

RESEARCH ARTICLE

Finnish adolescents' perceptions of their health choices: A qualitative study

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Abstract

This study described adolescents' perceptions of the aims of their daily health choices and how they make them. We used a qualitative, explorative design, with 67 adolescents aged 15–16 years taking part in semi-structured focus groups in Finland in 2016. We analyzed the data with qualitative inductive content analysis. Adolescents perceived their health choices as automatic and driven by knowledge and mistakes, and these decisions reflected their values and feelings. Their health choices were based on immediate and long-term goals and they reported that making good choices improved their self-confidence and enhanced their individuality. Adolescents also used health choices to promote other people's health. Health choices were linked to parental help and restrictions, and seeking acceptance from friends. Adolescents' health choices were also enabled and limited by society and the environment that they lived in. In conclusion, adolescents' health choices were an integral part of their daily decision-making, reflected the environment they lived in, and aimed to promote their health and express their individuality.

KEYWORDS

adolescence, adolescents, decision-making, focus groups, health choices, health literacy, health promotion

Key points

- Adolescents make health choices to promote their own immediate and long-term health, and that of others, and to express their individuality.
- Their health choices are linked to individual and social contexts, such as parental restrictions, seeking acceptance from friends, and the environment they live in.
- Adolescents' health choices are an integral part of their daily decision-making, and this age group may need support from healthcare professionals to make decisions.

1 | INTRODUCTION

The average health of adolescents has improved since the turn of the millennium, but considerable global differences have emerged in individuals from 10 to 19 years of age. Today's adolescents face a range of problems linked to their health choices, such as not eating breakfast,

skipping meals, and consuming highly processed food (World Health Organization [WHO], 2017a). Adolescents' physical activity levels are low, and studies have focused on their problematic use of social media. There are ongoing concerns about substance use, but some improvements have been identified. Overall, adolescents' health seems to have improved, but high social inequalities still exist (Inchley

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et al., 2020.) The greatest improvements have been in Western countries. One reason for the global variations in adolescents' daily lives is the difference in opportunities they have for accessing health services and making health choices (Inchley et al., 2020).

Health choices are decisions that can have a direct or indirect influence on health and they form the basis for adolescents' health and well-being. These decisions can be made consciously or unconsciously and are based on a number of reasons and motivations (Moilanen, Pietilä, Coffey, & Kangasniemi, 2018; Moilanen, Pietilä, Coffey, Sinikallio, & Kangasniemi, 2018). Individual health choices are emphasized by health promotion activities (WHO, 2017b) that aim to enhance adolescents' opportunities for healthy choices (WHO, 1986). Individual health choices are part of both ethical and legal autonomy and the rights of adolescents to participate in, and influence, decisions concerning their own health and the issues that relate to them (Archard, 2016; United Nations, 1990; Purcell, 2010; United Nations, 1948). Health choices also play an integral role in the lives of adolescents, by supporting them as they become independent from their parents and take responsibility for their own health (Ivanitskii, 2016; Moilanen, Pietilä, Coffey, Sinikallio, & Kangasniemi, 2018; Soenens et al., 2007).

One particular characteristic of adolescents' health choices is that they can have a long-lasting and serious impact on their future (WHO, 2017a). In addition, adolescence is a phase of life that is characterized by rapid and individual biological, cognitive, emotional, and social changes (Hashmi, 2013). This rapid development influences an adolescent's level of maturity and thought processes and affects their ability to make their health choices (Banich et al., 2013; Swanson et al., 2013). It also has an impact on adolescents' health literacy, which is their ability to acquire, understand (Fleary et al., 2018; Parnell et al., 2019), and use health information to aid their decision-making (Parnell et al., 2019).

Adolescents make health choices in their daily lives, and these are influenced by their personal preferences and linked to peers and friends (Moilanen, 2018; Moilanen, Pietilä, Coffey, Sinikallio, & Kangasniemi, 2018). Health choices are also associated with adolescents' parents and families, because socioeconomic, educational, and geographic factors can either promote or hinder their opportunities to make their own choices. Society enables adolescents to make health choices by controlling their wider opportunities and the environments they live in (Moilanen, 2018).

