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The influence of sociodemographic variables and traumatic life events on the alcohol consumption of homeless people in Spain

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Abstract
This article uses the latest Spanish Survey on Homeless People to address whether traumatic experiences, sociodemographic characteristics, and homeless categories are associated with being an abstainer, a risky drinker, or a high-risk drinker. The sample was composed of 3,407 Spanish homeless adults ranging from 18 to 93 years old (M_{age} = 41.30, SD = 13.86). A multinomial logistic regression model was used. Results showed that experiencing childhood problems and demographic factors, such as being male, single, over 50, living in insecure or inadequate housing, and having lived in a shelter for less than three months were associated with alcohol consumption. Likewise, traumatic life events, such as a parent having been in prison, illness, disabilities, and alcohol problems in the family or themselves, are also risk factors in alcohol use. The findings from Spain support that early intervention strategies both disrupt cumulative inequality and empower those at risk of homelessness to develop their skills and improve their wellbeing.

Keywords Homelessness · Alcohol · Traumatic life events, Spain

Introduction

Debates on homelessness increasingly reflect the complex interplay between housing situations and complex life experiences. This paper contributes to these debates through a new analysis of traumatic experiences in one's life and the consumption of alcohol among homeless people in Spain. The findings aim to inform policy on homelessness and enhance service delivery, as well as help shape public health initiatives and strengthen social services for children living in families that are experiencing traumatic life events. The most widely used definition of homelessness in Europe is found in the European Typology of Homelessness and Housing Exclusion (ETHOS) proposed by the European Federation of National Organizations Working with the Homeless (FEANTSA). ETHOS conceptualises homelessness in four main categories: *rooflessness, houselessness, insecure housing* and *inadequate housing* (Amore et al., 2011; Edgar et al., 2001; Feantsa, 2007). In this paper we use rooflessness, houselessness, and a third category of housing exclusion, combining insecure and inadequate housing.

Traumatic life events, homelessness, and alcohol consumption

This study is based on trauma theory that highlights the cumulative nature of traumatic and adverse events (Kubiak, 2005). The definition of trauma can be described as an event that causes acute fear, impotence, horror, and anxiety, such as physical or sexual abuse, combat, and domestic violence (Finkelhor et al., 2007; Kulkarni et al., 2010). Recurrent adverse events and experiences of a nonviolent nature, such as illness, hunger, losing one's job, lack of social support, and losing one's home, are examples of the negative impact

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of cumulative trauma theory (Finkelhor et al., 2007). Previous studies focusing on cumulative traumatic events and distress reveal a dose–response pattern, in which the negative outcome worsens for every added traumatic or distressful event (Kubiak, 2005). Traumatic and adverse events interact in such a way as to increase risk for negative outcomes well beyond the combined effect of simply adding the risks of each traumatic and adverse event together (Parrish et al., 2011). Examining long-term effects of multiple traumas, Felitti et al. (1998) highlighted that childhood difficulties, from sexual abuse to parental divorce, are consequential in their effects on adult well-being decades later (Felitti et al., 1998). These theoretical premises and studies demonstrate how important it is to acknowledge and deal with compound traumatic and distressful events in vulnerable populations. Traumatic experiences may precipitate homelessness and are found to be substantially overrepresented in homeless populations (Koegel et al., 1995), and several studies have found significant associations between each type of childhood adversity and lifetime homelessness (Edalati et al., 2017; Koegel et al., 1995).

This study examines traumatic life events with reference to Cumulative Disadvantage/Advantage (CDA) theory and Cumulative Inequality Theory (CIT). CDA theory refers to a tendency for people to diverge over time from characteristics such as money, health, status, etc. CIT expands CDA in an attempt to focus specific attention on the accumulation of inequality, including varying consequences from similar events or incidents, and how people's lives are altered (Ferraro & Shippee, 2009). The main purpose of CIT is to recognize and comprehend the mechanisms that cause the incongruence of status groups in the course of time. CIT incorporates macro- and micro-sociological data to associate the two levels of analyses. The theory broadened over forty years to acknowledge that experience of disadvantage and inequality affects quality of life among communities, companions, and individuals. The theory is primarily a social scientific way to explain the association of disadvantage and inequality with well-being, biological and health factors, and personal adaptation. A fundamental premise is that "social systems generate inequality, which is manifested over the life course via demographic and developmental processes" (Ferraro & Shippee, 2009, p. 333). However, CIT indicates specifically that risk factors related to disadvantaged situations in fact influence the diverging life paths.

