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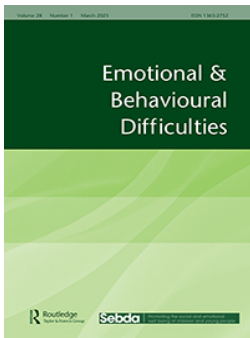
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# Investigating health behaviours and health beliefs in individuals with Social, Emotional, and Mental Health (SEMH) difficulties

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## ABSTRACT

Individuals with SEMH difficulties often perform negative health behaviours, yet little qualitative research aiming to understand why exists. The present study aimed to uncover reasons for poor health behaviours in individuals at an SEMH college. Eight students attending a specialist SEMH college were interviewed about their health behaviours and health beliefs. IPA was utilised to analyse the datasets. Participants seemed aware of the potential severity of ill-health following negative health behaviours, yet this only appeared to influence behaviour when they believed themselves as susceptible to the illness. Coping with adversity and social influence were key barriers in reducing unhealthy behaviours, with perceived barriers outweighing any potential health benefits. Participants expressed good mental wellbeing as key in being physically healthy, both directly and as mediated through health behaviours. Finally, participants engaging in unhealthy behaviours appeared to minimise the potential risks associated with each behaviour. Students with SEMH difficulties perform negative health behaviours for various reasons including social influence, enjoyment and coping with adversity. Addressing these factors may help to improve the health behaviours of this cohort.

## KEYWORDS

Social emotional mental health; special educational needs; health behaviours; health beliefs; physical health; psychological coping

## Introduction

Health behaviours can be defined as chosen behaviours that support the improvement or maintenance of one's health, with negative health behaviours achieving the opposite (Gochman 1997). The term encapsulates a wide range of behaviours including diet, exercise, smoking, alcohol consumption, substance misuse and doctor visits (Conner and Norman 2017). Many negative health behaviours have been implicated in morbidity and mortality as adults (Corepal et al. 2018).

Negative health behaviours such as smoking and alcohol consumption are often initiated in adolescence (Sychareun, Thomsen, and Faxelid 2011) and may continue well into adulthood (Paavola, Vartiainen, and Haukkala 2004). Negative health behaviours tend to cluster, particularly in adolescence. For example, adolescents using substances have been found to consume larger quantities of alcohol (Faeh et al. 2006) and engage in risky sexual behaviour (Somers et al. 2016). Further, associations have been noted between several negative health behaviours and lower levels of healthy behaviours including physical activity (Furlanetto et al. 2014) and fruit and vegetable intake (McClure et al. 2009). Thus, adolescence is a key time to address negative health behaviours before they are continued into adulthood.

Furthermore, adolescents who lack social support or stable home lives are at greater risk of performing negative health behaviours such as substance misuse (Cleveland et al. 2008). This may

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explain why greater negative health behaviours are found in looked-after children (Williams et al. 2001), care leavers (Ridley and McCluskey 2003), adolescents from poorer backgrounds (Paavola, Vartiainen, and Haukkala 2004) and adolescents who had experienced childhood trauma (Bellis et al. 2014; Hughes et al. 2017). A similar yet under-researched population of adolescents are those classed as having social, emotional and mental health difficulties (SEMH). According to the UK Department for Education, known risks to SEMH pupils include self-harm, substance misuse and eating disorders (DfE 2015), which could be due to adverse childhood experiences (ACEs) or poor mental health which are common in this population (DfE 2015). Similarly, research suggests trauma could lead to the development of SEMH difficulties in some young people (Cumbria County Council, 2018). Further, links between ACEs and negative health behaviours have been well evidenced in literature. Hughes et al. (2017) found moderate associations between ACEs and smoking and heavy alcohol consumption, strong associations for sexual risk taking, poor mental health and problematic alcohol consumption. They found the strongest association between ACEs and problematic substance misuse and self-directed violence. Thus, experiencing multiple ACEs appears to be a key risk factor in performing negative health behaviours.

Despite awareness of the negative health behaviours performed by individuals with SEMH difficulties, to our knowledge there is no qualitative research aiming to understand why they perform risky health behaviours.

