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Alcohol use in adolescence: a qualitative longitudinal study of mediators for drinking and non-drinking

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ABSTRACT

Initiation of alcohol use often takes place in adolescence. This longitudinal study explores adolescents' alcohol use by highlighting mediators in their network that either hinder or facilitate alcohol consumption. Qualitative individual interviews were conducted with 75 adolescents (age 15–16) during their final year of lower secondary school (LSS), and their first year of upper secondary school (USS) (age 16–17), amounting to 150 interviews in total. Three drinking practices were identified during the transition from LSS to USS. The *abstainers* did not drink either in LSS or USS. They emphasized negative effects of alcohol and ascribed their non-drinking to the mediating role of parental expectations, sports and school achievements, and weak social ties. The *initiators* started to drink in USS and described increased acceptance, availability, peer pressure and social benefits as mediators for alcohol use initiation. The *drinkers* drank alcohol in both LSS and USS, and the mediators for drinking ranged from curiosity and social lifestyles to personal vulnerability traits. This study identified hindering and facilitating mediators for drinking, but also highlighted blurred boundaries between drinking and non-drinking: non-drinkers recognized social benefits associated with drinking, and drinkers highlighted control and responsible drinking alongside the pleasure and social benefits of drinking.

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Introduction

Adolescence is a transitional phase characterized by physical, mental and psychosocial developments (Forehand & Wierson, 1993), and an important period in regard to formation of new drinking practices. During adolescence, young people's expectations concerning the effects of alcohol shift from negative to positive as they become more aware of the potential benefits of its use, and less convinced of its costs and risks (Masten et al., 2008; Schulenberg & Maggs, 2002). Adolescents also become increasingly concerned with peer relationships during this period (Vartanian, 2000), in terms of both conformity with peers, social acceptance (Forehand & Wierson, 1993; Gunther Moor et al., 2010), and rejection of parental values (Palmonari et al., 1991). In addition, adolescents' first experiences with alcohol typically take place with peers outside the family context (Simonen et al., 2017).

The transition from lower secondary school (LSS) to upper secondary school (USS) is significant; in LSS, pupils attend the school local to their place of residence; for USS, they have more options and can choose different areas of study. Changing schools involves changes in friendship groups for many adolescents, as they discover new social arenas and peer networks. In this paper, we explore various drinking practices by identifying mediators that either hinder or



facilitate alcohol consumption (including abstention) among a large sample of Norwegian adolescents.

Alcohol use initiation usually occurs in early to mid-adolescence. The European Alcohol and Drug Survey (ESPAD) shows that an average of 80% of students aged 15–16 have used alcohol, and 13% were intoxicated during the last 30 days (Kraus et al., 2016). However, adolescent drinking is being challenged by young people who choose not to drink (Pavlidis et al., 2019). Underage drinking is less common today than it was 10–15 years ago, both in Nordic countries and globally (de Looze et al., 2015; Kraus et al., 2020; Pape et al., 2018).

This longitudinal study explores alcohol use in adolescence by highlighting mediators in their network that either hinder or facilitate alcohol consumption.

Alcohol as a mediator

Inspired by the Actor Network Theory (ANT), we draw attention to how nonhuman objects – in this case alcohol – act on users, engage in practices, and operate in networks (assemblages) (Latour, 2005, p. 68). The actor-network refers to the relations between human and non-human actors (Latour, 1994), and in the context of this study, the relations

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between adolescents and alcohol within different drinking practices.

Highlighting the agency of alcohol is useful in exploring the evolving position of alcohol and identify mediators that hinder or facilitate adolescent drinking. When we refer to alcohol, we usually mean the substance found in beverages such as beer, wine, and spirits. The substance has an internal, physiological impact on the body when consumed. Externally, the substance has an impact on and is used in wider social practices as alcohol's materiality is interlinked with packaging (i.e. bottles) and practices (i.e. consuming, purchasing, sharing, hiding, toasting, and so on.)

For example, drinking practices are likely to be adjusted according to the alcoholic beverage type. Spirits commonly invite small shots; beer, on the other hand, usually entails larger steins. Alcohol can refer both to the various categories of alcoholic beverages based on strengths and flavors, and to broader mediators such as age limits to decrease accessibility. For instance, consumption of spirits is regulated by a higher age threshold in Norway (20 years old) than beer and wine (18 years old). In addition, drinking can change situations from an everyday setting to excess, or from safe to risky.

Mediators (Latour, 2005) refer to the factors translating or modifying the meanings, or the elements associated with an actant such as alcohol. Following Latour (2005, p. 39), *'no matter how apparently simple a mediator may look, it may become complex; it may lead in multiple directions which will modify all the contradictory accounts attributed to its role'*. For example, the different meanings of alcohol may be mediated by the type of beverages, consumers, and drinking practices in different social contexts. A chilled glass of Chablis at a wine tasting in France will entail a different meaning compared to a cheap bottle of warm vodka hidden in a 16-year-old's pocket. Thus, identifying mediators implicates an awareness of the factors influencing the relations between adolescents and alcohol.

Duff (2012) demonstrates how alcohol consumption is mediated by social processes, settings, and dynamics. As Demant (2009) notes: 'In research on alcohol and youth, concepts like drinking pressure, excuse value and peer pressure often have a tone of "invisible agency", which ascribes power to a collective that works behind the backs of drinking [or non-drinking] teenagers' (p. 29). Further, Bøhling (2015) shows how drunkenness emerges as the product of unpredictable yet patterned encounters between bodies, spaces, beverages, and consumption practices. Thus, several studies have demonstrated how network theories have successfully highlighted both the socio-spatial context of alcohol use and the multitude of independent factors influencing it (Bøhling, 2015; Demant, 2009; Pedersen et al., 2017). The recognition that behaviors and phenomena are complex configurations of relations allows for a grounded empirical sensitivity that lets us describe, rather than presume, how the associations in a network actually work to produce the phenomenon of interest (Latour, 2005). ANT perspectives may thus help illuminate how alcohol, drinking, user groups, and contexts are processual phenomena continually contingent upon interactions with one another (Bøhling, 2015).