Two important axioms of cumulative inequality theory are: (a) life paths are shaped by a combination of risk, available resources, and human agency; and (b) the perception of life paths influences future trajectories. One of the central features not addressed in CAD but clearly stated in CIT is the important influence that the perception of life paths has on later trajectories. Individuals respond as active subjects in social systems in addition to being dealt advantages or disadvantages (Ferraro & Shippee, 2009). Individuals interpret the assemblage of life experiences to chart their own courses of action. Hence, the way people interpret and respond to early adversity is clearly influenced by human agency. For example, some people may live with serious disadvantages but manage quite well by making good choices, efficiently marshalling resources, or exerting extraordinary effort. This is not to minimise the influence of structural disadvantage but rather acknowledge the significant role played by human agency in dealing with adversity. Therefore, CIT favours the structure-agency debate by recognising how individuals perceive their life paths. Whether surmounting adversity or preserving a favoured status, the importance lies in combining both systemic and agentic processes. Another difference between CAD and CIT is that the latter focuses specifically on the transmission of inequality from one generation to another (Pearlin et al., 2005).

Studies that have investigated the causes of alcohol consumption, including heavy and binge drinking, have shown that the risk of problems related to alcohol consumption tends to be significantly higher for individuals who report traumatic experiences than those who do not. For example, childhood maltreatment is a risk factor for numerous psychiatric disorders, including alcohol use disorder (Fetzner et al., 2011). Both small- and large-scale studies have reported strong positive correlations between alcohol abuse and different types of traumatic experiences. In the United States these experiences include physical abuse in childhood, neglect, verbal abuse, domestic violence, substance abuse and/or mental illness in the home environment, and incarcerated household members (Brady & Back, 2012; Dube et al., 2005; Lee & Chen, 2017; Loudermilk et al., 2018; Pilowsky et al., 2009; Strine et al., 2012) while Canadian studies identified physical abuse (MacMillan et al., 2001) sexual abuse, and exposure to parental domestic violence (Fuller-Thomson et al., 2016) as associated with alcohol misuse. In Australia, experience of sexual abuse has been linked to alcohol issues (Dinwiddie et al., 2000; Nelson et al., 2002), as have neglect, domestic violence, parental separation/divorce and incarcerated household members in the Philippines (Ramiro et al., 2010; Lee & Chen, 2017) found that adults who experienced child abuse were 39% more likely to binge drink compared to adults who had not experienced child abuse; and Loudermilk et al. (2018) argued that there is an increased risk of binge drinking and any drinking among adults who experienced abuse as a child (OR 1.30 and 1.21 respectively).

Pilowsky et al. (2009) pointed out that individuals who experienced two or more adverse childhood events are at increased risk for lifetime alcohol dependence. Similarly, the meta-analysis performed by Hughes et al. (2017) revealed a

heightened risk of several negative health-related outcomes among individuals with at least four traumatic experiences compared with those who had no traumatic experiences. Significant associations were moderate for heavy alcohol use and strong for problematic alcohol use.

While there is an increased risk of alcohol-related problems among both men and women who experience trauma (Dube et al., 2005), some studies suggest that the two genders show different and at times conflicting patterns. Some studies (MacMillan et al., 2001) indicate that the risk of self-reported alcohol-related problems is significantly higher among men who suffered childhood physical abuse and sexual abuse, while other studies show that women were at greater risk (Koegel et al., 1995; Nelson et al., 2002). Another study (Fang & McNeil, 2017) also found that males who had a score of three or more traumatic life events were nearly 1.7 times more likely to binge drink. In the case of women, childhood verbal abuse ("How often did a parent or adult in your home ever swear at you, insult you, or put you down?") correlates with alcohol abuse. For men, being raised by a parent with an addiction problem and experiencing verbal abuse as a child are both associated with heavy and binge drinking.

Not many studies have been published that focus specifically on the homeless population; however, the few that are available suggest that abuse in childhood also predicts harmful use of alcohol and other controlled substances among homeless adults (McQuistion et al., 2014). This is particularly important since the likelihood of homeless people being exposed to these forms of abuse and other trauma is higher compared with the general population (Keane et al., 2015). Focusing on Australian adults with low housing stability (Keane et al., 2015), the authors found that individuals who remembered experiencing childhood violence were significantly more likely to be low-risk or risky drinkers than abstainers, and individuals who remembered experiencing childhood neglect were more likely to be risky drinkers than abstainers. Earlier studies on the Spanish homeless population revealed that homeless people who had experienced over five stressful life events before the age of sixteen were more likely to have an addiction problem at the time of the study (Fajardo-Bullón & Santos, 2013). Moreover, participants with multiple traumatic experiences became homeless at an earlier age than others when they had more serious problems with drugs before entry into supported housing (Spanish Government, 2015). Recent studies have underscored the importance of taking into account additional traumatic experiences that have not been included in previous studies of homeless populations, investigating new associations to increase scientific knowledge and research evidence (Mersky et al., 2017; Radcliff et al., 2019). There is no prior robust analysis of how early traumatic life experiences may combine with rooflessness, houselessness or living in insecure or inadequate housing to influence alcohol consumption patterns among the homelessness population in Spain.

