

Trajectories of care leavers according to indicators of psychosocial adjustment: A cohort analysis

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ABSTRACT

Background: The study of the trajectories of care leavers regarding their involvement with a series of public services and institutions contributes to identify some indicators of psychosocial adjustment and therefor make proposals of improvement in their transitions into adulthood.

Objectives: The present study aims to contribute to knowledge in this regard and the objectives focus on analysing the relationship of care leavers once they become adults with (i) the child protection system as parents, (ii) the penitentiary system, and (iii) residential resources for people with disabilities, analysing the results according to gender, country of origin, type of foster care when they were minors, type of support received as young care leavers and years in care.

Method: With a pioneering study in Spain, we analyse cohort of former looked-after young people from the Autonomous Community of Catalonia born between 1983 and 1993 (N = 8334), based on the analysis of official records. Bivariate data analysis and three logistic regression models was carried out.

Results and conclusions: The results indicate that despite experiencing higher rates of vulnerability in these three areas compared to the general population, it is notable that the majority of this population with a care background overcome adversity without displaying any of these indicators. Differences by the variables of gender, type of placement and support received are discussed to help identify factors influencing the life pathways of former looked-after youth.

1. Introduction

There is a widespread belief among social workers, psychologists, education professionals and in the media that most cases of abusive parents were once abused children, or that most abused children will repeat the patterns of abuse or neglect learned at home. This issue has also been widely echoed in scientific research, where we find numerous works and publications that, for years, have been promoting a debate with as yet little consensus. This paper attempts to contribute to the knowledge on what happens when they leave the care system, with a pioneering study conducted in Spain. It focuses on a cohort of young people who were in the child protection system and their subsequent relationship, on reaching adulthood, with the penitentiary system, the child protection system and the department for people with disabilities. The results are analysed according to sex, country of origin, type of care experienced within the care system and type of support received as a young care leaver.

Since the publication by Curtis (1963) of *Violence Breeds Violence*, and

later the claim made by Kempe and Kempe (1978) that abusive parents were very likely to have been abused as children, a large body of work has been produced. Garbarino and Gilliam (1980) also pointed to the hypothesis of intergenerational transmission as a major component in the study of child maltreatment, but at the same time, they noted that this hypothesis did not have the consensus of the scientific community. Also, in the 1980s, Kaufman and Zigler (1987) claimed that the scientific literature reviewed so far lacked sufficient quality to give clear support for such transmission, and Cicchetti and Aber (1980) criticised claims of high continuity of maltreatment across generations.

Reviewing the main studies, Madigan et al. (2019) grouped two main approaches under the umbrella term of intergenerational transmission of maltreatment. The first approach argues that abused children are likely to become abusive parents, a line that most studies have focused on (see the cycle of violence in Widom, 1989; Belsky, 1980). The second approach claims that when children who have experienced abuse become parents their sons and daughters will also probably be victims of some kind of abuse even if they are not the perpetrators; that is, they will be

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more exposed to different situations of abuse due to their experiences of victimisation (as in Kim et al., 2007).

But both these lines of research have major methodological limitations, starting with how to make the definition of maltreatment operational, and continuing with the questions raised by studies based on retrospective recall, or on single informants, and in particular, due to the lack of prospective studies (Madigan et al., 2019). Along these lines, Kaufman and Zigler (1987) criticised the methodological design of the four types of studies that most often supported the intergenerational hypothesis: firstly, studies based on case histories that give a voice primarily to parents of maltreated children – studies that are not very generalisable; secondly, studies based on the review of official files or registers, which often contain incomplete and biased information, or as Widom et al. (2015) stated, only include cases that have been reported. In this respect, Barnett et al. (1993) proposed recoding official records according to a systematised typology of maltreatment instead of using the officially recorded typology in order to improve its rigour. Thirdly, there are studies based on clinical interviews, which do not usually have a comparison group, and fourthly, self-report studies with risk of social desirability bias (also in Leve et al., 2015).

Widom et al. (2015) examined several of these methodological designs and found, for example, that individuals who had previously been in care had higher levels of monitoring by social services than those who had not. They were therefore more likely to be referred back to care services even though their situation was similar to parents who had not been in care and did not get referred. This bias must also be taken into consideration when working with official registers.

This variability in the measurement of intergenerational transmission leads to great variability in the results, as noted by Cicchetti (2004) and Thornberry et al. (2012). Kaufman and Zigler (1987) noted that most studies are retrospective, analysing the personal past of people with maltreatment issues and concluding that there were very high rates of intergenerational transmission of maltreatment. But this method excludes the majority, i.e. those who do not have abuse issues. In contrast, prospective or longitudinal studies – which are in the minority – conclude that only a small proportion of children who have been victims become offenders or abusers in later life. This small share is still higher than in studies in the general population. Thus, according to these authors, the percentage of intergenerational transmission may vary from 18% to 90% depending on the procedure applied. They argue that a history of maltreatment is only one of many possible determining factors in transmission and that if we accept this hypothesis without reservation, not only will we be doing so in an unfounded and mistaken way but we will also be contributing to self-fulfilling prophecies, thus limiting the scope of the debate.

Prospective longitudinal studies are noteworthy but rare because of the challenges for the researcher, both in terms of financing and methodology. Most notably Kim-Spoon et al. (2013), who used a combination of official records and interview data in both maltreatment and control samples. In particular, the study by Widom et al. (2015) prospectively followed 902 maltreated children with a matched comparison group of 667 subjects over four decades, using multiple informants to assess maltreatment. They found that approximately 21% of parents with a history of maltreatment reproduced maltreatment towards their children, compared to 11.7% of the control group. In addition, parents with a history of abuse were four times more likely than those in the control group to have a child taken into care (4.8% vs. 1.3%). However, intergenerational transmission of maltreatment was more likely in sexual abuse and neglect, but not associated with physical abuse. In the case of the latter form of maltreatment, this finding was in line with that of Appleyard et al. (2011) who also observed a very weak association with physical abuse, and contrary to what Simons et al. (1991) had suggested some years earlier.

