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Associations between trust and drinking among adolescents

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Abstract

Introduction. Trust is closely linked with health, but previous research on its association with alcohol use has yielded mixed findings. The aim of this study is to examine: (i) how two different dimensions of trust (general/institutional) are associated with alcohol use among adolescents; (ii) how these dimensions interact with alcohol use; and (iii) whether the associations are moderated by sex, parenting, health, school satisfaction or economic disadvantage. **Methods.** A nationwide sample of 5549 adolescents (aged 15–16 years) in Sweden answered a questionnaire in school. General and institutional trust were measured with five items each. Logistic regressions were used to examine associations between drinking and the trust dimensions, and the cross-combinations of these. Moderation by sex, parenting, health, school satisfaction and economic disadvantage was tested. Results. General and institutional trust were both significantly associated with drinking. High scores on both dimensions simultaneously were associated with the lowest probability of drinking, and low scores on both with the highest. Low institutional trust had a stronger association than low general trust. The combination of high institutional/low general trust was more protective than low institutional/high general trust. The association between general trust and drinking was moderated by school satisfaction, and the relationship between institutional trust and drinking was moderated by parental support and control. Discussion and Conclusions. High trust is associated with a lower probability of past-year drinking among 15-16-year-olds. Parents and schools can be useful in endeavours to prevent low-trusting individuals in this age group from drinking. [Sjödin L, Livingston M, Karlsson P, Larm P, Raninen J. Associations between trust and drinking among adolescents. Drug Alcohol Rev 2022;41:221-229]

Key words: trust, adolescents, drinking.

Introduction

In all human interaction, trust is a fundamental part. Social engagement builds upon the principle of trust. This essential part has proven to be of importance in contexts ranging from how well a society works (e.g. its economic development and democracy) [1,2], to levels of individual happiness and life satisfaction [3]. In a global context, the Nordic countries enjoy an exceptionally high and stable level of trust [4]. Trust is also a robust predictor of health. Associations between trust and a range of mental and physical health outcomes have repeatedly been found [5,6]. Trust is considered to be an important predictor of both morbidity and mortality [7].

Trust is usually formed during adolescence and early in life [1,8]. The socialisation process is particularly active during adolescence, as social spheres expand beyond their parents and they increasingly rely on approval from peers [9]. This is a life stage when trust likely becomes a central factor. Adolescence also involves the discovery of new activities, such as alcohol use [10]. As drinking is mainly a social activity [11,12], social processes like trust should theoretically be of importance. Given that the formation of trust and the initiation of alcohol drinking both occur during adolescence, it is important to understand how these two relate to each other.

Trust can be divided into different dimensions. A common distinction is between general trust (interpersonal/social) and institutional trust (political/systematic

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confidence) [13]. The first refers to trust in other people, and the second to trust in the public institutions of society. Thus, general trust can be viewed as a horizontal dimension and institutional trust as a vertical. Some studies have found that trust in public institutions more strongly influences general trust than vice versa [14] but how these two dimensions are related to alcohol use is still largely unknown.

It has previously been suggested that adolescents with high trust have more social support and are being more controlled, which acts protectively against substance use [15]. Parents' emotional warmth has been shown to predict adolescents' trust in their parents, which in turn predicts trust in peers and politicians [16]. Parenting practices have also been shown to be associated with adolescents' alcohol use [17,18]. A sense of belonging in school, as well as bonding with teachers and peers, has been shown to be important for alcohol consumption among 15-year-olds [19,20]. Enjoying school has been associated with a lower probability of alcohol use among Swedish adolescents [17].

As previously mentioned, there is a well-established link between health/well-being and trust [3,21–23]. Health/well-being is also associated with adolescent alcohol use [17], and drinking can provide temporary relief and relaxation, but adolescents with high social support from friends are less likely to use alcohol as self-medication [24]. There is evidence that people with low socioeconomic status have lower levels of trust than others [25]. Social inequalities and socioeconomic status have also been found to be related to drinking among adolescents [26,27]. Sex-differences between different aspects of trust and substance use have been observed in some studies as well [28–30].

