Problematic familial alcohol use and adolescents’ heavy drinking: can conditions in school compensate for the increased risk of heavy drinking among adolescents from families with problematic alcohol use?

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ABSTRACT

The aim of the present study is to assess the association between problematic alcohol consumption in the family and youth alcohol consumption and to explore the extent to which this association is moderated by conditions in school in terms of schools’ degree of student focus. We use data from the Stockholm School Survey performed among 10,757 ninth grade students and the Stockholm Teacher Survey performed among 2,304 teachers in the same schools. Multilevel logistic regressions were performed. The results showed that problematic alcohol consumption in the family was associated with a higher likelihood of heavy drinking among adolescents. The association was weaker in schools with a strong student focus, indicating a compensatory effect of conditions in school.

Introduction

Adolescent alcohol consumption is common, although a decline has been observed in recent years in several countries (Pape, Rossow, & Brunborg, 2018) including Sweden (Leifman, 2013; Raninen, Livingston, & Leifman, 2014). Despite being illegal for minors, survey data suggest that 56 percent of all 15 year olds in Sweden have consumed alcohol in the past 12 months and that around six percent of the boys and girls, respectively, can be regarded as heavy consumers (Leifman, 2013). Alcohol consumption in youth is by some seen as unproblematic and claimed to be part of normal development during a phase in life when experimentation is common. Yet, excessive adolescent drinking is coupled with unintentional injuries (McCambridge, McAlaney, & Rowe, 2011) and a range of negative social and behavioural outcomes in youth (MacArthur et al., 2012; Wiefferink et al., 2006). In addition, high alcohol consumption in youth has been linked with alcohol problems and dependence later in life (McCambridge et al., 2011; Norström & Pape, 2012), especially among those with early onset (Pitkänen, Lyyra, & Pulkkinen, 2005) and those from poorer social backgrounds (Due et al., 2011; Gauffin, Hemmingsson, & Hjern, 2013; Wells, Horwood, & Fergusson, 2004).

Problematic familial alcohol use is a key risk factor for high alcohol consumption in youth and later in life (Karlsson, Magnusson, & Svensson, 2016; Latendresse et al., 2008; Vermeulen-Smit et al., 2012), particularly for children of alcoholics (Johnson & Leff, 1999). Yet, research suggests that the transmission of familial drinking patterns occurs already at lower levels of consumption and that they may persist into adulthood even if family consumption is rather low (Karlsson et al., 2016). In addition, the
evidence of the negative influence of parental alcohol abuse on offspring health and wellbeing is ample. Individuals brought up in families with problematic alcohol use have, for instance, increased risks of adolescent behavioural problems, delinquency, mental health problems and poor school performance (Berg, Bäck, Vinnerljung, & Hjern, 2016; Christoffersen & Soothill, 2003; Finan, Schulz, Gordon, & Ohannessian, 2015; Pisinger, Bloomfield, & Tolstrup, 2016). In a survey targeting 1000 randomly selected Swedish 16–19-year-olds, about 20 percent of the adolescents were classified as having parents with alcohol problems. Further, 44 percent reported that they think someone close to them drinks too much alcohol and about 22 percent of these responded that this has hurt them or caused them problems (Elgán & Leifman, 2013). The group of youth at risk of alcohol related and other problem behaviours associated with problematic familial use of alcohol is thus of significant size. The transmission of familial drinking patterns involves many different factors. Modelling of familial behaviour and a negative influence of familial drinking on parenting practices are commonly put forward as important mechanisms (Finan et al., 2015; Latendresse et al., 2008), as are inherited psychological and biological predispositions that may negatively interact with environmental factors and put some individuals at greater risk for developing problematic alcohol use than others (Johnson & Leff, 1999).