The literature already provides multidimensional knowledge on the factors that determine adolescents' health and their health behavior. Compared to behavioral theories and models of individual theories (Opalinski et al., 2018; Short & Mollborn, 2015), the health choices approach emphasizes their agency and their individual opportunities to influence and control their decision-making (Ivanitskii, 2016; Moilanen, Pietilä, Coffey, Sinikallio, & Kangasniemi, 2018; Paternoster & Pogarsky, 2009). For example, in recent years attention has been paid to adolescents' particular health choices in areas such as dietary patterns (Tebar et al., 2020; Williams et al., 2020), exercise (Matud & Díaz, 2020), and smoking (Ho et al., 2020; Veronda et al., 2020), and their associations with background factors and health. However, little

is known about adolescents' perceptions of their health choices and how they make them. We need to understand adolescents' perceptions so that we can support them and enable them to make their own health choices. Information about how adolescents make daily choices that have an impact on their health may be helpful when designing health promotion interventions.

1.1 | Aim

This study aimed to describe Finnish adolescents' perceptions of the health choices they make in their daily life. The research questions were:

1. How do adolescents describe their health choices?
2. What kind of aims do adolescents have with regard to their health choices?
3. How do adolescents perceive the way they achieve their health choices?

2 | METHOD

2.1 | Data collection

We collected the data by holding semi-structured focus group interviews with 15- and 16-year-old Finnish adolescents in the spring of 2016. Participants were in the ninth grade, which is the last level of compulsory basic education in Finland.

The semi-structured interview guide that was used was based on previous literature (Kangasniemi et al., 2012; Moilanen, Pietilä, Coffey, Sinikallio, & Kangasniemi, 2018; Snelling, 2012), and it focused on adolescents' health choices, their rights, their responsibilities and duties, and their freedom to make health choices (Table 1). This study provides feedback on two key themes: the health choices that adolescents make and their opportunities to achieve those health choices.

We gathered the data from four public schools in Eastern Finland. Three of the schools had students aged 7–16 years (grades 1–9) and one had students aged 12–16 years (grades 7–9). Two of the schools were in urban areas and two were in rural areas. They had 130 to 456 pupils.

After receiving ethics committee approval, and with acknowledgment from the principals of the four schools, we contacted the head teachers so that the participants could be recruited. The researcher (T.M.) presented the study to the adolescents during lessons, while the teachers were present, and asked them if they had any questions. After that, the adolescents who were happy to take part contacted the researcher to agree on the interview dates.

At the beginning of each focus group, the researcher explained the aims of the study and the voluntary and anonymous nature of the participation. The ground rules for the focus groups were also described. The interviews followed the semi-structured interview guide, but the researcher encouraged the adolescents to raise any issues that they

TABLE 1 The interview themes, content, and references used to produce the semi-structured interview guide

Main themes	Content	References ^a
Health and health choices	<ul style="list-style-type: none"> • Health and what it means • Health-related choices made on the day of the focus group • Making independent choices • Potential consequences of choices 	Crondahl & Eklund, 2012; Ioannou, 2003; Lee et al., 2010; McDade et al., 2011
Freedom related to health choices	<ul style="list-style-type: none"> • The context of being free to make own choices • Opportunities to make own choices 	Hirjaba et al., 2015; Moilanen et al., 2018; Purcell, 2010; Rose et al., 2013; Snelling, 2012
Rights, duties and responsibilities related to health choices	<ul style="list-style-type: none"> • Health related rights: focus and content • Health-related responsibilities: focus and content • Potential duties • Supporting and inhibiting factors for adolescents' rights, duties and responsibilities 	Hirjaba et al., 2015; reference blinded for review; McDade et al., 2011; Meah et al., 2010; Moilanen et al., 2018; Snelling, 2012

^aIncludes references not presented in this study.

considered relevant to the topic or to the questions they were asked. The adolescents were also encouraged to engage in open discussions about any comments made by their peers. In addition, the researcher encouraged participants to expand on the answers that they had given to make sure that their meaning was clear.

A total of 67 adolescents were recruited into the study, forming 14 focus groups with three to six participants in each group, until a decision was made to cease data collection. The participants were 42 girls and 25 boys aged 15 and 16 years old. The members of each focus group all came from the same class, as we felt they would be more comfortable discussing issues in front of people they already knew. The audiotaped interviews were carried out in the classrooms during school time and they lasted 30 to 45 min. We collected and analyzed the data until no new content emerged, and to ensure that we had achieved saturation and thus new themes would no longer emerge, an additional three focus groups were conducted before terminating data collection (Guest et al., 2006).