Sociodemographic variables and homelessness as risk factors for alcohol consumption

According to Collins et al. (2021), alcohol use disorder is ten times more widespread among homeless individuals than in the general population (Collins et al., 2021). These authors also highlighted that the likelihood of the homeless population dying from alcohol-related causes is six to ten times higher than that of the general population. A correlation between alcohol abuse and homelessness is also reported by Panadero et al. (2017). Alcohol dependence is associated with multiple health conditions (Fang & McNeil, 2017) and may contribute to higher rates of emergency service use among homeless populations (Holtyn et al., 2017) and prolong the experience of homelessness (Keane et al., 2015).

Alcohol use disorders (AUDs) appear more prevalent amongst the homeless than those with stable housing (Businelle et al., 2020), but research findings vary regarding the connection between alcohol consumption and homelessness (Thompson et al., 2013). Despite there being a clear link between alcohol consumption and homelessness, the direction of this relationship is unclear (Kemp et al., 2006). Some research has shown that substance abuse is a contributing factor to homelessness (Fajardo-Bullón, 2011; Keane et al., 2015; McVicar et al., 2015; Panadero et al., 2017; Vázquez et al., 2019), while other studies show that homelessness may lead to drug use (Fountain et al., 2003; Neale, 2001). This debate is more about whether substance abuse is a cause (the social selection model) or consequence (the social adaptation model) of homelessness (Culhane, 2005; Neale, 2001). Nevertheless, both theories help to understand the connection between homelessness and problematic substance use (Alexander et al., 2022; Fountain et al., 2003; Johnson & Chamberlain, 2008) and there is some consensus that homeless people experience higher levels of substance use than those of the general community (Keane et al., 2015).

In their Australian study, Keane et al. (2015) found that factors linked to alcohol consumption for people with low housing stability included gender, age, and country of birth. There is some comparative evidence that the likelihood of being low-risk or risky drinkers was significantly higher in males than females (Bretherton, 2017) but other studies which report no differences in alcohol consumption between homeless men and women (Neisler et al., 2019). Keane et al's (2015) research in Australia also found that

the likelihood of low-risk or risky drinkers was significantly higher in younger participants than those aged 50 and above; Australians were less likely to be low-risk or risky drinkers than individuals from other countries; individuals who had been homeless in the previous six months were less likely to be risky drinkers than those who had been housed during the same period; and individuals who reported substance abuse in the family history were less likely to be risky drinkers. Given the complexity of findings around traumatic life events, homelessness and alcohol consumption, more research is needed to confirm the nature of associations. In the Spanish context, questions emerge around whether sociodemographic factors, life events and different experiences of homelessness influence alcohol consumption.

The current study

The aim of this study is to examine whether traumatic life events, sociodemographic characteristics, and the category of homeless status are significantly associated with being an abstainer, risky drinker or high-risk drinker within the Spanish homeless population. To the best of our knowledge, this is the first time that such associations have been tested in the Spanish national homeless population, using the 2012 national survey of homeless people in Spain.

Method

Participants and procedure. The 2012 spanish national homelessness survey

In this paper we carried out secondary analysis of data which was collected through the Spanish Survey on Homeless People, the most recent cross-sectional survey of homelessness conducted for the Spanish government (Fajardo-Bullón et al., 2019). The Ministry of Economy, Industry and Competitiveness carried out and funded this survey within the scope of the Spanish Statistical Office (National Institute for Statistics, 2012) and it was administered by the National Statistics Institute. This institute allows researchers from Spain to work within the national open data file to produce complementary analysis (more information can be found at https://www.ine.es).

The territorial scope of the survey included all Spanish municipalities with more than 20,000 people across the whole of Spain. A total of 3,433 homeless adults were interviewed for the survey (M_{age} = 41.30, SD = 13.86). Twenty-six participants who had missing data in at least one variable were removed from the study by the authors, leaving a final population of 3,407 homeless people (78% male and 22% female). Most respondents (58.8%) reported being abstainers, 39.1% were risky drinkers and just 2.3% were high-risk drinkers. A significant majority (84.4%) reported they were single. In terms of homelessness categories, most of the sample (67.8%) were roofless, 20.4% were houseless, and 11.8% were living in housing exclusion (insecure or inadequate housing).