Against this backdrop, the aim of the current paper is to explore various mediators that hinder or facilitate drinking among adolescents during the transition from LSS to USS. Recognizing these mediators is essential to understand both adolescent drinking and non-drinking.

Methods

Data for this paper consist of 150 longitudinal qualitative interviews and subsequent field notes. The study is part of a longitudinal project in which a sample of adolescents was interviewed about alcohol, tobacco and drug use, and leisure time, since their first year of LSS in 2014 (Brunborg et al., 2019). In the qualitative part of this project, entire school classes from throughout Norway were asked to participate in interviews. The first wave of data collection (T1) was initiated in 2015 and consisted of interviews with 118 eighth-grade students (12–13 years old). Roughly, one-half of the sample were boys. In 2017, we conducted the first follow-up (T2), when the students were in the beginning of 10th grade ($n=85$, 14–15 years old). The second follow-up (T3) was conducted during their last semester in 10th grade ($n=95$, 15–16 years old), and the last follow-up (T4) was conducted in their first year of USS ($n=80$, 16–17 years old). Findings from the initial waves of data collection are reported elsewhere (Bakken et al., 2017; Sandberg & Skjaelaen, 2017; Scheffels et al., 2020).

For this study, we use data from T3 and T4 to explore adolescent drinking practices during the transition from LSS to high USS. Specifically, we carried out interviews with 75 adolescents in 2018 during their final year of LSS (T3), and followed them up in 2019 during their first year of USS (T4). These procedures generated a total of 150 interviews (one per person at both assessments) and enabled longitudinal data analyses.

During the interviews, we followed a semi-structured guide with questions about the perceptions of and experiences with tobacco, alcohol, and illicit drugs, aiming to understand how these substances were perceived and integrated into the participants' day-to-day lives. This approach included general questions about their schools, their spare time, their interests and ambitions, and their anticipated near and distant futures (Sandberg & Skjaelaen, 2017). The longitudinal approach allowed for the accumulation of responses that can be read against each other (Yates & McLeod, 2007), with the goal to analyze changes over time (Saldaña, 2003), in order to understand how the adolescents' views of and experiences with alcohol developed during the year in question.

While several researchers participated in data collection, analysis, and publications, a core group, including authors of the current study, followed the project from the outset. The interviews were conducted by the authors and took place at the schools during school hours or convenient places nearby, and they lasted on average between 45 and 60 minutes. Themes covered in the interview guide were developed in collaboration between the authors to ensure that all interviews were conducted in a comparable manner. We discussed experiences during data collection and made

adjustments to the guide based on the adolescents' replies. We also tried to make provisions so that each author interviewed the same participant at both T3 and T4, in order to follow the individual trajectories in-depth and to maintain established relationships. The interviews were audiotaped and transcribed verbatim. Pseudonyms were used and identifying factors were removed from the transcripts.

In addition to the interviews, we wrote field notes that added contextual data, such as the interview atmosphere and the interviewers' immediate experiences of and analytic thoughts about the person interviewed, and how they had evolved since the previous round of interviews. We took special note of temporal developments in the adolescents' alcohol use trajectories, focusing on whether they had initiated, abstained, or continued the use of alcohol, and how they themselves accounted for these (dis)continuities. The 1/2 to 2 pages long field notes about each participant at both LSS and USS were linked to their interviews through the use of same pseudonyms and included the time of each interview to highlight temporal aspects.

We systematically coded the interviews from both waves of data collection using the qualitative analysis software, HyperRESEARCH. The initial coding involved devising a codebook based on predefined themes in the interview guide, such as: own experience of alcohol, refraining from drinking, risk perceptions, curiosity, binge drinking, alcohol effects, expectancies, and consequences. To obtain unambiguous coding, one third of the interviews were coded by two researchers.

The point of departure for the current analysis was a thorough reading of the field notes for each of the 75 participants. This enabled us to gain an overview of the developments that had occurred, along with the participants' experiences with alcohol at both interview times. As we searched for patterns of drinking practices in the field notes, we identified three different groups: abstainers ($N=31$), initiators ($N=17$), and drinkers ($N=27$). The coded interview data complemented this initial analysis by providing contextual descriptions of the adolescents' experiences, representations, and views on alcohol use, and whether they had evolved from LSS to USS. The accounts were grouped according to the related drinking practices, and we paid specific attention to the mediators hindering or facilitating drinking for each group, which included descriptions of peers, places, age, relationships, and regulations (Demant, 2009). The analyses were based on a trajectory approach (Grossoehme & Lipstein, 2016) and focused on changes over time. The advantages of this approach are that it allows us to identify individual-level changes and associated social processes to a greater extent than in repeated cross-sectional analysis (Saldaña, 2003).

Although this study is based on a large number of participants, this qualitative study identifies complex, embedded practices of meaning making, and we have analyzed the data accordingly. Most importantly, we have sought to answer our research questions on a comprehensive basis, and not merely through the participants' direct responses to questions (Sandberg & Skjælaaen, 2017).

A strength of this study was the use of longitudinal qualitative data from a sizable nationwide sample. However, there are also possible limitations: First, interview data can lead to known biases, such as selective recall and socially desirable responses, especially among adolescents. Second, attrition is a challenge in longitudinal studies. In this study, we have only included the adolescents who were interviewed in both waves (T3: $n=75$ of 95 and T4: $n=75$ of 80). Still, we believe that the selective attrition has been kept to a minimum, as the sample heterogeneity was maintained in terms of gender, location, and inclusion of participants in socially vulnerable positions. Third, the study reflects adolescent drinking practices among Norwegian youth and findings are not necessarily transferable to other socio-cultural contexts.