Previous studies on the link between trust and alcohol use have yielded mixed findings. For example, in one study low institutional trust was linked to an increased probability of hazardous alcohol use among adults [30], but in another, the relationship only held for women [28]. In two Danish studies, high general trust was associated with increased drinking among adults [31,32]. In contrast, a Swedish study found low general trust to be associated with heavier drinking [33]. Most evidence shows that low general trust is a risk factor for alcohol consumption among adolescents [34-36], although a Swedish study found no associations between general trust and adolescent drinking [15]. A study from Japan found an association only among girls [37]. However, to our knowledge, no studies have explored how institutional trust relates to alcohol use among adolescents or how the two dimensions of trust interact.

This study aims to examine: (i) how general and institutional trust are associated with alcohol use

during the past year in a nationally representative sample of Swedish adolescents; (ii) how these dimensions interact with alcohol use; and (iii) if associations are moderated by sex, parenting, health, school satisfaction or economic disadvantage.

Methods

Data

This study was based on data from a national school survey of Swedish ninth graders conducted in 2017. Participants were born in 2001 and were 15–16 years old when they answered the paper-and-pen questionnaire. Statistics Sweden randomly selected 500 schools, and one class at each participating school was picked to fill out the questionnaire. At the school level, 344 schools (68.8%) agreed to be part of the study, and 82.3% of the individuals asked agreed to participate (n = 5549). These respondents gave their informed written consent to use the information they provided. The Ethical Review Board in Stockholm (Dnr 2017/103-31/5) approved this study.

Measures

Past-year alcohol use was measured with the question "Have you ever had a drink of alcohol? (disregard drinks below 2.8%, such as light beer or weak cider)." Possible response options for this question were "No", "Yes, during the past 30 days", "Yes, during the past 12 months" and "Yes, more than 12 months ago". The source of this item is the Swedish Annual School Surveys conducted since the year 1971 by the Swedish Council for Information on Alcohol and Other Drugs [38]. In this paper, drinking during the past 12 months was used to determine respondents' drinking status. Sensitivity analyses (data not shown) were done using drinking during the past 30 days or lifetime use and it showed close to identical results.

Five questions were used to measure institutional trust and another five measured general trust. The question for the former dimension was stated "How much do you normally trust... (i) Government and parliament, (ii) The justice system (police and courts), (iii) Teachers, (iv) News (TV, radio) and (v) Researchers and experts". The four answer options were "Very much", "Fairly much", "Not that much" and "Not at all". The latter trust dimension was probed with the question: "Considering society as a whole, mark the alternative that best agrees with how you feel: (i) You can trust most people, (ii) You can never be too careful when you meet new people,

(iii) Most people are trying to be helpful, (iv) Most people only care about themselves, and (v) Most people are honest." The response alternatives were "Totally correct", "Partly correct" and "Totally incorrect". These items were selected from the Organisation for Economic Co-operation and Development's data bank on the measurement of social capital [39] and then modified to suit the context and target population.

Composite measures were created for institutional trust (Cronbach's alpha 0.77) and general trust (Cronbach's alpha 0.59) for each respondent by creating mean scores based on their answers. Before creating the two scales and descriptive analyses were made, all 10 items were reverse coded so that higher values indicate higher trust. This was done for all items except the two items of general trust that were reverse worded ("You can never be too careful when you meet new people"/"Most people only care about themselves") since higher values already indicated higher trust on these two items. Before analyses of association were made, the item "b) You can never be too careful when you meet new people" was omitted due to unsatisfactory internal consistency for general trust which increased the internal consistency (Cronbach's alpha of 0.70).

For further analysis, we also derived binary variables to analyse cross-combinations of trust. Variables for high trust and low trust were derived by dividing the data based on the median value of each dimension (high = above 50%, low = below 50%). These two variables were then used to create cross-combinations of the two dimensions (high/high, low/high, high/low, low/low). Sensitivity analyses (data not shown) were made using alternative coding based on an absolute mid-cut-off point (2.5) of the available response options (1–4). The results were robust regardless of using relative or absolute cut-points in the division of the two trust scales.