It is also worth noting the reviews of published research, such as that of Ertem et al. (2000), seeking compliance with eight methodological standards to determine the scientific validity of the studies and

concluding that 80% of the studies reviewed failed to meet five of these standards due to strong evidence of repetition of physical abuse. Later, Thornberry et al. (2012) continued this type of review by broadening the forms of maltreatment and methodological criteria and concluded that, while most studies showed weak to modest support for the maltreatment cycle hypothesis, in studies with more rigorous methodology, this support became tenuous. Leve et al. (2015) also noted that the most comprehensive reviews and meta-analyses found that there was a modest but significant risk of intergenerational transmission of child maltreatment. Indeed, Thornberry et al. (2012) found that the most robustly designed studies showed only mixed support for the intergenerational transmission hypothesis, with some studies reporting that the risk of intergenerational transmission was weak to moderate (Renner & Slack, 2006). Kaufman and Zigler (1987) suggested that the rate of intergenerational transmission appeared to be around 30%, five times higher than in the general population, and research by Thornberry et al. (2013) found that those who had experienced maltreatment were 2.6 times more likely to be maltreated as adults compared to those who had not. The results of the meta-analysis in Madigan et al. (2019) revealed a modest association of intergenerational maltreatment, also analysed by specific types (neglect, emotional abuse and sexual abuse), and a weaker association with physical abuse the greater the methodological rigour.

2. Resilience and protective factors: the case of care leavers

Drawing on resilience studies, Vanistendael (2002, p.182) said, in reference to the study by Kaufman and Zigler, that *'This study demonstrates a greater risk of being an abuser when one has been abused, but also that, in most cases, this risk does not become a reality'*. The concept of intergenerational transmission of maltreatment must be taken into consideration, precisely to be able to activate strategies to minimise it and, in this respect, resilience studies remind us that it is necessary to break with the idea of a homogenous group in terms of maltreated children, fleeing from stereotyped social representations. Resilience occurs through an interaction between the individual and his or her environment: faced with a problem, a way of resisting and being constructive exists, but the problem and the way of dealing with it will depend on each specific context (Vanistendael & Lecomte, 2002). We should, therefore, avoid determinism that predicts a doomed outcome for children who *'get off on the wrong foot and are stigmatised by their traumatic experience'* (Cyrlunik, 2005, p. 62.).

Hence, although most maltreated children will not replicate maltreatment with their own children, the focus should remain on prevention given that maltreatment causes morbidity and mortality in childhood and increases the risk of health problems in adulthood, such as addictions, depression, or suicide (Akin et al., 2019). Studying the intergenerational transmission of child maltreatment allows us to understand why and how some children are maltreated and how to break the cycle. Undurraga and Santelices Alvarez, 2022, in their review of protective factors that act as moderators of the association between risk factors and the transmission of maltreatment, and which may prevent transmission, identified four categories from the individual to the social level. However, they highlighted that the largest number of protective factors for breaking the cycle are concentrated in the relationship sphere; as children, with positive and stable relationships that support them and allow them to have positive memories of caring (also in Narayan et al., 2019 and in line with Cyrlunik's 'resilience tutor', 2005), and as adults, with the presence of stable, emotionally supportive relationships with partners and positive communication (see Conger et al., 2013).

Understanding the concept of resilience as a dynamic process in which an interplay of factors is observed, studies have shown that different mediating factors exist that enable young people leaving care, the target population in this article, to achieve better than expected outcomes (Van Breda, 2018). In Crous et al. (2021), the young people not only explained the adversities they faced but above all what they did to overcome them, emerge stronger and learn from the experience (also in

Brady & Gilligan, 2020; Courtney et al., 2020; Stein, 2006). The study identified that the main factors promoting resilience were found at different levels, from the micro level more focused on the personal sphere, i.e. the ability to cope with adverse situations and the perception of control and autonomy, to a more relational and environmental level, such as the education received and perceived social support. Gilligan (2019, p. pp15) pointed out that many young adults leaving care do quite well despite being forced to make early transitions at age 18 and manage to show resilience. The author showed how important it is for care leavers to rely on the resources in their social ecology at the time of transitions, i.e. former caregivers and other adults involved in their pathways but also the support they may have at work or training centre. To enhance these networks is to enhance their resilience.

One limitation in looking for studies on young people formerly in care is that many of them focus on people under 25 years of age (often when they are still in contact with welfare services) and are unable to provide data beyond that age. One exception is the work by Brännström et al. (2017) which followed a cohort of individuals up to the age of 60, also finding higher rates of inequality compared to the population that had not been in care, but highlighting that, despite difficulties, the majority of individuals were coping. A more discreet but pioneering study in Spain (Del Valle et al., 2008) also found that only 15% of young people who had been in residential care had serious problems (drug dependence, delinquency) once they had left the child protection system.

3. Background of the study

In Spain, at the end of 2020, there were a total of 49,171 children and adolescents under some form of protection measure, 47% of whom were in residential care and 53% in foster care (Observatorio de la, 2021). In Catalonia, the north-eastern region where this study is focused, there were a total of 8372 children in care in August 2022 (DGAIA, 2022). Of these, more than half (57.1%) were living in residential children's homes (a percentage that has increased significantly since 2018 due to the arrival of unaccompanied young migrants, who are mostly taken into care), and the rest were in kinship (28.5%) and non-kin foster (14.4%) care. The majority of children in care in Catalonia who have experienced maltreatment are victims of neglect (between 65 and 70%) followed by psychological and physical maltreatment (around 10–15% in both cases) and sexual abuse (approximately 1–2%).

Catalonia has a care service for young people between 16 and 21 years of age, created in 1994 with the aim of facilitating the transition to adult life, and regulated since 2010 by Law 14/2010 on the Rights and Opportunities of Children and Adolescents. This service, the first in Spain, provides housing, financing, legal support, psychological support, and job placement. In August 2022, there were about 4500 young care leavers receiving support from this service, aged 17 (2.3%), 18 (17.7%), 19 (26.3%), 20 (26.8.1%), and 21 and over (26.9%) (DGAIA, 2022). For the purposes of this study, the population born between 1983 and 1993 and who were still receiving support at the age of 16 was 8312 persons.

4. Objectives

Despite the relevance of contributing to the study of intergenerational abuse, the type of administrative data available in the present study partly restricts the possibilities of going into this debate in depth, since only two of the three objectives have a certain relationship with the issue of intergenerational repetition. In any case, the study is in line with what Courtney (2008) suggested regarding the need for the use of secondary data to understand the experiences of young people leaving care, to provide information regarding adult outcomes and to make comparisons with the outcomes of young people in other situations. However, there are few studies that use secondary data analysis. In Spain, there are some subunit data (for example the case of Catalonia) on care experiences and outcomes, very few at national level, very few is used by the Government for research and there is not data from population-based studies

(according to Courtney categorization, 2008).

This study is focused on the population that was taken into the care system while they were underage and remained in care at least until they were 16 years old. The aim of the study is to analyse whether after reaching adulthood and aged between 27 and 37 years old at the time of this study, they have had a relationship with the child protection system as parents, with the justice system as adults, and with the care network for people with disabilities. This type of research has not been published in Spain and where few studies have been carried out in Europe. It was important to focus on young people who were in care at least until the age of 16, i.e. those who had to plan their emancipation while still in care, excluding those who were able to leave for a more stable situation before that age, such as adoption or return to the biological family. More specifically, the study allows us.