There was no simple framework for the direct selection of the target population due to the nature of homelessness. Therefore, it was necessary to use an indirect sampling method recruiting users of accommodation and catering services targeted to the homeless population in Spain. The Spanish National Statistics Institute criteria for interview were based on the list of homeless service users on a given night, or, where no list was available, interviewees were selected randomly on arrival/departure. The survey method is the established approach for many national homeless data sets, notably in Norway (Dyb, 2017). Only a few countries continuously record data on homelessness. In the UK, for example, local authorities have statutory homelessness duties and record homeless households' sociodemographic characteristics, reasons for homelessness, interventions and outcomes (Anderson et al., 2016) and the influence of differing national data sets on the scope for international comparisons is illustrated in Anderson et al's comparative study of Ireland, Norway and Scotland.

In Spain, the Computer-Assisted Personal Interview (CAPI) was used to collect the survey information. The interview included sociodemographic characteristics, use of service, living conditions, financial situation, health, family ties, and background. It is important to clarify that the questions for the national survey were developed by the Ministry of Economy, Industry and Competitiveness. The authors of this paper did not construct new questions, but rather reanalysed the national database selecting the most relevant factors to address the research questions emerging from the scientific literature review. The national survey offers a unique opportunity to analyse interviews with a substantial proportion of the homeless population and a high absolute number of cases, only possible in a national study overseen by the Government of Spain. The factors analyzed for this study are described below.

Traumatic childhood experiences Participants were asked about their experiences before 18 years of age: problems with violence in the family, if a parent was in prison, if a parent was ill, disabled or suffered a disabling accident, alcohol problems (self or in the family), or lived in an institution. All experiences were assessed on a dichotomous scale (yes or no) except "where living before 18th birthday" with the two options: in an institution or with family/other people. For this paper, the authors clustered different experiences to analyse their influence using multinomial logistic regression

modelling. Recent research indicates the importance of adding new traumatic experiences in childhood that have not been included in previous studies (Radcliff et al., 2019). For example, homelessness, housing insecurity, or other measures of socioeconomic deprivation have been suggested as additional measures of traumatic experiences (Mersky et al., 2017).

Sociodemographic characteristics Several factors were measured: sex, country of birth, highest educational level completed, time in the shelter where the person was interviewed, marital status, age, and total income per month.

Alcohol consumption Homeless people were interviewed about alcohol consumption with the following question: "In reference to the consumption of alcoholic beverages, could you tell me how often and what type of alcoholic drinks you usually consume? Drinks like wine, beer, cava, sherry, cider, and the combinations thereof were coded as low-alcohol drinks. Drinks like anise, brandy, gin, whiskey, rum, and combinations thereof were code as high-alcohol drinks. Following the approach used to analyse self-rated health of the Spanish homeless population (Fajardo-Bullón et al., 2019, p. 5), participants were classified into four categories according to their weekly pure alcohol consumption: (1) Light, from 1 to 175 c.c. of pure alcohol/week; (2) Moderate, from 176 to 525 c.c. of pure alcohol/week; (3) High, from 526 to 700 c.c. of pure alcohol/week; and (4) Excessive, over 700 c.c. of pure alcohol/week. The authors used responses to these questions in order to categorize participants according to their levels of alcohol risk, as in the 2015 study discussed above (Keane et al., 2015): (1) Abstainers (non-drinkers); (2) Risky drinkers (light and moderate); and (3) High-risk drinkers (high and excessive).

Homelessness status In the Spanish survey, the sample participants are aged 18 years or older, and had used an accommodation and/or day centre, during the week prior to that of the interview. In municipalities with more than 20,000 inhabitants, at least one night had been spent by participants in one of the following places: a hostel, a residence, a shelter, a domestic violence shelter, a centre for refugees, a centre for asylum-seekers, a flat provided by a public administration, an NGO or institution, an occupied flat, a guest house paid by a public administration, a public space (train, bus or metro station, parking lot, public garden, open space, etc.) or a semi-public space (entrance of a building, cave, car, etc.). In this paper, by means of the ETHOS typology, homeless status was divided into four categories: (1) Roofless (people living rough); (2) Houseless (people in emergency accommodation, people in accommodation for the homeless, people in women's shelters, people in accommodation for immigrants, people due to be released from institutions, people receiving longer-term support); (3) Insecure housing (people living in insecure accommodation, people living under threat of violence, people living under threat of eviction); and (4) Inadequate housing (people living in temporary/non-conventional structures, people living in unfit housing, people living in extreme over-crowding). In order to homogenize the groups, the 3rd and 4th categories were combined.

