Childhood with a relative’s excessive alcohol use, and own drinking in adult years

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Abstract

Objective: The aim of this study was to investigate if individuals who had been brought up by relatives (e.g. parents, siblings and grandparents) who consumed excessive alcohol affected these individuals’ own alcohol use in their adult years. The participants in the study were also asked about their alcohol consumption in the past 12 months, and abstainers were asked about their reasons for choosing to live their lives without consuming alcohol. Method: A quantitative approach was used. Data collected from the Icelandic RARHA SEAS were used in this study. A panel of 2500 respondents in the age range of 18–65 years was randomly sampled and was intended to be adequately representative of the Icelandic population. There was a 34.9% response rate (n=873). Results: Of the 873 source of this study, 26.6% (n=211) categorised as Group A had lived with relatives who excessively consumed alcohol, and this had negatively affected them in their childhood. In their adult years, Group A seemed to be more frequently intoxicated than the control group, Group B (n=659). They also experienced more negative consequences from their alcohol consumption. Group A was likely to consume alcohol to deal with difficult feelings such as depression, and they were also more likely to abstain than Group B. Conclusions: The childhood experience of living with relatives who excessively use alcohol does not impact everyone in the same way in their adult years. Some of them are more likely to use excessive alcohol as adults without relating it to their childhood experience of relatives excessively using alcohol.

Keywords
Alcohol use, abstinence, adult years, childhood, intoxication

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The family is the primary source for children to form attachment to others through nurturing, socialisation, and developing their own values and attitudes with their parents and other relatives around them. Excessive use of alcohol or other substance by relatives can harm children mentally, physically, and socially. It can also increase the risk of these children using alcohol and other substances in their adult years (Lander et al., 2013). Research has shown that excessive alcohol drinking not only affects the individuals who drink, but also has an effect on the whole family and other relatives (Ólafsdóttir et al., 2018; Ólafsdóttir et al., 2020).

This study investigates whether the patterns of alcohol use for the individuals in their adult years were somehow linked to their childhood experiences of excessive alcohol use by their relatives (childhood and teenage years will be referred to as childhood in this article). Furthermore, the individuals were asked about their own alcohol consumption in the past 12 months. Abstainers were asked why they had chosen to live their lives without drinking in order for us to understand whether this was related to their negative childhood experiences of their relatives’ excessive alcohol use.

Studies have shown that not all children who are brought up by relatives consuming alcohol experience negative effects in their childhood, which can be explained by the presence of one or more protective factors in the environment. These may include older siblings, the extended family, and the alternative structure provided by school. Some children are more vulnerable than others to the difficult situations that can arise in the family environment and threaten their well-being mentally, physically, and socially (Larkin et al., 2012; Park & Schepp, 2015). Studies have also pointed out that some children living with relatives who excessively use alcohol can develop resilience to cope with difficult situations that follow in their adult years (Park & Schepp, 2015; Velleman & Templeton, 2007). Children who grow up living with relatives affected by a substance use disorder (SUD) are at greater risk of being neglected and often witness violence within their family. They may themselves be victims of mental, physical, or sexual violence (Johnson & Stone, 2009; Lander et al., 2013; Solis et al., 2012; Sunday et al., 2011; Velleman & Templeton, 2007). Children can experience psychological violence through negative comments, indifference toward the child, lack of encouragement or support, and minimal intimacy (Johnson & Stone, 2009). Studies have shown that children who grow up in such circumstances may experience anxiety, fear, guilt, anger, and low self-esteem, which can manifest in their adult years (Ólafsdóttir et al., 2018; Velleman & Templeton, 2007; Velleman et al., 2008).

Being brought up by a relative with SUD and witnessing or being subjected to violence can cause great stress to a child (Ólafsdóttir et al., 2020). The term stress is used to describe the negative aspects experienced by children living in such circumstances. The stress of living with a parent’s excessive alcohol use, or that of another relative, can result in both short-term and long-term harm to the individual (Anderson & Baumberg, 2006; Johnson & Stone, 2009; Larkin et al., 2012; Velleman et al., 2008). This may manifest itself as emotional distress to the child, who may start to misuse alcohol or other drugs as he or she grows up and gains access to these substances (Campbell, 2002; Park & Schepp, 2015; Velleman et al., 2008). Research has shown that not all individuals who have been brought up by relatives excessively using alcohol will consume alcohol themselves in their adult years. Many individuals choose to abstain from alcohol and other substances altogether (Epler et al., 2009).