Active informed consent was obtained from both the interviewees and their parents. The study was approved by the Norwegian Data Inspectorate (reference no.: 15/01495) after an ethical evaluation by the National Committee for Research Ethics in the Social Sciences and the Humanities (reference no.: 2016/137).

Results

The results show that drinking practices among the adolescents evolved from the final year of LSS to the first year of USS. We identified three groups with different drinking trajectories and defined mediators that hinder or facilitate alcohol consumption.

The abstainers

During the final year of USS, when the adolescents were 15–16 years old, only a minority recounted any personal experiences with drinking. The non-drinkers explained there was no high status ascribed to drinking in their peer groups, and they compared drinking to other norm-transgressive behaviors. In addition, the legal age for purchasing alcohol and parental attitudes were highlighted in their explanations for non-drinking. They also related alcohol use to loss of self-control (Scheffels et al., 2020).

During the first year of USS, a significant proportion of adolescents – *the abstainers* – continued to refrain from drinking. Usually, these participants were part of social groups in which non-drinking was described as normal. Their explanations for non-drinking echoed those of the previous year; they did not see drinking as interesting and they prioritized school and sports. Nina illustrated this line of thought at USS and explained: *I don't need to drink because my friends do other things.*

Anton was typical of the adolescents within this group. During the final year of LSS, he presented himself as a promising athlete and conscientious student. Anton emphasized his friends' non-drinking as the main reason for his own non-drinking. One year later, Anton expressed confidence about his non-drinking, and described similar negative perceptions toward drinking as he did one year earlier:

I don't want to become addicted. I think it can be dangerous. There is so much other stuff I can do. (Anton, USS)

Anton associated alcohol with addiction and danger. Refraining from drinking in his case can be interpreted as refraining from an unwanted lifestyle which he assumed would negatively affect his well-being. Caluzzi et al. (2021) also demonstrate how drinking can be a barrier to achieve sports- and fitness-related goals. Although health and control were the emphasized mediators for his continuous non-drinking, Anton also acknowledged that alcohol is a part of social settings, and he hinted that his non-drinking might exclude him from certain social arenas:

If you attend parties, you become more social. I'm an introvert, so I think I would become more outgoing by drinking. (Anton, USS)

During both interviews, Anton described himself as an 'introverted nerd' and said that his social life had not expanded since starting USS. Nor did he have much contact with his old friends. However, he seemed content with his self-proclaimed 'nerdy' identity and its focus on school and sports performance.

Other abstainers recounted similar stories. Torleif was reserved and described himself as a 'loner' during both interviews. Both Anton and Torleif recognized the potential social benefits of alcohol use at USS, which is common among adolescents (Schulenberg & Maggs, 2002). However, neither of them seemed eager to betray their own sense of personality merely to be included in the social world that consisted of partying and alcohol use.

In contrast, Marianne had many friends, some of whom had started to drink. She explained:

I haven't started drinking yet. I don't think it tastes any good and I can see that my friends get silly from drinking. It doesn't look like much fun. All the vomiting and everything. (Marianne, USS)

Marianne described alcohol as having an internal, physiological impact on the body, and that this may negatively influence the drinker's behavior. She highlighted the connections between the drinker and the drink by describing the taste of the liquid (not good) and how alcohol affected the body (made it silly), sometimes ending with vomiting. Although this perception can be interpreted as a hindering mediator, she was also aware of the positive mediating role of alcohol in peer networks. Marianne adopted a personal stance toward non-drinking, emphasizing individual choice and control (Pavlidis et al., 2019).

Marianne also referred to the legal age limits and regulations as legitimate hindering mediators for continued non-drinking:

I have a goal for myself that I'll wait until I turn 18, because then it's legal. It's quite common to drink, but it's still breaking the law. (Marianne, USS)

Several of the abstainers also emphasized closeness and open communication with their parents. Their parents' stances were thereby mirrored in their drinking practices, as they wanted to ensure that their parents were not disappointed by their actions (Simonen et al., 2017).

Some abstainers rejected alcohol because they did not want to lose control, whether in a short- or long-term context (Scheffels et al., 2020). In these stories, they highlighted the potential external negative consequences of drinking

among their reasons for refraining. Marianne continued and talked about a friend who hosted a party that got out of control: *the neighbours became angry, so the police came. And things were stolen.*

This story highlights the risk context involved with alcohol use among adolescents, and some of the abstainers still echoed the stories they had recounted as 12–13 years old, describing the perceived negative effects of drinking (Sandberg & Skjaelaaen, 2017). Similar discourses of harm have been found among Australian adolescents in explaining why they avoided alcohol (Caluzzi et al., 2020).

Even though the abstainers did not drink themselves, alcohol was not 'black boxed' as a matter of unimportance (Callon & Latour, 2014). Rather, the position and meaning of alcohol were highly present in the abstainers' accounts.

To sum up, a prevailing explanation among abstainers during USS was that their peers also refrained from drinking. While they largely recognized that drinking had status and served as a criterion of inclusion in their peer environments, the abstainers often offered distinct reasons for refraining from drinking. These reasons were often similar to the reasons that were important in LSS. However, for some abstainers, non-drinking was also related to loneliness or lack of social integration.

The initiators

The second group includes those who abstained from drinking in LSS but started to drink one year later. We label these adolescents as *the initiators*. Their new drinking practices were often related to the expanded peer networks and new social arenas.