Data analysis

The relationships between the explanatory (predictor) and response variables were examined using multinomial logistic regression modelling, a common technique in risk analysis (Hedeker, 2003). While simple linear regression can investigate the relationship between a single predictor and response (dependent) variable, multinomial logistic regression is required when there are several explanatory variables (Bayaga, 2010). The response (dependent) variable may be a numerical value or a binary response (one of two possible outcomes, such as alive or dead, success or failure, yes or no (Bayaga, 2010). In this paper, alcohol consumption was modelled as the dependent variable, with abstainers forming the reference category. The independent variables were childhood experiences where 'no' was the reference category for each. In the case of the variable "Where lived before 18th birthday", the option living in an institution was the reference category versus living with family or tutors. Sociodemographic factors and homeless status were modelled as predictor factors.

All the results are reported as adjusted odds ratios (OR) with 95% confidence intervals (CI) and the analyses were conducted using IBM SPSS Statistics 24. The Declaration of Helsinki was followed when conducting the study and ethical approval was received by the Committee of Good Practices of the European Statistical System (ETUCE) under Directive 95/46/Parliament and the European Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data. Individual verbal consent was obtained from all participants for the participation and publication of the survey.

Results

The survey consisted of 3,407 adults aged over 18. Over three fifths of respondents were male. The age demographic of participants was more evenly spread although slightly leaning towards the older age groups. Most respondents were

single. Just over half of the participants reported abstaining from alcohol (58.6%). Most of the respondents reported living with family before the age of 18 years (95.4%), and most achieved primary and secondary level studies (85%).

Recall of traumatic life events and alcohol consumption

The consumption of alcohol as a dependent variable and its relationship with a range of factors mentioned above and shown in Table 1 was analysed using the first multinomial logistic regression model. The likelihood ratio test of the final model against the ones where all the parameter coefficients are 0 (null) show that the final model is outperforming the null ($\chi 2 = 282.2$, $df = 40$, $p < .001$). The correct percentage of the classification table, between the observed and predicted data, according to the model, was 61.2% of global success (the best prognosis being in the abstemious category, with 88.6% success).

The results of Table 1 indicated that homeless individuals who recalled traumatic life events such as a parent in prison (OR = 1.46, 95% CI [1.03, 2.07]) or illness, disability, or accident of a parent (OR = 1.29, 95% CI [1.08, 1.52]) were significantly more likely to be risky drinkers

Table 1 Results of the logistic regression model examining the relationships of childhood experiences and sociodemographic factors with adult alcohol consumption

	Risky versus abstainer	*p*	High-risk versus abstainer	*p*
Sex				
Male	2.14* [1.77, 2.59]	< 0.001	5.94* [2.13, 16.50]	0.001
Female	Reference		Reference	
Country of birth				
Spain	1.01 [0.85, 1.21]	0.875	0.86 [0.50, 1.50]	0.611
Other country	Reference		Reference	
Problems experienced before 18 [a]				
Violence in the family	1.07 [0.86, 1.32]	0.539	1.02 [0.55, 1.88]	0.944
A parent was in prison	1.46* [1.03, 2.07]	0.032	1.31 [0.48, 3.54]	0.593
Illness, disability, or accident of parent	1.29* [1.08, 1.52]	0.004	1.55 [0.93, 2.57]	0.091
Alcohol problems in the family or themselves	0.96 [0.78, 1.17]	0.694	3.29* [1.92, 5.63]	< 0.001
Lived before age 18				
With family/other people	0.88 [0.63, 1.24]	0.480	0.84 [0.29, 2.44]	0.742
In an institution	Reference		Reference	
Highest educational level completed				
No studies	0.71 [0.47, 1.08]	0.113	0.98 [0.25, 3.95]	0.983
Primary studies	0.88 [0.88, 0.68]	0.390	1.022 [0.42, 2.48]	0.961
Secondary studies	0.95 [0.75, 1.21]	0.706	1.06 [0.48, 2.34]	0.887
College or university studies	Reference		Reference	
Time in the shelter				
< Three months	1.56* [1.34, 1.80]	< 0.001	1.62* [1.01, 4.88]	0.047
≥ Three months	Reference		Reference	
Marital status				
Single	1.28* [1.04, 1.58]	0.018	2.06 [0.87, 4.7]	0.101
With partner	Reference		Reference	
Homeless status				
Roofless	0.61* [0.49, 0.77]	< 0.001	0.32* [0.19, 0.55]	< 0.001
Houseless	0.48* [0.37, 0.64]	< 0.001	0.01* [0.03, 0.29]	< 0.001
Insecure or inadequate housing	Reference		Reference	
Age				
18–29	0.95 [0.76, 1.20]	0.703	0.20* [0.66, 0.61]	0.005
30–39	0.96 [0.76, 1.20]	0.713	0.65 [0.33, 1.31]	0.230
40–49	0.99 [0.81, 1.21]	0.939	0.96 [0.55, 1.68]	0.891
≥ 50	Reference		Reference	
Income per month				
0-199 euros	1.14 [0.87, 1.51]	0.325	2.43 [0.71, 8.31]	0.154
200–399 euros	1.23 [0,91, 1.67]	0.176	1.96 [0,52, 7.30]	0.317
400–599 euros	1.51* [1.12, 2.03]	0.006	2.82 [0.80, 9.93]	0.106
≥ 600 euros	Reference		Reference	