The extent to which these symptoms manifest themselves in a child who lives with a relative’s SUD may depend on other factors in the home environment. The child’s own inner strength and self-preservation skills can also be protective factors in surviving an
upbringing in an environment with a relative’s excessive alcohol use (Anderson & Baumberg, 2006; Johnson & Stone, 2009; Larkin et al., 2012; Norström, 2002; Velleman & Templeton, 2007; Velleman et al., 2008).

Children and adolescents are affected by the environment they live in, by the upbringing they get, and by hereditary factors. Children who are brought up with the excessive alcohol use of relatives receive messages from their close relatives and community about what constitutes normal behaviour, attitudes, and values. If a child grows up to believe that it is normal to use alcohol or other drugs for pleasure or to relieve stress, he/she can view it as normal behaviour in their adult years (Wodarski, 2010).

Method

In this study, the following questions were used from the dataset of the Reducing Alcohol-Related Harm, Standardised European Alcohol Survey (RARHA SEAS). Nineteen European countries participated in the RARHA SEAS project in 2014–2016 in order to measure different cultures of alcohol use across eastern, western, southern, and northern Europe. The survey addresses traditional cultures of alcohol use – such as beer, wine, and spirit consumption – in the participating countries to shed light on how different alcohol consumption patterns within those cultures can affect lifestyles (RARHA, n.d.). The RARHA SEAS questionnaire measures the following nine categories relating to an individual’s consumption of alcoholic beverages: (1) Culture, (2) Alcohol consumption, (3) Risky one-off consumption, (4) Context of consumption, (5) Unrecorded alcohol supply, (6) Individual harm, (7) Harm from others, (8) Attitudes and (9) Sociodemographics. The answers to most questions were given on a Likert scale or by responding to “Yes” and “No” questions. The questions about harm resulting from other people’s alcohol consumption are considered an important aspect of the dataset. There were also optional questions about which household member was an excessive alcohol user; that is, parent(s), stepparent(s), or sibling(s). In the Icelandic dataset, the participants in this study did not answer these optional questions. Evaluation of the validity and reliability of the RARHA SEAS questionnaire showed that the measurement was relevant. Possible negative effects such as excessive alcohol use and the negative psychological and social effect on others were also identified (see further in RARHA, n.d.).

Data collection for the Icelandic RARHA SEAS was conducted in 2015 by the Directorate of Health. A panel of 2,500 respondents was randomly sampled in the age range 18–65 years, which was deemed to be adequately representative of the Icelandic population. Half the sample was drawn from the National Registry of Icelanders, the other half from a Gallup Panel, originally recruited by telephone from the National Registry of Icelanders. The survey was delivered online to a random sample of 2,500 individuals; 873 persons completed the survey, giving a 34.9% response rate. At the data processing stage, the data were weighted by gender, age, and region (RARHA, n.d.). The tables included here have been put together using IBM SPSS Statistics custom tables. Significance tests were created using a comparison of column proportions, with a Bonferroni adjustment to adjust the p-values. In addition, an odds ratio (OR) with a 95% confidence interval (CI) was used to support the p-value. When analysing the Likert scale data, a two-sample t-test was performed giving a p-value, as well as Cohen’s d.

The Icelandic National Bioethics Committee granted permission for this project through Act no. 74/1997 on scientific research in the health sector and Act no. 77/2000 concerning the protection of privacy regarding the processing of personal data (Government of Iceland, n.d.-a-b).
Of the 873 respondents, 442 were men (50.6%) and 431 were women (49.4%). The average age was ≈40 years; the youngest participant was 18 years old and the oldest was 64 years old. Most of the participants were married or lived with a partner (72.9%), while the rest (27.1%) were single or separated. In their household at the time of taking the survey, 48% had individuals under the age of 18 years, whereas 52% did not.

| Table 1. Demographic background of Groups A and B. |
|---------------------------------------------------|
| **Group** | **A** (N = 211) | **Group** | **B** (N = 585) |
| Count | % | Standard Error | Count | % | Standard error | p-value |
| Gender: | | | | | | |
| Male | 103 | 48.3% | 3.4% | 300 | 50.8% | 2.1% | – |
| Female | 111 | 51.7% | 3.4% | 290 | 49.2% | 2.1% | – |
| Marital status: | | | | | | |
| Married | 153 | 72.6% | 3.1% | 426 | 73.1% | 1.8% | – |
| Not married | 58 | 27.4% | 3.1% | 157 | 26.9% | 1.8% | – |
| Children in household: | | | | | | |
| Living with children | 107 | 51.3% | 3.5% | 273 | 47.0% | 2.1% | – |
| Not living with children | 101 | 48.7% | 3.5% | 307 | 53.0% | 2.1% | – |
| Professional status: | | | | | | |
| Professionally active | 169 | 79.0% | 2.8% | 493 | 83.6% | 1.5% | 0.132 |
| Student | 19 | 9.0% | 2.0% | 55 | 9.2% | 1.2% | – |
| Unemployed or temporarily not working | 9 | 4.0% | 1.3% | 9 | 1.5% | 0.5% | 0.029 |
| Retired or unable to work through illness | 14 | 6.4% | 1.7% | 19 | 3.3% | 0.7% | 0.045 |
| Other | 3 | 1.5% | 0.80% | 14 | 2.4% | 0.8% | – |
| Education level: | | | | | | |
| At least tertiary education | 87 | 41.5% | 3.4% | 297 | 51.2% | 2.1% | 0.016 |

