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The double-sided coin of loneliness and social media - young adults' experiences and perceptions

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ABSTRACT

Introduction: Youth is associated with various emotions and experiences that can negatively affect young adults' health and well-being, loneliness being one of them. Experiences of loneliness can have a negative impact on young adults' psychological well-being and quality of life. The aim of this study was to investigate young adults' experiences and perceptions of loneliness and its association with social media.

Methods: Guided by a semi-structured interview guide, data material was collected in the form of essays with nine young adults aged 19-27. Qualitative content analysis was used to analyze the data.

Results: Three main categories and eight subthemes emerged. The main categories were: Negative experiences of involuntary loneliness, Positive experiences of voluntary loneliness, and Social media is a double-sided coin vis-à-vis loneliness.

Discussion: Impacted by various complex individual aspects, loneliness for young adults can be both positive and negative, and social media's association with loneliness can be considered double-sided.

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KEYWORDS

Loneliness; social media; young adults

Introduction

One of the greater health risks in today's society is loneliness, especially among young people (Heinrich & Gullone, 2006; von Soest et al., 2020; World Health Organization, 2023). Loneliness is considered a global public health concern (World Health Organization, 2023), and for example in Finland the rate of experiences of loneliness among girls is high particularly (Institutet för hälsa och välfärd, THL, 2023).

During the past 20 years smartphones and social media have become increasingly popular and more easily accessible, and a large portion of young adults' peer communication today occurs through social media (Twenge et al., 2019). Some researchers have found that social media can be beneficial in maintaining relationships (Cauberghe et al., 2021; Nowland et al., 2018; Thomas et al., 2020). Other researchers have found an association between young adults' high social media use and lower mental health (Gao et al., 2020; Geirdal et al., 2021) or increased levels of loneliness (Bonsaksen et al., 2021; Helm et al., 2022). As seen in previous research, the use of social media can be associated with a decrease in in-person social interaction and increase in perceived loneliness among young adults (Twenge et al., 2019, 2021; Wang et al., 2018). Moreover, the manner in which young adults communicate with peers and family changed during the COVID-19 pandemic, with communication either primarily or even solely transpiring via social media, which has been linked to an even further increase in young adults' experiences of loneliness (Espinoza & Hernandez, 2021; Fardghassemi et al., 2022).



Research on loneliness

Human beings have a natural need to belong to a community and are social in nature, and those who experience difficulties in establishing and preserving relationships can experience loneliness (Heinrich & Gullone, 2006). A complex and multidimensional concept, we find there is no single definition that describes the concept of loneliness in its entirety. Loneliness can be described as an unpleasant feeling (Perlman & Peplau, 1998) that arises when a person lacks social relationships (Matthews et al., 2016; Peplau & Perlman, 1982) or is dissatisfied with their current social relationships, whether in terms of quality or quantity (Peplau & Perlman, 1982). Loneliness can also be defined as an involuntary, subjective and unpleasant experience that negatively affects a person's well-being (Heinrich & Gullone, 2006).

How a person experiences loneliness can vary and change during different periods of their life (von Soest et al., 2020). Experiences associated with loneliness can vary in intensity and duration and even evoke strong negative emotions such as sadness, emptiness, meaninglessness or anger (Rich Madsen et al., 2021). Loneliness can be associated with a sense of shame or can become an invisible stigma, making it difficult to confide in others (Rich Madsen et al., 2021). Loneliness can even incapacitate, leaving a person unable to influence their own situation (Hemberg et al., 2022). Genetic predisposition, personality traits or behaviour can entail that some individuals are more vulnerable to experiencing loneliness (Perlman & Peplau, 1998).

While classifications and definitions somewhat differ, loneliness can be divided into three different types: emotional, social (R. S. Weiss, 1987), and existential (Garnow et al., 2022; Hemberg et al., 2022). Emotional loneliness can be associated with the lack of an intimate attachment figure (Perlman & Peplau, 1998) or the absence of a partner, close friend, or other meaningful relationship (Hemberg et al., 2022; R. S. Weiss, 1987). Social loneliness can be associated with the disintegration of a person's social role (R. Weiss, 1973) or a lack of social networks that results in an experience of not belonging (Hemberg et al., 2022; R. S. Weiss, 1987). Perhaps the most difficult form of loneliness, existential loneliness can be associated with perceived alienation, a sense of emptiness, or lack of meaning in life and is linked to the individual (Garnow et al., 2022; Hemberg et al., 2022). Existential loneliness can only be influenced by the individual experiencing it, while emotional and social loneliness can be corrected in part via external factors (Garnow et al., 2022).

Not everyone who experiences social isolation experiences loneliness (Baloyannis, 2015; Rich Madsen et al., 2021), thus a distinction should be made between involuntary and voluntary loneliness (Hemberg et al., 2021; Ruiz-Casares, 2012). When self-chosen, voluntary loneliness can be nurturing and liberating (Baloyannis, 2015) or even health-promoting because it can provide a 'breathing space' or renewed strength (Hemberg et al., 2021). Voluntary loneliness can also provide a person insights that can lead to self-development (Hemberg et al., 2021; Ruiz-Casares, 2012).

Loneliness occurs in all age groups but is most prevalent and has the greatest impact on young people's development when compared to other age groups (Fardghassemi et al., 2022; Heinrich & Gullone, 2006; von Soest et al., 2020). Young people actively seek a community where they feel accepted as individuals (Kaniušonytė et al., 2019) and risk experiencing loneliness when they do not find their place in society. Failure to resolve loneliness among young people can lead to significant anxiety about the future and can lead to difficulties in developing healthy and sustainable relationships (Kekkonen et al., 2020; Mikkelsen et al., 2020).

Loneliness can exacerbate various somatic and mental health problems (Christiansen et al., 2021), and involuntary loneliness is on the rise around the world, especially among young people (Fardghassemi et al., 2022; Twenge et al., 2021). Preventing and reducing experiences of involuntary loneliness is fundamental to health and well-being (Christiansen et al., 2021; Lempinen et al., 2018).

Various measures introduced during the COVID-19 pandemic such as social distancing, lockdown and quarantine have led to increased experiences of loneliness (Houghton et al., 2022; Marchini et al., 2021). Young people's everyday lives changed drastically because of such measures, which in turn was detrimental to their mental health and development (Houghton et al., 2022; Marchini et al.,



2021). Young people became even more lonely because, for example, they were not allowed to go to school (Houghton et al., 2022; Rogers et al., 2021). Also, despite good opportunities for online interaction, young people experienced a lack of emotional attachment as well as a decrease in support from their friendships (Houghton et al., 2022; Rogers et al., 2021). Young people also experienced an increase in depressive symptoms and anxiety and a deterioration in well-being during the COVID-19 pandemic (Branquinho et al., 2020, Geirdal et al., 2021; Houghton et al., 2022). While the pandemic has clearly negatively impacted young people's well-being, the long-term effects on their development and well-being are as yet unknown (Branquinho et al., 2020; Houghton et al., 2022).