- To analyse the rate of young people formerly in care who have had a child of their own placed in care by the child protection system. For the purpose of the study, it was essential to know how many cases occurred in which children had to be protected from a situation of abuse or neglect by parents who were cared for by the same system when they were minors.
- To analyse the percentage of young care leavers later admitted to a correctional facility. Several studies (Leve et al., 2015) show that delinquency (partly reflected in prison admissions) has associations with child maltreatment and may be a possible outcome of having experienced maltreatment (Widom et al., 2015).
- To analyse the percentage of young people who have left care and been admitted to centres for people with disabilities. This topic is not linked to the intergenerational transmission of maltreatment but is interesting from the point of view of showing situations with fewer opportunities for social inclusion in which young people who have suffered maltreatment and have a disability find themselves when they reach adulthood, especially because disability may be one of the consequences of having experienced maltreatment as a child (Crous et al., 2020).

If few studies are available, it is even more difficult to find data disaggregated by independent variables such as the following.

- Gender: men-women (only two options were recorded in former case files)
- Age range (27–32 years and 33–37 years)
- Nationality: Spanish or foreign, and whether they are unaccompanied young migrants
- Territorial distribution: Barcelona and metropolitan area (urban), and the rest of Catalonia (predominantly semi-urban and rural areas)
- Type of care while in the protection system: non-kin foster care, kinship care, residential care and own family care (with a protection order and monitoring by the child protection system)
- Attention received by the support service for young care leavers (yes/no), and if yes, assessment (positive or negative) made by the service of stay in care
- Years in care: Less than 5 years, between 5 and 9 years, 10 years or more

5. Method

Work has been carried out by analysing the information contained in the records of the official database, with quantitative processing of anonymised data.

5.1. Sample

The cohort of young people born between 1983 and 1993 was selected for two main reasons: the aim was to be able to study this population when they were over 25 years of age, a gap that occurred in

studies with populations formerly in care, and also to have a sufficiently extensive cohort (10 years) to be able to analyse their life pathways. A second criterion was for these young people to have been in the care system at the age of 16, regardless of when they entered. We therefore selected those who had had to go through the process of leaving the care system in their transition to adulthood. After cleaning the database and eliminating repeated cases and cases with no information, we were left with a population of 8334 subjects, who had been in the protection system when they were minors, were still in the system when they were 16 years old, and were aged between 27 and 37 years old in 2020 (see Table 1).

Significant differences were observed in the composition of the sample according to gender and country of origin. Thus, among those born abroad, 87% were male, and among males, 39.7% were of foreign origin. If we focus only on the group of young unaccompanied migrants, the gender difference was even greater, as 96.6% were male. A higher concentration of foreigners was also observed in Barcelona city and metropolitan area, with 32% of foreigners, and the differences were even greater when it came to those in residential care, where foreigners accounted for 47.6%.

In addition, half of those who had been in residential care (50.8%) and 40.9% of those in non-kin foster care were attended by the care leavers' support service. Yet, only 28.2% of those in kinship care and 19.6% of those living with their biological family under a protection order needed this service.

Lastly, it is noteworthy that 43% of the sample had spent less than 5 years within the child protection system, while more than a half had been in the system more than 5 years.

5.2. Procedure and data

Throughout the entire process, the research team carried out the

Table 1
Population of care leavers (May 2020).

	No.	%
Sex		
Female	3192	38.3
Male	5142	71.7
Total	8334	100
Year of birth		
1989–1993	4529	54.4
1983–1988	3804	45.6
Country of birth		
Spanish	5989	71.9
Foreign	2345	28.1
Total	8334	100
Non-accompanied migrants		
No	7569	90.8
Yes	765	9.2
Territorial area		
Barcelona city and metropolitan area	3243	50.8
Rest of Catalonia	3136	49.2
Total	6379	100
Type of placement		
Non-kin foster care	330	5.6
Kinship care	1364	23.3
Residential care	2599	44.4
Supervised care in own family	1564	26.7
Total	5857	100
Support services for young care leavers		
None	5516	82.7
Yes, with negative or neutral assessment	306	4.6
Yes, with positive assessment	851	12.7
Total	6673	100
Years in protection		
Less than 5 years	3570	42.9
Between 5 and 9 years	2001	24.0
10 years or more	2751	33.1
Total	6673	100

scientific direction of this work and data analysis, but specialists from the Child Protection Department were responsible for managing and collecting the data and for arranging inter-service agreements. Thus, once the cohort had been identified, the Department cross-checked the data with prison services on the one hand, and with child protection and disability data on the other – both areas fall under the same Department. Subsequently, in order to be able to contrast with the general population in these three areas, a comparison was made using some data from the general population.

Bivariate analysis of the data was carried out by means of contingency tables in which the three dependent variables (having a child in the protection system, having been admitted to a prison service or having been admitted to a service for people with disabilities) were cross-checked with the available independent variables mentioned above. A Chi-square test was calculated to observe the existence or not of statistically significant differences between the different categories of the independent variables for each of the dependent variables. In addition, the rates for the three dependent variables of the target group (former looked-after young people) were compared with the rates for the general population.

Finally, three logistic regression models were carried out: one for care leavers who have had a son or daughter placed under the care system, the second for care leavers who have been imprisoned and the third for care leavers who have been admitted to a centre for people with disabilities.

Table 2
Care leavers born between 1983 and 1993 who have had a son or daughter placed under the care of the Child Protection Department in Catalonia.

	Have they any children taken into care?					pvalue	
	No		Yes		Total		
	No.	%	No.	%	No.		%
Sex							
Female	2654	83.1	538	16.9	3192	100	Pr = 0.000
Male	4917	95.6	224	4.4	5141	100	
Total	7571	90.9	762	9.1	8333	100	
Year of birth							Pr = 0,870
1989–1993	4117	90.9	412	9.1	4529	100	
1983–1988	3454	90.8	350	9.2	3804	100	
Total	7571	90.9	762	9.1	8333	100	
Country of birth							Pr = 0.000
Spanish	5277	88.1	712	11.9	5989	100	
Foreign ^a	2294	97.9	50	2.1	2344	100	
Total	7571	90.9	762	9.1	8333	100	
Territorial area							Pr = 0.000
Barcelona city and metro. area	2969	91.6	274	8.4	3243	100	
Rest of Catalonia	2744	87.5	391	12.5	3135	100	
Total	5713	89.6	665	10.4	6378	100	
Type of placement							Pr = 0.011
Non-kin foster care	309	93.6	21	6.4	330	100	
Kinship care	1264	92.7	100	7.3	1364	100	
Residential care	2342	90.1	256	9.9	2598	100	
Supervised care in own family	1409	90.1	155	9.9	1564	100	
Total	5324	90.9	532	9.1	5856	100	
Support services for young care leavers							Pr = 0.000
No ASJTET	5059	91.7	457	8.3	5516	100	
Negative or neutral assessment	263	86.0	43	14.0	306	100	
Positive assessment	761	89.4	90	10.6	851	100	
Total	6083	91.2	590	8.8	6673	100	
Years in protection							Pr = 0.125
Less than 5 years	3266	91.5	304	8.5	3570	100	
Between 5 and 9 years	1798	89.9	203	10.1	2001	100	
10 years or more	2496	90.7	255	9.3	2751	100	
Total	7560	90.8	762	9.2	8322	100	

^a 0% non-accompanied migrant youngsters.