Note. There is a slight deviation in N depending on the questions, which can be explained by cases with no answer. Three answers were missing in the grouping variable about living with a relative who excessively used alcohol in childhood, 75 answers were missing concerning marital status, 97 answers were missing regarding professional status and 23 answers missing regarding education status.

**Results**

Of the 873 respondents, 442 were men (50.6%) and 431 were women (49.4%). The average age was ≈40 years; the youngest participant was 18 years old and the oldest was 64 years old. Most of the participants were married or lived with a partner (72.9%), while the rest (27.1%) were single or separated. In their household at the time of taking the survey, 48% had individuals under the age of 18 years, whereas 52% did not.

| Table 2. Negative effects of a relative's excessive alcohol use in childhood by gender (Group A, n = 211). |
|---------------------------------------------------------------|
| **Male** (N = 103) | **Female** (N = 108) |
| Count | % | Standard error | Count | % | Standard error | p-value | OR (95% Int.) |
| “Affected lot” | 62 | 60.5% | 4.8% | 82 | 75.9% | 4.1% | 0.016 | 2.09 (1.15, 3.77) |
| “Affected a little” | 25 | 24.3% | 4.2% | 14 | 13.1% | 3.2% | 0.036 | 0.46 (0.23, 0.95) |
| “Not affected at all” | 16 | 15.2% | 3.5% | 12 | 11.0% | 3.0% | – | 0.87 (0.30, 1.52) |
The educational status of the respondents was as follows: 15.8% primary school, 38% secondary school, 45% university, and 1.2% other education. Most of the respondents were professionally active (81.7%), while 18.3% were not active in the labour market.

**Negative effects of living with a relative’s excessive alcohol use in childhood**

The respondents were asked whether they had experienced living with an alcohol-dependent person during their childhood. Of the 804 individuals who answered the question, 214 or 26.6% (α = 0.05, 23.6% ≤ μ ≤ 29.8%) said “Yes”. These individuals will be referred to as Group A. Those who did not have this experience will be referred to as Group B.

The groups had a similar gender distribution with an approximate equal split between male and female. In both groups, 73% were married, and approximately half lived with children (see Table 1). The average age in Group A was 40 years and in Group B, 41 years. However, there are noticeable differences in the demographic backgrounds of the two groups (see Table 1). Group A seems to be more likely to be unemployed or temporarily not working (p-value: 0.029) and more likely to be retired or unable to work through illness (p-value: 0.045). Evidence also suggests that Group A is less educated, as Group B is more likely to have completed tertiary education (p-value: 0.016).

The 211 participants (103 male and 108 female) in Group A were asked how much they felt to be negatively affected by the experience of having lived with a person’s excessive alcohol use in their childhood. The response options were: (1) Affected a lot, (2) Affected a little, (3) Not affected at all.

Table 2 shows that 75.9% of the female participants and 60.5% of the male participants reported being negatively “affected a lot” by being brought up by relatives who excessively used alcohol. The p-value for the gender comparison in “affected a lot” is 0.016, which means that the females were more likely than the males to experience being “affected a lot”. Furthermore, males were more likely to experience being “affected a little” with a p-value of 0.036 when comparing the difference between the groups.

**Current alcohol consumption related to the individuals’ feelings and social life with respect to childhood conditions**

The respondents were asked about their current alcohol consumption, and, when comparing Groups A and B, there does seem to be a difference. Respondents in Group A were more likely to state they abstained from alcohol consumption than Group B. However, comparison of the groups yields
a $p$-value of 0.059, which is not significant with a 95% significance level. Due to the $p$-value being close to the required significance level, there is a potential for type II error, which is when there is a mistaken acceptance of the null hypothesis.