2.2 | Analysis

We analyzed the data using qualitative inductive content analysis (Graneheim & Lundman, 2004), after the audiotaped interviews had been transcribed verbatim. This produced 161.5 pages of text in 12-point Times New Roman, with 1.5 line spacing. The data were read thoroughly to gain an overview of the content. Then we inductively identified the meaning units, namely the words and sentences that described the health choices. These meaning units were condensed into codes and subcategorized according to their differences and similarities. They were then further abstracted into three main categories and named inductively as health choices that were an integral part of daily life, the aims and expected consequences of health choices and the context in which health choices were made. The analysis was conducted by two researchers (N.R. and T.M.) up to the subcategory phase, and then finalized in collaboration with all authors.

2.3 | Ethical considerations

The Ethical Committee of the University of Eastern Finland (Statement 17/2015), the school district, and the principals of the participating schools approved the study. We obtained oral and written informed consent from the adolescents, and informed their parents about the study. Parental approval was not sought, because this type of study does not need it according to Finnish law (Medical Research Act, 1999). The research ethics principles outlined in the Declaration of Helsinki and responsible research practices were followed during all phases of this study (Finnish National Board on Research Integrity TENK, 2019; World Medical Association, 2013).

3 | RESULTS

3.1 | Adolescents' descriptions of health choices

3.1.1 | Integrated decisions about health and well-being

Adolescents described their health choices as decisions that were integrated into their daily life (Table 2). For example, they made decisions about what and how much food they ate and where they ate it. They felt that these choices had an influence on their weight, for example, that they were relevant to any weight problems. Their daily health choices also included regulating their screen time and making sure that it did not disrupt the amount of sleep they got.

The adolescents also recognized that their health played a role in daily decisions about whether they went to school by foot or by bicycle. They saw this as an essential way to take care of their own health. Daily health choices also included decisions on hygiene, such as how often they cleaned their teeth, showered, or changed their clothes. It also included how clean they kept their bedrooms. The adolescents also mentioned using substances during the discussions on daily

TABLE 2 Categories of adolescents' perceptions of their health choices

Main category	Subcategory
Adolescents' descriptions of their health choices	Integrated decisions about health and well-being
	Reasoning driven by knowledge
	Automatic and mistake-based decisions
	Reflecting on values and feelings
Aims and expected consequences of health choices	Promoting comprehensive well-being
	Improving self-confidence and individuality
	Promoting other's health
Achieving health choices	Helped and hindered by parents
	Acceptance and pressure from friends and peers
	Enabled and limited by society

health choices and said that they wondered what difference smoking or drinking alcohol, or abstaining, had on their health.

At school you can decide whether you go and eat at lunch and how much you are going to eat. Even though the food is not necessarily so good, you can still eat it. (FG1)

I can decide by myself, whether am I going to stay awake or try to go to bed at a certain time. (FG9)

3.1.2 | Reasoning driven by knowledge

Adolescents made their health choices based on consciously and actively thinking about eating, rest, exercises, and social relationships. They said that it was easy to get information that helped to guide this process from parents, teachers, health brochures, television, and the Internet. The adolescents also preferred information-based advice, although information about negative health consequences did not always prevent them from making bad decisions. They said that they considered the potential consequences of their health choices for their immediate health and their health in the near future. Adolescents also considered the impact their decisions would have on the health of others at the same time.

It is rather easy nowadays to know what is healthy and what it is not. Or you can find that from the Internet. You can find everything from there. (FG1)

There are bad choices, such as smoking or drinking alcohol or things like that. (FG2)

This may not be the healthiest thing to eat, but you can sometimes eat it, if you acknowledge that you cannot eat it all the time. (FG1)

When I am making choices, I consider the future. (FG2)

3.1.3 | Automatic and mistake-based decisions

Adolescents said that their health choices could also be a result of automatic and unconscious routines, such as how often they brushed their teeth or visited the dentist, or what they ate for breakfast. The adolescents saw these from a routine point of view. They felt that since these kinds of decisions were an integral part of daily life, they did not think about the potential consequences. Some said that they had learned from their previous mistakes not to make the same bad health choices again.

I don't really think. It comes from my subconscious whether this is good for me or not. (FG2)

Usually I go with my current feelings. I might regret it, but next time I know what to do better. (FG11)

3.1.4 | Reflecting on values and feelings

Adolescents associated their health choices with their values, feelings, and the opportunities they had to make their own decisions (Table 2). They felt that their health choices were good and successful if they were in accordance with their own values and instructions. Good health choices also met the expectations that others had of them, such as their parents and peers. Adolescents' perceptions about the impact that religion had on their health choices differed. Some adolescents talked about the influence that religion had on their food choices, such as not eating pork. Others thought that religion had more effect on the health choices of previous generations. Adolescents felt that their health choices were based on their own feelings, such as their willingness to experiment or search for pleasure. These included choices about nutrition, rest, exercise, and substance use. The adolescents said that sometimes they resisted their cravings and sometimes they gave into them. Regular health choices were also related to meaningful goals, such as sporting success.