Variable		N	Odds ratio	p
sex	Female	1552	Reference	
	Male	2359	0.27 (0.21, 0.34)	<0.001
year_of_birth	1983-1988	1130	Reference	
	1989-1993	2781	0.85 (0.65, 1.11)	0.223
country_of_birth	Foreigner	1014	Reference	
	Spanish	2897	4.78 (3.08, 7.68)	<0.001
territorial_area	Barcelona city and metropolitan area	2063	Reference	
	Rest of Catalonia	1848	1.33 (1.05, 1.68)	0.016
type_of_placement	Kinship care	818	Reference	
	Non-kin foster care	185	1.05 (0.52, 1.95)	0.894
	Residential care	1796	2.51 (1.78, 3.57)	<0.001
	Supervised care in own family	1112	1.62 (1.16, 2.30)	0.006
Support_services_young_leavers	None	3068	Reference	
	Yes, with negative or neutral assessment	210	1.15 (0.70, 1.82)	0.579
	Yes, with positive assessment	633	1.17 (0.85, 1.59)	0.311
years_protec	Less than 5 year	1801	Reference	
	Between 5 and 9 years	968	0.82 (0.61, 1.10)	0.193
	10 years or more	1142	0.73 (0.54, 0.99)	0.041

Fig. 1. Logistic Regression Model for care leavers who have had a son or daughter placed under the care of the Child Protection.

5.3. Ethical aspects

This research obtained two necessary approvals; firstly, by the Ethics Committee (approval code: CEBRU0004-2019). In addition, an agreement was signed between the research team and the Child Protection Department, authorising the research and specifying data processing in relation to: access to anonymised information, data processing at the university's headquarters, and security and confidentiality measures. For this purpose, researchers were required to keep all information strictly confidential and to comply with all technical and organisational measures put in place to ensure the confidentiality of the information and its integrity. These obligations continued to apply even after the termination and expiry of the agreement.

6. Results

The results are presented according to the three specific objectives and compared with general population data.

6.1. Do former looked-after youth have their own children placed in the care system?

Table 2 shows that the percentage of young people who were in care and who, on reaching adulthood, also had their children placed in care was 9.1%. This percentage is based on the total number of young people born between 1983 and 1993, but as we did not know how many of them had actually become parents, the percentage was based on the total number of adults, not on the total number of parents. We did know that 5607 mothers were registered in the protection system at the time of the study, of whom 2302 were born between 1983 and 93. Of these 538 (23%) were formerly in care. We did not have data on the percentage of

the general population in this cohort whose children had been placed in the child protection system.

Significant differences were found in all disaggregated variables except by age group and years in the care system. More frequently recorded in the child protection registers were women's children (16.9%) than men's (4.4%); children of Spanish nationals (11.9%) compared to a low number of children born to foreigners (2.1%) and none among unaccompanied migrants. There were more living in semi-urban and rural areas (12.5%) than in urban areas (8.4%); more who were in residential care while in the child protection system or who had been supervised while living with their own family (9.9%) compared to those who were in kinship care (7.3%) and in non-kin foster care (6.4%). Finally, more had been attended to by the young care leavers' support service with a negative rating (14%) compared to those with a positive rating (10.6%) and those who did not require the support of the service (8.3%) (see Fig. 1).

The logistic regression model (Fig. 2) confirms all previous observations. Individuals of Spanish nationality have nearly 5 times higher odds of having a child in protective care compared to foreigners (p < 0.001). Those residing in rural areas also show significantly higher odds of having children in protective care (p < 0.001) in comparison to those living in the metropolitan area. Furthermore, individuals who were in residential centre have 2.5 times higher odds of having a child in the care system than those in family foster care (p < 0.001). Finally, there are differences regarding those that spent more than 10 years within the child protection system (p < 0.001).

6.2. Have former looked-after youth been sent to prison as adults?

Table 3 shows that the percentage of adults who were in the child protection system and who have been in prison as adults was 8.1%,

Variable		N	Odds ratio	p
sex	Female	1552	Reference	
	Male	2359	4.57 (3.31, 6.45)	<0.001
year_of_birth	1983-1988	1130	Reference	
	1989-1993	2781	0.72 (0.53, 0.97)	0.03
country_of_birth	Foreigner	1014	Reference	
	Spanish	2897	3.08 (2.12, 4.51)	<0.001
territorial_area	Barcelona city and metropolitan area	2063	Reference	
	Rest of Catalonia	1848	0.95 (0.74, 1.23)	0.71
type_of_placement	Kinship care	818	Reference	
	Non-kin foster care	185	1.73 (0.81, 3.48)	0.14
	Residential care	1796	3.52 (2.29, 5.56)	<0.001
	Supervised care in own family	1112	2.29 (1.50, 3.61)	<0.001
Support_services_young_leavers	None	3068	Reference	
	Yes, with negative or neutral assessment	210	1.49 (0.92, 2.34)	0.09
	Yes, with positive assessment	633	0.60 (0.39, 0.89)	0.02
years_protec	Less than 5 year	1801	Reference	
	Between 5 and 9 years	968	0.93 (0.66, 1.31)	0.68
	10 years or more	1142	0.88 (0.62, 1.23)	0.45

Fig. 2. Logistic Regression Model for care leavers who have been imprisoned.

compared to the general population in this cohort, where the percentage was 3%. Compared by sex, men had a significantly higher percentage of prison admissions (11.4%) than women (2.8%). The percentage of prison admissions among those who were older was also slightly higher. However, no differences were observed according to nationality or territorial area. However, both the type of protection measure and the support received by the young care leavers' services reached statistical significance, with a lower rate of prison admissions for those who had been in non-kin foster care (5.2%) and kinship care (4.3%) compared to those who had been in residential care (9.4%) or monitored in their own family (8%). It can also be observed that both those who did not require care leavers' support services (7.8%) and especially those who had had a positive assessment (5.2%) showed much lower rates of prison admissions compared to those who had been negatively assessed (14.7%).