In England there are 1,276,215 pupils classed as having special educational needs, with 17.5% of these young people classified as having SEMH difficulties (Department for Education [DfE], 2018). Also, 3.1% of all pupils in England have an Education, Health and Care plan (EHCP), which is a plan to support young people (below age 25) who require additional educational, health and social care support than is offered through SEN support (GOV.UK 2021). Many specialist SEMH schools and colleges within England require pupils to have an EHCP for admission (Good Schools Guide 2021).

Much of the aforementioned research with adolescents were largely retrospective (Bellis et al. 2014), focus groups (Ridley and McCluskey 2003) or survey based (Paavola, Vartiainen, and Haukkala 2004), with none consisting of qualitative interviews to uncover reasons for negative health behaviours and accompanying beliefs. Also, to our knowledge, no research has been conducted directly with individuals with SEMH difficulties, thus this research adds to the literature twofold.

The present study utilised semi-structured interviews with individuals attending an SEMH specialist college in the North of England, to investigate their health behaviours and associated health beliefs. Understanding why this cohort perform negative health behaviours that might increase the risk of future ill health can lead to the development of effective interventions to mitigate these risks. Themes were inductively developed and then mapped deductively to the Health Belief Model (HBM) constructs, originally devised by Rosenstock (1966), to deduce whether health beliefs influence the negative health behaviours described by participants. The HBM posits that health behaviours are performed based on the individual's perceived susceptibility to illness, perceived severity of the illness and perceived benefits and barriers to changing health behaviours. Self-efficacy was later added to the model (Rosenstock, Strecher, and Becker 1988).

## Materials and methods

Ethical approval was granted by the University Ethics Panel, reference: 21/PSY/004.

### Aim

To understand the health beliefs and health behaviours of young people with SEMH difficulties.

### Design

A qualitative study of eight semi-structured interviews. Participants were asked to discuss any health behaviours relevant to them, before being asked questions about smoking, substance misuse,

healthcare visits, alcohol use and diet. Questions covered their general opinions of the health behaviours, as well as their own behaviours. Interpretative phenomenological analysis (IPA) was utilised to analyse the datasets, to understand participants' interpretations of their own health behaviours and accompanying beliefs (Pietkiewicz and Smith 2014),

### **Participants**

Participants were recruited from a specialist SEMH college in the Northwest of England. Inclusion criteria: aged 18 or above, have an EHCP, attend a specialist SEMH college at time of interview and speak English.

Eight individuals (7 males, 1 female) aged 18–22 (mean age: 20) volunteered to participate. Seven participants had formal mental health diagnoses at time of interview including Depression, Anxiety, Autism, Psychosis and PTSD. Only one participant did not have a diagnosis. ACE scores ranged from 2 to 15 (mean 11).

### **Procedure**

Individuals were either interviewed face-to-face ( $N=6$ ) at the college or over the phone ( $N=2$ ), with complete interviews lasting between 13 and 26 minutes (mean length: 19 minutes). One participant withdrew after four minutes. Informed consent was obtained prior to interviews. Health behaviours of participants were captured, as detailed in Table 1. Most participants described regularly smoking tobacco and consuming alcohol. Most participants described a link between their mental and physical health.

### **Reflections**

Due to the lead author's prior working relationship with the participants, they were able to engage in open and in-depth conversations about their health behaviours. RT and MF reviewed interview transcripts and all stages of analysis to screen for unintended bias due to this prior relationship. It is unclear whether rich data would be obtained by professionals without a prior working relationship with the participants.

### **Analysis**

Interpretative phenomenological analysis (IPA) as outlined by Pietkiewicz and Smith (2014) was employed to analyse the datasets; to foster understanding of participants' lived experiences regarding health behaviours and their health beliefs (Finlay 2011). Following transcription, the lead author read the transcripts multiple times and re-listened to the audio recordings to immerse herself in the data. Transcripts were then coded line-by-line with exploratory comments added after key extracts. Comments were utilised to identify emergent themes which were then clustered into superordinate and sub themes. RT and MF reviewed the themes and discussed analytic decisions with the lead author. Findings were then related to the HBM (Rosenstock, Strecher, and Becker 1988) to establish whether health beliefs appeared to influence health behaviours of participants.

### **Results**

Five superordinate themes were identified across the eight datasets, based on HBM constructs.