Abstainer is the reference category. Results are reported as odds ratios, with 95% confidence intervals shown in parentheses. *$p < .05$. [a]Reference category is 'no'.

than to be abstainers. Individuals who recalled alcohol problems (themselves or in the family) were more likely to be high-risk (OR = 3.29, 95% CI [1.92, 5.63]) drinkers than abstainers.

In addition, males were significantly more likely than females to be risky (OR = 2.14, 95% CI [1.77, 2.59]) or high-risk (OR = 5.94, 95% CI [2.13, 16.50]) drinkers than abstainers. People who had been living in the shelter less than three months were significantly more likely than people living in the shelter three months or more to be risky (OR = 1.56, 95% CI [1.34, 1.81]) or high-risk (OR = 1.61, 95% CI [1.01, 2.62]) drinkers than abstainers. Single individuals were significantly more likely than people with a partner to be risky (OR = 1.28, 95% CI [1.04, 1.58]) drinkers than abstainers. Individuals in roofless (OR = 0.61, 95% CI [0.49, 0.77]) and houseless situations (OR = 0.48, 95%, CI [0.37, 0.64]) were significantly less likely than those in insecure or inadequate housing to be risky drinkers than abstainers. In the same way, individuals in roofless (OR = 0.32, 95% CI [0.19, 0.55]) and houseless situations (OR = 0.10, 95% CI [0.03, 0.29]) were significantly less likely than those in insecure or inadequate housing to be high-risk drinkers than abstainers. Individuals aged 18 to 29 were significantly less likely than the older individuals, ≥ 50 (OR = 0.20, 95% CI [0.66, 0.61]), to be high-risk drinkers than abstainers. Lastly, individuals who earn between 400 and 599 euros per month were significantly more likely than individuals who earn more than 600 euros to be risky (OR = 1.51, 95% CI [1.12, 2.03]) drinkers than abstainers.

Discussion

This is the first study to our knowledge that examines the association of traumatic life events, sociodemographic variables, homelessness status, and alcohol consumption in a homeless population representative of the whole of Spain. The purpose of this paper was to explore whether alcohol consumption correlates with traumatic life events, sociodemographic factors, and homelessness categories.

Traumatic life events, homelessness, and alcohol consumption

High alcohol consumption leads to serious public health issues (Fang & McNeil, 2017). In addition, homelessness is a significant public health issue, since individuals experiencing homelessness are more likely than the general population to have chronic physical and mental health conditions (Sleet & Francescutti, 2021; Strehlau et al., 2012). The use of alcohol and other drugs are associated with a higher use of emergency departments with associated health care costs (Macias et al., 2014) and the mortality rate among these individuals is three to five times higher than in the general population (Hwang et al., 2011). Previous studies on the Spanish homelessness population suggested that alcohol-related problems preceded homelessness (Panadero et al., 2017; Roca et al., 2019). Alcohol use among homeless people can also contribute to noncompliance with treatment interventions, increase the burden of medical and psychiatric conditions and increase all-cause mortality (Fajardo-Bullón et al., 2019). Therefore, understanding the factors that can contribute to alcohol abuse and its association with homelessness is vital, especially in a European context.