Yet, it is not only conditions in the family that matters for youth development. In developmental theories, youth development is often described as the result of a complex number of factors on different societal levels. Bronfenbrenner (1979), for instance, describes individuals as embedded in multiple social contexts that not only exert direct effects, but also interact with each other in their influence on individual development. In addition to conditions in the family, it is a well-established fact that conditions in school are central for youths’ educational outcomes and development. School contextual effects have for instance been clearly described and extensively examined with regard to students’ achievement in the field of school effectiveness research (Grosin, 2004; Mortimore, 1993; Reynolds et al., 2014). Research conducted within this field has contributed greatly to our understanding of the school environment and its influence on youth development by early showing that qualities of the school per se matter for students’ performance and behaviours, regardless of the students’ own background (Rutter, Maughan, Mortimore, & Ouston, 1979). A number of qualities that were found to be common among particularly successful schools (in terms of high attendance, good behaviour, few students with delinquent behaviours and high educational scores) were early pinpointed (Mortimore, 1993; Rutter et al., 1979). These qualities include a positive learning environment, a strong leadership, high expectations, order, structured teaching and positive relationships with students and their parents (Mortimore, 1993; Reynolds et al., 2014; Sammons, Hillman, & Mortimore, 1995). Rutter coined the term school ethos to emphasize the importance of a good atmosphere and positive learning environment for a well-functioning school. School ethos (or related concepts such as school culture or school climate) has been defined as the shared beliefs, values, and norms that pervade at a school and that manifest themselves in the way that teachers and students relate, interact, and behave towards each other (Koth, Bradshaw, & Leaf, 2008; Rutter et al., 1979). In schools characterized by a positive ethos the overall atmosphere of the school has been found to be more pleasant and focused on praise and rewards rather than on punishment and critical control (Mortimore, Sammons, Stoll, Lewis, & Ecob, 1989). Empirical studies have shown that schools with effective school features in terms of a positive school ethos are characterized not only by better educational outcomes (Granvik Saminathen, Brolin Låftman, Almqquist, & Modin, 2018) but also by for instance less bullying (Sara Brolin Låftman, Östberg, & Modin, 2017; Bitte Modin, Låftman, & Östberg, 2017), more well-being (B. Modin & Östberg, 2009; Sellstrom & Bremerberg, 2006) and less problem behaviours in terms of smoking and substance use (Aveyard, Markham, & Cheng, 2004; Bonell, Fletcher, & McCambridge, 2007) among its students.

The teachers’ attitude to their students is a central component of the ethos concept. In schools with a positive ethos teachers express that they enjoy teaching, they show an interest in the children as individuals and not just as students, and they engage in ‘small talk’ also outside the class room to a larger extent than teachers in schools with weaker ethos (Mortimore et al., 1989).
Indeed, in schools with a stronger ethos, students’ perception of teacher caring is also higher than in schools with a weaker ethos (Ramberg, Låftman, Almquist, & Modin, 2018). In line with the general assumption of effective school research, there is empirical evidence for the vital role of teacher support for students’ academic motivation and learning (Velasquez, West, Graham, & Osguthorpe, 2013). Furthermore, in schools where the teacher support is rated as strong students report less psychosomatic health complaints (Låftman & Modin, 2012; Modin & Östberg, 2009) than in schools with weak teacher support.

Hence the evidence of the importance of teachers’ attitudes towards their students is clear. However, the association could be complicated. School-level contextual characteristics can affect individual-level behaviour directly (i.e. main effects), but they can also condition the effects of individual-level factors on individual behaviours (i.e. moderating effects). Put differently, the effects of individual differences are not constant across settings. Instead, the influence of for instance, unfavorable home conditions may be conditional on the characteristics of the school setting in question (Wilcox, 2003). Yet, although some recent studies suggest that such interacting effects are important (Crosnoe, 2004; Eklund & Fritzell, 2013; Olsson & Fritzell, 2017), most research conducted on school effects has concerned the direct effects of schools on student outcomes. However, considering the compensatory duty of the school (Granvik Saminathen et al., 2018; Skolverket, 2012), the most important role of schools may be the potential they hold for moderating the effects of individual-level differences (micro–macro interactions) (Wilcox, 2003). This is also in line with one of the core ideas of the effective school movement, namely that effective schools do not only have the potential to promote positive outcomes among its students but also to combat the negative effects of factors external to the school (Mortimore, 1993; Rutter et al., 1979). One example of such an external factor is problematic familial use of alcohol.

**Aim of the study**

In the current study, the ambition is to examine whether certain combinations of conditions in the home and at the school operate to cause synergistic effects on student outcomes, here in terms of their alcohol consumption. There is clear evidence of variation in student alcohol consumption between Swedish schools (Carlson & Almquist Y, 2016; Olsson & Fritzell, 2015), but whether there is between-school variation in student focus and whether this may help combat the risk associated with unfavourable home conditions on youth alcohol consumption has to our knowledge, hitherto not been considered. In sum, the aim of the current study is to assess the association between problematic alcohol consumption in the family and youth alcohol consumption and to explore the extent to which this association is moderated by ‘school effectiveness’ in terms of the schools’ degree of student focus. To this end, we combine newly collected data from two separate sources: the Stockholm Teacher Survey and the Stockholm School Survey.