Through the regression model, we observe, as previously indicated in the bivariate analysis, that men have 4.5 times higher odds of having been incarcerated compared to women ($p < 0.001$), and individuals of Spanish nationality exhibit triple the odds of imprisonment compared to foreigners ($p < 0.001$). Those who resided in residential centres also show triple the odds of incarceration compared to those placed in family care, while individuals under 'Supervised care in own family' show double the odds of imprisonment compared to those in family foster care, with both cases reaching statistical significance ($p < 0.001$).

On the other hand, having received a positive assessment within the Support services for young care leavers serves as a protective factor regarding the likelihood of incarceration compared to those who did not benefit from this support service ($p < 0.001$).

6.3. Have former looked-after youth been admitted as adults to a centre for people with disabilities?

Table 4 shows that the percentage of adults who were formerly in care and who later entered a residential centre for people with disabilities was 5.1%. On the other hand, 0.1% of the general population in this cohort is admitted to residential facilities for people with disabilities.

Significant differences were observed in all the disaggregated variables. More women were admitted (6.2%) than men (4.5%), also among the youngest. No foreigners were admitted compared to 7.2% of Spanish nationals. Admissions were more common among people from outside the metropolitan area (8.6%), young people who had been in residential care (7.1%) and among those who had obtained a negative evaluation from the care leavers' support services (10.1%).

The logistic regression model (Fig. 3) supports the findings presented in Table 4 according to area of residence, type of placement, years in care and the evaluation of the post-care service. However, it is noteworthy that gender does not achieve statistical significance in the model. It is important to keep in mind that the variable 'country of birth' have been excluded from this model, as Table 4 shows that there are no foreigners who have been referred in a disability care centre.

6.4. Crossovers between the three variables above

Regarding the confluence of factors in the same individuals, Table 5 shows that the number of people who had been in prison and had children in the child protection system was 16.5%, and there were

Table 3
Care leavers who have been imprisoned.

	Care leavers who have been imprisoned						pvalue
	No		Yes		Total		
	No.	%	No.	%	No.	%	
Sex							
Female	3102	97.2	90	2.8	3192	100	Pr = 0.000
Male	4557	88.6	585	11.4	5142	100	
Total	7659	91.9	675	8.1	8334	100	
Year of birth							
1989–1993	4200	92.7	329	7.3%	4529	100	Pr = 0.003
1983–1988	3459	90.9	345	9.1%	3804	100	
Total	7659	91.9	674	8.1	8333	100	
Country of birth							
Spanish	5489	91.7	500	8.3	5989	100	Pr = 0.183
Foreign	2170	92.5	175	7.5	2345	100	
Total	7659	91.9	675	8.1	8334	100	
Territorial area							
Barcelona city and metro. area	2941	90.7	302	9.3	3243	100	Pr = 0.095
Rest of Catalonia	2881	91.9	255	8.1	3136	100	
Total	5822	91.3	557	8.7	6379	100	
Type of placement							
Non-kin foster care	313	94.8	17	5.2	330	100	Pr = 0.000
Kinship foster care	1305	95.7	59	4.3	1364	100	
Residential care	2354	90.6	245	9.4	2599	100	
Supervised care in own family	1439	92.0	125	8.0	1564	100	
Total	5411	92.4	446	7.6	5857	100	
Support services for young care leavers							
No ASJTET	5086	92.2	430	7.8	5516	100	Pr = 0.000
Negative or neutral assessment	261	85.3	45	14.7	306	100	
Positive assessment	807	94.8	44	5.2	851	100	
Total	6154	7.8	519	7.8	6673	100	
Years in protection							
Less than 5 years	3275	91.7	295	8.3	3570	100	Pr = 0.016
Between 5 and 9 years	1815	90.7	186	9.3	2001	100	
10 years or more	2558	93.0	193	7.0	2751	100	
Total	7648	91.9	674	8.1	8323	100	

significantly more men than women. Also, the percentage of those who had had children in the protection system and were in a centre for people with disabilities rose to 12.6%.

7. Discussions and conclusions

The first aspect to highlight is the age of the cohort of young people in this study. We focused on analysing what had happened to young people aged between 27 and 37, thus overcoming one of the limitations of many of the studies on the in-care population, which focus on the under 25-year-olds, often still linked to social protection services. The relationship that they have had, on reaching adulthood, with the child protection system as parents, with the penitentiary system and with residential resources for people with disabilities has been analysed, revealing differences by gender, country of birth, types of foster care or whether they were attended by the care leavers' support services when they were between 16 and 21 years of age, and less by years in the care system. Following Courtney (2008) there are few studies that use secondary data, despite they can be very relevant for providing information related to adult outcomes. The scarcity of this type of studies may be due to the decentralisation of services (as it is the Spanish case), data protection policies or the existence of poor official data.

Worthy of note is that even though the former in-care population show higher rates of experiencing vulnerable situations in later life compared to the general population, this study has highlighted that,

Table 4
Former looked-after youth who have been admitted to a centre for people with disabilities.

	Admission to centres for people with disabilities						pvalue
	No		Yes		Total		
	No.	%	No.	%	No.	%	
Sex							
Female	2995	93.8	197	6.2	3192	100	Pr = 0.001
Male	4910	95.5	232	4.5	5142	100	
Total	7905	94.9	429	5.1	8334	100	
Year of birth							
1989–1993	4257	94	272	6.0	4529	100	Pr = 0,000
1983–1988	3647	95.9	157	4.1	3804	100	
Total	7904	94.9	429	5.1	8333	100	
Country of birth							
Spanish	5560	92.8	429	7.2	5989	100	Pr = 0.000
Foreign	2345	100	0	0	2345	100	
Total	7905	94.9	429	5.1	8334	100	
Territorial area							
Barcelona city and metro. area	3114	96.0	129	4.0	3243	100	Pr = 0.000
Rest of Catalonia	2867	91.4	269	8.6	3136	100	
Total	5981	93.8	398	6.2	6379	100	
Type of placement							
Non-kin foster care	313	94.8	17	5.2	330	100	Pr = 0.000
Kinship care	1296	95.0	68	5.0	1364	100	
Residential care	2415	92.9	184	7.1	2599	100	
Supervised care in own family	1512	96.7	52	3.3	1564	100	
Total	5536	94.5	321	5.5	5857	100	
Support services for young care leavers							
No ASJTET	5334	96.7	31	3.3	5516	100	Pr = 0.000
Negative or neutral assessment	275	89.9	182	10.1	306	100	
Positive assessment	785	92.2	66	7.8	851	100	
Total	6394	95.8	279	4.2	6673	100	
Years in protection							
Less than 5 years	3462	97.0	108	3.0	3570	100	Pr = 0.000
Between 5 and 9 years	1877	93.8	124	6.2	2001	100	
10 years or more	2565	93.2	186	6.8	2751	100	
Total	7904	95.0	418	5.0	8322	100	

despite adversity, the majority manage to cope. This is in line with Brännström et al. (2017) or Del Valle et al. (2008), using longitudinal studies or larger age cohorts. The idea that emerges from this result is that of resilience, in line with Van Breda (2018) and Gilligan (2019, p. pp15) pointing out how care leavers achieve better than expected outcomes and analyse which factors from their social environment are contributing to enhance resilience.