Friends expect something from you and are then disappointed if you don't make choices in accordance with their expectations. (FG9)

When you are young, you certainly want to try different things. (FG4)

Because I want to succeed in sports, I do not use substances or anything. (FG4)

3.2 | Aims and expected consequences of health choices

3.2.1 | Promoting comprehensive well-being

Adolescents used health choices to promote their comprehensive well-being (Table 2), which comprised daily happiness, feelings of joy, and belief in the future. They felt that they could influence their well-being if they made good health choices on a regular basis. At the same time, bad health choices risked their health and could decrease their physical strength, cause weight gain, and decrease their life expectancy. They could irritate friends and argue with them if they did not get enough sleep. Adolescents felt that occasional bad and unhealthy choices could actually have a positive influence on their health. They described their choices as morally right when they only affected themselves and not others.

You aim to make as many good choices as possible daily, but sometimes you know that you have made a slightly worse choice. But if you don't do it too often... then it does not raise concern. (FG9)

Adolescents said that they could prevent diseases by making healthy choices, such as eating healthy food, getting sufficient exercise, and abstaining from harmful substances. They controlled their alcohol use by making sure that they did not drink it every weekend or multiple days in a row and they regulated the amount they drank. However, all the participants were unanimous that abstaining from substances would improve their health. They also acknowledged that they might get sick, despite making healthy decisions. Adolescents felt that seeking and using healthcare services were health choices and so was following the advice given to them by healthcare professionals. When it came to promoting their own health, the adolescents talked about making choices about attending regular health and dental checks. They linked treatment to seeking medical help when they needed it. This help could be face-to-face support, such as discussions with public health nurses, or practical solutions if they had toothache.

If you get dental caries, you need to go to the dentist, so that it will not worsen. (FG11)

You need to be able to seek help, for example from the school psychologist. (FG4)

3.2.2 | Improving self-confidence and individuality

Adolescents felt that if they made good health choices, they could improve their confidence in their ability to do the right thing and concentrate on positive social relationships. They believed that if they made good health choices that were generally acceptable to others, that their parents would give them more responsibility to make more independent decisions in the future. These included decisions about curfews.

However, some of the adolescents were critical about their own health choices, as they had set high standards for themselves. They were disappointed if they were unable to make daily decisions according to their own values and standards. Adolescents made health choices that expressed their individuality, by making decisions about their clothing, hair, and makeup, as this had a positive effect on their mental health.

It is important that you are able to dress as you like and no-one orders that. It improves your self-confidence. (FG11)

3.2.3 | Promoting others' health

Adolescents said that one of aims of their own health choices was to protect the health of others and protect their relationships with friends, family, and school personnel. This included decisions about spending time with friends and making sure that they had good relationships. The health choices they made in relation to social health also included taking care of those they cared about as best they could at their age. They said they had to help others, such as to discussing concerns or encouraging others to access services. However, they were very aware of the need to protect their own well-being when helping others. They also said that they gave greater thought to health choices that could also have an impact on others. One example they gave was not letting small children or younger siblings see them smoking.

You can always look after your friends, and what they are doing, so that they won't get involved in anything. (FG10)

You don't dare smoke in front of preschoolers or walk past them when smoking. (FG3)

3.3 | Achieving health choices

3.3.1 | Helped and hindered by parents

Adolescents said that their health choices were never completely independent or free (Table 2). They had varying opportunities to make independent decisions about some aspects of their health and influence the health choices their parents made for them. Some said that they could make independent health choices and that their parents listened to their views, while others said that their parents made decisions about their health without asking them. Family values and customs were reflected in the adolescents' health choices. For example, some parents promoted environmental values or had views on how money should be used. This influenced adolescents' opportunities to choose what hobbies they could have or what food they could eat at home. However, most of the adolescents felt that they had enough opportunities to make their own health choices and that

having more opportunities could actually make them feel stressed and tired.