Social media and its impact on young people's experiences of loneliness

Young people spend more and more time online today (Twenge et al., 2019), even more than before owing to the COVID-19 pandemic (Espinoza & Hernandez, 2021), and the way they socialize with friends has changed. Already previously a major problem, loneliness has increased drastically since smartphones became more accessible and popular, and young people today can spend more time on social media than they do in face-to-face contact with friends or family (Twenge et al., 2021). Inperson communication occurs increasingly infrequently and contact with friends nowadays often takes place via online communication (Lyyra et al., 2022). Online communication can be positive if a person has difficulties expressing themselves face to face, and some young people may find it easier to open up via a screen (Lyyra et al., 2022). While exiting uncomfortable discussions and situations is easier online than in real life, online conversations can become more superficial and therefore do not always satisfy a person's need for attachment (Lyyra et al., 2022; Twenge et al., 2019).

Research indicates that young people who spend more time online tend to have poorer mental health, quality of life and well-being (Gao et al., 2020; Geirdal et al., 2021; Marttila et al., 2021). More time online can also lead to a greater sense of loneliness when compared to those young people who spend less time online (Gao et al., 2020; Geirdal et al., 2021; Marttila et al., 2021). For young people without a strong off-line social network, social media is perceived as being something negative because the relationships created through social media are more often short-lived and rarely satisfy the friendship needs of the individual (Lyyra et al., 2022). Conversely, for young people with a rewarding off-line social network, social media is perceived as being something positive because it can facilitate regular contact with friends (Lyyra et al., 2022).

Although high or problematic social media use (PSMU) can be harmful, the use of social media during the COVID-19 pandemic has been seen to have reduced young people's experiences of loneliness (Chen et al., 2022; Espinoza & Hernandez, 2021; Sundqvist & Hemberg, 2021). Those who continuously communicated with friends via social media during the COVID-19 pandemic also have reported feeling better, linked to receiving support from their social network during a difficult period in their life development (Espinoza & Hernandez, 2021).

Nevertheless, the increased use of social media has also led to more than half of young people developing a social media addiction, which involves using social media in an exaggerated and compulsive way (Chen et al., 2022; Kitiş et al., 2022). Social media addiction can lead to isolation from family or friends (Kitiş et al., 2022). Moreover, because many young people may not recognize that they have a problem and they rarely seek help, which not only makes their addiction difficult to overcome but also potentially dangerous (Kitiş et al., 2022).

Despite serving a positive purpose during the COVID-19 pandemic when social distancing was enforced (Espinoza & Hernandez, 2021), more social media addiction and PSMU among young people is being seen even though restrictions have now eased on a global level (Rogers et al., 2021). Compared to peers who do not spend as much time on social media, young people with PSMU can feel more socially isolated (Primack et al., 2017). PSMU has been associated with increased experiences of loneliness, and dependence on social media makes loneliness an even

more difficult pattern to break (Chen et al., 2022). Problematic use of social media can ultimately lead young people to a sense of being increasingly alone, because they spend less and less time with their friends off-line (Ang et al., 2018; Bekar et al., 2022; Marttila et al., 2021; Twenge et al., 2021). Nonetheless, social media can even help young people sustain social relationships, thereby making it easier to manage loneliness (Cauberghe et al., 2021; Nowland et al., 2018; Thomas et al., 2020).

Online communication and social media use are continually and rapidly changing, thus it is difficult to draw an evidence-based conclusion on how social media affects young people's experiences of loneliness without first investigating their perspectives. To date, there has been scant research on young people's experiences of loneliness in relation to social media use, especially from the perspective of young adults.

Aim

The aim of this study was to investigate young adults' experiences and perceptions of loneliness and its association with social media.

The research questions were:

- (1) How is voluntary and involuntary loneliness experienced and perceived among young adults?
- (2) What is the impact of social media on young adults' loneliness?

Materials and methods

A qualitative explorative design was used in order to reach deep and nuanced understanding of loneliness among young adults. Qualitative content analysis (Graneheim & Lundman, 2004) was used to analyse the data.

Selection and recruitment

Inclusion criteria were males and females (a) who have experienced loneliness (b). Exclusion criteria were non-Swedish speaking (a) and aged under 16 years or older than 29 years (b). Participants were initially recruited by sending out information about the study through a flyer info sheet to all students at a university in Finland. Containing information about the study, the flyer info sheet was sent to all students at the university using a shared email address. Information about the study was also disseminated through the university's student union information sheet and social media (Facebook). The participants were recruited through self-selection and snowball effect, with those interested in participating asked to contact the project researchers by email or telephone. Nine young adults aged 19–27 (seven women and two men) resident in Finland and fluent in the Swedish language were included. All participants were middle-class Swedish-speaking Finns enrolled at the university included in the study.

Data collection and analysis

Guided by a semi-structured interview guide, data material was collected in the form of essays. Examples of the questions in the interview guide include: What does loneliness mean to you?, How do you feel about situations where you are by yourself or alone?, Could you tell us about your own different experiences of loneliness?, Can you describe a situation where you experienced involuntary loneliness, and your thoughts about how you felt and what you did?, Can you describe a situation where you experienced voluntary loneliness, and your thoughts about how you felt and what you did?, Could you tell us about your use of social media and how it relates to loneliness?

The participants answered the questions in essay format. While some participants asked to read the interview guide prior to providing responses, all responses were nonetheless seen to be freely composed. One participant supplemented their essay with an interview conducted digitally via Zoom, which was transcribed verbatim. The interview quide was used with one of the participants who both wanted to write an essay and be interviewed afterwards.

The analysis was inspired by Graneheim and Lundman's (2004) description of qualitative content analysis. First two authors read the texts several times to gain a general sense of the overall content. Each text was then read and reread several times and divided into meaning units, whereafter the meaning units were condensed, abstracted and coded. The various codes that emerged were compared, and all three authors together discussed the creation of main themes and subthemes illustrating the meaning of the data until consensus was reached.

Ethical considerations

Ethical approval for the study was granted by an ethical committee at the university where the researchers were situated. The ethical guidelines outlined by the Finnish National Advisory Board on Research Ethics TENK (2023) were followed throughout the study. Participants provided informed consent for participation in the study. The participants were informed both orally and in writing about the purpose of the study, confidentiality, withdrawal of consent and publication intent.

Findings

The purpose of this study was to explore young adults' experiences and perceptions of loneliness and social media. The participants included nine (n = 9) middle-class young adults aged 19–27 (seven women and two men) resident in Finland, fluent in the Swedish language and enrolled at the university included in the study. For an example of the data analysis conducted, see Table 1.