A limitation that should be pointed out is that the results presented in this study can only partly relate to the issue of intergenerational repetition and should therefore be taken with caution. One of the approaches to approximate repetition rates according to Kim et al. (2007) is to study what happens to the children of those who have been abused, stating that they will be more exposed to different situations of abuse, even if it is not their parents who are the perpetrators. In our study, the rate of young people who were in care and whose children have also been taken into care was 9.1%, but as we did not know how many of them had actually become parents (one of the limitations of this study), we looked at the children in this cohort whose mothers had been in care as children and the percentage was 23%, similar to the 21% in the study by Widom et al. (2015). However, according to the same authors, a key consideration to contextualise this finding is that care leavers often have higher levels of monitoring by social services compared to other young people and are therefore more likely to be referred back to social services. Studies such as ours based on the analysis of data from official registers must take this bias into account. Another limitation when working with official

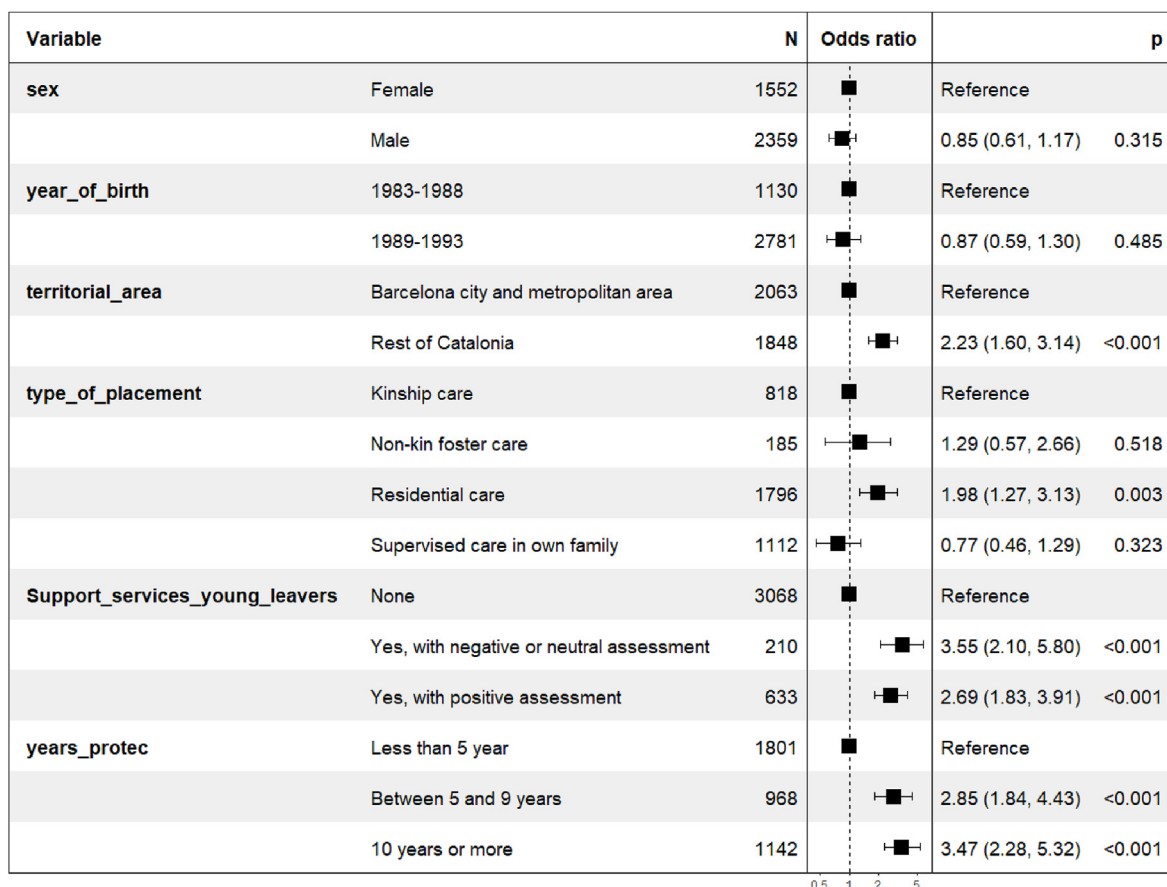


Fig. 3. Logistic Regression Model for Care leavers who have been admitted to a centre for people with disabilities.

registers is that only reported cases are included and therefore other situations of abuse exist that are not recorded in the registers.

Moreover, when the data was disaggregated by gender, the registers showed more mothers than fathers, either because the father was unknown or because he had not recognised the child. Therefore, looking at the data, it may erroneously appear that women tend to reproduce situations of child neglect more than men. This argument can also be put forward to explain the higher percentages of Spanish parents than foreigners, the latter being mostly men and concentrated in urban areas, which also explains their lower percentage in these areas.

Another indicator of repetition or intergenerational transmission is to know how many young people with a care background become delinquents (some of them go to prison) when they are older. [Leve et al. \(2015\)](#) showed that delinquency has associations with child maltreatment and [Widom et al. \(2015\)](#) suggested that it may be a potential outcome of having experienced maltreatment. However, [Kaufman and Zigler \(1987\)](#) argued that most retrospective studies conclude very high rates of transmission, but that according to prospective or longitudinal studies, only a small proportion of child victims go on to become offenders or abusers in later life, even though these rates are higher than in studies of the general population. In our study, the rate of former looked-after young people admitted to prison was 8.1%; a low percentage, but still higher than that of the general population (3%). In this area, as also occurs with the general population, we found that the prison population was basically male, and there were no differences according to nationality; a fact that challenges widely held preconceptions. On the other hand, more former looked-after girls were admitted to centres for people with disabilities than boys, and no differences were found between those who were foreign born, confirming the hypothesis that the most resilient tend to migrate ([Raghallaigh & Gilligan, 2010](#)).