The adolescents felt that their parents tried to influence their health choices by offering support and by imposing rules and sanctions. They said that the best way to influence their health choices was mutual discussion, information sharing, and encouragement. They felt that support and positive pressure by parents could encourage them to try harder to make better health choices than they would have done on their own. In addition, if their parents yelled and exerted their authority this decreased adolescents' self-confidence and their trust in their parents. Adolescents felt that their parents' rules on health choices focused on doing housework, going outdoors daily, and curfews. Sanctions for making choices that went against their parents' rules could include restricting how much money they were given or having their mobile phones confiscated for a period of time. Adolescents felt that another sanction was to lose their parents' trust. However, some adolescents said that their parents' rules did not prevent them from making their own decisions. In addition, the parents' opportunities to influence adolescents' health choices were limited to the time they spent with the adolescents at home. All the adolescents said that they could make independent health choices when they were not with their parents.

They cannot prevent what their kid does, where they do it and when. (FG3)

I was alone at home one weekend and then I felt that I could do anything. (FG5)

3.3.2 | Acceptance and pressure from friends and peers

Adolescents' health choices were evaluated by their friends and peers, and positive feedback from their friends supported their health choices. Making similar health choices could strengthen a sense of belonging to a peer group and ties with friends. For example, adolescents tended to follow their peers with regard to drinking and smoking or abstaining from substance use.

Adolescents felt that the pressure on them to make good or bad health choices was more significant if they only had a few friends or were scared about being alone. Some participants mentioned that they felt no need to pressure their friends, even though it was very easy to do. Good friends did not put each other under pressure and they respected each other's health choices. The adolescents all agreed that everyone was responsible for their health choices, even if those decisions were made under pressure.

Friends are quite good at pressuring you to do something. (FG3)

Well, it depends on the person and how good you are at resisting. I defend my opinions at length. (FG2)

3.3.3 | Enabled and limited by society

Adolescents felt that their living environment influenced their opportunities to make health choices. For example, smaller villages did not have the same opportunities for activities as larger cities, and adolescents thought that they would exercise more if they lived in a bigger city.

The fact that you live in the middle of nowhere complicates your choices. (FG13)

Schools influenced adolescents' health choices, as it had an effect on their daily routines and lunch times. However, adolescents felt that they were able to decide what they ate. In some case the school served ingredients that they did not have at home, such as milk products or salad. Adolescents thought that school lunch reduced the need to eat unhealthy snacks.

The adolescents felt that society tried to control their health choices by using health and well-being legislation and regulations, such as age limits. However, age limits could not prevent adolescents from making health choices about substances if they wanted to use them. Some adolescents questioned the need for age limits, because they could not protect adolescents from harm and only inhibited health choices. In addition, adolescents said that society provided very little support for people who were not heterosexual.

4 | DISCUSSION

The adolescents in our study integrated their health choices into their daily lives. They saw health choices as a way to promote their immediate and long-term well-being and prevent diseases. Adolescents made some deliberate health choices, but others were casual choices that were based on values and feelings. They also used health choices to show that they were individuals, but they were also considerate of others.

Adolescents acknowledged that they sometimes made unhealthy decisions, despite having the necessary information to make healthy choices. This suggests that traditional health education about the benefits and risks of health choices may not be timely and influential in Western cultures, especially when it is supplemented by restrictions on adolescents' health choices. At the same time, adolescents need greater knowledge about health choices, especially in non-Western cultures (Kyilleh et al., 2018), and better health literacy. For example, information gained from parents or the Internet could be harmful if adolescents lacked the appropriate health literacy to assess it. Developing adolescents' health literacy could be one way to support awareness of good health choices (Fleary et al., 2018). However, the adolescents who took part in our study acknowledged that information on its own may not be enough, because health literacy may be influenced by impulsivity (Berkman, 2018) and sensation seeking in adolescence (Fleary et al., 2018). In addition, health choices are dynamic and adapt to current circumstances (Parnell et al., 2019).

It is noteworthy that adolescents connected their health choices to short-term and long-term consequences on nutrition, exercising,

and rest, in line with previous studies (Corte et al., 2020). Health choices were also connected to their well-being and to their developing identity, which is a crucial phase of adolescence (Tsang et al., 2012). Considering health choices as part of their developing identity could support their self-esteem and prevent health risks in the future (Corte et al., 2020; Tsang et al., 2012).

Health choices depended on the context in which they were made, including the society they lived in and the insights of their parents. Adolescents' health choices were also related to parental involvement and their parents' health literacy. One study showed that adolescents received better guidance and support to make good health choices if their parents had good education and incomes and high levels of health literacy (Fleary et al., 2018). This suggests that improving parents' health literacy could also have a positive impact on adolescents' health choices. Further studies about the influence of parental and adolescent health literacy on adolescents' health choices could strengthen the knowledge that is needed to ensure that health initiatives support adolescents' daily decision-making.