Three main themes emerged from the analysis: Negative experiences of involuntary loneliness, Positive experiences of voluntary loneliness, and Social media is a double-sided coin vis-à-vis loneliness. Each main category and associated subthemes are described below. For an overview of the findings, see Table 2.

Negative experiences of involuntary loneliness

This main category encompassed young adults' negative experiences of loneliness and in which situations such occurred. The participants perceived that when loneliness was involuntary various negative experiences could arise, described below in subthemes. Some concepts are interrelated or synonyms, accordingly some may be included in two or more subthemes.

Alienation – an isolating feeling of not belonging

According to the study participants, being alone without having chosen to be alone, in other words involuntary loneliness, can be perceived as exclusion. The participants often described their involuntary loneliness as not belonging and also used the term alienation to describe it. The participants viewed exclusion as one of the worst experiences regarding involuntary loneliness. They revealed how they have experienced alienation despite being in the company of others and described such as one of the worst forms of loneliness.

... I experienced a feeling of alienation such times when I have been in the company of others... What has defined this company most has been how different from the others in the company that I am... Perhaps the worst form of loneliness... being WITH others and feeling alone is perhaps the most left out you can feel. (P2)



Table 1. Example of the data analysis conducted.

Meaning-bearing unit	Condensed unit	Code	Subtheme	Main theme
Experienced a sense of alienation where I've been in the company of others how different I am sometimes I feel invisible or like no one hears when I talk The loneliness can be due to not feeling a connection to others around you that you feel different from others I would call self-imposed solitude a sanctuary that gives me freedom to think undisturbed when I've been alone If I get into my own thoughts more in depth I become more reflective Learned to enjoy myself and being with myself And I've become independent.	experienced a sense of alienation sometimes I feel invisible you feel different from others Self-chosen solitude a sanctuary I become more reflective [when alone] enjoy myself has become independent;	Being outside, excluded To experience yourself as invisible Feeling inadequate Not belonging anywhere and deviating from the 'norm' A sanctuary, a place to reload To be allowed to develop, development Getting to know oneself, self-knowledge, both the good and the bad	Alienation – an isolating feeling of not belonging Invisibility – An experience of not being seen or heard and that no one would notice if you disappeared Deviance – A separate element that makes one deviate from the norm Sanctuary – a place, a time to breathe Self-reflection – a time to reflect and develop as a human being Independence and self-knowledge – A space where you can be exactly who you are	Negative experiences of involuntary loneliness Positive experiences of voluntary loneliness
For me, my loneliness arises from an addiction to [social media] – but at the same time when I feel alone its two-sided Stealing time I'd rather spend with my friends but relieves loneliness when it arises ' both perpetrators and rescuers'	helps when I feel lonely. 'Rescuers' my loneliness arises from an addiction to [social media]. 'Perpetrator'	Can alleviate experiences of loneliness in difficult moments Can reinforce experiences of loneliness when one already feels bad	Social media can alleviate perceived feelings of loneliness Social media can cause or increase perceived feelings of loneliness	Social media is a double- sided coin vis-à-vis Ioneliness

Table 2. Overview of the findings.

Negative experiences of involuntary loneliness	Positive experiences of voluntary loneliness	Social media is a double-sided coin vis-à-vis loneliness
Alienation – An isolating feeling of not belonging	Sanctuary – a place, a time to breathe	Social media can aleviate perceived feelings of loneliness
Invisibility – An experience of not being seen, not being heard, that no one would notice if you disappeared	Self-reflection – a time to reflect and develop as a human being	Social media can cause or increase perceived feelings of loneliness
Deviantion – A separate element that makes one deviate from the norm	Independence and self-knowledge – A space where you can be exactly who you are	

The feeling of alienation results from feeling different from others or of not belonging in a particular group, which noticeably increases a sense of loneliness, according to the participants. One participant described a specific event during their studies when their feeling of alienation was extra palpable, including how they even perceived that alienation as being 'hostile'.

I have had to take courses with completely new groups where I do not know anyone from before... everyone else knows each other... made me feel like an intruder... others looked at me weirdly or didn't listen to me in discussions. (P1)

The participants noted that exclusion does not always come from feeling left out in different situations with other people. It can also come from having no place in society or lacking motivation in life. The participants also emphasized that the transition from childhood to adulthood can lead to



exclusion when one's studies are over and one should decide what to do with the rest of one's life without having a clear answer or direction.

The toughest time came for me with the loneliness I felt when I had finished my studies for the past academic year and what was left was emptiness and loneliness in life. Everything that could be done, I had already done [in order to alleviate loneliness] ... Nothing inspired me anymore. And there is still that feeling of loneliness and the isolation it brought. (P6)

Another participant mentioned loneliness that arose due to the COVID-19 pandemic. The participant, who at the time was a recent graduate and had been used to meeting dozens of people every week, was suddenly isolated and unemployed. This participant experienced this situation as being very lonely, observing that it was difficult to find ways to pass the time. The participant noted that they kept waiting for things to get better, for restrictions to ease, so that they could continue living their life the way they wanted, but that the days felt endless as the restrictions and isolation continued.

Invisibility – an experience of not being seen or heard and that no one would notice if you disappeared

The participants experienced a type of loneliness where they did not feel seen or listened to, which they also connected to a sense of hopelessness or of being unimportant. While invisibility and alienation are somewhat similar, the participants emphasized a sense of being unseen despite having friends and perceiving that no one would notice their absence. They observed that despite having friends and acquaintances, they lacked a person they could trust and with whom they could share their deep, inner feelings and thoughts.

I also often feel alone . . . in a sad way. . . I would like to have deeper connections with my loved ones so that we could do the things I do alone, together... Then I can also get sad and think badly about myself if I see that my friends are doing something without me... then you can feel hopeless or unimportant. (P9)

One participant revealed that their loneliness gave rise to such anxiety that they sought connection with anonymous people online in an attempt to relive their loneliness, but which only provided temporary relief.

...when I feel so incredibly alone that I burst... I've tried to replace the feeling that I don't really have good friends with 'small talk' with a stranger online. Telling a username on a computer screen that I'm crying, but not being able to tell a real person about it, is one of the worst feelings of loneliness. (P5)

The participants perceived that a sense of invisibility could also create situations that further exacerbated their loneliness, which in turn seemingly confirmed their belief that they were alone and, perhaps, also invisible. One participant described an event in their life when they felt extremely lonely, when they had attended a party with friends but was left and had no way to get home. The participant described how that day was the loneliest day of their life and had become a discomforting memory that could awaken if they encountered their (former) 'friends' again. The participant even observed that the only reason they were left behind was because they were neither special nor popular. It was only because I was a 'nobody' that I was forgotten... I've never before felt so left out and alone (P1). This same participant also described how they could feel alone even if surrounded by other people and that they were still ignored despite efforts to engage in conversations and events, which makes them feel invisible.

