz-Díaz, M. R. (2016). Adults and elders and their use of ICTs: Media competence of digital immigrants. *Comunicar*, 24(4), 101–110. <https://doi.org/10.3916/c49-2016-10>
- Robles, J. M., Torres Alberó, C. and Molina Molina, O. (2023). La brecha digital: Un análisis de las desigualdades tecnológicas en España. *Sistema: Revista de Ciencias Sociales*, (218), 3–22. <https://dialnet.unirioja.es/servlet/articulo?codigo=3281409>
- Sassen, S. (2001). *Global cities and global city-regions: A comparison*. Oxford University Press EBooks, 78–95. <https://doi.org/10.1093/oso/9780198297994.003.0007>
- Selwyn, N. (2004). Reconsidering political and popular understandings of the digital divide. *New Media and Society*, 6(3), 341–362. <https://doi.org/10.1177/1461444804042519>
- Selwyn, N. (2006). Digital division or digital decision? A study of non-users and low-users of computers. *Poetics*, 34(4-5), 273–292. <https://doi.org/10.1016/j.poetic.2006.05.003>
- Selwyn, N. (2010). Degrees of digital division: Reconsidering digital inequalities and contemporary higher education. *Universities and Knowledge Society Journal*, 7(1). <https://doi.org/10.7238/rusc.v7i1.660>
- Shaw, J. and Glover, W. (2024). The Political Economy of Digital Health Equity: Structural Analysis. *Journal of Medical Internet Research*, 26(1), e46971. <https://doi.org/10.2196/46971>
- Thomas, D. (2003). *Hacker culture*. University of Minnesota Press.

- Torres Albero, C. (2017). Sociedad de la información y brecha digital en España. *Panorama Social*, (25), 17–33. <https://dialnet.unirioja.es/servlet/dcart?info=linkandcodigo=6371386andorden=0>
- Varela, J. (2015). *La brecha digital en España. Estudio sobre la desigualdad postergada*. Comisión Ejecutiva Confederal de UGT.
- Van Deursen, A., Helsper, E., Eynon, R. and Van Dijk, J. (2017). The compoundness and sequentiality of digital inequality. *International Journal of Communication*, 11, 452– 473.
- Van Deursen, A. and Helsper, E. (2015). The third-level digital divide: Who benefits most from being online? *Communication and Information Technologies Annual*, 10, 29–52. <https://doi.org/10.1108/s2050-206020150000010002>
- Van Deursen, A. and van Dijk, J. (2015). New media and the digital divide. *International Encyclopedia of the Social and Behavioral Sciences*, 787–792. <https://doi.org/10.1016/b978-0-08-097086-8.95086-4>
- Vázquez Carretero, E. (2017). *Brecha digital en Andalucía; TIC, sociedad y territorio. Análisis y propuestas en el ámbito de las infraestructuras* (PhD thesis).
- Venkatesh, V., Morris, M., Davis, G. and Davis, F. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Yruela, M. P. (2002). Para una nueva teoría de Andalucía. Cambio y modernización en la sociedad andaluza. *La Sociedad Andaluza [2000]*, Córdoba. <https://idus.us.es/handle/11441/56022>
- Willekens, M., Siongers, J. and Lievens, J. (2022). Social stratification and social media disengagement: The effect of economic, cultural and social capital on reasons for non-use of social media platforms. *Poetics*, 101708. <https://doi.org/10.1016/j.poetic.2022.101708>

## Notas

- 1 An OR greater than one indicates a higher probability of search compared to the reference category, while an OR less than one indicates a lower probability.

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