Egil was one of the initiators and started drinking after entering USS. He was reflective about his own transition: during the final year of LSS, Egil played video games and did sports in his spare time. He also had a girlfriend who was skeptical of alcohol use. One year later, Egil was still into sports, but he had broken up with his girlfriend and made many new friends. In his account of his drinking initiation, the break-up was cited as the turning point, highlighting how the power of the relationship and the interactional processes were previously mediators for non-drinking. In the USS interview, he said that he wanted to gain new experiences and become more social:

The first time I drank properly was at a party. I had never been tipsy or drunk before. I felt a bit of peer pressure, but I also knew I wanted to drink, because everyone else had been drinking a thousand times. I had a bottle of Kalinka vodka. (Egil, USS)

Egil acknowledged that he experienced peer pressure, but at the same time he emphasized that drinking was his own decision:

I was thinking that tonight, I'm going to get drunk for the first time, and it's going to be nice, because I'm with my friends. I'm the right age for testing it. I've always been a person who thinks a lot before I do things. But I have become tired of it after so many years. It was very liberating, to be able to do things and have an excuse for it, somehow. That was what I liked most about it. (Egil, USS)

Egil considered drinking as a planned and conscious choice. The quote demonstrates how Egil was highly aware of that alcohol, in his case a bottle of vodka, would get him intoxicated. In addition, the consumption of alcohol would allow him to behave in a less controlled and freer manner, and he emphasized his age and the social context as facilitating mediators. The quote illustrates that alcohol was central to his identity that night (Demant, 2009). Egil described the experience as pleasurable and social, but most importantly, as a feeling of independence. Here, drunkenness was not linked exclusively to the consumption of alcohol, but a factor in his network with other people (Bøhling, 2015, p. 139). Yet, at the same time, Egil's story shows a controlled loss of control (Measham, 2002, 2004). He described pleasure in losing control by drinking, but his account was also a story of control – highlighting the 'right age' and that he was making a conscious decision to let go.

Being part of the network of other drinkers was an important mediator for initiation. For several of the adolescents, the transition to USS was described as intensifying their contact with peers, new social contexts, and activities, including parties and social situations where alcohol played a key role. Brita, one of the initiators, explained her drinking onset as being late due to her strict parents. In LSS, Brita emphasized parental expectations as a hindering mediator for drinking. However, at USS, her peers seemed to have become more important than her parents:

I started later than normal because I've had such strict attitudes and opinions at home. And I've always thought my parents were right. Sometimes I still do. (Brita, USS)

In USS, Brita presented herself as a social person who had many friends, and parties formed the social focal point. She said that she sometimes felt bad about going against her parents' rules about drinking but legitimized it because of the social benefits of alcohol.

Similar to Brita's account, Bente described how strict parental rules contributed to her non-drinking during LSS. Contrary to several of the abstainers at LSS, Bente was part of a network in which drinking was already an established practice, although she had promised her parents not to drink. During LSS, she expressed ambivalence about her non-drinking because of the social costs associated with being sober:

I don't drink because I have a deal with my mum and dad. But, if you don't drink, you're not invited to parties. That's the tricky part. Sometimes I just wonder if I should start drinking. (Bente, LSS)

Bente described the importance of alcohol in social contexts and how non-drinking could lead to social sanctions in her peer group. In USS, Bente reflected on how she had felt punished and excluded by her peers for not drinking during LSS, referring to it as a 'lonely period'. At USS, she pointed to her drinking debut as a turning point:

I didn't want to cross my parents' boundaries or break the trust we had. I sacrificed so much in order to not drink. But they eventually realized how hard it had hit me and my social image in LSS. (Bente, USS)

Bente appeared happier and more outgoing during the USS interview. She explained how her parents had changed their rules regarding drinking, partly as a result of her social misery in LSS. What stood out in Bente's account was her increased self-confidence and social status, and drinking had a mediating role in improving her self-image and self-perceived social position. She further emphasized how alcohol externally changed the social context leading up to parties, describing how she and her friends planned what to wear, met up beforehand to listen to music, put on make-up and borrow each other's clothes, and planned how to get hold of alcohol. As noted by Demant (2009), changes like less strict parental rules and greater social mobility helped adolescents like Bente to cross a threshold toward bodily pleasure through drinking. This demonstrates how alcohol is an agent in a wider network of actants such as music and make-up, together with parental rules and acceptance in new peer groups leading to increased exposure to alcohol. The sum of each mediator thus shapes the adolescents' drinking practices (Bøhling, 2015, p. 133), and indicates that alcohol consumption is a relational achievement involving diverse objects, places, actors, and effects (Duff, 2012).

Parties involved meeting new friends and strengthening existing networks. Bente's story from USS highlighted the symbolic power of alcohol, where drinking was not the goal, but rather the admission ticket to a selected community and friendships. She described drinking as normal:

I've been drunk and I've been drinking. I'm at a party and mix with people who're also drunk. So, I'm a normal youth for my age. (Bente, USS)

In contrast, during the final year of LSS, non-drinking was described as the norm within their age group (Scheffels et al., 2020). However, Bente now presented the increased normalization of drinking as a facilitating mediator for drinking initiation.

To sum up, several of the *initiators* talked about forming new social networks in USS. Their changed drinking patterns were described as driven by mediators such as increased social pressure to drink, interlinked with growing social opportunities and greater acceptance of drinking. In addition, increased parental tolerance, and the pleasures of drinking were highlighted. As such, the initiators' stories both echoed and contrasted the stories they conveyed one year earlier.

The drinkers

Some students had started drinking during LSS and still drank alcohol in USS. These adolescents constitute what we call *the drinkers*. Their drinking practices ranged from moderate to binge drinking.