You can also feel lonely even though you are surrounded by people... sometimes... I feel invisible or like no one hears when I talk, that kind of loneliness is much worse... Sometimes I can hang out with a bunch of acquaintances and feel like no one would notice if I disappeared. It's a sad kind of loneliness. (P1)

Deviation – a separate element that makes one deviate from the norm

Not adhering to what is considered to be normative in a society can encapsulate both exclusion and alienation, but as seen in this main category loneliness can primarily be associated with exclusion, for example exclusion because of chronic illness, sexuality or non-conformative actions.

The participants perceived a sense of loneliness that they could connect to feeling that no one else could identify with their situation, experiences, or how they feel because they somehow were different from others. The loneliness may be due to not feeling a connection to others around you... that you feel different from others and don't fit into the values of society (P9). The participants also perceived that young people risk becoming lonely if they deviate from that which is considered normative and that, to avoid loneliness, some can hide certain aspects of themselves. The participants even observed that some could choose to be alone because it is easier than opening up to other people and facing negative or even occasionally antagonistic resistance. One participant recounted that their chronic illness is partly the reason for their involuntary loneliness and described how exhausting it was when no one understood how they feel or could relate to or fully understand the challenges they face. Another participant revealed that their sexual orientation could lead to feelings of alienation, noting that if one does not belong to heteronormative groupings it could even be difficult to fit into other groups.

... I revealed my sexuality... After that, my classmates were a little uncomfortable around me... A fellow student said bluntly... you can't be gay and a teacher... I think... If one deviates from the norm, there is a risk... one gets lonely... it is very human to exclude those who... are different even though these people... have done nothing wrong. (P1)

This participant described how negative comments from fellow students or even instructors could lead to a not just a sense of loneliness but even fear, because the environment that the participant believed and had previously perceived was welcoming or open was now experienced as being unwelcoming.

The normalization of coupled relationships (couple-norm) in society was also something the participants mentioned in relation to loneliness. Some participants described how their life situation could deviate from that of their peers, that they could be experiencing a different life transition than those around them. One participant revealed that even though they do not currently wish to be in a relationship that not being in a relationship could give rise to loneliness....the couple-norm [is] not a big source of concern... but I'm not unaffected by it... [it]makes me think everything would be so much better if I were in a relationship... (P2).

Some participants described how their being in a relationship, whether non-cohabitating, cohabiting or remote, could result in them feeling less alone. The participants also described how the couple-norm could lead to negative behaviour, in the sense that some could start or continue with relationships that were not beneficial. One participant described how a friend was involved in what the participant considered to be a destructive relationship, observing that this friend would rather be in a relationship than alone. I think [they are] so scared of loneliness that [they would] rather be in a... destructive relationship than alone (P2).

Positive experiences of voluntary loneliness

This main category encompassed young adults' positive experiences of loneliness and in which situations such occurred. The participants perceived that when loneliness was voluntary various positive experiences could arise, described below in subthemes.

Sanctuary – a place, a time to breathe

All of the study participants maintained that some type of voluntary loneliness was needed to cope with everyday life. One participant described how voluntary loneliness can be experienced



as a 'sanctuary' that allows them the freedom to think undisturbed and without various impressions that encroach upon their mind. I would call self-imposed solitude a sanctuary that gives me freedom... to think undisturbed... (P2). The participants also observed that loneliness can provide a sanctuary for those who characterize themselves as introverts, noting that such individuals need time to themselves to recover. One participant described how they have always enjoyed and still feel the need to spend time in solitude, even as a child. I enjoy spending time alone... If I spend too much time with others, I get tired... It takes something extra for me to want to spend time with someone as a friend (P3).

Some participants described loneliness as a subjective experience that is based on individual expectations, perceiving that when loneliness can be liberating when self-chosen.

Being alone is nice as I know that I myself have made the choice to spend time by myself...In my case, loneliness is not experienced... [as being] difficult... it is... about an active choice... In these situations, loneliness helps me to relax and gather my thoughts. (P8)

The participants surmised that voluntary loneliness may be necessary for well-being and that fatigue or anxiety can be experienced if one does not have the opportunity for such. Some participants noted that loneliness and silence can be valued for those who have grown up in large families. I often get tired and anxious if I spend too much time with others... Gotta be by myself to recharge my batteries and focus... I thrive alone... often I am in a good mood and I'm rarely bored even though I'm all alone... (P1).

Self-reflection – a time to reflect and develop as a human being

According to the participants, voluntary loneliness is important and necessary for well-being. The participants perceived that voluntary loneliness could provide individuals with an opportunity to reflect on their life and develop as a human being. One participant described how people in society today are constantly surrounded by different impressions and noted that being voluntarily alone for a period of time could constitute the only time a person could think for oneself without being influenced by others. In today's society... (you are) constantly surrounded by impressions... The moment you are alone may be the only opportunity to sit down and get closer to your own thoughts and reflections (P8). Even another participant explained that they are able to think more deeply when they have been alone for a time, without the distraction of others.

When I've been alone and haven't hung out with anyone for a couple of days... I get into my own thoughts more deeply, I become more reflective... Have time to process everything in peace and quiet and do not get distracted by others... (P1)

The participants perceived that voluntary loneliness allowed them to think about themselves and create and be the person they feel they are without external stress. One participant described that voluntary loneliness could facilitate time for self-reflection and self-focus. Another participant also noted that voluntary loneliness provided them with the time to reflect on their life and what they wanted to be. This loneliness I have had to live with, the good and the bad. . . I got to know myself and developed as a person. . . [I]know who I am, what I want and where I'm going (P6). This participant described how they through reflection realized that they no longer wanted to be single and found love a few days after downloading a dating application. This participant perceived that loneliness was not just one thing but many different things simultaneously; it had helped them learn about themselves as an individual, helped them learn about life, enabled their creativity, and enriched their life.

My inner world is rich... when you get lonely... in a kind of silence, thoughts begin to move much more inside... In this story of loneliness, I have tried to take in the good and the worst about loneliness... loneliness has been like a dear friend of mine... not just an evil creature... Sometimes it's been a monster I didn't want to see or meet... But these moments have given me several lessons about life and myself as an individual. (P6)



Independence and self-knowledge – a space where you can be exactly who you are

The participants perceived that voluntary loneliness could provide them with the liberty to do what they wanted and be exactly the person they wanted to be, without having to take others into consideration. They also experienced that voluntary loneliness could be freeing, knowing that they could manage loneliness and that it is okay to be sad for a while. One participant described how when they miss their partner their loneliness could feel overwhelming, but that they choose to be alone to independently feel and deal with their feelings, which has facilitated their understanding that loneliness and sadness can be temporary.