Adolescents' daily decisions about their health were related to seeking acceptance from peers and friends and it could be difficult for them to make decisions that went against their opinions. Health promotion activities aimed at adolescents, such as in schools and youth centers, could consider this. Interventions that provide practical and clear guidance about how to make choices, which do not agree with peers' choices, could help adolescents to make their own value-based decisions (Berkman, 2018). The guidance could include discussions with adolescents about potentially challenging situations and how to handle them in practice. However, the most effective approach to identifying the best way to support adolescents' health choices is to carry out research that asks adolescents how they can make their voices heard and how their needs can be met.

Adolescents acknowledged that achieving their health choices was also linked to the opportunities provided by society. One way to influence how adolescents achieve their own health choices could be nudging, which refers to positively steering them towards good health choices (Haviland et al., 2020) and removing barriers to decision-making. Nudging can include providing healthy food in school canteens and restaurants (Broers et al., 2017) and providing quality information about healthy choices (Haviland et al., 2020). However, not all adolescents react to nudging in the same way (Fowler & Roberts, 2019), as they have different opportunities to achieve their own choices. Empirical evidence on the effectiveness of nudging has been contradictory (Broers et al., 2017; dos Santos et al., 2020). Further research is needed to find out how well this technique works when it comes to supporting the health choices of adolescents from different backgrounds and life situations.

4.1 | Limitations

This study deepens our understanding of adolescents' health choices, but it had some limitations. The participants could be regarded as privileged, compared to other countries, because of the quality of

Finnish schools and equal access to high-quality healthcare. Although the definition of adolescents ranges from 10 to 19 years, the target group for this study was students aged 15 to 16 years. This produced a focused examination of the topic. Another limitation of this study was that specific background information was not collected from the participants about their parents. This was because our focus was on the adolescents' perceptions of their health choices, not on their actual choices and the potential associations that these had to various factors such as family background. It is clear that there is a need to develop a wider understanding of adolescents' perceptions at different ages and in different target groups.

A strength of the study was that the focus groups achieved good rapport, with open conversations and wide-ranging descriptions of the adolescents' health choices by using a semi-structured approach (Flanagan et al., 2015; Jayasekara, 2012; Mack et al., 2009). However, the adolescents may have been influenced by the presence of the researcher and other students (Jayasekara, 2012). For example, they freely discussed nutrition and exercise, but hardly mentioned sexual health and substance use, possibly because they felt uncomfortable doing so. This could be also due to the fact that the topics that were discussed were initiated by the participants and not guided by the researcher. The data were collected until the data were saturated (Guest et al., 2006). The researchers' understanding of the topic may have influenced the additional questions that emerged during the focus group, causing moderator bias. Presenting the results of the analysis to the participants could have strengthened their trustworthiness, but since the participation was anonymous we had no way to do this. The data collation, analysis, review, and interpretation are thus solely the result of collaboration among the research group.

4.2 | Relevance to practice

The way that adolescents perceive their health choices is highly relevant for health promotion initiatives. The participants in our study considered the potential consequences of their health choices in relation to their own health and the health of others. They also recognized the relevance of wider opportunities and different contexts when making choices. We feel that adolescents' perceptions should be examined by studies that focus on wider and diverse target groups, in order to gain a deeper understanding of their decision-making. One option could be strengthening their health literacy and nudging them to making more decisions that improve their health. However, the best way to support adolescents in making health choices is to ask them what help they actually need.

5 | CONCLUSION

This study produced new knowledge about adolescents' perceptions of their health choices and associated issues. The adolescents' health choices mainly focused on daily living and aimed to improve their

overall well-being and express their individuality. The adolescents who took part in our study recognized that their health choices were associated with both individual and social contexts. Improving adolescents' health literacy, and nudging them to make good health choices, should be emphasized when planning both healthcare and practical health promotion activities.

AUTHORS' CONTRIBUTIONS

Study design: Tanja Moilanen and Mari Kangasniemi. Data collection: Tanja Moilanen. Data analysis: Tanja Moilanen, Nina Rahkonen, and Mari Kangasniemi. Manuscript writing: Tanja Moilanen, Nina Rahkonen, and Mari Kangasniemi.