The HBM, initially established by Rosenstock (1966) postulates that health behaviour is the result of core health beliefs. The main facets of the model are: - perceived susceptibility to ill health, perceived severity of the potential illness, and benefits and barriers to acting upon health beliefs.

**Table 1.** Health behaviours described by YP.

YP identifying themselves as smokers	5
YP regularly consuming alcohol	5
YP reporting negative healthcare experiences	3
YP regularly using substances	4
YP discussing the relationship between physical and mental health	7
YP discussing risky sexual behaviours	2
YP regularly engaging in physical activity	1
YP describing a balanced diet	2

Self-efficacy, individuals' belief in their ability to *change* their health behaviours, was later added to the model (Rosenstock, Strecher, and Becker 1988).

### **Perceived severity**

Participants tended to believe the consequences of smoking, regularly drinking alcohol or avoiding healthcare visits to be fairly severe, such as cancer or death. In contrast, several participants minimised the severity of consequences associated with substance misuse, instead citing benefits such as weight loss and coping.

The belief that illegal drugs were not particularly deleterious in terms of physical health was apparent across the interviews. For example, one participant suggested cocaine as a good weight loss tool, if the individual did not become addicted:

'do cocaine because it helps you lose weight, it's healthy as long as you don't get addicted to it'. (P5)

Although other participants did not describe drugs as healthy per se, they seemed to minimise the risks associated with substance misuse:

'drugs are not as bad as they make out' (P3) and similarly, 'coke, weed, stuff like that they're all bad drugs but they're not life changing' (P8)

In contrast, some participants did think drugs were potentially damaging to health, but lacked knowledge as to why:

'And drugs, I don't know, er it's just not good for your brain or something' (P4)

Marijuana was seen differently to other illegal drugs, with even individuals who do not take drugs seeing it in a positive light, *'I think weed is the only one that's respectable'* (P4). The main reasoning for this included viewing cannabis as useful for medicinal purposes:

'I think marijuana is the only one, because some health benefits' (P1), and believing it to pose less risk compared to other drugs, 'but weed is the only drug that won't kill you'. (P5)

In contrast, one participant who did regularly smoke marijuana discussed the potential harms and severe consequences of the drug. He described individuals using it daily and being unaware of the dangers:

'it slowly gets you when you wouldn't think it, gets at you' (P8) [and later] 'people smoke it every day thinking it's fine and really you're just addicted.'

Some participants were aware of the potentially severe consequences of taking illegal substances, but reasoned the enjoyment of being under the influence outweighed any potential risks. For example, P6 seemed aware of the severe consequences of taking illegal substances:

'unsafe [...] yeah all of them yeah, that's why they're drugs, that's why it's illegal' (and later) 'It can, it can kill you, one and you're dead'

Yet he continued to take substances due to enjoying the feeling of being under the influence:

'because of the feeling, I couldn't feel like that, I couldn't take anything else that would make me feel like that' (P6)

All participants, including smokers and non-smokers, appeared knowledgeable regarding the potential risks of smoking, with one participant noting *'it says it can kill you on the packet'* (P4). Whilst this knowledge was given as a reason for not smoking by non-smokers, this knowledge of severe consequences did not seem to influence participants' decisions to continue smoking:

'It'll [smoking] probably kill me off soon, but apart from that it's alright' (P5)

Another smoker described family members dying from lung cancer due to smoking, but this did not influence his own smoking behaviour:

'my nan died from lung cancer through smoking [...] both sides of my family it's a big problem' (P6)

Despite being aware of the potential harms to physical health, participants often expressed initially being unaware of how addictive nicotine can be, potentially explaining why they continued to smoke despite knowing the risks:

"My dad said, the first time I ever started smoking, he said 'you'll get addicted' and I went 'no I won't, no I won't, no I won't' (P5)

'that's why it's always there, you know what I mean, that's why it's a bad thing, it's a bad thing to get out of, once you're in'(P6)

### Perceived susceptibility

According to the HBM, people will not change their health behaviours unless they perceive themselves as at risk from illness (Rosenstock 1966). Thus, perceived susceptibility is a key component of the model. Despite participants acknowledging that the health consequences of their behaviours could be severe, many dismissed their susceptibility to ill health.