Cecilie, one of the drinkers, described positive attitudes toward the pleasurable aspects of drinking in LSS. She also spoke openly about her use of alcohol with her parents but stated that she adjusted her drinking stories to coincide with their expectations. She was, in her own words, 'a responsible young girl'. During the final year of LSS, many of her friends were also already drinking, and Cecilie said that she had gotten

drunk to an extent that required assistance from friends. Yet, her overall evaluation of the situation was positive:

It was a bit nasty, but it went well. My best friend and my boyfriend took care of me until we got home safe. (Cecilie, LSS)

Cecilie indicated that her parents accepted her drinking already in LSS. This mediator, together with having a broad network of friends who also drank, facilitated her drinking.

One year later, Cecilie emphasized that she still drank, but in a different way: *We were partying all the time, almost every weekend. Now we don't do it anymore.* She followed by explaining why her drinking practices had changed:

Sometimes I feel that it is not the right day or time to drink. I don't want to come home to my boyfriend's place completely drunk. It doesn't feel good. I also think about my plans for the next day. I don't want to be in bad shape. (Cecilie, USS)

Cecilie said that she had moderated her drinking since LSS, and that she now drank in a more conscious way. As such, her story resembled that of the abstainers through her emphasis on wanting to be healthy and in control. The same themes were reported in a Swedish study by the participants who were previously moderate and heavy drinkers but had now developed new ways to drink alcohol that were less focused on getting drunk (Månsson et al., 2020). A Danish study (Frank et al., 2020) also demonstrated how being responsible and prioritizing everyday obligations became the common explanations for more moderate drinking among young adults.

Parental relationships also seemed to facilitate alcohol-related practices in the *drinkers'* group. Cecilie and others described an open relationship with their parents, as reflected in the fact that they were largely permitted to drink even though they were below the legal age. This open relationship also implied that they felt responsibility to drink moderately, as they did not want to violate their parents' trust.

Jerund, who started drinking at the age of 15, described increased trust from his parents during USS, despite his drinking practices involving heavy intoxication and partying that sometimes got out of hand. At age 17 in USS, Jerund drank almost every weekend, often consuming large amounts of alcohol:

I don't think you can have the same amount of fun without drinking. The last time I drank, I had four alcopops, six beers, and half a bottle of spirits. (Jerund, USS)

Jerund enjoyed drinking and emphasized it by describing a high consumption in detail, indicating that the fun was related to the internal bodily transformation caused by alcohol. Moreover, it can be linked to the transgressive identity associated with someone who consumed a lot of alcohol. Despite his recalling that he sometimes got so drunk that he had to leave the party, he nonetheless valued the fun and community of such transgressions (Tutenges & Rod, 2009). He continued by talking about his parents and emphasized that their attitudes were characterized by acceptance and trust: *Mom trusts me more. They are not so anxious when I drink anymore.* Jerund thus indicated that his parents worried

less about his drinking than before, even though he actually drank more during USS.

Arvid perceived himself as a good athlete, and he was also into gaming. During the LSS interview, he revealed that he had been drinking vodka with some friends and *become a little drunk*. His drinking revolved around experimentation:

The first time, we bought one litre of 40%. My friend threw up because of the nasty taste. We don't remember anything of that night. We had vomited. My friend woke up in my sister's bed, I woke up in my mom's bed, no one understood what had happened. (Arvid, LSS)

Arvid recounted his story as a humorous anecdote, even though it included both vomiting and memory loss, but he accepted it as an effect that alcohol was supposed to have. Similarly, Demant (2009) describes the bodily effect of throwing up as a central experience associated with the effects of alcohol; it is a central object in the adolescents' network. Arvid's account thereby resonates with Demant (2009), by highlighting that the adolescents made themselves susceptible to the effects of alcohol to a certain limit, by inviting alcohol to take over some of their control.

One year later, Arvid said that he had made many new friends. For him, alcohol was linked to parties which directly expanded his social life. He described a typical party as follows:

I think it is fun. It's very social. You get numb in the body, so you don't feel that much. If you stagger and fall, you just laugh. You enjoy yourself, you don't care about anything. (Arvid, USS)

By describing partying and getting drunk as bodily experiences that involved laughing and having a good time, Arvid's story indicates that drinking alcohol helped him transform into a more carefree person. In this sense, the stories of loss of control, although not directly experienced, reflect the stories told by the abstainers. Such conceptions informed their notions of being affected in the right way according to the specific drinking space (Demant, 2009).

Despite the positive experiences and social benefits from alcohol within this group, some of the drinkers had started to drink heavily early on and had destructive experiences. Anett was one such person and recounted that she had a difficult childhood. She described negative drinking experiences while in LSS, which included involvement of both the police and the emergency services. During the USS interview, she explained that she had stopped going to parties. She now drank very seldomly and instead used cannabis more frequently. When she did drink, however, she drank heavily: *'I was with my boyfriend and we drank a whole Jack Daniel's. And then we started arguing'*.

Roald was also one of the young people in a socially vulnerable position. He grew up in various foster homes and started drinking at the beginning of LSS. He was still drinking heavily, and said that his foster parents helped him if he got too drunk:

The first time was when the neighbour found me lying in the garden. I did not remember anything. The second time was this summer. We had been outside drinking, and then I was picked up at eight in the evening because I drank too much. (Roald, LSS)

For both Anett and Roald, their challenging childhoods appeared to be facilitating mediators for heavy drinking.

In sum, *the drinkers* emphasized the effects of alcohol on their body and mind, as well as the sociability of drinking, pointing out how alcohol is integrated into their social networks. Adolescents who had many friends described parties as important social arenas in their lives. Some had extended their heavy drinking once in LSS, while others highlighted a new way of drinking in which intoxication was no longer the primary goal. The voices of vulnerable young people were also heard among the drinkers.