**Data and method**

**Data material**

The study is based on data that combines information from students and teachers in senior-level schools in Stockholm municipality. The school contextual information is derived from the Stockholm Teacher Survey (STS) and from the Swedish National Agency of Education (control variables at the school-level). The primary purpose of the STS is to gather information about schools’ learning, working, and social environments. The survey was carried out among all senior-level teachers in 208 school units in Stockholm municipality in the spring of 2014 and 2016 (n = 2,533; response rate 54%). Student level information is based on data from 9th grade students (ages 15–16 years) in 188 school units participating in the Stockholm School Survey (SSS) of 2014 and 2016 (n = 11,626; response rate 83%). The SSS is conducted biennially in Stockholm.
municipality. Participation is mandatory for public schools; but most independent schools take part on a voluntary basis. The survey is distributed in classrooms by teachers and the completed questionnaires are returned in sealed envelopes. Our combined teacher-student data covers a total of 169 school units, 10,757 grade 9 students and 2,304 teachers (Kjellström, von Saenger, Löfgren Jarl E., & Modin, 2018). Full information on all of the variables used in the analyses was available for 9,198 students distributed across 159 school units.

According to a decision by the Regional Ethical Review Board of Stockholm (2010/241–31/5), data from the SSS are not subject to consideration for ethical approval, since the questionnaires are filled in anonymously by the students. The Regional Ethical Review Board of Stockholm has approved ethical permission for the STS (2013/2188–31/5 (for 2014) and 2015/1827–31/5 (for 2016).

**Variables**

**Dependent variable**

Student alcohol consumption was assessed by the question ‘How often do you on the same occasion drink alcohol corresponding to at least 18 cl liquor/a whole bottle of wine/4 big bottles of cider or 4 bottles of beer?’ Students who answered ‘A couple of times a month’ and ‘A few times a week’ were classified as heavy drinkers and distinguished from the rest (i.e. those answering ‘Do not drink’, ‘Never drink this amount’, ‘Very seldom’, ‘Sometime per year’, or ‘Sometime per month’).

**Independent variable (individual-level)**

Familial alcohol use was constructed from the question “Do you think someone in your family drinks too much alcohol?” The response categories were “No”, “Don’t know” and “Yes”. Owing to the large number of missing in relation to the question (in total almost nine percent of the students participating in the SSS), respondents with missing information were grouped together with those answering don’t know (in total slightly more than 10 percent of the students participating in SSS) and included in the analyses as a separate category.

**Independent variable (school-level)**

School student focus was measured by teacher-rated responses about the level of student focus at the school in terms of a) positive feedback to students, b) high expectations of the students, c) whether the teachers take their time with students even if they want to discuss something other than schoolwork, and d) whether the students are treated with respect. Responses to all four items were rated according to a 5-graded scale ranging between ‘Strongly agree’ to ‘Strongly disagree’. The four items showed internal consistency (Cronbach’s alpha = 0.75) and were added to an index with the possible range of 4–20, with higher values indicating a stronger student focus, before aggregated to school mean values. In order to detect any potential non-linear associations, the school mean values of student focus were divided into three groups of approximately equal size, to distinguish between schools with strong (32.7 percent), intermediate (33.3 percent), and weak student focus (33.9 percent).

**Control variables (individual-level)**

Gender was measured by the question: ‘Are you a boy or a girl?’ and the response categories ‘Boy’ and ‘Girl’.

Family structure was measured by the question ‘Who do you live with?’ with a list of options to choose from. Those who responded both ‘Mother’ and ‘Father’ were classified as living with two parents in one household and were compared with all others.

Parents’ university education was measured by the question: ‘What is the highest level of education your parents have?’ The response categories, which covered mother and father individually, were: ‘Old elementary school or compulsory school (max 9 years schooling)’; ‘Upper
secondary school; ‘University and/or university college’, and; ‘Don’t know’. Those who responded ‘University and/or university college’ for at least one parent were classified as having one parent with a university education and were compared with all others.

Migration background was measured by the question: ‘How long have you lived in Sweden?’ The response categories were: ‘All my life’; ‘10 years or more’; ‘5–9 years’, and; ‘Less than 5 years’. Those who responded that they had lived in Sweden less than nine years were grouped (due to small numbers) and compared with the two other categories.