Perceived susceptibility appeared to vary based on health behaviour discussed. For example, participants seemingly minimised their susceptibility to ill health due to taking illegal substances, instead citing benefits such as enjoyment, stress reduction and weight loss. In contrast, participants did acknowledge the risk of smoking cigarettes, yet described continuing to smoke, as they did not seem to believe they were susceptible to the risks.

Interestingly, some participants reported experiencing physical symptoms due to smoking, but attributed these to other behaviours such as medication use:

'Sometimes I get a bit of a bad chest, but I don't think that's from smoking, I think that's from my meds' [and later] 'which [smoking] is like increasing my blood pressure, but I don't feel bad or anything' (P3)

In support of this interpretation, one participant described smokers as being in denial regarding the harms smoking is causing their body:

'you tell yourself "oh I don't really smoke that much anyway" but it's still, is damaging, it's still damaging' [and later] "Whether you want to believe it or not, it'll still damage you no matter how much you smoke 'cos you're still smoking". (P6)

Even when participants did believe they were susceptible to ill health following smoking, this did not appear to influence their behaviour or increase motivation to stop smoking:

'probably it'll kill me off soon, but except for that it's alright' (p5)

### **Barriers and benefits**

A key barrier to reducing unhealthy behaviours such as taking illegal substances, smoking cigarettes or reducing alcohol was the belief that they would not be able to cope without these substances. Five participants described using substances to cope with adversity, either due to past or current trauma. The benefits of improving their physical health through reducing substances was overshadowed by this belief and need to cope. For example, one participant described using marijuana to manage symptoms of his PTSD following childhood trauma:

'When you smoke weed, you don't dream, your PTSD don't work, and then if I don't smoke weed, the dreams come back'. (P8)

Similarly, another participant described using marijuana to cope with difficult life events, due to lacking other coping strategies:

'to get through a death or something, that's what I do with weed'. (P5)

This participant also described self-medicating with cannabis due to difficulties accessing healthcare when homeless. Even since obtaining an address and a GP, he still preferred to use marijuana over his prescribed medication for Depression:

'Now I've got no weed, I have to substitute it with my medication' (P5)

### **Smoking cigarettes**

Similarly, there was a common belief that smoking cigarettes helped individuals to cope with adversity and everyday stressors. One participant described struggling with anger if he did not have a cigarette:

'[smoking is] amazing because it chills me out' (P5)

He also expressed using cigarettes to cope after difficult life events, such as the death of family members:

'I just let myself go because my uncle died, so obviously I thought 'f\*ck this, I can't cope anymore' (P5)

Another participant described the physical act of going outside to smoke as a way of coping. He deemed a cigarette break to be a socially acceptable reason to go outside for a breather, rather than admitting to feeling overwhelmed or needing space to think:

'It's sort of like a coping, coping strategy sort of thing, I can go outside, smoke, have a little bit of a think and then get back to what I was doing' (P3)

One participant expressed being unable to quit smoking, due to his difficult life situation. He believed he could not cope with the additional stress of smoking cessation:

'If I could, I would, if there was no stress to it I would just quit or, right now, where I am, I won't be good' (P8)

### **Alcohol**

As with other substances, alcohol was described as a coping strategy, largely due to its supposed ability to help individuals to forget past events:

'Can't lie, I've been there, helps you to forget sometimes' [and later] 'people use it as a coping mechanism, that's usually how it starts'. (P6)

One individual depicted using alcohol to control his anger, as he described not feeling angry when intoxicated:



'I'm not an angry p\*ssed, I'll tell everyone I love them' (P5)

Also, many individuals minimised the potential harms of substance misuse, making the barriers of reducing substances outweigh the benefits for this sample.

### Healthcare

Seven participants described healthcare visits as important in maintaining overall health 'you need them, it's what keeps us running' (P4), yet only two participants regularly attended healthcare appointments.