Discussion

The longitudinal analysis identified three groups with different drinking practices during the transition from LSS to USS. The first group, *the abstainers*, continually refrained from drinking while emphasizing the negative effects of alcohol. Their narratives accounted for parental expectations, sports- and school-related goals, and weak social ties as mediators of their non-drinking. The second group, *the initiators*, started drinking in USS. Their narratives described increased acceptance, availability, peer pressure and social benefits as mediators for alcohol initiation in USS. In the third group, *the drinkers*, continued to drink across both LSS and USS but often with varied drinking patterns. Their drinking mediators varied between curiosity, social networks, and individual and social vulnerability. Based on these findings, we discuss mediators that hinder and facilitate drinking during the transition from LSS to USS, and how ANT perspectives may help illuminate drinking practices among adolescents.

Hindering mediators

Adolescents in this study recounted different mediators that hindered their drinking. These mediators involved membership in non-drinking networks, legal age limits for drinking, parental rules and expectations, school and sports achievements, weak social ties, and fear of both short- and long-term negative consequences often emphasizing the addictive potential of alcohol use. These mediators hindered, slowed down or moderated alcohol consumption among the adolescents during the school transition period.

Several of these mediating factors were identical to the previously stories conveyed by the adolescents at age 12–13, when they were highly skeptical of drinking and predominantly perceived its negative effects such as getting drunk and becoming addicted (Sandberg & Skjaelaen, 2017). The *abstainers* in this study echoed these accounts, in both LSS and USS. During the last year of LSS, the majority of the participants had no drinking experience, and their accounts of refraining from alcohol use included their peers' disapproval, legal age constraints, parental expectations that they should not drink and the fear of losing control (Scheffels et al., 2020). Among the *abstainers*, these explanations were still valid during the first year of USS. In addition, they emphasized that their non-drinking was an active choice (Hardcastle et al., 2019; Pavlidis et al., 2019). Nevertheless, some of the

abstainers experienced social exclusion because drinking and popularity were closely related (Järvinen & Gundelach, 2007).

Further, adolescents highlighted their relationship with parents as an important mediator for both hindrance and facilitation of drinking. Lack of parental acceptance limited alcohol use for some adolescents, while parental acceptance legitimized increased drinking for others.

Health and the need to be in control were emphasized in both the non-drinkers' and drinkers' accounts during USS, and resembled the stories they presented during LSS. This is in line with other studies showing that adolescents and young adults avoid drinking to pursue healthy lifestyles (Caluzzi et al., 2020, 2021; Frank et al., 2020; Månsson et al., 2020). Drinkers now used arguments that suited their decision to drink; they enjoyed partying and the temporary loss of control but stressed that they drank with awareness of their own health and without losing control. As such, the hindering mediators for drinking influenced not only non-drinking, but also moderation among those who did drink.

Facilitating mediators

In all three groups, especially among the *initiators* and the *drinkers*, the participants reported several facilitating mediators for drinking. During the transition from LSS to USS, they pointed to increases both in the availability of alcohol and in the acceptance of drinking in their peer groups. Alcohol had moved closer to their social lives, and thus made peer pressure and social drinking norms more important mediators (Demant & Järvinen, 2011; Järvinen & Gundelach, 2007; Pearson et al., 2006).

Adolescents in all groups recognized that drinking could provide social benefits, as they were invited to parties and included in wider social networks if they used alcohol. For some, expectancies about the effects of alcohol shifted from negative to positive, and they became aware of the potential benefits of drinking alcohol, and less convinced of its costs and risks (Masten et al., 2008; Schulenberg & Maggs, 2002). In line with Månsson et al. (2020), there seemed to be a convergence between previously more 'extreme' thoughts about alcohol, and consequently less polarization between abstainers and drinkers.

Some adolescents said that drinking alcohol was a planned individual choice, but also an important facilitator of being sociable at parties and for meeting new friends.

Our findings also align with other studies suggesting that abstinence can lead to social exclusion, because drinking and popularity are closely related during this period. Järvinen and Gundelach (2007) demonstrate how teenagers' struggle for recognition can be so strong that abstainers are put under pressure, and non-drinking teenagers may end up as the losers in the negotiation of status within peer groups. At the same time, the non-drinkers in our study stood firm in their arguments for non-drinking.

As several of the adolescents in this study argued, alcohol and parties could create feelings of belonging (Demant & Østergaard, 2007), and membership in drinkers' networks was an important mediator for drinking. Other studies

demonstrate how popular adolescents tend to drink more than others (Demant & Järvinen, 2011; Järvinen & Gundelach, 2007; Pearson et al., 2006).

The mediating role of alcohol in peer networks

This paper shows how adding alcohol to a social situation transforms the outcome, both internally because of the physical effects due to the inscription of alcohol, and externally because alcohol becomes a factor that modifies the social meanings of situations (Latour, 1994). Identifying mediators involve awareness of the factors that influence the relations between adolescents and alcohol, such as peers, places, age, alcoholic beverages, parties, bodies, parents, relationships, and regulations.

Our findings show that alcohol can be seen as an actant with social and individual implications for adolescents; both for those who are drinking and for those who are not. In this way, the ANT-perspective sheds light on how alcohol has agency in itself, causing a significant change in adolescents' social settings. Awareness of how alcohol is integrated in social environments can be useful to capture the multitude of factors that shape both experiences of drinking and experiences while drinking (Pedersen et al., 2017). Since alcohol use principally emerges in social contexts, this lends credence to the idea that alcohol itself can be an actant excluding those rejecting it by its presence as shown in the abstainers' narratives of social exclusion. The adolescents in this study evaluated social situations in terms of how much alcohol people were drinking and in what ways they were drinking it. This implies that the network of interaction includes alcohol as a key component.