A number of covariates that might affect the association between adolescents' trust and drinking were also used in the study. These variables were: sex, parenting, self-rated health/well-being, school satisfaction and economic disadvantage. Respondents' biological *sex* at birth was identified from the respondent's civic registration number (Swedish personal identity number). In Sweden, this number is assigned at birth; the next-to-last digit is odd for males and even for females. A binary variable was created for sex and *boys* were coded as ones.

Parenting was measured with six statements, two for each of three components: rules, control and support. The following question was asked for all items: "How do the following statements apply to you?". The statements for parental rules were "My parent(s) set definite

rules about what I can do at home", and "My parent(s) set definite rules about what I can do outside the home". Parental control was measured with; "My parent(s) know who I am with in the evenings" and "My parent(s) know where I am in the evenings". The statements for parental support were: "I can easily get warmth and caring from my mother and/or father" and "I can easily get emotional support from my mother and/or father". Response alternatives were: "Almost "Often", "Sometimes", "Seldom" always", "Almost never". Due to the variable's inverted values (always-never), the scale was reversed (never-always) to facilitate interpretation. Three composite measures of mean score scales were created: parental rules (Cronbach's alpha 0.74), parental control (Cronbach's alpha 0.77) and parental support (Cronbach's alpha 0.88).

Health/wellbeing was measured with the question "If you think about your health, how would you say that you feel?." School satisfaction was measured with the question: "How do you feel about being at school?." The response options for both questions were "Very good", "Fairly good", "Neither good nor bad", "Fairly bad" and "Very bad". The two variables were coded so that higher scores meant better health and more school satisfaction.

Economic disadvantage was measured with three questions: (i) "If you suddenly needed 200 SEK (≈23 USD) tomorrow, for example to go to a movie, could you afford it yourself?"; (ii) "Think about the past 12 months. Have you ever been unable to buy something you wanted to have and that others your age have, because you could not afford it?"; and (iii) "Think about the past 12 months. Have you ever been unable to join your friends to do something because you could not afford it?". The following response alternatives were available: "Yes", "No", "Do not know" and "Do not want to answer". Economic disadvantage is indicated by the response option "No" for the first question, and by "Yes" for the second and third questions. Based on these three responses, a composite mean score scale was created (Cronbach's alpha 0.62). The response options "Do not know" and "Do not want to answer" were coded as missing values.

Statistical analysis

Data analyses were performed using the statistical software Stata version 15.1 [40]. Initially, Pearson correlation tests were done to examine the association between institutional and general trust. They had a weak-moderate correlation (r = 0.34) and were thus treated as separate measures in subsequent analyses. An analytic sample was created based on valid answers on all variables used in this study (complete case analysis—missing cases (n = 495, 8.92%).

Differences in mean values of past 12-month alcoholusers between the analytic and the excluded sample were tested with a t-test. No significant difference between the samples was found. A 95% significance level (P < 0.05) was used for all analyses. The analytic sample was used in all analyses and adjustments for a potential cluster effect at the school level were applied using cluster-robust standard errors. T-tests and chi-square tests were used to examine differences in means and percentages, respectively, and logistic regressions were used to examine multivariable associations. Adjustments were made for covariates that might potentially influence both levels of trust and drinking status in adolescence. Lastly, interaction analyses were conducted to explore if any variable modified the association between trust and alcohol consumption. An adjusted model was used for this purpose.

Results

Descriptive statistics

The total prevalence of drinking during the past 12 months in the sample was 38.4%. Table 1 shows the characteristics of our sample, separated into past 12-month alcohol-users and past 12-month abstainers. Consistently higher mean values were observed on both trust dimensions for past 12-month abstainers. Only one exception in this pattern was observed for the item "You can never be too careful when you meet new people", were past 12-month alcohol-users showed higher trust. High institutional/high general trust was more common among past 12-month abstainers, and low institutional/low general trust was more common among past 12-month alcohol-users.