**Control variables (school-level)**

Proportion of parents with post-secondary education was measured by information about the percentage of students with highly educated parents (i.e. at least one parent with tertiary education) in the school. This official register information was retrieved from the Swedish National Agency for Education.

Proportion of full time teachers per student was based on official register information from the Swedish National Agency for Education.

**Method**

The method used was multilevel modelling. Multilevel models take the hierarchical structure of the data into account by allowing the variance in the outcomes to be separated between higher level units, in this case into student-level variation and school-level variation. Two-level binary logistic regression models were estimated using Stata’s `xtlogit` command. Odds ratios (OR) are reported. The proportion of the total variance contributed by the school-level variance component was assessed by means of ‘rho’ estimates (similar to the intraclass correlation). The analyses were performed in multiple steps. Firstly, an empty model was estimated. The empty model is an intercept-only model with no independent variables, showing how much of the variance in the outcome, i.e. adolescent heavy drinking, that is situated between schools. In Model 1, the main individual-level predictor, i.e. familial alcohol use, was added to explore its association with adolescents’ heavy drinking, and in Model 2 the individual-level control variables were added. In Model 3, the main school-level variable of interest, i.e. teacher-reported student focus, was included and in Model 4 the school-level control variables were added. Finally, in Model 5, we tested for the cross-level interaction between familial alcohol use and teacher-reported student focus to assess if the effect of familial alcohol use on students’ heavy drinking is compensated in schools characterized by higher rated student focus among its teachers, whilst also adjusting for the full set of individual- and school-level control variables.

**Results**

Descriptive statistics is presented in Table 1. Of the students included in the sample, 4.5 per cent were classified as heavy drinkers, i.e. they reported drinking alcohol corresponding to at least 18 cl liquor/a whole bottle of wine/4 big bottles of cider or 4 bottles of beer a couple of times a month or more often. With regard to familial alcohol use, 10.1 percent of the students stated that they thought that someone in their family was drinking too much and were thus regarded as living in families with problematic alcohol use. In terms of background characteristics of the sample, about half of the included students are boys (50.1 percent). A majority come from families with two parents in the same household (65.6 percent), have at least one university educated parent (57.9 percent) and have lived all their life in Sweden (82.8 percent). Furthermore, heavy drinking was shown to vary across schools ranging from zero to 25 percent of heavy drinkers in the school. With regard to teacher-rated student focus, the mean value of the index ranged from 12.4 to 19.7 between the participating schools.
Table 2 presents student heavy drinking by familial alcohol use and control variables. Heavy drinking was most common among students who also reported that someone in their family drinks too much alcohol (8.7 percent) and among those who responded that they do not know if someone in their family drinks too much or did not respond to the question (7.7 percent). Among those who reported that they do not think that someone in their family drinks too much, 3.7 percent were regarded as heavy drinkers. The difference was statistically significant. In addition, heavy drinking was found to be more common among students not living with both their parents (5.3 percent) than among those living with both their parents (4.1 percent).

Table 2. Students heavy drinking by familial alcohol use and control variables. n = 9198.

| Students alcohol consumption | n (%)     |
|-----------------------------|----------|
| **Familial alcohol use**    |          |
| Not problematic             | 276(3.7) |
| Don't know/Missing          | 60(7.7)  |
| Problematic                 | 80(8.7)  |
| **Gender**                  |          |
| Boys                        | 189(4.1) |
| Girls                       | 227(4.9) |
| **Family structure**        |          |
| Two parents in the same household | 249(4.1) |
| Other                       | 167(5.3) |
| **Parents’ university education** |     |
| No parent                   | 171(4.4) |
| At least one parent         | 245(4.6) |
| **Migration background**    |          |
| Lived in Sweden all life    | 354(4.6) |
| Lived in Sweden ≥ 10 years  | 263(3.8) |
| Lived in Sweden < 10 years  | 416(4.1) |

Table 1. Sample descriptive n = 9198 students distributed across 159 school units.