Since I have felt this kind of loneliness, I have... realized that loneliness... is temporary... it is important to accept all your feelings...I haven't felt the need to spend time with anyone to 'cure' loneliness... when you've been sad... been nice to be by yourself in the solitude. (P8)

Another participant revealed that the knowledge that they had social contacts could alleviate their loneliness, because the thought of the other people in their life could provide awareness that their loneliness was only temporary. Even if you feel lonely... it's not healthy to cling to a person 24/7...you need...to be alone... and at the same time have the knowledge that there are... people... who are there...(P6).

One participant described how they appreciate loneliness in certain situations because it allows them to be who they are without 'interference'. ... I get to do what I want, how I want, when I want and can get to know myself without others interfering in it (P9). Another participant stated that they enjoyed being alone, because their upbringing and loneliness had made them independent. One participant revealed that they have at different times experienced loneliness in various contexts when they have not or not wanted to fit in. However, this same participant continued and noted that they can enjoy such time because it allows them to be who they are, stating that they perceived that seeking to be someone one is not can lead to (negative) loneliness. This participant also revealed that they have realized that they would rather be alone than try to be someone else.

Being independent and taking responsibility for oneself and one's choices in life are also important, according to the participants. One participant described how loneliness can become a learning tool if a person is involuntarily alone, maintaining that each person if responsible for alleviating their own loneliness and observing that loneliness can make them think about why they are alone or what they can do to change the situation.

... When it comes to responsibility for alleviating loneliness... Friends have a big part in alleviating loneliness... but... [you] can't demand that a friend help you... the main responsible person is yourself... If you feel lonely [you should] question why.... (P7)

The participants perceived that they have a responsibility to seek contact if they were lonely and not sit and wait for others to make contact. One participant experienced that loneliness gave them 'food for thought' and they have realized that loneliness and the suffering it entails will ultimately make them stronger. This participant also described how loneliness has helped them learn that they do not want to change for anyone else; their fellow human beings must accept them for who they are.

Social media is a double-sided coin vis-à-vis loneliness

This main category encompassed the impact that young people feel social media has on their experiences of loneliness. The participants perceived that social media has both positive and negative sides, namely that it can both alleviate but even cause or increase young people's experiences of loneliness.



Social media can alleviate perceived feelings of loneliness

The participants perceived that social media could have a positive impact on their loneliness because it facilitates communication with friends and people around the world. One participant stated that they know many people around the world and that social media enables their contact with them. Another participant explained how social media made it easy to keep in touch with their partner and family when they lived by themselves.

... We sent messages and called daily...[I] recall that I found the 'goodnight conversation' with my partner very important... without that conversation, I had trouble sleeping... In other words, social media and the phone can make loneliness feel less difficult.... (P8)

Another participant described how when they moved away to study a chat group with good friends from home made them feel less alone. This participant revealed that even though their closest friends were elsewhere they could still keep in touch and talk about anything in the group chat. I enjoyed my studies... but longed for the contact with the dearest people of my life... we created a WhatsApp group where we still talk about different things when we feel like it... (P6).

The participants even perceived that when a person is alone social media could serve as a way to pass the time and feel less lonely. One participant described that they use social media to alleviate their loneliness, trying... to find a connection through it somehow (P9), and that social media could temporarily alleviate loneliness. Another participant revealed that social media could reduce the 'silence' of loneliness. This participant noted that they could feel less alone when listening to someone via a video, describing how they could feel part of that other person's world even if they did not know them.

...when I'm voluntarily alone and physically alone, I like to spend time on YouTube...I come from a family that often hung around each other...l like to have some background noise... music doesn't work... should be human voices that talk... When I'm alone in this way, I rarely feel like I'm alone... but I can laugh with the people in the video. (P7)

This same participant perceived that by coming into contact others experiencing similar things social media could even help with more serious problems such as anxiety or sadness.

...[1] think that social media has an 'impact' on how young people experience loneliness... it can be positive sometimes... Many people who regularly watch videos do so because it helps them with anxiety or dealing with grief – the videos become a distraction... they provide more human contact.... (P7)

This participant described that they often use closed and private servers to communicate with strangers or friends. This could allow them or others to publish a post at any time and even helped ensure that either they or others were available in case anyone wanted to talk. I probably spend most time in front of the computer... because with the help of it... I am in contact with my friends... I always have a server open when I have on my computer... just in case anyone wants to speak (P7).

Social media can cause or increase perceived feelings of loneliness

The participants in this study also perceived that social media could have a negative impact on their loneliness. They experienced that the use of social media could cause or increase loneliness, for example that some people could stop seeking in-person contact with friends because of the convenience of interacting over social media. The participants observed that not needing to leave one's residence to perform various activities could lead to isolation. I believe that social media greatly restricts young people from actively seeking out social, physical contexts... why meet friends when you can chat over the phone . . . ? (P8).

Some participants experienced that heavy social media and/or phone use ('being stuck on the phone') could result in a person ignoring many other things, which they perceived made the relationship with social media feel very complex. The participants observed that



increased screen time could entail that there was no time left for other activities. Involuntary loneliness among young people is becoming more common... [1] think it depends to some extent on the amount of screen time and... an increased pressure to fit in (P8). The participants perceived that the use of social media and technology could easily become addictive, which could entail that the time (formerly) spent with friends was instead replaced with time spent on social media.

I think that you can very easily become obsessed with technology and especially applications like YouTube – and that they have a clearly negative effect on people's lives. . . fast and accessible entertainment. . . It's addictive. (P7)

One participant attributed their loneliness to an addiction to YouTube, noting that they were experiencing a 'vicious circle'. This participant described how their use of social media both resulted in less interaction with friends yet even simultaneously alleviated their experiences of loneliness.

For me, my loneliness arises from an addiction to YouTube ... it's a double-sided relationship where the application steals time that I would rather spend with my friends... but relieves loneliness when it arises... I think a better lifestyle with more time away from my computer would solve a lot of problems. (P7)

The participants experienced that the passive use of social media could even increase loneliness. One participant revealed that they spent a lot of time on social media at the beginning of their university studies and was able to see how their fellow students socialized while they themselves were not invited, which according to the participant confirmed that they were being excluded. This participant found the situation to be so difficult that they stopped following people they knew on social media in order to preserve their well-being.

I often saw how my fellow students hung out with each other without me...[it] became... Extra hard because otherwise I wouldn't have known... that I was excluded... Through social media, I saw it so clearly... After a while, I stopped following people I know.... (P1)

Another participant expressed similar thoughts about how seeing what others are doing on social media while also perceiving that one does not fit into a group's or society's expectations could increase loneliness. The loneliness may be due to not feeling a connection to others around you perhaps because of social media or that you feel different from others and do not fit into the values of society (P9).