Further, during the transition from LSS to USS, the networks that shape the adolescents undergo central changes. The association of alcohol, body, parties, and parental rules makes adolescents act differently during USS than in LSS (Demant, 2009). As argued by Pavlidis et al. (2019) and Caluzzi et al. (2021), the increasing emphasis on individual responsibility for health and wellbeing challenges the boundaries between drinking and non-drinking that may lead to novel cultures of alcohol use. We can observe similar tendencies in our study. The initiators recounted stories of how and why they started to drink, and we saw that increased parental acceptance, availability of alcohol, peer pressure, and social benefits were new mediators for drinking. At the same time, the initiators echoed many of their previous arguments for non-drinking, but they were reformulated to serve as arguments for drinking. Controlled and responsible drinking were highlighted, and they presented their drinking as a normal behavior. This may indicate that they still recognized the norm of non-drinking from previous years but adapted it to their new social reality. In the same way, the abstainers also recognized social benefits derived from drinking, and the increased importance of alcohol among peers, while nonetheless choosing to maintain their abstinent identities. In this way, blurred boundaries between drinking and non-drinking were also visible in our data.

Conclusions

By emphasizing the internal and external sides of adolescent alcohol consumption, we argue that drinking practices are mediated by numerous factors. These factors are visible in the way adolescents describe how alcohol transforms both their own behavior and their broader social contexts.

As alcohol is filled not only with meanings but is also strongly embedded in social settings, it has an impact on both drinkers and those who refrain from drinking. This study demonstrates mediators that either hinder or facilitate drinking. It also demonstrates the complexities of adolescent narratives, such as the abstainers who recognize social benefits associated with drinking, while drinkers often highlight control and responsible drinking alongside the pleasure and social benefits of drinking.

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References

- Bakken, S. A., Sandøy, T. A., & Sandberg, S. (2017). Social identity and alcohol in young adolescence: The perceived difference between youthful and adult drinking. *Journal of Youth Studies*, 20(10), 1380–1395. <https://doi.org/10.1080/13676261.2017.1333585>
- Böhling, F. (2015). Alcoholic assemblages: Exploring fluid subjects in the night-time economy. *Geoforum*, 58, 132–142. <https://doi.org/10.1016/j.geoforum.2014.11.012>
- Brunborg, G. S., Scheffels, J., Tokle, R., Buvik, K., Kvaavik, E., & Burdzovic Andreas, J. (2019). Monitoring young lifestyles (MyLife)- a prospective longitudinal quantitative and qualitative study of youth development and substance use in Norway. *BMJ Open*, 9(10), e031084. <https://doi.org/10.1136/bmjopen-2019-031084>
- Callon, M., & Latour, B. (2014). Unscrewing the big Leviathan: How actors macro-structure reality and how sociologists help them to do so. In K. K. Cetina & A. V. Cicourel (Eds.) *Advances in social theory and methodology: Toward an integration of micro- and macro-sociologies* (Vol. 1, pp. 277–304). Routledge.
- Caluzzi, G., MacLean, S., & Livingston, M. (2021). "No one associates alcohol with being in good health": Health and wellbeing as imperatives to manage alcohol use for young people. *Sociology of Health and Illness*, 43, 1–17. <https://doi.org/10.1111/1467-9566.13237>
- Caluzzi, G., Pennay, A. E., & MacLean, S. (2020). Reflexive habitus and the new obligation of choice: Understanding young people's light drinking and alcohol abstinence. *Journal of Youth Studies*, 1–15. <https://doi.org/10.1080/13676261.2020.1778658>
- de Looze, M., Raaijmakers, Q., Bogt, T. t., Bendtsen, P., Farhat, T., Ferreira, M., Godeau, E., Kuntsche, E., Molcho, M., Pfortner, T.-K., Simons-Morton, B., Vieno, A., Vollebergh, W., & Pickett, W. (2015). Decreases in