However, when analysing other factors that may have contributed to these results, the type of placement while in care and the need for support

between the ages of 16 and 21 stood out, with significant differences. On the one hand, among those who had been in residential care as children, there were more former looked-after youth whose own children were in care, more who were sent to prison as adults and more admitted to centres for people with disabilities, compared to those who had been in either kinship or non-kin foster care. This finding serves as yet another argument to support the need to promote foster care over residential care ([Llosada-Gistau et al., 2017](#)).

Young people leaving care in Catalonia can receive support from services for care leavers up to the age of 21, especially for housing and financial benefits. Joining is voluntary, and this service is aimed at those with the greatest psychosocial difficulties (family, economic, health, addictions, etc.). The findings indicated that those who did not need to go to the care leavers' support service or those who did and were able to follow a positive path to independence had more favourable outcomes in the domains studied. In contrast, those who needed the support of the care leavers' service and followed a negative process (were evicted from their flat, lost financial benefit, continued with drug addictions, etc.) were the ones more over-represented in terms of prison admissions, being parents of children in care or being admitted to a centre for people with disabilities. This finding reinforces the role of these services as they are useful for care leavers, observing differences according to the outcome of the socio-educational intervention and the characteristics of the young people. Public policies must continue to support this type of services since they are crucial to support the transition to adulthood, but they also must improve to be more effective with young people who present the most challenges since they are the ones who have obtained the most negative results in our study. That is, for example, with those who have more challenging behaviour, or with a mental health problem or a disability (see [Crous et al., 2020](#)).

Moreover, it should be noted that in the period of time that these young people were in care, it was possible for them to continue living in

Table 5
Overlapping factors in the same individuals.

	No Prison (%)	Yes Prison (%)
No Children in care	92.8	7.2
Yes children in care	83.5	16.5 ^a
No disability centres	95.2	91.3
Yes disability centres	4.8	8.7
	No disability centres	Yes disability centres
No Children in care	95.6	4.4
Yes children in care	87.4	12.6 ^b

^a 10.6% women; 30.8% men.

^b 14.3% men; 11.9% women.

their own family under the legal measures and control of the child protection system. This measure was abolished by Law 14/2010 as it was a catch-all, both for young people who had run away from a home, as well as those who had left and were on probation, and those who had been given a last chance by their parents to change. The results obtained in this study were not favourable for the young people who were under this protection order.

Finally, the years in the child protection system do not provide a clear result and have to be further analysed in future research. One explanation is that many years in the system can be positive for some children (it gives them stability) and negative for others (they do not want to be there or are not well-treated). A few years in the system can also be positive (they can return to their family of origin or be adopted) or negative (when they have run away or have been reunited with their family in a precipitous manner). It is therefore an uninformative variable on its own and should be related to other variables.

In conclusion, with these results we can begin to have figures that show how many children in care will themselves have children placed in care and how many will go to prison when they grow up, providing information regarding adult outcomes and discouraging false beliefs. The majority will not, showing resilience, which should raise the expectations of childcare professionals working with them both inside and outside the protection system and also the expectations of the children and young people themselves, to avoid contributing to self-fulfilling and deterministic prophecies. However, the rate does remain higher than in the general population, and the care system needs to take note of the influencing factors, by reviewing residential care, strengthening family foster care, and improving support services for young care leavers in order to address the diverse situations of vulnerability that the in-care population face. For future research, it will be necessary to further analyse secondary data and extend it to fields such as education, health, and employment, as well as the factors that hinder or facilitate their transition to adulthood.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

- Akin, B. A., Johnson-Motoyama, M., Kepple, N., & Clark, S. L. (2019). Intergenerational transmission of child maltreatment. *Oxford Bibliographies in Social Work*. <https://doi.org/10.1093/OBO/9780195389678-0274>
- Appleyard, K., Berlin, L. J., Rosanbalm, K. D., & Dodge, K. A. (2011). Preventing early child maltreatment: Implications from a longitudinal study of maternal abuse history, substance use problems, and offspring victimization. *Prevention Science*, 12(2), 139–149. <https://doi.org/10.1007/s11211-010-0193-2>