Table 2 presents the distributions of past 12-month alcohol-users and past 12-month abstainers in each of the four trust combinations. The combination of high general and high institutional trust was more common among past 12-month abstainers. Also, high institutional trust combined with low general trust was slightly more common among past 12-month abstainers than among past 12-month alcohol-users. In contrast, low institutional trust combined with high general trust, and the combination of low trust in both trust dimensions was more common among past 12-month alcohol-users.

Regression analyses

In Table 3, two different logistic regression models are presented: Model 1 contains the two continuous trust scales alone, and Model 2 is adjusted for covariates. In Model 1, higher trust in either dimension was linked to a lower probability of drinking in the last 12 months. The

association was stronger for institutional trust (odds ratio 0.54) than for general trust (odds ratio 0.77). In Model 2, the estimates remained essentially unchanged. Thus, the relation between both trust dimensions and alcohol use was robust after adjustments for sex, parenting, health, school satisfaction and economic disadvantage. Higher levels of parental control and self-rated health, and being a boy were significantly associated with a decreased probability of drinking. Economic disadvantage was associated with a significantly increased probability of drinking.

Table 4 shows the associations between different combinations of the two trust measures and alcohol use. The combinations of low institutional and high general trust (low/high), high institutional and low general trust (high/low), and high scores on both dimensions (high/high), were compared with low scores on both trust scales (low/low). High trust in any category was found to be significantly associated with a decreased probability of alcohol use, and the combination of high trust in both scales was associated with the lowest probability.

In Model 1, the group with high trust in both dimensions had almost three times lower odds (odds ratio 0.38) of drinking compared with the group that scored low on both trust dimensions. Also, in both models the high/ low-group had lower odds than the low/high-group, indicating that institutional trust was more strongly associated with alcohol use than general trust was. The difference was, however, not entirely distinct since the confidence intervals between these two trust combinations overlapped in both models. At the same time, a low institutional trust combined with high general trust still significantly decreased the probability of drinking when compared with the 'low/low' trust group, suggesting that a high general trust was protective against the risk of a low institutional trust. As seen in Table 3, the same pattern recurred regarding the associations of the covariates with alcohol use. Boys and individuals with higher levels of parental control and self-rated health had a significantly lower probability of drinking, and economic disadvantage increased that probability.

Interaction analyses

Three of the 14 interaction terms were statistically significant (see Table 5). The association between institutional trust and alcohol use was significantly moderated by parental control and parental support. The association between general trust and alcohol use was significantly moderated by school satisfaction.

Both high parental control and high parental support decreased the association between low institutional trust and alcohol use, while strong school satisfaction

| Table 1 | Descriptive | statistics of | f included | study | mariables |
|----------|-------------|---------------|------------|-------|-----------|
| I aut I. | Description | similarios o | , incinaca | sinuv | cariacies |