Barriers included not feeling listened to by healthcare professionals 'I've been telling her for ages that I don't want to be on meds and she's just like kept me on them' (P3), and fear of receiving bad news. One participant detailed avoiding visits due to concern he could receive a negative diagnosis. He expressed preferring not to know any potential bad news and did not consider the benefits of early treatment if symptoms are checked. He described finding a lump he feared could be cancerous, but not wanting to get checked:

"If it is anything bad, I don't want to know, 'cause then I've got nothing to worry about then have I" [and later] 'yeah and not know cos than at least if I did die from cancer or whatever, I wouldn't know about it' (P5)

### Social influence

Social influence was discussed by all participants as both a barrier to improving health behaviours, but also as a positive influence when ceasing negative health behaviours. Peer influence was a key reason mentioned by all smokers, both in relation to the first time trying a cigarette, and when explaining why the behaviour continued. Several participants described smoking as a social activity and to make friends at the college:

"that can be another thing, so it's like 'you coming out for a fag' and 'cos you've got nothing else to do, you feel like you should go, you're like 'go on then' (P6)

One participant described how peer pressure as a child followed by addiction is the reason he started and continues to smoke:

'So you're forced to smoke and then you get addicted and then it's too late' (P8)

Social influence appeared to be a barrier to reducing certain behaviours, such as taking marijuana, as participants articulated smoking marijuana to be a social activity:

'I reckon it's just something to do with your mates' [and later] 'when I was on the ward someone said, "do you want a bit of this joint?" and we smoked it' (P3)

In contrast, social influence prevented the initiation of negative health behaviours in some participants. For example, one participant described not trying cigarettes due to disapproval from his mother: '*my mother wouldn't be very happy*' (P4).

Other participants described avoiding or ceasing negative health behaviours due to witnessing the negative impact they had on influential others. For example, one participant described ceasing cocaine use after his mother lost her teeth, as he feared he would too:

'Because my mum takes it and she's got no teeth' (and later) 'I need to get a filling on that one [tooth] because that's through that, because of the drugs I was taking, there's that hole there' (P5)

Similarly, one participant regularly consumed illegal substances until witnessing his friend nearly overdose. This event was sufficient to prevent the participant from continuing this behaviour:

'It took me to watch my best friend in front of me just looking like he was going to die and I just thought, it's not for me anymore' (p6)

Another participant reported avoiding alcohol due to witnessing the negative impact of regular consumption on his family members:

'I've seen the effects of wine on my dad and then I've seen the effects of beer on my uncle and then vodka, that'll just ruin your liver' (and later) 'wine's like slow, slow like biting at you here and there [...] like beer you get beer belly and you start noticing, wine just slowly gets at you. Wine in another word is like weed, it slowly gets you when you wouldn't think it' (P8)

Main barriers to improving their health behaviours included coping with adversity, addiction and social influence. Participants felt they would not be able to cope without taking substances, thus this need to cope outweighed any benefit of reducing the behaviour. Further, several individuals minimised the potential harms of behaviours such as substance issue, making the cost of reducing the behaviour outweigh any potential benefits.

Social influence did positively improve the health behaviours of three participants, largely due to witnessing the negative impact of substance abuse on others.

### Self-efficacy

Individuals often lacked the belief that they could change negative health behaviours such as smoking cigarettes and substance misuse. Many participants expressed using these substances to cope with current life adversity and did not believe they could cope as well without:

'People use it [alcohol] as a coping mechanism, that's usually how it starts' (P6)

Due to using substances as a coping mechanism, four participants detailed how reducing substances would be easier when mentally well:

'once you're in a better place, it's a lot easier [to quit]' (P8)

Participants also believed substances to be highly addictive and thus extremely difficult to stop taking:

'If you're doing it every day, you start to want it, and then when you don't have it you start to feel like annoyed' (P3)

Thus, self-efficacy to improve negative health behaviours was generally low in this sample.

### Mental wellbeing

This theme explores mental wellbeing behaviours as described by participants as important health behaviours. Seven participants expressed good mental wellbeing as key in remaining physically healthy, both directly and as mediated through health behaviours.

Despite questions specifying *physical* health, seven participants, including the young person without a formal diagnosis, expressed behaviours such as seeking a therapist and performing mindfulness as important. One reason for this was due to participants expressing a direct link between physical and mental health:

'I think if you're healthy in your mind, you're healthy overall'. (P4)

Some individuals suggested this link was due to mental health impacting on physical health behaviours, such that individuals were less likely to perform actions that improve physical health when feeling mentally unwell:

'If you're not feeling [mentally] well you probably skip the gym for the day and you might not eat well'. (P1)

As well as poor mental health leading to an absence of positive health behaviours, other participants described mental health as a cause of negative health behaviours such as substance misuse:

'that's why ecstasy was the one for me, because I felt happy all the time'. (P6)

Several individuals suggested improving mental wellbeing to be more effective than increasing health behaviours when trying to improve physical health, '*focus more on mental [health]*' (P4). Participants also described this link as bidirectional, with positive health behaviours having a positive impact on mental health:

'like stop smoking, exercise more, eat better, like your mind gets better or something' (P8)

## Discussion

This research aimed to understand the attitudes of young people with SEMH difficulties to health behaviours, and their collocated health beliefs. Findings suggest there are multiple individual, psychological, social and environmental factors influencing the health behaviours of participants. Perceived severity of ill health did not appear to influence the behaviours of participants, with most being fully aware of the consequences of their negative health behaviours. This is likely due to their perceived susceptibility to illness, with several participants not believing the potential severe consequences would happen to them, possibly due to the young age of participants. Consistent with literature around similar cohorts, participants described using substances such as cigarettes, alcohol and drugs to cope with past and present life adversity and stress (Robertson, Xu, and Stripling 2010). Participants also appeared to minimise the harms associated with unhealthy behaviours such as taking illegal substances and smoking cigarettes, instead focusing on the benefits of these behaviours such as stress reduction and the medicinal uses of marijuana. Mental wellbeing was important to all participants, and behaviours such as seeking a therapist were widely discussed.

### *Perceived severity and susceptibility*

Participants tended to minimise the potential harms associated with substance misuse, instead focusing on benefits such as weight loss and coping with stressors. In contrast, individuals did acknowledge the potential severe consequences associated with smoking cigarettes such as cancer and death, yet this did not appear to influence the behaviours of smokers. These findings may be explained by optimistic bias whereby individuals tend to view their own susceptibility to illness as lower than that of other individuals (Bränström, Kristjansson, and Ullen 2006). Thus, participants may appraise their own risks of harm as low, despite being aware of the potential consequences of certain negative health behaviours. Research has established adolescents to be aware of harms associated with negative health behaviours, but alter their perceptions of the risks to continue the behaviour (Gerrard et al. 1996). This may in part explain participants dismissing physical symptoms of smoking and instead attributing them to other factors such as medication use. Optimism bias has been established in multiple similar populations including smokers rating their own risk of smoking related illness as lower than other smokers (Peretti-Watel et al. 2007) and young adults rating themselves as less likely to overdose than other substance misusers (Frank et al. 2015). Thus, perceived severity only appears to influence behaviours when participants believe there are susceptible to the negative consequences.

Their perceived susceptibility appeared to change when witnessing the negative impact of behaviours such as substance misuse and regularly consuming alcohol on similar others such as parents or close friends. Thus, optimistic bias may reduce when similar others suffer ill-health, as individuals realise the same could happen to them. This suggestion is supported by research which found individuals are less likely to be influenced by the optimistic bias when comparing themselves to a specific individual, especially if they knew the individual personally (Alicke et al. 1995). Witnessing the negative impacts on a similar other may shift individuals' perception of susceptibility to ill health, leading to a reduction in the negative behaviour as posited by the HBM.

### *Barriers and benefits to action*

A key barrier to reducing negative health behaviours was to cope with past and present life adversity such as the loss of a loved one or PTSD symptoms. This finding is supported by previous literature displaying a link between adverse experiences, trauma and substance misuse, especially marijuana (Robertson, Xu, and Stripling 2010), possibly due to its calming effect (Levin and Donovan 1998). Thus, providing adolescents facing adversity with coping strategies may help to reduce substance misuse in this population; due to reducing barriers such as poor mental wellbeing. In support, psychological interventions including cognitive behavioural therapy, and antidepressant medication, have been suggested to be effective in reducing marijuana use (McRae, Budney, and Brady 2003).

Further, social influence was discussed as a key barrier to reducing behaviours such as smoking, substance misuse and alcohol consumption, in individuals engaging in those behaviours. These findings support prior research which found that adolescents are nearly twice as likely to engage in a negative health behaviour if their friend also engaged in that behaviour (Maxwell 2002). Recent research with university students of similar age to the present sample found coping with stress and social influence to be the main reasons given for cigarette smoking (Hiler et al. 2020), suggesting these reasons are not specific to SEMH students. Social networks may therefore be a key factor explaining negative health behaviours within this sample.