| Individual-level | n     | %    |
|------------------|-------|------|
| **Student alcohol consumption** |       |      |
| Heavy drinkers   | 416   | 4.5  |
| **Familial alcohol use** |       |      |
| Not problematic  | 7498  | 81.5 |
| Don’t know/Missing | 775   | 8.4  |
| Problematic      | 925   | 10.1 |
| **Gender**       |       |      |
| Boys             | 4604  | 50.1 |
| Girls            | 4594  | 49.9 |
| **Family structure** |     |      |
| Other            | 3165  | 34.4 |
| Two parents in the same household | 6033 | 65.6 |
| **Parents’ university education** |       |      |
| No parent        | 3873  | 42.1 |
| At least one parent | 5325 | 57.9 |
| **Migration background** |     |      |
| Lived in Sweden all life | 7621 | 82.8 |
| Lived in Sweden ≥ 10 years | 688  | 7.5  |
| Lived in Sweden < 10 years | 889  | 9.7  |
Results from the multilevel analyses of student heavy drinking are presented in Table 3. First, an empty model is fitted. As indicated by the intra-class correlation coefficient (rho), 8.2 percent of the total variation in the outcome can be attributed to differences between schools (p < 0.001). In Model 1, information on familial alcohol use is included. The result shows that familial alcohol use is associated with adolescents’ alcohol consumption. More specifically, students who reported that they do not know if someone in their family drinks too much (OR 2.24, p < 0.001) and students who regarded someone in their family as drinking too much (OR 2.43, p < 0.001) were more likely to be heavy drinkers than those students who responded that nobody in their family drinks too much. This association holds although it is slightly attenuated when, in Model 2, individual-level controls are adjusted for. Next, in Model 3, information on schools’ level of student focus is added to the model. The effect of familial alcohol use on student alcohol consumption largely persists. The results further demonstrate that the odds of having heavy alcohol consumption is higher if the student attends a school characterized by intermediate (OR 1.66, p < 0.01) or strong student focus (OR 1.57, p < 0.05). However, as suggested by the results of Model 4, the effect of school student focus on student alcohol consumption is largely weakened and turns non-significant when school-level controls are added to the model. This is primarily due to the inclusion of the proportion of parents with tertiary education (data not presented). Finally, in Model 5, the cross-level interaction between familial alcohol use and school student focus on student heavy alcohol use is tested. The result suggests that the detrimental effect of problematic familial alcohol use on student heavy drinking is less pronounced in schools characterized by a stronger student focus. More specifically, students who stated that they do not know if somebody in their family drinks too much (OR 0.45, p < 0.07) and students who stated that they think that somebody in their family drinks too much (OR 0.46, p < 0.05) have lower odds of being heavy drinkers if they attend a school characterized by strong student focus.

To further examine the association between familial alcohol use and student heavy alcohol consumption across schools with varying degrees of student focus, analyses stratified by schools’ level of student focus were performed and demonstrated in Table 4. As illustrated by the results the negative effect of problematic familial use on student heavy alcohol consumption is weaker in schools with intermediate (OR 2.22, p < 0.001) and strong (OR 1.69, p < 0.05) student focus than in schools with weak student focus (OR 3.66, p < 0.001). The pattern is similar for youth who stated

| Table 3. Odds ratios from multilevel logistic regressions of familial alcohol use on student heavy drinking. n = 9198 students within 159 school units. |
|---------------------------------------------------------------|
| **Familial alcohol use**                                     |
| Not problematic (ref.)                                      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Don’t know/Missing                                          | 2.24***| 2.21***| 2.21***| 2.25***| 3.09***|
| Problematic                                                 | 2.43***| 2.31***| 2.30***| 2.27***| 3.67***|
| **School student focus**                                    |
| Weak (ref.)                                                  | 1.00 | 1.00 | 1.00 |
| Intermediate                                                | 1.66**| 1.20 | 1.38 |
| Strong                                                      | 1.57*| 1.12 | 1.44 |
| **Cross level interactions**                                |
| Don’t know family use*intermediate student focus            | 0.83 |
| Don’t know family use*strong student focus                  | 0.45*|
| Problematic family use*intermediate student focus           | 0.60 |
| Problematic family use*strong student focus                 | 0.46*|
| Sigma_u                                                     | 0.542 | 0.530 | 0.536 | 0.491 | 0.379 | 0.382 |
| rho                                                         | 0.082 | 0.078 | 0.080 | 0.068 | 0.041 | 0.042 |
| −2 log-likelihood                                           | −1678.6 | −1650.8 | −1646.9 | −1642.2 | −1627.4 | −1623.8 |

*p < 0.001 **p < 0.01 *p < 0.05+p < 0.07
Empty model contains no independent variables. Model 1 adds familial alcohol use. Model 2 adds individual-level control variables. Model 3 adds school student focus. Model 4 adds school-level control variables Model 5 adds cross-level interaction between familial alcohol use and school student focus. Bold rho-estimates are significant on 5%-level
that they do not know if anybody in their family drinks too much i.e, the negative effect becomes weaker the stronger the school’s level of student focus.