Several other participants also explained how their experiences of social media could be doublesided. One participant described social media as being both perpetrators and rescuers (P2). This participant observed that it was better for their well-being to limit themselves to a single social media (chat) application with friends rather than be more active across various forms of social media. Myself, I don't use any social media other than WhatsApp... have never done so... I think I'm best off staying out of that world (P2). This participant perceived that it was primarily 'glorified' images that were shown on social media and that consequently social media could reinforce loneliness if a person already felt lonely or excluded. This participant even discussed how they perceived some people could present an idealized image on social media in an attempt to hide their own loneliness, noting that such actions could instead increase (others') loneliness.

I think... [social media]... can give rise to or reinforce feelings of loneliness... Especially if you feel a little lonely and left out right from the start... Social media really always has idealized pictures... why would you highlight [grey] everyday life... when you can brighten it up in more beautiful colors on social media... but how do you influence others with that... It is possible that you reinforce the loneliness of others in your attempts to hide your own loneliness. (P2)

Discussion

The aim of this study was to investigate young adults' experiences and perceptions of loneliness and its association with social media. We found that young adults can have negative experiences of involuntary loneliness and positive experiences of voluntary loneliness, and that there are both



positive and negative aspects to young adults' use of social media vis-à-vis loneliness, namely that it can both alleviate but even cause or increase young adults' experiences of loneliness.

Previous research indicates that voluntary loneliness can be experienced as being positive because it often encompasses reflection, development and a willingness to be periodically alone (Houghton et al., 2022; Rich Madsen et al., 2021). Conversely, involuntary loneliness can be experienced as being negative because it produces a feeling of emptiness or strong uneasiness (Ruiz-Casares, 2012) or a sense of alienation (Hemberg et al., 2021).

We saw in this study that exclusion can be interrelated with loneliness among young adults, that is young adults can experience loneliness in different situations, a sense of being excluded from a community or invisible, despite being surrounded by others or even friends. Invisibility and alienation both touch on experiences of existential loneliness, which is associated with young people's feelings of exclusion and of not belonging anywhere (Garnow et al., 2022; Rich Madsen et al., 2021). Existential loneliness often correlates with the social transitions that typically occur during young adulthood (Sundqvist & Hemberg, 2021). The participants in this study were all young adults: university students or recent university graduates. Previous research indicates that an increased level of loneliness can often be experienced during this life stage (Kekkonen et al., 2020; von Soest et al., 2020). Young adults may be missing hometown friends or have perhaps not yet established new, close friendships (Diehl et al., 2018) in their new setting. The participants in this study revealed experiences of increased loneliness, which may be linked to their feeling excluded, that is loneliness associated with not having yet found a place in society (cf. Sundqvist & Hemberg, 2021).

Previous research also indicates that loneliness can occur when young people deviate from that which is considered normative from a societal perspective (Korzhina et al., 2022). The participants in this study revealed that chronic illness, sexual orientation or not choosing to be in a relationship (not adhering to the couple-norm seen in society) could result in negative experiences of loneliness. This can be compared to previous research, which indicates that when young people's longing to belong with others is unfulfilled, feelings of existential loneliness and alienation can emerge (Hemberg et al., 2022; Verity et al., 2021)

We saw that not adhering to the couple-norm seen in society or experiencing a different life transition than peers could entail loneliness among young adults. Some participants experienced that their loneliness decreased when they found a partner, while other participants experienced that seeking to satisfy emotional needs through a partner could lead some to 'settle' for a partner who may not be positive for well-being. Despite not actively searching for a romantic relationship, young people can experience that something is missing in their lives (cf. Korzhina et al., 2022; Sundqvist & Hemberg, 2021), and those who are voluntarily single can still experience loneliness (Adamczyk, 2017).

From the findings we discerned that young adults' experiences of loneliness could also be positive. Despite a common view that loneliness is something negative, for example that it can provoke uncomfortable feelings such as anxiety, fear or anger (Rich Madsen et al., 2021), being alone can lead to new insights, self-knowledge and a sense of freedom (Baloyannis, 2015). Several participants in this study described how voluntary loneliness was a positive experience and supported their overall well-being and health, findings that are in line with previous research (Hemberg et al., 2021; Rich Madsen et al., 2021). In this study voluntary loneliness was associated with a sanctuary, self-reflection, and independence and self-knowledge.

We found that voluntary loneliness as a sanctuary provided young adults with the place and time to breathe and just 'be' and could be necessary for well-being. Previous research also indicates that young people who enjoy being alone have better well-being than those who cannot cope with being alone (Hemberg et al., 2021; Houghton et al., 2022). Some participants perceived that good family relationships could alleviate their experiences of loneliness. Previous research shows that during adolescence young people seek affirmation from peers and autonomy from parents (Erikson, 1985; Kaniušonytė et al., 2019). We saw that those participants with good familial relationships and good contact with their family had lower levels of loneliness, which can be attributed to that they still had a functioning support network.

We even found that some participants perceived that one must be comfortable with being in solitude; otherwise one could become too dependent on others for own well-being. Other participants noted that although they could sometimes feel involuntarily alone, they could still realize that their loneliness was only temporary and could be situation-based, which made it easier to accept and alleviate (cf. Verity et al., 2021).

We even found that voluntary loneliness could be associated with self-reflection, which could provide young adults with the time to reflect and develop as a person. Voluntary loneliness is also associated with self-knowledge; when a person is allowed to be in their loneliness, they can reflect more on themselves and their situation and begin to see loneliness from different perspectives (Hemberg et al., 2021; Houghton et al., 2022). In line with previous research, loneliness can cause suffering, which is a natural part of life and can increase young people's awareness (Lindholm, 1998). We saw that some participants could perceive that they themselves were the reason they were alone. These participants maintained that because they could sometimes consciously or unconsciously alienate others that self-knowledge was also important. As seen in previous research, young people can sometimes blame others for their perceived loneliness (Verity et al., 2021). Still, although the participants in this study observed that they themselves were sometimes the cause of own loneliness, they likewise perceived that the responsibility for alleviating their loneliness was also theirs.

We additionally saw that voluntary loneliness could provide young adults independence and selfknowledge, a space where they could be exactly who they are. Enjoying one's own loneliness can be healthy and can even provide an opportunity for new insights and reflections (Hemberg et al., 2021; Houghton et al., 2022). Acceptance of and reconciliation with loneliness and suffering can lead to personal growth and development into a stronger and more meaningful whole (Eriksson, 2018; Lindholm, 1998). Several participants in this study had accepted that experiences of loneliness were a natural part of their lives and learned to accept and appreciate moments of loneliness.

Some participants described experiences of loneliness caused by peers and how it is often peer acceptance they seek. Other participants expressed how they sometimes choose to be alone because they are not satisfied with their social relationships; they do not feel accepted as they are and would rather be alone than pretend to be someone they are not. As seen in previous research, young people can experience unbearable suffering when they are not true to themselves or when they go against their own nature (Lindholm, 1998).