- adolescent weekly alcohol use in Europe and North America: Evidence from 28 countries from 2002 to 2010. *The European Journal of Public Health*, 25(Suppl. 2), 69–72. <https://doi.org/10.1093/eurpub/ckv031>
- Demant, J. (2009). When alcohol acts: An actor-network approach to teenagers, alcohol and parties. *Body & Society*, 15(1), 25–46. <https://doi.org/10.1177/1357034X08100145>
- Demant, J., & Järvinen, M. (2011). Social capital as norms and resources: Focus groups discussing alcohol. *Addiction Research & Theory*, 19(2), 91–101. <https://doi.org/10.3109/16066351003725776>
- Demant, J., & Østergaard, J. (2007). Partying as everyday life: Investigations of teenagers' leisure life. *Journal of Youth Studies*, 10(5), 517–537. <https://doi.org/10.1080/13676260701594828>
- Duff, C. (2012). Accounting for context: Exploring the role of objects and spaces in the consumption of alcohol and other drugs. *Social & Cultural Geography*, 13(2), 145–159. <https://doi.org/10.1080/14649365.2012.655765>
- Forehand, R., & Wierson, M. (1993). The role of developmental factors in planning behavioral interventions for children: Disruptive behavior as an example. *Behavior Therapy*, 24(1), 117–141. [https://doi.org/10.1016/S0005-7894\(05\)80259-X](https://doi.org/10.1016/S0005-7894(05)80259-X)
- Frank, V. A., Herold, M. D., Schröder, S., Bjønness, J., & Hunt, G. (2020). Legitimizing and negotiating abstinence: Young adults' narratives about practicing situational and long term abstinence in Denmark. *The International Journal on Drug Policy*, 81, 102655. <https://doi.org/10.1016/j.drugpo.2019.102655>
- Grossoehme, D., & Lipstein, E. (2016). Analyzing longitudinal qualitative data: The application of trajectory and recurrent cross-sectional approaches. *BMC Research Notes*, 9(1), 1–5. <https://doi.org/10.1186/s13104-016-1954-1>
- Gunther Moor, B., van Leijenhorst, L., Rombouts, S. A., Crone, E. A., & Van der Molen, M. W. (2010). Do you like me? Neural correlates of social evaluation and developmental trajectories. *Social Neuroscience*, 5(5–6), 461–482. <https://doi.org/10.1080/17470910903526155>
- Hardcastle, S. J., O'Connor, M., & Breen, L. J. (2019). Exploration of young adults' influences on, and consequences of, avoiding alcohol consumption. *Substance Use & Misuse*, 54(5), 831–840. <https://doi.org/10.1080/10826084.2018.1546744>
- Järvinen, M., & Gundelach, P. (2007). Teenage drinking, symbolic capital and distinction AU – Järvinen, Margaretha. *Journal of Youth Studies*, 10(1), 55–71. <https://doi.org/10.1080/13676260701196137>
- Kraus, L., Guttormsen, U., Leifman, H., Arpa, S., Molinaro, S., Monshouwer, K., & Hibell, B. (2016). *ESPAD report 2015. Results from the European school survey project on alcohol and other drugs*. European Monitoring Centre for Drug and Drug Addiction.
- Kraus, L., Room, R., Livingston, M., Pennay, A., Holmes, J., & Törrönen, J. (2020). Long waves of consumption or a unique social generation? Exploring recent declines in youth drinking. *Addiction Research & Theory*, 28(3), 183–193. <https://doi.org/10.1080/16066359.2019.1629426>
- Latour, B. (1994). On technical mediation. *Common Knowledge*, 3, 29–64.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford University Press.
- Masten, A. S., Faden, V. B., Zucker, R. A., & Spear, L. P. (2008). Underage drinking: A developmental framework. *Pediatrics and Neonatology*, 121, S235–S251. <https://doi.org/10.1542/peds.2007-2243A>
- Measham, F. (2002). Doing gender-doing drugs: Conceptualizing the gendering of drugs cultures. *Contemporary Drug Problems*, 29(2), 335–373. <https://doi.org/10.1177/009145090202900206>
- Measham, F. (2004). Play space: Historical and socio-cultural reflections on drugs, licensed leisure locations, commercialisation and control. *International Journal of Drug Policy*, 15(5–6), 337–345. <https://doi.org/10.1016/j.drugpo.2004.08.002>
- Månsson, J., Samuelsson, E., & Törrönen, J. (2020). Doing adulthood—Doing alcohol: What happens when the 'sober generation' grows up? *Journal of Youth Studies*, 1–16. <https://doi.org/10.1080/13676261.2020.1844173>
- Palmonari, A., Kirchler, E., & Pombeni, M. L. (1991). Differential effects of identification with family and peers on coping with developmental tasks in adolescence. *European Journal of Social Psychology*, 21(5), 381–402. <https://doi.org/10.1002/ejsp.2420210503>
- Pape, H., Rossow, I., & Brunborg, G. S. (2018). Adolescents drink less: How, who and why? A review of the recent research literature. *Drug and Alcohol Review*, 37(S1), S98–S114. <https://doi.org/10.1111/dar.12695>
- Pavlidis, A., Ojajarvi, A., & Bennett, A. (2019). Young people and alcohol abstinence: Youth cultural practices and being a non-drinker in Finland and Australia. *Journal of Youth Studies*, 22(8), 1101–1116. <https://doi.org/10.1080/13676261.2019.1566597>
- Pearson, M., Sweeting, H., West, P., Young, R., Gordon, J., & Turner, K. (2006). Adolescent substance use in different social and peer contexts: A social network analysis. *Drugs: Education, Prevention and Policy*, 13(6), 519–536. <https://doi.org/10.1080/09687630600828912>
- Pedersen, W., Tutenges, S., & Sandberg, S. (2017). The pleasures of drunken one-night stands: Assemblage theory and narrative environments. *The International Journal on Drug Policy*, 49, 160–167. <https://doi.org/10.1016/j.drugpo.2017.08.005>
- Saldaña, J. (2003). *Longitudinal qualitative research: Analyzing change through time*. Altamira.
- Sandberg, S., & Skjælaaen, Ø. (2017). "Shoes on your hands": Perceptions of alcohol among young adolescents in Norway. *Drugs: Education, Prevention and Policy*, 25(6), 449–456. <https://doi.org/10.1080/09687637.2017.1335690>
- Scheffels, J., Buvik, K., Tokle, R., & Rossow, I. (2020). Normalisation of non-drinking? 15–16-year-olds' accounts of refraining from alcohol. *Drug and Alcohol Review*, 39(6), 729–736. <https://doi.org/10.1111/dar.13084>
- Schulenberg, J. E., & Maggs, J. L. (2002). A developmental perspective on alcohol use and heavy drinking during adolescence and the transition to young adulthood. *Journal of Studies on Alcohol, Supplement*, 14(14), 54–70. <https://doi.org/10.15288/jsas.2002.s14.54>
- Simonen, J., Kataja, K., Pirskanen, H., Holmila, M., & Tigerstedt, C. (2017). Trusting and misleading. Parents' and children's communication and negotiation about alcohol as described by teenagers. *Addiction Research & Theory*, 25(4), 342–348. <https://doi.org/10.1080/16066359.2017.1288804>
- Tutenges, S., Rod, M. H. (2009). 'We got incredibly drunk... it was damned fun': Drinking stories among Danish youth. *Journal of Youth Studies*, 12(4), 355–370. <https://doi.org/10.1080/13676260902866496>
- Vartanian, L. R. (2000). Revisiting the imaginary audience and personal fable constructs of adolescent egocentrism: A conceptual review. *Adolescence*, 35(140), 639–662.
- Yates, L., & McLeod, J. (2007). *12 to 18: A qualitative longitudinal study of students, values and difference in Australian schools*. Australian Curriculum Studies Association.