Social influence also highlighted benefits of reducing negative behaviours such as smoking and substance misuse in three participants, with participants avoiding these behaviours due to disapproval from others or witnessing the harmful effects of substances. When similar others such as parents or friends experienced the consequences of negative health behaviours, such as tooth loss or overdosing, this did appear to influence the health behaviours of participants and deterred them from continuing the negative behaviour. This latter finding may influence their perceived susceptibility to ill health, thus increasing motivation to reduce the behaviour as proposed in the HBM. Previous literature contrasts this finding, due to concluding adolescents as more likely to perform negative health behaviours such as substance misuse, drinking alcohol and smoking cigarettes if influential others such as parents and peers perform these behaviours (Branstetter, Low, and Furman 2011; Rusby et al. 2018; Scalici and Schulz 2017). One might posit that the relationship between these factors could be non-linear, such that the perceived or real extent of harm moderates the link.

### *Self-efficacy*

Participants also did not believe they would be able to stop smoking tobacco, due to addiction and coping with stressors. Research with students in mainstream schools found psychological variables such as health locus of control (believing their health is within their control), self-efficacy and self-esteem were all significantly correlated with negative health behaviours such as smoking, substance misuse, inactivity and alcohol consumption (Kim 2011). Thus, lack of self-efficacy as detailed in the HBM may contribute to the continuation of certain negative health behaviours in this sample.

### *Mental wellbeing*

Several participants described mental health behaviours such as seeking a therapist as key in improving physical health, and overall wellbeing. Participants believed that mental health impacted on physical health, both directly and as mediated through health behaviours. Participants suggested individuals performed less positive health behaviours, and more negative health behaviours, when feeling mentally unwell. This may be seen as a key health behaviour within this cohort where mental health diagnoses are common. This finding is consistent with research finding an association between negative health behaviours such as smoking and lack of physical activity with depression, with positive health behaviours associated with improved mental wellbeing (Buttery, Mensink, and Busch 2015).

Further, the young person without a formal mental health diagnosis reported never having smoked, taken substances, performed risky sexual behaviours and rarely drank alcohol. He described

the risks of performing these behaviours and did not identify any benefits to using substances, except for marijuana, which he described as having medicinal purposes. This participant did not describe requiring substances to deal with adversity, which is one potential explanation for not taking substances. Parental influence is another potential explanation.

## Conclusion

Main reasons reported for performing negative health behaviours included social influence, coping with adverse life experiences and minimising susceptibility their own to illness. Improving coping strategies and increasing self-efficacy in this sample may help to reduce some of the negative health behaviours performed. Population level interventions may be effective for this sample, due to social influence given as a key reason for initiating several negative health behaviours.

## Limitations

One limitation of this present research is that only one female participated. This is important as previous research found gender differences in health behaviours, especially in adolescence (Buttery, Mensink, and Busch 2015; Sarason et al. 1992). However, more males have an EHC plan, and males are more likely to receive SEN support (DfE 2019), possibly explaining the lack of females in this present sample.

The method of the present study did not allow for comparisons between different educational provisions and their approach to teaching young people about health. Independent specialist provisions will differ to mainstream education providers with pupils with SEMH difficulties.

## Clinical implications

As the present sample described adversity and poor mental health as main reasons for performing negative health behaviours, interventions could focus on improving social support and coping mechanisms for individuals with SEMH difficulties, so that they do not rely on substances or other negative health behaviours to cope. Reducing optimism bias and increasing perceived susceptibility may also improve health behaviours in this population.

## Further research

Further research may benefit from a larger sample where more experiences and explanations for health behaviours are captured. This research would also benefit from the inclusion of more female participants, as they might discuss different health behaviours and health beliefs compared with males. Prior research regarding health behaviours has noted gender differences, for example alcohol consumption was related to depression in female participants, but not in males (Buttery, Mensink, and Busch 2015).

Research may also benefit from assessing health behaviours and health beliefs in young people with SEMH difficulties who attend mainstream education, as their health-related education may differ. The present study was conducted at a specialist independent college, who are not required to follow the national curriculum.

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No potential conflict of interest was reported by the author(s).

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## Notes on contributors

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## Data availability statement

Data will not be shared outside of the research team, as per our ethical approval.

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