We found that some participants often used social media as a distraction to pass the time whenever they experienced loneliness. Young people can tend to use distraction to try to avoid experiences of loneliness, that is they seek to experience positive emotions for the moment (Ruiz-Casares, 2012). We discerned that social media is not always the direct cause of young adults' loneliness but that the manner in which social media is used and accessed was determinative, which is supported by previous research (Ang et al., 2018; Bekar et al., 2022). As seen in this study, the role of social media is somewhat double-sided; it could alleviate loneliness but, if a person was already experiencing loneliness, it could even increase loneliness. Research consensus on social media and its association with loneliness is lacking (Ang et al., 2018; Twenge et al., 2021; Wang et al., 2018). Social media might have an impact on loneliness, although it is unclear to what extent (Bekar et al., 2022; Hemberg et al., 2022). Some suggest that social media increases loneliness among young people (Primack et al., 2017; Twenge et al., 2019) while others find that social media is positive because it can alleviate feelings of loneliness by facilitating contact with friends as well as paving the way for new friendships (Espinoza & Hernandez, 2021; Wang et al., 2018).

Nevertheless, as previous research shows, some individuals can develop an addiction to social media (Bekar et al., 2022; Kitiş et al., 2022). Internet addiction, and specifically addiction to social media, can cause young people to spend less time face-to-face with friends because social media often occupies much of their time, which can lead to a negative spiral that amplifies loneliness (Bekar et al., 2022; Kitiş et al., 2022; Marttila et al., 2021). This is supported by the experiences seen in this study, where some participants described how easy it was to become addicted to different applications. This is in line with previous research, which indicates that young people try to alleviate

loneliness with social media in such a way that they increasingly risk developing a harmful addiction (Ang et al., 2018; Marttila et al., 2021). For some participants in this study, the (mis)use of social media simultaneously alleviated but also increased their experience of loneliness (cf. Bekar et al., 2022), making it more difficult for them to experience lasting alleviation.

We also saw that some young adults could often engage in heavy social media use, that is become 'stuck' on social media or their phone, even though they would prefer to spend time with friends. How young people use social media is therefore crucial to whether loneliness is alleviated or amplified (Berryman et al., 2018). Especially during the COVID-19 pandemic, the use of social media as a tool for communicating with friends has been perceived as being positive (Espinoza & Hernandez, 2021; Lyyra et al., 2022). Still, as seen in this study, social media can fulfill young adults' need for attachment but passive use of social media can lead to increased loneliness (cf. Berryman et al., 2018).

We discerned that some participants in this study attained insight into and an understanding of how social media could possibly worsen their health, specifically their well-being, and consequently made active choices to use social media only in such a way that they could maintain their experience of health. For example, some participants avoided social media altogether because they were aware that it would worsen their well-being, while others explained that they avoided following friends on social media and instead only followed strangers with whom they had no personal contact but who enriched their everyday lives. As seen in previous research, seeing a 'glorified' image of another person's life through social media can be difficult for young people, because such a false or distorted picture of reality can perhaps be impossible to achieve and may, thereby, contribute to feelings of failure (Fardghassemi et al., 2022).

Methodological considerations

The data collection method used in this study can be considered both a strength and a limitation. The use of anonymous essays may have benefited some participants and enabled a more honest description of their experiences. However, some participants may have found such a method to be more challenging. The relatively small sample could have been impacted by the COVID-19 pandemic that was ongoing at the time of data collection, and a larger sample might have resulted in different findings. Furthermore, the interview was conducted digitally because of the COVID-19 pandemic. Still, rich data was yielded and saturation of data was seen. Validation of the findings was strengthened when the researchers also came together to discuss the final themes and subthemes. A strength is that both young adult males and females of various ages participated in the study. It can therefore be assumed that a trustworthy and nuanced depiction of young adults' experiences and perceptions of loneliness and its relation to their social media use.

Conclusion

Loneliness for young adults can be both positive and negative. Young adults can have negative experiences of involuntary loneliness, associated with experiences of alienation, invisibility or being different, and also have positive experiences of voluntary loneliness, associated with a space to 'be', self-reflection, independence and self-knowledge. Social media can also be considered double-sided in that it impacts young adults' experiences of loneliness in both negative and positive ways. Social media can alleviate young adults' experiences of loneliness by facilitating communication with friends or by creating a sense of community, even with previously unfamiliar individuals. However, it can also exacerbate young adults' experiences of loneliness, by making their perceived loneliness tangible. Our findings can help professionals working with young adults better understand young adults' loneliness, especially regarding social media use. A focus on further exploring how social media, including the use of various applications, may impact young people's experiences of loneliness should be included in future studies.



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Author contributions

Emelie Käcko was responsible for the study conception and design, data analysis and discussion and drafted the manuscript at all stages. Emelie Käcko and Jessica Hemberg were responsible for the data collection. Jessica Hemberg and Pia Nyman-Kurkiala contributed to the study conception. All authors contributed to the data analysis and provided critical comments on the manuscript.

Emelie Käcko contributed to the study conception, design, data collection, data analysis, discussion and drafted the manuscript. Jessica Hemberg contributed to the study conception, design, data collection, data analysis, discussion and provided critical reflections. Pia Nyman-Kurkiala contributed to the design, discussion and provided critical reflections.

Ethical approval

Ethical approval for the study was granted by an ethical committee at the university where the researchers were situated. The ethical guidelines outlined by the Finnish Advisory Board on Research Integrity (2023) were followed throughout the study. Participants provided informed consent for participation in the study. The participants were informed both orally and in writing about the purpose of the study, confidentiality, withdrawal of consent and publication intent.

References

- Adamczyk, K. (2017). Voluntary and involuntary singlehood and young adults' mental health: An investigation of mediating role of romantic loneliness. Current Psychology, 36(4), 888-904. https://doi.org/10.1007/s12144-016-
- Ang, C. S., Chan, N. N., & Lee, C. S. (2018). Shyness, loneliness avoidance, and internet addiction: What are the relationships? The Journal of Psychology, 152(1), 25-35. https://doi.org/10.1080/00223980.2017.1399854

Baloyannis, S. (2015). The philosophy of solitude. ENCEPHALOS, 52, 14–24.