**Discussion**

Alcohol consumption is common among adolescents, even though there has been a decrease in several countries during the past decades (Pape et al., 2018). A body of research has shown that excessive alcohol use in adolescence is associated with a range of problems in both short and long term, pointing at the importance of identifying potentially preventive measures.

Most earlier studies on youth alcohol consumption have either focused on associations between individual and family characteristics and youth drinking, or explored the direct effect of conditions in school. In the current study we combined student-reported information on conditions at home and teacher-reported information on characteristics of the school environment to enhance our understanding of the determinants of adolescent alcohol use. More specifically, the ambition of the study was to explore the extent to which conditions in schools may help combat the risk associated with unfavourable home conditions in terms of problematic familial alcohol use on adolescent heavy drinking.

In sum, results from our analyses showed that youth from families with problematic and possibly problematic alcohol use were more likely to be heavy consumers themselves than youth who did not perceive anybody in their family to be drinking too much. This result is in line with expectations, since familial problematic alcohol use has previously been found to be a key risk factor for offspring alcohol consumption in youth as well as later in life (Karlsson et al., 2016; Latendresse et al., 2008; Vermeulen-Smit et al., 2012). Thus, our results provide additional support for the assumption that problematic familial alcohol use may be transmitted from parents to children. The fact that students who were unsure if the family consumption level was to be regarded problematic also were more likely to be heavy consumers, could possibly indicate that, in line with what has been suggested elsewhere (Karlsson et al., 2016), the transmission of drinking behaviours may take place already at quite low levels of consumption.

The most important finding, given the purpose of the study, was that the effect of familial alcohol use on adolescent heavy drinking was moderated by conditions in school. More specifically, youth from families with problematic or possibly problematic alcohol use who attended a school in which the student focus was rated as high were less likely of being heavy consumers than those attending a school with lower levels of student focus. This finding is in agreement with one of the core ideas of the effective school movement, namely that an effective and well-functioning school has the potential to counteract the negative effects of factors external to the school, such as problematic home conditions (Rutter et al., 1979). Although less central to the aim of the study, it could be noted that the direct effect of school student focus was positive, indicating that youth in schools characterized by strong student focus were more likely to be heavy consumers than youth in school characterized by weaker student focus. Even though the result is theoretically unexpected (Rutter et al., 1979), the fact that the association disappears when information about the proportion of parents with post-secondary education in the school is entered corresponds well with previous

| Home alcohol consumption       | Weak student focus (n = 2630) | Intermediate student focus (n = 3472) | Strong student focus (n = 3096) |
|-------------------------------|------------------------------|------------------------------------|-------------------------------|
| Not problematic (ref.)        | 1.00                         | 1.00                               | 1.00                          |
| Don’t know/Missing            | 2.96***                      | 2.59***                           | 1.42                          |
| Problematic                   | 3.66***                      | 2.22***                           | 1.69*                         |

**Table 4.** Student heavy drinking by level of school student focus. Odds ratios from two-level binary logistic regressions n = 9198 students within 159 schools.
studies on school advantage and youth alcohol consumption. Generally this type of studies suggest that youth that attend sociodemographic advantaged schools tend to be more engaged in alcohol use than youth in less advantaged school settings (Carlson & Almqvist Y, 2016; Olsson & Fritzell, 2015). In addition, school ethos has previously been found to be stronger in more advantaged school settings (Granvik Saminathen et al., 2018). In sum, the unexpected association is likely to be driven by the greater prevalence of alcohol use in advantaged school settings rather than by the stronger student focus. Yet, irrespective of the sociodemographic profile of the school, efforts placed at creating a school environment in which a strong student focus in terms of respect, support, time, positive feedback and high expectations is obvious will be beneficial (in particular) for students at risk and from problematic home settings.