A closer look at Group A according to the degree to which their childhood conditions affected them, suggests a noticeable difference in the alcohol consumption of the “not affected” individuals compared to those who were “affected a lot” and Group B (see Table 3). Thus, those who were “not affected” are isolated from Group A, as their behaviour is noticeably different. However, there did not seem to be much of a difference in the behaviour of respondents who felt they were “affected a lot” or “affected a little”. Therefore, the degree to which they experience being affected does not seem to be relevant. This might be due to the individuals’ sense of what is “a lot” and “a little”, these being subjective terms. For the interpretation of the responses, this difference will be disregarded, and the individuals will be compared on the basis of “affected” and “not affected”. The respondents who experienced excessive alcohol use by relatives during their childhood but did not experience being affected are called Group A.2 ($n = 27$) in Table 3, and

Table 4. Excessive alcohol use indicators grouped with childhood conditions and separated into the degree of affect.

|                  | Group A.1 ($N = 121$) |           | Group A.2 ($N = 22$) |           | Group B ($N = 458$) |          |
|------------------|-----------------------|-----------|----------------------|-----------|-------------------|----------|
|                  | Count | %       | Standard error | Count | %       | Standard error | Count | %       | Standard error |
| Feeling guilty   | 55    | 46.9%   | 4.6%         | 12    | 55.8%   | 10.6%         | 156    | 34.0%   | 2.2%          |
| Blacking out     | 31    | 25.2%   | 3.9%         | 9     | 42.3%   | 10.5%         | 100    | 21.6%   | 1.9%          |
| Failing to do what was normally expected | 24 | 19.9% | 3.6% | 6 | 25.4% | 9.3% | 53 | 11.6% | 1.5% |
| Having a drink in the morning | 8 | 6.2% | 2.2% | 3 | 12.3% | 7.0% | 37 | 8.0% | 1.3% |

|                  | Group A.1 & A.2 | Group A.1 & B | Group A.2 & A.2 | Group B A.1 & B | Group B A.2 & B |
|------------------|-----------------|---------------|-----------------|-----------------|-----------------|
| Feeling guilty   | $p$-value       | 0.03          | 0.11            | 0.69            | (0.28, 1.73)    | 1.61          | 0.81             | 2.32            | (0.98, 5.5)    |
| Blacking out     | $p$-value       |               | 0.071           | 0.50            | (0.19, 1.28)    | 1.23          | 1.03             | 2.48            | (1.03, 5.97)  |
| Failing to do what was normally expected | $p$-value       | 0.054          | 0.163           | 0.66            | (0.23, 1.87)    | 1.89          | 1.07             | 2.87            | (1.07, 7.64)  |
| Having a drink in the morning | $p$-value       |               |               | 0.45            | (0.11, 1.84)    | 0.81          | 0.36             | 1.80            | (0.51, 6.35)  |

Note: Those who drank to excess six or fewer times per year did not answer these questions and are, therefore, not included. Excluded $p$-values are not statistically significant as shown by the OR.
those who experienced being “affected a lot” or “affected a little” are assigned to Group A.1 (n = 182). The sample of Group A.2 is quite small (n = 27), and the results from the following tables must be interpreted with caution. The results might, however, provide evidence that this group needs to be studied further. Those in Group A.2 seem to be less likely to abstain from alcohol consumption and seem to drink to intoxication considerably more often than Group A.1 and Group B. In Group A.2, only one respondent (5.3%) abstained from alcohol compared to 16.7% in Group A.1 and 9.7% in Group B. This might indicate more frequent alcohol consumption in Group A.2. When comparing Group A.1 and Group B, the data show that participants in Group A.1 are more likely to abstain from alcohol than those in Group B (p-value: 0.03).

When asked how often they became intoxicated due to alcohol consumption, Group A.2 reported intoxication at least once a week in 12.4% of cases, while the corresponding percentages for Group A.1 and Group B were 0.4% and 2.1%, respectively. There seems to be no difference between Group A.1 and Group B when it comes to intoxication. The difference observed in Group A.2 needs to be investigated further, either through a larger Icelandic sample or by examining whether similar differences can be found in other countries in the same study. The observations from that group cannot be validated statistically, because only a handful of individuals fit into the group. Therefore, more research is needed to explore the behaviour of that group.

Participants in this study who reported a frequency of intoxication of more than six times a year were asked a series of questions to indicate excessive alcohol use (see Table 4). When asked whether they felt guilt or remorse after alcohol use, 55.8% of Group A.2 reported “Yes” compared to 46.9% of Group A.1 and 34% of Group B. The difference between Group A.1 and Group B gives a p-value of 0.03, which shows that Group A.1 is more likely to feel guilty after alcohol use than Group B. In the question concerning experiencing a blackout, participants were asked whether they had been told they had said or done something while consuming alcohol that they did not remember: 42.3% of Group A.2 reported “Yes”, compared to 25.2% of Group A.1 and 21.6% of Group B. The difference between Group A.2 and Group B gives a p-value of 0.071. Due to a small sample in Group A.2, this could be a type II error. When asked if they had failed to do what was normally expected of them, 25.4% of Group A.2 reported “Yes”, compared to 19.9% in Group A.1 and 11.6% in Group B. In the last question, they were asked whether they had had a drink in the morning when they first got up: 12.3% of Group A.2 reported being likely to do so compared to 6.2% in Group A.1 and 8.0% in Group B. However, for this last question, the data did not show a significant difference.