Our results showed that individuals who experienced alcohol problems (themselves or in the family) before the age of 18 were more likely to be high-risk drinkers than to be abstainers, as might be expected from the intergenerational transmission of inequality (CIT), a vital element of how inequality is generated (Ferraro & Shippee, 2009). Our results confirm the modelling pattern of exposure to alcohol abuse in childhood and later abuse in adulthood (Dube et al., 2005), in this case for the Spanish homeless population. The results of the present study reinforce those other studies that show that trauma in early life also contributes to harmful use of alcohol and other illicit substances in adulthood (Alexander et al., 2022; McMorris et al., 2002; McQuistion et al., 2014). The results also concur with studies of the general population where those who experienced different forms of violence between parents in their childhood were 1.24 times more susceptible to dangerous alcohol levels in their midlife (Leung et al., 2016). The Spanish findings add to the evidence that the home situation in childhood is an important long-term factor contributing to the onset and persistence of homelessness and how inequality can be transmitted across generations (Ferraro & Shippee, 2009; Hills et al., 2010, 2019). In other words, homelessness is not randomly distributed across the population, but rather the odds of experiencing it are systematically structured around a set of identifiable individual, social and structural factors, most of which, it should be emphasized, are outside the control of those directly affected (Bramley & Fitzpatrick, 2018). Detecting and addressing adverse childhood experiences is therefore a fundamental component of avoiding homelessness and alcohol difficulties in adulthood (Bramley & Fitzpatrick, 2018). Given the correlation between serious mental health issues and substance abuse and homelessness, upstream preventative measures could also be cost-effective.

Sociodemographic variables and homelessness as risk factors for alcohol consumption

The analysis for Spain also indicated that being male, over 50, living in insecure or inadequate housing (in contrast to living in the street or shelters), and having lived in a shelter for less than three months all increased the probability of being a high-risk drinker rather than an abstainer. These results are consistent with previous studies regarding gender (Bretherton, 2017; Calvo et al., 2022; Keane et al., 2015; Rodriguez-Moreno et al., 2021); but not other factors, since Keane et al. (2015) found that the likelihood of younger participants to be risky drinkers was higher. Our results do not show associations between alcohol consumption and any age range, except for older than 50, where there is a greater likelihood of being a high-risk drinker in comparison to the youngest homeless (18–29 years). This data is consistent with previous studies on the Spanish homeless population (Calvo et al., 2022). This may be explained by the fact that older homeless adults are more likely to recognize their alcohol consumption than the younger group (Brown & Steinman, 2013). In contrast, previous research discovered that the likelihood of being a risky drinker was higher among young homelessness participants, which may indicate some learning for prevention with increasing age (Keane et al., 2015; Opalach et al., 2016). Results from the general population also showed that when age increased, the level of alcohol consumed declined (Leung et al., 2016). Additional studies focused on age and alcohol consumption among homeless people may be needed.

On the other hand, the results of the present paper show that living in insecure or inadequate housing implies a greater likelihood of being a risky drinker than those who are roofless and houseless. These results are consistent with previous studies in the Australian population where individuals who had been homeless in the previous six months were less likely to be risky drinkers than those who were not homeless (Keane et al., 2015). In the case of roofless people, the lower risk may be due to a lack of financial resources to spend on alcohol. In the case of the houseless group, it is important to note that most hostels in Spain are restricted from drinking alcohol (Panadero et al., 2017). However, it has also been shown that alcohol can be a way of coping with difficult life situations (Fajardo-Bullón et al., 2019), as can drug use (Dickson-Gomez et al., 2017) and so further research could usefully explore drivers behind these patterns in different contexts.

As previously mentioned in the introduction, the purpose of CIT is to acknowledge the importance of people's capacity to make choices within social systems. People do not merely undergo social reality, but actively scrutinize, interpret, and attempt to change their social reality (Blumer, 1969). The overall consensus of previous research is that homelessness is a result of a combination of structural, institutional, personal, and relationship factors; consequently, focusing simply on structural and institutional factors can be considered reductionist.

Undoubtedly, structural or institutional circumstances are influential. Sociological studies have demonstrated that life chances are limited by structurally generated disadvantages (Hills et al., 2010). The long-term impact of disadvantages in childhood has been widely documented from an array of life experiences. This includes a cumulative effect where one risk factor increases the likelihood of another and also indirectly increases the risk of homelessness (Grey et al., 2019; Moss & Singh, 2016).

However, the experience of homelessness also reflects personal characteristics that influence the ways in which people will be most vulnerable. While people's lives are shaped by structural factors, they also understand their social environment and how they fit in, and so can make informed choices within constraints. This process consists of interpreting the past and looking to shape the future. Whilst one person may have a negative outlook regarding their condition, another person in the same situation may feel more in control. Different people in similar life conditions will also be different in their receptiveness to resource activation. One person might quickly latch onto social networks and make use of assistance, while another may downplay or underrate the effectiveness of easily available or latent resources.