| | Past 12-month abstainers ($n = 3115$) Mean value (95% CI) | Past 12-month alcohol users ($n = 1939$) Mean value (95% CI) | <i>P</i> -value | Min-max |
|--|---|---|-----------------|---------|
| Institutional trust | 2.89 (2.86–2.91) | 2.65 (2.61–2.68) | 0.00 | 1–4 |
| Low institutional trust, % | 46 (44–48) | 63 (61–66) | 0.00 | 0-100 |
| Parliament and government | 2.68 (2.65–2.71) | 2.41 (2.37–2.46) | 0.00 | 1-4 |
| The justice system (police and courts) | 2.89 (2.86–2.93) | 2.59 (2.54-2.64) | 0.00 | 1-4 |
| Teachers | 2.99 (2.96–3.02) | 2.68 (2.63–2.73) | 0.00 | 1-4 |
| News (TV, radio) | 2.65 (2.61–2.68) | 2.46 (2.42–2.51) | 0.00 | 1-4 |
| Researchers and experts | 3.22 (3.19-3.26) | 3.10 (3.05-3.14) | 0.00 | 1-4 |
| General trust | 2.45 (2.43–2.47) | 2.32 (2.29–2.35) | 0.00 | 1-4 |
| Low general trust, % | 43 (41–45) | 55 (53–58) | 0.00 | 0-100 |
| You can trust most people | 2.52 (2.49–2.55) | 2.31 (2.27-2.34) | 0.00 | 1-4 |
| You can never be too careful when you meet new | 1.81 (1.79–1.84) | 1.91 (1.87–1.95) | 0.00 | 1–4 |
| people Most people trying to be helpful | 2.75 (2.72–2.77) | 2.60 (2.57–2.64) | 0.00 | 1–4 |
| Most people only care about themselves | 2.11 (2.08–2.14) | 2.08 (2.04–2.12) | 0.12 | 1-4 |
| Most people are honest | 2.42 (2.40–2.45) | 2.29 (2.25–2.32) | 0.00 | 1-4 |
| Boys, % | 50 (48–52) | 48 (45–50) | 0.15 | 0-100 |
| Girls, % | 50 (48–52) | 52 (50–55) | 0.15 | 0-100 |
| Parental rules | 3.07(3.02-3.11) | 3.06 (3.01–3.12) | 0.79 | 1–5 |
| Parental control | 4.59 (4.57–4.62) | 4.12 (4.08–4.17) | 0.00 | 1–5 |
| Parental support | 4.51 (4.48–4.54) | 4.29 (4.25–4.34) | 0.00 | 1–5 |
| Self-rated health | 4.11(4.07-4.14) | 3.91 (3.87–3.96) | 0.00 | 1–5 |
| School satisfaction | 4.12 (4.08–4.16) | 3.95 (3.90–4.01) | 0.00 | 1-5 |
| Economic disadvantage | 0.14 (0.13–0.16) | 0.21 (0.19–0.22) | 0.00 | 0–1 |

decreased the association of general trust with alcohol use. If someone with high institutional trust also perceived high parental control or support, the probability of drinking was even lower than if trust was considered alone. This protective factor also applied to those satisfied with school.

Discussion

This study examined how two dimensions of trust were associated with alcohol use in a nationally representative sample of adolescents in Sweden. We found that both institutional and general trust were consistently associated with drinking, even after adjustments for covariates. The association between general trust and adolescents' alcohol use is in line with some previous findings [34–37]. However, it contradicts a previous study that found no associations with general trust [15], and two studies where general trust was found to increase alcohol consumption [31,32]. These studies used volume measures of alcohol use or binge drinking and their measure of general trust was limited to one item, which might explain differences in results. The study populations also differed, as they either consisted of the Danish adult population [31,32] or data on

Table 2. Relative and absolute frequency of different trust combinations by drinking status

| Trust combinations | Past 12-month abstainers, % (n) | Past 12-month alcohol users, % (n) | Total, % (n) |
|--------------------------------|---------------------------------|------------------------------------|--------------|
| High/high | 37.46 (1167) ^a | 21.97 (426) | 31.52 (1593) |
| Low institutional/high general | 19.36 (603) | 22.59 (438) ^b | 20.60 (1041) |
| High institutional/low general | 16.89 (526) ^a | 14.60 (283) | 16.01 (809) |
| Low/low | 26.29 (819) | 40.85 (792) ^b | 31.88 (1611) |
| Total | 100 (3115) | 100 (1939) | 100 (5054) |

^aPast 12-month abstainers overrepresented. ^bPast 12-month alcohol-users overrepresented.

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Table 3. Multiple logistic regression models with drinking during the past 12 months as the dependent variable

| | Model 1: OR (95% CI) | Model 2: OR (95% CI) |
|--|--|--|
| Institutional trust General trust Sex (boys) Parental rules Parental control Parental support Self-rated health School satisfaction Economic | 0.54* (0.47–0.61) 0.77* (0.68–0.87) | 0.64* (0.56–0.73) 0.83* (0.72–0.95) 0.79* (0.68–0.92) 1.03 (0.98–1.09) 0.51* (0.47–0.56) 1.05 (0.97–1.14) 0.90* (0.83–0.98) 1.06 (0.96–1.16) 1.36* (1.11–1.66) |
| disadvantage Observations | 5054 | 5054 |

CI, confidence interval; OR, odds ratio.

adolescents from a single city in southern Sweden collected 16 years earlier than the data used in this study [15].