CONFLICT OF INTEREST

The authors have no conflicts of interest to declare.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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REFERENCES

- Archard, D. (2016). Children's rights. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Summer 2016 ed.). Stanford University. <https://plato.stanford.edu/archives/sum2016/entries/rights-ch>
- Banich, M. T., De La Vega, A., Andrews-Hanna, J. R., Mackiewicz Seghete, K., Du, Y., & Claus, E. D. (2013). Developmental trends and individual differences in brain systems involved in intertemporal choice during adolescence. *Psychology of Addictive Behaviors*, 27(2), 416–430.
- Berkman, E. T. (2018). Value-based choice: An integrative, neuroscience-informed model of health goals. *Psychology and Health*, 33(1), 40–57.
- Broers, V. J. V., De Breucker, C., Van den Broucke, S., & Luminet, O. (2017). A systematic review and meta-analysis of the effectiveness of nudging to increase fruit and vegetable choice. *European Journal of Public Health*, 27(5), 912–920.
- Corte, C., Lee, C. K., Stein, K. F., & Raszewski, R. (2020). Possible selves and health behavior in adolescents: A systematic review. *Self and Identity*. Advance online publication. 1–27. <https://doi.org/10.1080/15298868.2020.1788137>
- dos Santos, Q., Perez-Cueto, F. J. A., Rodrigues, V. M., Appleton, K., Giboreau, A., Saulais, L., Monteleone, E., Dinnella, C., Brugarolas, M., & Hartwell, H. (2020). Impact of a nudging intervention and factors associated with vegetable dish choice among European adolescents. *European Journal of Nutrition*, 59(1), 231–247.
- Flanagan, S. M., Greenfield, S., Coad, J., & Neilson, S. (2015). An exploration of the data collection methods utilised with children, teenagers and young people (CTYPs). *BMC Research Notes*, 8, 61.
- Flery, S. A., Joseph, P., & Pappagianopoulos, J. E. (2018). Adolescent health literacy and health behaviors: A systematic review. *Journal of Adolescence*, 62(October), 116–127.
- Fowler, L. R., & Roberts, J. L. (2019). A nudge toward meaningful choice. *American Journal of Bioethics*, 19(5), 76–78.
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82.
- Hashmi, S. (2013). Adolescence: An age of storm and stress. *Review of Arts and Humanities*, 2(1), 19–33.
- Haviland, A. M., Damberg, C. L., Mathews, M., Paddock, S. M., & Elliott, M. N. (2020). Shifting from passive quality reporting to active nudging to influence consumer choice of health plan. *Medical Care Research and Review*, 77(4), 345–356.
- Ho, Y. C., Lee, H. C., Lin, M. F., & Chang, H. J. (2020). Correlations among life stress, smoking behavior, and depressive symptoms in adolescents: A descriptive study with a mediating model. *Nursing and Health Sciences*, 22(4), 949–957.
- Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jåstad, A., Cosma, A., Kelly, C., & Arnarsson, Á. M. (2020). *Spotlight on adolescent health and well-being: Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada* (Vol. 1). WHO Regional Office for Europe.
- Ivanitskii, A. M. (2016). Determinism and free choice in the operation of the brain. *Neuroscience and Behavioral Physiology*, 46(9), 1082–1089.
- Jayasekara, R. S. (2012). Focus groups in nursing research: Methodological perspectives. *Nursing Outlook*, 60(6), 411–416.
- Kangasniemi, M., Halkoaho, A., Lämsimies-Antikainen, H., & Pietilä, A.-M. (2012). Duties of the patient: A tentative model based on metasynthesis. *Nursing Ethics*, 19(1), 58–67.
- Kyllieh, J. M., Tabong, P. T. N., & Konlaan, B. B. (2018). Adolescents' reproductive health knowledge, choices and factors affecting reproductive health choices: A qualitative study in the West Gonja District in Northern region, Ghana. *BMC International Health and Human Rights*, 18(1), 1–12.
- Mack, R., Giarelli, E., & Bernhardt, B. A. (2009). The adolescent research participant: Strategies for productive and ethical interviewing. *Journal of Pediatric Nursing*, 24(6), 448–457.
- Matud, M. P., & Díaz, A. (2020). Gender, exercise, and health: A life-course cross-sectional study. *Nursing and Health Sciences*, 22(3), 812–821.
- Medical Research Act 488/1999/ 1999. Ministry of Social Affairs and Health, Finland. <https://www.finlex.fi/en/laki/kaannokset/1999/en19990488>
- Moilanen, T. (2018). *Ethical basis of adolescents' health choices: Focus on rights, duties and responsibilities* [Doctoral dissertation, University of Eastern Finland]. UEF eRepository. <https://erepo.uef.fi/handle/123456789/19911>
- Moilanen, T., Pietilä, A.-M., Coffey, M., & Kangasniemi, M. (2018). Adolescents' health choices related rights, duties and responsibilities: An integrative review. *Nursing Ethics*, 25(4), 418–435.
- Moilanen, T., Pietilä, A.-M., Coffey, M., Sinikallio, S., & Kangasniemi, M. (2018). Adolescents' lived experiences of making health choices: an ethical point of view. *Scandinavian Journal of Caring Sciences*, 32(2), 914–923.
- Opalinski, A. S., Weglicki, L. S., & Gropper, S. S. (2018). Health habit: A concept analysis. *Nursing Forum*, 53(1), 50–60.
- Parnell, T. A., Stichler, J., Barton, A., Loan, L., Boyle, D., & Allen, P. (2019). A concept analysis of health literacy. *Nursing Forum*, 54(3), 315–327.
- Paternoster, R., & Pogarsky, G. (2009). Rational choice, agency and thoughtfully reflective decision making: The short and long-term consequences of making good choices. *Journal of Quantitative Criminology*, 25(2), 103–127.
- Purcell, M. (2010). Raising healthy children: Moral and political responsibility for childhood obesity. *Journal of Public Health Policy*, 31(4), 433–446.
- Short, S. E., & Mollborn, S. (2015). Social determinants and health behaviors: Conceptual frames and empirical advances. *Current Opinion in Psychology*, 5, 78–84.