The individuals who participated in this study were asked to rate the extent to which they related to a number of statements regarding the reasons behind both their alcohol consumption and why they decided to abstain from alcohol. The statements concerning their alcohol consumption can be categorised into two distinct groups. First, questions related to alcohol consumption in social situations, such as “I drink because it improves parties” and “I drink to fit in with the group”. Second, there were questions about the feelings the individuals were trying to achieve or suppress by alcohol consumption, such as “I drink because I like the feeling” and “I drink because it helps me when I feel depressed”. The statements were made one at a time about how often they drank for a particular reason, and the participants were given five response options on a Likert scale, ranging from “Never” to “Always”. The results were weighted on a scale of 1 to 5: “Never” = 1, “Rarely” = 2, “About half the time” = 3, “Most of the time” = 4 and “Always” = 5. Therefore, the mean value can range from 1 (no one in the group felt they drank for that
Table 5. Statements regarding alcohol consumption that relate to the feelings and social life of participants.

|                                | Group A.1 (N = 184) | Group A.2 (N = 27) | Group B (N = 659) |
|--------------------------------|----------------------|--------------------|--------------------|
|                                | Mean | Standard error | Mean | Standard error | Mean | Standard error |
| I consume alcohol because I like the feeling | 2.71 | 0.11 | 3.11 | 0.30 | 2.79 | 0.06 |
| I consume alcohol because it helps me when I feel depressed | 1.46 | 0.07 | 1.23 | 0.09 | 1.26 | 0.03 |
| I consume alcohol to forget about everything | 1.16 | 0.05 | 1.00 | 0.00 | 1.13 | 0.02 |
| I consume alcohol because it improves parties | 3.20 | 0.11 | 2.73 | 0.26 | 3.20 | 0.06 |
| I consume alcohol because it is fun | 3.53 | 0.10 | 3.12 | 0.29 | 3.52 | 0.05 |
| I consume alcohol to fit in with the group | 1.44 | 0.07 | 1.29 | 0.16 | 1.36 | 0.03 |
| I consume alcohol so I do not feel left out | 1.29 | 0.05 | 1.11 | 0.06 | 1.23 | 0.03 |

|                                | A.1 & A.2 | A.1 & B | A.2 & B |
|                                | p-value | Cohen’s d | p-value | Cohen’s d | p-value | Cohen’s d |
| I consume alcohol because I like the feeling | 0.189 | −0.284 | 0.550 | −0.055 | 0.272 | 0.224 |
| I consume alcohol because it helps me when I feel depressed | 0.200 | 0.276 | 0.010 | 0.278 | 0.830 | −0.044 |
| I consume alcohol to | 0.001 | 0.307 | 0.508 | 0.061 | 0.000 | −0.249 |

(continued)
reason) to 5 (where everyone in the relevant group always drank for that particular reason). The groups were then compared using a t-test giving a $p$-value and Cohen’s $d$ for each comparison. The results are presented in Table 5.

The participants in Group A.2 did not find that alcohol consumption helped when they felt depressed or helped them forget about everything, while these were the experiences that Group A.1 was more likely to relate to. Group A.1 was significantly more likely than Group B to consume alcohol to help when they felt depressed, with a $p$-value of 0.01. Both groups A.1 and B seemed to be more likely than group A.2 to drink to forget everything, with a $p$-value of $< 0.01$. However, there was no variation in the data for group A.2, resulting in 0.00 standard deviation, which makes the validity of such significant values doubtful.

When asked whether they drank to enhance their social life, Group A.1 and Group B showed almost identical results. However, Group A.2 was less likely to relate to these statements. The difference was mostly displayed in absolute terms. The only significant difference was that A.1 was more likely than Group A.2 to drink in order not to feel left out, with a $p$-value of 0.035.