We also found that the link between general trust and drinking differed by school satisfaction. The protective aspect of strong school satisfaction on adolescents with low general trust has, to our knowledge, not been reported previously. Schools are likely an important part of young people's social life, where trust plays an essential role. This fits well with previous findings showing that both low sense of school belonging and

Table 4. Multiple logistic regression models with drinking during the past 12 months as the dependent variable and combinations of trust as determinants

| REF: low/low | Model 1: OR (95% CI) | Model 2: OR (95% CI) |
|-------------------------------------|-------------------------|-------------------------|
| Low institutional/ high general | 0.75* (0.64–0.88) | 0.83* (0.70-0.98) |
| High institutional/low general | 0.56* (0.46–0.67) | 0.67* (0.55–0.81) |
| High institutional/ high general | 0.38* (0.32–0.44) | 0.49* (0.42–0.58) |
| Sex (boys) | | 0.80* (0.69-0.93) |
| Parental rules | | 1.03 (0.98-1.09) |
| Parental control | | 0.51* (0.46-0.55) |
| Parental support | | 1.04 (0.96-1.13) |
| Self-rated health | | 0.90* (0.83-0.98) |
| School satisfaction | | 1.04 (0.95–1.14) |
| Economic disadvantage | | 1.38* (1.13–1.69) |
| Observations | 5054 | 5054 |

CI, confidence interval; OR, odds ratio.

Table 5. Interaction analyses. Multiple logistic regression models with drinking during the past 12 months as the dependent variable

| | Institutional trust OR (95% CI) | General trust OR (95% CI) |
|-------------------------------|------------------------------------|------------------------------|
| Trust × Sex | 0.88 (0.71–1.09) | 0.96 (0.76–1.22) |
| Trust × Parental | 1.06 (0.96–1.16) | 1.03 (0.93–1.15) |
| rules | | |
| Trust × Parental control | 0.83* (0.73–0.95) | 0.91 (0.77–1.07) |
| Control | 0.05% (0.55.0.00) | 0.00 (0.55 1.00) |
| Trust \times Parental | 0.87*(0.77-0.98) | $0.88 \ (0.77-1.02)$ |
| support | | |
| Trust × Health | 0.94 (0.83-1.06) | 0.90 (0.79-1.04) |
| $Trust \times School$ | 0.99 (0.89–1.11) | 0.88* (0.77-1.00) |
| satisfaction | • | |
| Trust × Economic disadvantage | 1.21 (0.86–1.71) | 0.78 (0.54–1.13) |
| Observations | 5054 | 5054 |
| Observations | 3034 | 5054 |

CI, confidence interval; OR, odds ratio.

family belonging are linked to drinking among individuals aged 11-15 years [19,20].

Until now, evidence regarding how adolescents' institutional trust is associated with alcohol use has been non-existing. Our results show that institutional trust among adolescents is linked to drinking in ways that have previously been observed among adults [28,30]. This indicates a robust association between institutional trust and alcohol use, regardless of age and drinking prevalence. We also found a moderating role of parental support and control on institutional trust's association with alcohol use. This suggests that a high level of controlling and supportive parents can reduce the probability of drinking among adolescents with low institutional trust. One plausible explanation for this finding is that for those adolescents with low trust in public institutions the parents become more important. Parental practices involving democratic parenting and treating others compassionately have previously proven to increase general trust in adolescents [41]. Our findings expand this understanding to also highlight parenting's importance for institutional trust.

Institutional trust is expected to indicate compliance with societal norms, values and legislation [30]. A high institutional trust might entail a propensity to behave in line with regulations, such as to abstain from drinking as a minor. This might explain the stronger link of institutional trust with deviant behaviour, such as using alcohol in this age group.