- Snelling, P. (2012). Saying something interesting about responsibility for health. *Nursing Philosophy*, 13(3), 161–178.
- Soenens, B., Vansteenkiste, M., Lens, W., Luyckx, K., Goossens, L., Beyers, W., & Ryan, R. M. (2007). Conceptualizing parental autonomy support: Adolescent perceptions of promotion of independence versus promotion of volitional functioning. *Developmental Psychology*, 43(3), 633–646.
- Swanson, M., Schoenberg, N., Davis, R., Wright, S., & Dollarhide, K. (2013). Perceptions of healthful eating and influences on the food choices of Appalachian youth. *Journal of Nutrition Education and Behavior*, 45(2), 147–153.
- Tebar, W. R., Gil, F. C. S., Scarabottolo, C. C., Codogno, J. S., Fernandes, R. A., & Christofaro, D. G. D. (2020). Body size dissatisfaction associated with dietary pattern, overweight, and physical activity in adolescents: A cross-sectional study. *Nursing and Health Sciences*, 22(3), 749–757.
- Finnish National Board on Research Integrity TENK. (2019). *The ethical principles of research with human participants and ethical review in the human sciences in Finland* (Publications of the Finnish National Board on Research Integrity TENK 3/2019). https://tenk.fi/sites/default/files/2021-01/Ethical_review_in_human_sciences_2020.pdf.
- Tsang, S. K. M., Hui, E. K. P., & Law, B. C. M. (2012). Positive identity as a positive youth development construct: A conceptual review. *The Scientific World Journal*, 2012, 529691.
- United Nations, 1948. *Universal declaration of human rights*. <https://www.un.org/sites/un2.un.org/files/udhr.pdf>
- United Nations, 1990. *Convention on the rights of the child*. <https://www.ohchr.org/en/professionalinterest/pages/crc.aspx>
- Veronda, A. C., Irish, L. A., & Delahanty, D. L. (2020). Effect of smoke exposure on young adults' sleep quality. *Nursing and Health Sciences*, 22(1), 57–63.
- World Health Organization. (1986). *Ottawa charter for health promotion*. https://www.euro.who.int/__data/assets/pdf_file/0004/129532/Ottawa_Charter.pdf
- World Health Organization. (2017a). *Adolescents: Health risks and solutions* [Fact sheet]. Retrieved MONTH DD, YYYY, from <http://www.who.int/mediacentre/factsheets/fs345/en/>
- World Health Organization. (2017b). *Global accelerated action for the health of adolescents (AA-HA!): Guidance to support country implementation*. <https://apps.who.int/iris/rest/bitstreams/1084415/retrieve>
- Williams, S. L., Vandelanotte, C., Irwin, C., Bellissimo, N., Heidke, P., Saluja, S., Saito, A., & Khalesi, S. (2020). Association between dietary patterns and sociodemographics: A cross-sectional study of Australian nursing students. *Nursing and Health Sciences*, 22(1), 38–48.
- World Medical Association. (2013). *World medical association declaration of Helsinki: Ethical principles for medical research involving human subjects*. *JAMA*, 310(20), 2191–2194.

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