**Reasons why the participants in this study chose to abstain from alcohol**

Those who abstained from alcohol consumption were asked to respond to various statements regarding the reason for their abstinence (see Table 6). The answers were either “Yes” or “No”, and the respondents are grouped into Group A and Group B according to their childhood conditions. There were not enough respondents from Group A.2 to justify separating them from Group A. Thus, in the analysis of the following data, the participants in this study are

| Reason                                | Group A.1 Mean | Group A.2 Mean | Group B Mean |
|---------------------------------------|----------------|----------------|-------------|
| Forget about everything               | 0.091          | 0.979          | 0.065       |
| Consume alcohol because it improves parties | 0.136          | 0.927          | 0.181       |
| Consume alcohol because it is fun    | 0.414          | 0.313          | 0.630       |
| Consume alcohol to fit in with the group | 0.035          | 0.295          | 0.098       |

Note. Abstainers did not answer the questions and are, therefore, excluded from the data. Values are as follows on the Likert scale: 1 = never, 2 = rarely, 3 = about half of the time, 4 = most of the time, 5 = always.
grouped solely based on their childhood conditions into Group A and Group B, as in Table 2.

Both Groups A and B reported a similar view towards fundamental issues such as alcohol consumption being a waste of time, being bad for their health, and not liking the effect alcohol had on them. When the statements related more to other people’s impact on their decision, the respondents in Group A were more likely to answer “Yes”. When asked about their reasons for not consuming alcohol, the statement “I have seen bad examples of what alcohol can do” was relevant for 97.8% of Group A compared to 82.4% of Group B. The difference had a p-value of 0.03 when comparing the groups. Group A was more

| Reason for Abstaining | Group A Count | % (N = 31) | Standard error | Group B Count | % (N = 59) | Standard error | p-value | OR (95%) |
|-----------------------|---------------|------------|----------------|---------------|------------|----------------|---------|---------|
| I have seen bad examples of what alcohol could do | 32 | 97.8% | 2.6% | 49 | 82.4% | 4.9% | 0.03 | 12.41 (1.58, 97.32) |
| I was brought up not to consume alcohol | 2 | 6.8% | 4.5% | 16 | 28.2% | 5.9% | 0.016 | 0.18 (0.04, 0.82) |
| Consuming alcohol is a waste of money | 18 | 60.8% | 8.9% | 40 | 68.1% | 6.1% | 0.71 | 0.29, 1.77 |
| Consuming alcohol is bad for your health | 32 | 97.8% | 2.6% | 52 | 86.7% | 4.4% | 0.08 | 4.92 (0.59, 41.22) |
| I have been hurt by someone else’s alcohol consumption | 18 | 58.5% | 8.8% | 10 | 16.4% | 4.8% | 0.000 | 6.78 (2.53, 18.18) |
| Consuming alcohol would have a bad effect on my activities | 27 | 92.5% | 4.9% | 34 | 68.5% | 6.6% | 0.014 | 6.35 (1.34, 30.06) |
| I am afraid I would have problems with alcohol or be an alcohol dependent if I drank | 18 | 61.0% | 8.9% | 20 | 35.5% | 6.5% | 0.024 | 2.70 (1.08, 6.72) |
| Previously, my alcohol consumption has already harmed my life | 20 | 60.0% | 8.5% | 14 | 24.7% | 5.6% | 0.001 | 4.84 (1.92, 12.15) |
likely to relate to the statement “I have been hurt by someone else’s alcohol consumption”, with 58.5% relating to this compared to only 16.4% for Group A. A hypothesis testing the difference between the two groups gives a p-value of < 0.001. Therefore, it can be stated with confidence that Group A is more likely not to drink for that reason. Group A was also more likely to answer “Yes” to statements relating to not being able to handle alcohol consumption. First, they were more likely to be afraid of having problems with alcohol or becoming alcoholics: 61% of participants in Group A answered “Yes” compared to 35.5% in Group B. The difference between the two groups has a p-value of 0.024, so Group A is more likely to be afraid of becoming alcohol-dependent. Second, 60% of participants in Group A reported that their former alcohol consumption had already had a negative effect on their lives and, therefore, they did not drink, compared with 24.7% in Group B. The difference between the two groups is significant, with a p-value of 0.001. Third, participants in Group A also worried more that their alcohol consumption could have bad effects on their activities, with 92.5% answering “Yes” in Group A and 68.5% in Group B. The difference has a p-value of 0.014. In addition, participants in Group A were less likely (6.8%) than those in Group B (28.2%) to abstain from alcohol because they had been brought up to avoid it. There is a significant difference between the groups, with a p-value of 0.016.

Discussion

This study investigates whether the alcohol use patterns of participants in adult years is somehow linked to their childhood experience of relatives’ excessive alcohol use. The participants were asked about their own alcohol consumption over the past 12 months, and abstainers were asked about their reasons for choosing to live their lives without consuming alcohol. Of the 873 participants, 214, specified as Group A above, reported that they had been brought up in such an environment, while 659 had not (Group B). Of the participants in Group A, 60.5% of males and 75.9% of females reported that they had been negatively “affected a lot” (see Table 2). These findings support the results of Johnson and Stone (2009), Larkin et al. (2012), Park and Schepp (2015), and Velleman et al. (2008), which indicate that both short-term and long-term effects can occur in individuals living in difficult circumstances such as being brought up with a relative excessively using alcohol. The differences between women and men could also mean that women are more likely to be subjected to mental and physical abuse from a relative who drinks excessively (Ólafsdóttir et al., 2020).