One of the most interesting results was how the cross-combinations of trust dimensions related to alcohol use. Past 12-month alcohol-users were overrepresented in the group with both low institutional and low

^{*}statistically significant at 95% significance level (P < 0.05).

^{*}statistically significant at 95% significance level (P < 0.05).

general trust, as opposed to past 12-month abstainers, who were overrepresented with high trust in both dimensions. In contrasting combinations of trust, low institutional with high general trust was more common among past 12-month alcohol-users, while the inverse was more common among past 12-month abstainers. This suggests that institutional trust is slightly more related to drinking status than general trust. Associations between the cross-combinations of trust and drinking further support that notion (see Table 4). High trust in either of the two dimensions proved to be significantly associated with a decreased probability of alcohol use, and this probability decreased further with high trust in both dimensions. In comparison, low institutional trust has a stronger association with drinking than low general trust. Institutional trust has previously proven to be the driving dimension that impacts general trust [14].

A few limitations should be considered when interpreting these results. The Nordic countries are recognised as high-trust societies [4], and generalisations of our results to other settings should be done cautiously. In spite of this, we believe that these results serve the interest of an international audience, as the current body of evidence on how trust relates to drinking is scarce. The approach with double trust dimensions and the exploration of links with cross-combinations of these are also considered to be relevant to readers in different contexts.

This study is based on cross-sectional data; thus the direction of the effect cannot be determined. We cannot rule out that alcohol use influences the respondents' level of trust, or that the association is due to confounding factors not included in the analyses. However, we assume that the major effect direction goes from trust to drinking, since trust develops earlier in life [1,8], than the average initiation of alcohol use [10]. Our results are in addition restricted to 15-16 year-olds and their past-year drinking. However, our results showed to be robust in sensitivity analyses using past 30-day drinking and lifetime use. Moreover, the data covered only those who attended school on the day of the survey and agreed to participate. Those who declined participation or were absent may be especially likely to have low trust, including trust in research and experts. Based on the present findings, it is also possible that these non-participants drank more. If so, the associations in our results are potentially underestimated. One item of general trust was omitted due to low internal consistency, resulting in four items for general trust and five for institutional trust. However, in previous research, a single-item measurement of general trust is common. This has been problematised and multiple indicators are recommended [42]. Despite omitting one item, this study still uses several measures of trust.

There are also several strengths in the study. A double dimension approach of how trust relates to alcohol use has not been reported before, nor have the crosscombinations of the two dimensions of trust been explored. As far as we know, the associations between institutional trust and vouth drinking have neither been examined before. This is also the first study on adolescents' trust in a nationally representative Swedish sample. The large sample provided enough power to allow detailed analyses of how both dimensions of trust are associated with alcohol use and allowed for adjustment for several variables that might influence both the level of trust and drinking. The high-quality nationally representative data increases the generalisability of our findings and limits the possibility of our results being an artifact of selection bias.

Beyond using several measures of each trust dimension, this study also used a four-point Likert scale. Previous studies have often been limited to crude measures of trust. The use of a wider response range than a binary option has been requested in trust research [43]. Studies including at least one indicator of both general and institutional trust have previously been done on smoking cessation [44,45], cannabis smoking [46] and the purchase of illegal alcohol [47].

In summary, low trust is associated with alcohol use among 15-16-year-old adolescents in Sweden. This association is stronger for institutional than for general trust. We believe that low trust in institutions makes adolescents less prone to follow underage drinking laws, resulting in higher consumption. Efforts that build trust in institutions and stimulate parents of adolescents to be controlling and supportive can be expected to reduce drinking among 15–16-year-olds. Efforts directed towards promoting increased satisfaction in school can also be expected to reduce drinking in this age group. One such concrete example can be mentoring, as it has shown to be effective in promoting health behaviours [48].

Conclusions

Low trust is significantly associated with a higher risk of alcohol use among adolescents in Sweden. Institutional trust is slightly more important for adolescents' drinking than general trust. Frequent support and control from parents, as well as strong school satisfaction, can protect low-trusting adolescents from engaging in alcohol use.

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Conflict of Interest

The authors declare no conflicts of interest.

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