Individuals who are homeless or at risk of homelessness equally experience wider structural constraints and demonstrate diverse agency responses. Some active life decisions may reflect social selection or social adaptation models of alcohol consumption; some people may not be able to interpret or cope with stressful life events, while others may consume alcohol precisely to help themselves cope (Opalach et al., 2016). People's perceptions of a situation may be crucial to a purposeful resilient response. Therefore, interventions for tackling homelessness should not focus exclusively on the sociologically led structural or institutional levels, such as social programmes for minors, Housing First approach for adults and the importance of economic resources. Evidence based on a psychological perspective should also guide interventions, acknowledging that improving personal/psychological characteristics can help people to develop skills to better cope with stressful life challenges, make more effective decisions, and develop greater resilience. The new homelessness orthodoxy, as explained by Pleace (Pleace, 2016), recognised that the structural drivers of homelessness were more apparent when individuals lacked the personal capacity to overcome disadvantage or had inadequate access to support mechanisms that could

give rise to change. Findings from this new analysis in the Spanish context indicate the need to provide opportunities to empower people experiencing, or at risk of, homelessness to challenge (halt or reverse) the cumulation of disadvantages or traumatic life events and improve their life course by integrating support from both the individual and the social world.

Limitations

Some strengths and limitations of the Spanish Survey on Homeless People should be considered when interpreting the results of our analysis. The survey is based on respondent self-reporting, and therefore the subjectivity of individuals' perceptions could affect the results. Nonetheless, this is recognised as the most useful methodology in national surveys (Yergens et al., 2017). It is noted that alcohol consumption was restricted in some shelters, so some consumption may be hidden or under-reported. Reporting of traumatic experiences was limited by retrospective assessment (McKinney et al., 2009), possibly reducing the associations between adverse childhood experiences and alcohol consumption behavior (Keane et al., 2015); but again questionnaire surveys are commonly used to obtain this past information. There was no validated scale in the original survey to evaluate the traumatic experiences, nor did it include detailed questions on gender or cultural and ethnic background. All survey questions were generated by the Spanish Ministry of Economy, Industry and Competitiveness and could therefore not be extended or modified. Data is from 2012, which means that the nature of the homeless population may have changed since then, and there are still some factors that cannot be assessed by this type of secondary analysis. Notwithstanding these limitations, the core strength of the data is the large-scale national sample, with broad geographic coverage, and a robust technical methodology. The findings add to prior evidence from large-scale statistical analysis and administrative data sets which has been shown to make a significant contribution to a better understanding of European homelessness (Pleace, 2016).

Conclusions: theoretical and practical implications

This paper presents an original analysis of a variety of factors in a multinomial logistic regression modelling using the Spanish national homeless survey data (in contrast to studies that have used local samples or data). Therefore, theoretically, it provides robust new information showing that some traumatic life events in childhood increase the use of alcohol in adulthood. The Spanish data reinforces research on associated trauma, substance use, and persistent homelessness, all of which marked these experiences as predictors of recent emotional suffering (Ibabe et al., 2014).

This study also underlines the usefulness of cumulative advantage/disadvantage theories in analyzing the complex interplay of factors associated with homelessness. Early experiences and events affect life trajectories, and the combination of these events lead to cumulative inequality. Cumulative Inequality (CI) theories affirm that systemic forces build up across the life course (e.g., traumatic life events) as people age, leading to inferior outcomes such poorer health and housing insecurity (Ferraro & Shippee, 2009). From a life course perspective, the findings contribute to the case for more effective early interventions and more rigorous evaluation of how these processes of cumulative disadvantage generate and sustain homelessness and housing exclusion linked to early traumatic life events.

Practically, the findings underscore the need to develop and strengthen preventative public health policies that could influence early traumatic life events to curtail alcohol consumption in adulthood. Other studies have pinpointed the relevance of assessing trauma among patients with alcohol use disorders and the positive benefits associated with the application of integrative psychosocial interventions that target both trauma-related symptoms and alcohol dependence (Brady & Back, 2012). Our findings also suggest the need to provide greater support for children in families facing housing instability, and where dangerous alcohol use is a serious problem (concurring with Keane et al. (2015). Life chances are also significantly affected by housing instability, indicating a need for more than temporary housing assistance or financial support (Baptista, 2016; Gultekin & Brush, 2017). The national survey of homeless people in Spain not only represented a substantial step forward in robustly documenting the nature of homelessness within the country, but through secondary data analysis has also added to the international evidence on the ways in which traumatic experiences in early life are associated with adult alcohol consumption within homeless populations and in different homelessness situations.

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Availability of data and materials The data that support the findings of this study are available from the corresponding author upon reasonable request.

Declarations

Conflict of interest The authors report no conflicts of interest.

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