The results showed that 15.1% in Group A and 9.7% in Group B reported abstaining from alcohol (see Table 3). After splitting Group A into two groups, A.1. (affected) and A.2 (not affected), it was interesting to see that there was a difference in the reports between the groups as the following results show. Group A.2 reported abstaining from alcohol in 5.3% of cases compared to 16.7% in Group A.1 and 9.7% in Group B, indicating more frequent alcohol consumption in Group A.2.

Questions were also asked about whether the participants had experienced “feeling guilty”, “having a blackout”, “failing to do what was normally expected of them”, and “having a drink the morning”. These questions give an idea of whether the participants’ alcohol consumption had any relation to excessive alcohol use. All four experiences were more common in Group A.2 than Groups A.1 and B, which indicates they were more likely to have a problem with alcohol consumption. The sample size for Group A.2 was small but the p-value between Group A.2 and Group B for whether they were more likely to have a blackout while consuming alcohol was only 0.071 (see Table 4). They were more likely to relate to the other indications of excessive alcohol use, but as the sample size was small, there were no significant differences between the groups. These results support the findings in
Wodarski (2010) that the environment and hereditary factors can affect the beliefs and attitudes of children and adolescents towards alcohol use in adult years. Additional research focusing on Group A.2 would, therefore, be needed to give further evidence.

When the participants were asked why they chose to live their lives without consuming alcohol (Table 6), three interesting results were observed. First, Group A was significantly more likely than Group B to agree with the statement “I have been hurt by someone else’s alcohol consumption before” ($p$-value: < 0.001). The difference was substantial: 58.5% of Group A agreed with the statement compared to 16.4% of Group B. Second, Group A was significantly more likely to report “being afraid of having problems with alcohol” or “becoming alcohol-dependent”: 61% of participants in Group A answered “Yes” to these statements compared to 35.5% in Group B ($p$-value: 0.024). These results support the findings by Epler et al. (2009) that not all individuals who have lived their childhood with relatives who excessively use alcohol will go on to consume alcohol in their adult lives or choose to abstain.

Third, there was a significant difference between Group A, with 60%, and Group B, with 24.7%, regarding the statement that their “former alcohol consumption had already harmed their lives” and therefore, they chose not to drink ($p$-value: 0.001). This indicates that a large proportion of the Group A abstainers had had previous problems with alcohol. These findings support the studies by Campbell (2002), Larkin et al. (2012), and Velleman et al. (2008), which found that individuals who were brought up by a relative who excessively used alcohol were more at risk of misusing alcohol or other drugs than individuals who did not live in such circumstances in childhood.

There are limits to the tools used in all research. In this study, the sample size, $n = 873$, cannot reflect the entire Icelandic population with statistical confidence regarding the negative effects of being brought up by a relative who excessively used alcohol. The participants were not asked which household member was the alcohol consumer – parent, stepparent, or sibling. Furthermore, the study was conducted entirely with Icelandic individuals, so the results may not apply to other participants who were brought up in other countries in an environment with a relative who excessively used alcohol during their childhood. Nonetheless, the results of the study can indicate the negative effects on individuals growing up living with relatives (for example, parents or siblings) who have an alcohol problem. Thus, the study sheds light on these individuals’ attitudes and alcohol consumption in their adult years. The results also show that living in such circumstances in childhood does not have the same impact on all individuals, as the findings for both Group A.1 and Group A.2 indicate. Therefore, this is worth studying further. If further research validates the observation found in Group A.2, then those who experience not being affected by a close relative’s excessive alcohol consumption in childhood could be more inclined to have an unhealthier pattern of alcohol consumption later in life. It would be interesting to use a larger sample group for the questionnaire and take a closer look at the individuals who might report no negative effects from living with a relative who excessively uses alcohol, but at the same time report their own unhealthy alcohol consumption. This could provide more knowledge about alcohol consumption and the negative effect on others, and about denial and defence mechanisms in human behaviour in the field of addiction. More knowledge could also be gained from continuing to look at excessive alcohol use among relatives in families and how this can affect young children, for example, regarding their learning behaviour, attitudes and beliefs, and their own alcohol use, also in their adult years. The information could be used to further enhance knowledge in prevention and future policies in every society regarding the
accessibility of alcohol, prevention, and intervention strategies.