The result of this study thus underlines the potential of an effective school to foster healthy behaviours among students at risk of problematic alcohol consumption. In general, interventions aimed at reducing youth alcohol consumption have a strong focus on family- and individual-level characteristics (Bonell et al., 2007). When school interventions are discussed, this is usually done in terms of specific school intervention programs aimed at certain groups i.e. students from low socioeconomic background (Dietrichson, Bog, Filges, & Klint Jorgensen, 2015) or at improving, for instance, knowledge and peer norms for specific behaviours (Bonell et al., 2007). Although such school intervention programs may well be effective, the ambition of the current study has been to broaden the perspective. In line with ideas derived from the effective school literature the results from this study suggest that problem behaviours, in particular among those from unfavorable home conditions, may indeed also be counteracted by striving towards an overall good learning environment characterized by a strong student focus. In addition, we know from previous research that, by carrying out their main mission in a good way schools may actually prevent the emergence of problem behaviours at the school in terms of both bullying (Bitte Modin et al., 2017) and crime (Sandahl, 2014) and counteract the risk of engaging in crime among youth from families with alcohol problems (Sandahl, 2014). We also know, in line with what is being suggested by the accumulation of disadvantage hypothesis (Ben-Shlomo & Kuh, 2002), that it is the combination of the many risk factors often experienced by children of alcoholics that make them especially vulnerable to the risk for maladaptive behaviours (Johnson & Leff, 1999). Breaking the chain of disadvantage is thus essential. This study suggests that by focusing on its main task (of teaching and promoting student learning) the school has the potential to also compensate for disadvantage in the home setting and have a positive influence on the future trajectories of youth at risk.

**Strength and limitations**

This study was based on a new and unique data material covering a substantial portion of the 9th grade students and schools in Stockholm, making it ideal for multilevel analyses. Furthermore, the fact that the study uses two separate data sources with different informants, as well as official register information on schools, limits the risk of shared methods variance. Nevertheless, as always, the findings and interpretations of the current study should be considered with some study limitations in mind. Firstly, familial alcohol use was measured by a single question only. No information was obtained from parents or anybody else in the family about the consumption or their view on the severity of the family alcohol problems, nor was any kind of objective classification used. This could be considered a limitation. Yet, most studies on parental alcohol problems and related effects have been on more severe (and often clinical) cases of parental alcohol problems (Pisinger et al., 2016). The fact that this study investigates the impact of perceived familial alcohol problems opens up for insights that could not have been obtained otherwise. Secondly, the study relies on cross-sectional data, meaning that the possibility of reversed causality cannot be ruled out. Hence, although it seems unlikely, the students’ perception of the familial alcohol use as problematic could be a result of their own alcohol consumption rather than the other way around. Information on school student focus was however obtained from different source. Fourthly, findings are based on regional data on 9th grade
students in Sweden, which means that generalizations should be done with care. Finally, neither external nor internal non-response can be claimed to be completely at random. It might, for instance, be reasonable to believe that (a) children of alcoholics are less willing to report on problematic drinking in the family and that (b) absent students are more involved in problem behaviours than others. Yet, if anything, this probably implies that the reported associations were underestimated rather than the other way around.

Conclusion

In conclusion, the association between problematic familial alcohol use and adolescent heavy alcohol consumption appears to be weaker in schools characterized by a strong student focus. Our results thus lend support to the idea that an effective and well-functioning school can also counteract disadvantages associated with other areas in life. Research into how central contexts in young people’s lives, such as the family and the school, may act together to promote or prevent at-risk behaviours adds to our knowledge on adolescents’ development and engagement in risk behaviours but also opens up for preventions targeting not only the individuals and their families but also the environments in which they are embedded. In terms of recommendations for school practice, it is thus essential to strengthen the awareness that schools characterized by a strong school ethos in terms of a strong student focus have the potential to counteract poor home conditions and as such help reducing at-risk alcohol consumption among young people. Consequently, striving towards a school environment characterized by high teacher expectations, respect, positive feedback and time for teachers to talk with their students even about other things than schoolwork might promote not only high performance but also healthy trajectories among the students.

Acknowledgments

The study was supported by the Swedish Research Council, Forte, Formas, and Vinnova under Grant (2014–10107); and Systembolagets Alkoholforskningsråd under Grant (2017-0030)

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the Swedish Reserach Council, Forte, Formas and Vinnova [2014-10107]; Systembolagets Alkoholforskningsråd [2017-0030];

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Gabriella Olsson holds a PhD in Sociology. Her main research has been on youth health behaviours, particularly the influence of conditions in schools and the family for such behaviours.

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