- Barnett, D., Manly, J. T., & Cicchetti, D. (1993). Defining child maltreatment: The interface between policy and research. In D. Cicchetti, & S. L. Toth (Eds.), *Child abuse, child development, and social policy*. *Ablex* (pp. 7–74).
- Belsky, J. (1980). Child maltreatment: An ecological integration. *American Psychologist*, 35(4), 320–335. <https://doi.org/10.1037/0003-066X.35.4.320>
- Brady, E., & Gilligan, R. (2020). The role of agency in shaping the educational journeys of care-experienced adults: Insights from a life course study of education and care. *Children & Society*, 34(2), 121–135. <https://doi.org/10.1111/chso.12361>
- Brännström, L., Forsmana, H., Vinnerljunga, B., & Almqvist, Y. B. (2017). The truly disadvantaged? Midlife outcome dynamics of individuals with experiences of out-of-home care. *Child Abuse & Neglect*, 67, 408–418. <https://doi.org/10.1016/j.chiabu.2016.11.009>
- Cicchetti, D. (2004). An odyssey of discovery: Lessons learned through three decades of research on child maltreatment. *American Psychologist*, 59, 731–741. <https://doi.org/10.1037/0003-066X.59.8.731>
- Cicchetti, D., & Aber, L. A. (1980). Abused children-abusive parents: An overstated case? *Harvard Educational Review*, 50, 244–255.
- Conger, R. D., Schofield, T. J., Neppel, T. K., & Merrick, M. T. (2013). Disrupting intergenerational continuity in harsh and abusive parenting: The importance of a nurturing relationship with a romantic partner. *Journal of Adolescent Health*, 53(4), S11–S17.
- Courtney, M. (2008). Use of secondary data to understand the experiences of care leavers: Cross-national comparisons. In M. Stein, & E. Munro (Eds.), *Young people's transitions from care to adulthood: International research and practice* (pp. 279–288). Jessica Kingsley Publishers.
- Courtney, M. E., Okpych, N. J., Harty, J., Feng, H., Park, S., Powers, J., Nadon, M., Ditto, D. J., & Park, K. (2020). *Findings from the California youth transitions to adulthood study (CalYOUTH): Conditions of youth at age 23*. Chapin Hall at the University of Chicago.
- Crous, G., Montserrat, C., & Balaban, A. (2020). Young people leaving care with intellectual disabilities or mental health problems: Strengths and weaknesses in their transitions. *Social Work and Society*, 18(3), 1–19. <https://ejournals.bib.uni-wuppertal.de/index.php/sws/article/view/680>
- Crous, G., Montserrat, C., Gallart-Mir, J., & Matás, M. (2021). 'In the end you're no longer the kid from the children's home, you're just yourself': Resilience in care leavers over 25. *European Journal of Social Work*, 24(5), 896–909. <https://doi.org/10.1080/13691457.2021.1918063>
- Curtis, G. C. (1963). Violence Breeds violence—perhaps? *American Journal of Psychiatry*, 120. <https://doi.org/10.1176/ajp.120.4.386>, 386–38.
- Cyrulnik, B. (2005). *El amor que nos cura*. Gedisa.
- Del Valle, J. F., Bravo, A., Álvarez, E., & Fernanz, A. (2008). Adult self-sufficiency and social adjustment in care leavers from children's homes: A long term assessment. *Child & Family Social Work*, 13(1), 12–22. <https://doi.org/10.1111/j.1365-2206.2007.00510.x>
- DGAIA. (2022). *Informe estadístic mensual. Direcció General d'Atenció a la Infància i l'Adolescència (DGAIA) Agost 2022. Generalitat de Catalunya*.
- Ertem, I. O., Leventhal, J. M., & Dobbs, S. (2000). Intergenerational continuity of child physical abuse: How good is the evidence? *Lancet*, 356(9232), 814–819. [https://doi.org/10.1016/S0140-6736\(00\)02656-8](https://doi.org/10.1016/S0140-6736(00)02656-8)
- Garbarino, J., & Gilliam, G. (1980). *Understanding abusive families*. Lexington Books.
- Gilligan, R. (2019). Resilience, transitions, and youth leaving care. In V. R. Mann-Feder, & M. Goyette (Eds.), *Leaving care and the transition to adulthood: International contributions to theory, research, and practice* (pp. 15–68). Oxford University Press. <https://doi.org/10.1093/oso/9780190630485.003.0004>
- Kaufman, J., & Zigler, E. (1987). Do abused children become abusive parents? *American Journal of Orthopsychiatry*, 57, 186–192.
- Kempe, R. S., & Kempe, C. H. (1978). *Child abuse*. Fontana.
- Kim, K., Noll, J. G., Putnam, F. W., & Trickett, P. K. (2007). Psychosocial characteristics of nonoffending mothers of sexually abused girls: Findings from a prospective, multigenerational study. *Child Maltreatment*, 12(4), 338–351. <https://doi.org/10.1177/1077559507305997>
- Kim-Spoon, J., Cicchetti, D., & Rogosch, F. A. (2013). A longitudinal study of emotion regulation, emotion lability-negativity, and internalizing symptomatology in maltreated and nonmaltreated children. *Child Development*, 84, 512–527. <https://doi.org/10.1111/j.1467-8624.2012.01857.x>
- Leve, L. D., Khurana, A., & Reich, E. (2015). Intergenerational transmission of maltreatment: A multilevel examination. *Development and Psychopathology*, 27(402), 1429–1442. <https://doi.org/10.1017/S0954579415000851>
- Llosada-Gistau, J., Casas, F., & Montserrat, C. (2017). What matters in the subjective well-being of children in care? *Child Indicators Research*, 10(3), 735–760. <https://doi.org/10.1007/s12187-016-9405-z>
- Madigan, S., Cyr, C., Eirich, R., Fearon, R., Ly, A., Rash, C., ... Alink, L. (2019). Testing the cycle of maltreatment hypothesis: Meta-analytic evidence of the intergenerational transmission of child maltreatment. *Development and Psychopathology*, 31(1), 23–51. <https://doi.org/10.1017/S0954579418001700>
- Narayan, A. J., Ippen, C. G., Harris, W., & Lieberman, A. F. (2019). Protective factors that buffer against the intergenerational transmission of trauma from mothers to young children: A replication study of angels in the nursery. *Development and Psychopathology*, 31(1), 173–187. <https://doi.org/10.1017/s0954579418001530>
- Observatorio de la infancia. (2021). *Boletín de datos estadísticos de medidas de protección a la infancia. Boletín número 23. Datos 2020*. Ministerio de derechos sociales y agenda 2030.
- Raghallaigh, M., & Gilligan, R. (2010). Active survival in the lives of unaccompanied minors: Coping strategies, resilience, and the relevance of religion. *Child & Family Social Work*, 15(2), 226–237. <https://doi.org/10.1111/j.1365-2206.2009.00663.x>

- Renner, L. M., & Slack, K. S. (2006). Intimate partner violence and child maltreatment: Understanding intra- and intergenerational connections. *Child Abuse & Neglect*, 30(6), 599–617. <https://doi.org/10.1016/j.chiabu.2005.12.005>
- Simons, R. L., Whitbeck, L. B., Conger, R. D., & Wu, C. I. (1991). Intergenerational transmission of harsh parenting. *Developmental Psychology*, 27(1), 159–171. <https://doi.org/10.1037//0012-1649.27.1.159>
- Stein, M. (2006). Research review: young people leaving care. *Child and Family Social Work*, 11(3), 273–279. <https://doi.org/10.1111/j.1365-2206.2006.00439.x>
- Thornberry, T. P., Henry, K. L., Smith, C. A., Ireland, T. O., Greenman, S. J., & Lee, R. D. (2013). Breaking the cycle of maltreatment: The role of safe, stable, and nurturing relationships. *Journal of Adolescent Health*, 53, S25–S31. <https://doi.org/10.1016/j.jadohealth.2013.04.019>
- Thornberry, T. P., Knight, K. E., & Lovegrove, P. J. (2012). Does maltreatment beget maltreatment? A systematic review of the intergenerational literature. *Trauma, Violence, & Abuse*, 13(3), 135–152. <https://doi.org/10.1177/1524838012447697>
- Undurraga, C., & Santelices Alvarez, M. P. (2022). Factores protectores de la interrupción de la transmisión intergeneracional del maltrato infantil: Una revisión sistemática. *Terapia Psicológica*, 39(3), 375–392. <https://doi.org/10.4067/S0718-48082021000300375>
- Van Breda, A. D. (2018). A critical review of resilience theory and its relevance for social work. *Social Work*, 54(1), 1–18. <https://doi.org/10.15270/54-1-611>
- Vanistendael, S., & Lecomte, J. (2002). *La felicidad es posible*. Gedisa.
- Widom, C. S. (1989). The cycle of violence. *Science*, 244(4901), 160–166. <https://doi.org/10.1126/science.2704995>
- Widom, C. S., Czaja, S. J., & DuMont, K. A. (2015). Intergenerational transmission of child abuse and neglect: Real or detection bias? *Science*, 347(6229), 1480–1485. <https://doi.org/10.1126/science.1259917>