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References
Anderson, P. & Baumberg, B. (2006). Alcohol in Europe, a public health perspective: A report for the European commission. Institute of Alcohol Studies.
Campbell, C. J. (2002). Health consequences of intimate partner violence. The Lancet, 359, 1331–1336. https://doi.org/10.1016/S0140-6736(02)08336-8
Epler, A. J., Sher, K. J. & Piasecki, T. M. (2009). Reasons for abstaining or limiting drinking: A developmental perspective. Psychology of Addictive Behaviors, 23(3), 428–442. https://doi.org/10.1037/a0015879
Government of Iceland. (n.d.-a). Act no. 44/2014. Scientific research in the health sector. Ministry of Welfare. https://www.government.is/media/velferdarraduneyti-media/media/acrobat-enskar-sidur/Health-Sector-Research-Act-No-44-2014.pdf
Government of Iceland. (n.d.-b). Act no. 77/2000. The protection of privacy as regards the processing of personal data. Data Protection Commissioner. https://www.government.is/Publications/Legislation/Lex/?newsid=fadb4b17-f467-11e7-9423-005056bc530c
Johnson, P. & Stone, R. (2009). Parental alcoholism and family functioning: Effects on differentiation levels of young adults. Alcoholism Treatment Quarterly, 27(1), 3–18. https://doi.org/10.1080/07347320802586601
Lander, L., Howsare, J. & Byrne, M. (2013). The impact of substance use disorders on families and children: From theory to practice. Social Work Public Health, 28(0), 194–205. https://doi.org/10.1080/19371918.2013.759005
Larkin, H., Shield, J. J. & Anda, R. F. (2012). The health and social consequences of adverse childhood experiences (ACE) across the lifespan: An introduction to prevention and intervention in the community. Journal of Prevention & Intervention in the Community, 40(4), 263–270. https://doi.org/10.1080/10852352.2012.707439
Norström, T. (2002). Alcohol in post-war Europe: Consumption, drinking patterns, consequences, and policy responses in 15 European countries. Almqvist & Wiksell International.
Ólafsdóttir, J., Hrafnsdóttir, S. & Orjasniemi, T. (2018). Depression, anxiety, and stress from substance use disorder among family members in Iceland. Nordic Studies on Alcohol and Drugs, 33(3), 165–178. https://doi.org/10.1177/1455072518766129
Ólafsdóttir, J., Orjasniemi, T. & Hrafnsdóttir, S. (2020). Psychosocial distress, physical illness, and social behaviour of close relatives to people with substance use disorders. Journal of Social Work Practice in the Addictions, 20(2), 136–154. https://doi.org/10.1080/1533256X.2020.1749363
Park, S. & Schepp, K. G. (2015). A systematic review of research on children of alcoholics: Their inherent resilience and vulnerability. Journal of Child and Family Studies, 24, 1222–1231. https://doi.org/10.1007/s10826-014-9930-7
Reducing Alcohol Related Harm, (RARHA). (2016). Comparative monitoring of alcohol epidemiology across the EU Baseline assessment and suggestions for future action. Synthesis report. http://www.rarha.eu/NewsEvents/LatestNews/Lists/LatestNews/Attachments/36/Comparative%20monitoring%20%20of%20alcohol%20epidemiology%20across%20the%20EU%20%20E2%80%93%2027.02.pdf
Solis, J. M., Shadur, J. M., Burns, A. R. & Hussong, A. M. (2012). Understanding the diverse needs of children whose parents abuse substances. Current Drug Abuse Reviews, 5(2), 135–147.
Sunday, S., Kline, M., Labruna, V., Pelcovitz, D., Salzinger, S. & Kaplan, S. (2011). The role of adolescent physical abuse in adult intimate partner violence. *Journal of Interpersonal Violence, 26*(18), 3773–3789. https://doi.org/10.1177/0886260511403760

Velleman, R. & Templeton, L. (2007). Understanding and modifying the impact of parental substance misuse on children. *Advances in Psychiatric Treatment, 13*(2), 79–89. https://doi.org/10.1192/apt.bp.106.002386

Velleman, R., Templeton, L., Reuber, D., Klein, M. & Moesgen, D. (2008). Domestic abuse experienced by young people living in families with alcohol problems: Results from a cross-European study. *Child Abuse Review, 17*(6), 387–409. https://doi.org/10.1002/car.1047

Wodarski, S. J. (2010). Prevention of adolescent reoccurring violence and alcohol abuse: A multiple-site evaluation. *Journal of Evidence-Based Social Work, 7*(4), 280–301. https://doi.org/10.1080/15433710903176112