- Bekar, P., Arıkan, D., & Capık, C. (2022). The relationship of internet addiction with social media use purposes and loneliness of adolescents. Journal of Education and Research in Nursing, 19(3), 342-349. https://doi.org/10.5152/jern. 2021.47699
- Berryman, C., Ferguson, C. J., & Negy, C. (2018). Social media use and mental health among young adults. Psychiatric Ouarterly, 89(2), 307–314. https://doi.org/10.1007/s11126-017-9535-6
- Bonsaksen, T., Schoultz, M., Thygesen, H., Ruffolo, M., Price, D., Leung, J., & Geirdal, A. Ø. (2021). Loneliness and its associated factors nine months after the COVID-19 outbreak: A cross-national study. International Journal of Environmental Research and Public Health, 18(6), 2841. https://doi.org/10.3390/ijerph18062841
- Branquinho, C., Kelly, C., Arevalo, L. C., Santos, A., & Gaspar de Matos, M. (2020). "Hey, we also have something to say": A qualitative study of Portuguese adolescents' and young people's experiences under COVID-19. Journal of Community Psychology, 48(8), 2740–2752. https://doi.org/10.1002/jcop.22453



- Cauberghe, V., Van Wesenbeeck, I., De Jans, S., Hudders, L., & Ponnet, K. (2021). How adolescents use social media to cope with feelings of loneliness and anxiety during COVID-19 lockdown. *Cyberpsychology, Behavior, and Social Networking*, 24(4), 250–257. https://doi.org/10.1089/cyber.2020.0478
- Chen, Y., Liu, X., Chiu, D. T., Li, Y., Mi, B., Zhang, Y., Ma, L., & Yan, H. (2022). Problematic social media use and depressive outcomes among college students in China: Observational and experimental findings. *International Journal of Environmental Research and Public Health*, 19(9), 4937. https://doi.org/10.3390/ijerph19094937
- Christiansen, J., Qualter, P., Friis, K., Pedersen, S. S., Lund, R., Andersen, C. M., Bekker-Jeppesen, M., & Lasgaard, M. (2021). Associations of loneliness and social isolation with physical and mental health among adolescents and young adults. *Perspectives in Public Health*, 141(4), 226–236. https://doi.org/10.1177/17579139211016077
- Diehl, K., Jansen, C., Ishchanova, K., & Hilger-Kolb, J. (2018). Loneliness at universities: Determinants of emotional and social loneliness among students. *International Journal of Environmental Research and Public Health*, *15*(9), 1865. https://doi.org/10.3390/ijerph15091865
- Erikson, E. H. (1985). The completed life cycle (in Swedish: Den fullbordade livscykeln). Natur och Kultur.
- Eriksson, K. (2018). "Caring Science The Science of Caring About the Timeless in Time. (In Swedish: Vårdvetenskap Vetenskapen om vårdandet Om det tidlösa i tiden)". In K. Eriksson (Eds.), *The suffering human being (in Swedish*: Den lidande människan). (1994) (pp. 315-414). Liber AB.
- Espinoza, G., & Hernandez, H. L. (2021). Adolescent loneliness, stress and depressive symptoms during the COVID-19 pandemic: The protective role of friends. *Infant and Child Development*, 31(3), 2305. https://doi.org/10.1002/icd.2305
- Fardghassemi, S., Joffe, H., & Vall-Llosera Camps, M. (2022). The causes of loneliness: The perspective of young adults in London's most deprived areas. *PloS ONE*, *17*(4), e0264638. https://doi.org/10.1371/journal.pone.0264638
- Finnish National Advisory Board on Research Ethics TENK. (2023). Responsible conduct of research and procedures for handling allegations of misconduct in Finland. Guidelines of the Finnish National Board on Research Integrity TENK 2023 (In Swedish: *God vetenskaplig praxis och handläggning av misstankar om avvikelse från den i Finland. Forskningsetiska delegationens anvisningar 2023*). Retrieved December 12, 2023, from https://tenk.fi/sites/default/files/2023-04/Forskningsetiska_delegationens_GVP-anvisning_2023.pdf
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Wang, Y., Fu, H., & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *PloS One*, *15*(4), e0231924. https://doi.org/10.1371/journal.pone. 0231924
- Garnow, T., Garmy, P., Edberg, A. K., & Einberg, E. L. (2022). Deeply lonely in the borderland between childhood and adulthood experiences of existential loneliness as narrated by adolescents. *International Journal of Qualitative Studies of Health and Well-Being*, 17(1), 213–253. https://doi.org/10.1080/17482631.2022.2132653
- Geirdal, A. Ø., Ruffolo, M., Leung, J., Thygesen, H., Price, D., Bonsaksen, T., & Schoultz, M. (2021). Mental health, quality of life, wellbeing, loneliness and use of social media in a time of social distancing during the COVID-19 outbreak. A cross-country comparative study. *Journal of Mental Health*, 30(2), 148–155. https://doi.org/10.1080/09638237.2021. 1875413
- 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. https://doi.org/10.1016/j.nedt.2003.10.001
- Heinrich, L. M., & Gullone, E. (2006). The clinical significance of loneliness: A literature review. *Clinical Psychology Review*, 26(6), 695–718. https://doi.org/10.1016/j.cpr.2006.04.002
- Helm, P. J., Jimenez, T., Galgali, M. S., Edwards, M. E., Vail, K. E., & Arndt, J. (2022). Divergent effects of social media use on meaning in life via loneliness and existential isolation during the coronavirus pandemic. *Journal of Social and Personal Relationships*, 39(6), 1768. https://doi.org/10.1177/02654075211066922
- Hemberg, J., Korzhina, Y., Groundstroem, H., Östman, L., Nyström, L., & Nyman-Kurkiala, P. (2021). Loneliness two sides to the story: Adolescents' lived experiences. *International Journal of Adolescence and Youth*, 26(1), 41–56. https://doi.org/10.1080/02673843.2021.1883075
- Hemberg, J., Östman, L., Korzhina, Y., Groundstroem, H., Nyström, L., & Nyman-Kurkiala, P. (2022). Loneliness as experienced by adolescents and young adults: An explorative qualitative study. *International Journal of Adolescence and Youth*, 27(1), 362–284. https://doi.org/10.1080/02673843.2022.2109422
- Houghton, S., Kyron, M., Hunter, S., Lawrence, D., Hattie, J., Carroll, A., & Zadow, C. (2022). Adolescents' longitudinal trajectories of mental health and loneliness: The impact of COVID-19 school closures. *Journal of Adolescence*, *94*(2), 191–205. https://doi.org/10.1002/jad.12017
- Institutet för hälsa och välfärd, THL. (2023). Well-Being of Children and Young People School Health Promotion Survey 2023: More Than a Third of Girls and One in Five Boys Consider Their Health to Be Average or Poor. (In Swedish: Välbefinnandet Bland Barn Och Unga Enkäten Hälsa I Skolan 2023: Mer Än En Tredjedel Av Flickorna Och Var Femte Pojke Upplever Sitt Hälsotillstånd Som Medelmåttigt Eller dåligt). School Health Promotion Survey 2023 (In Swedish: Enkäten Hälsa i skolan 2023). Retrieved December 23, 2023, from https://urn.fi/URN:NBN:fi-fe20230913124228
- Kaniušonytė, G., Truskauskaitė, I., Žukauskienė, R., & Crocetti, E. (2019). Knowing who you are for not feeling lonely? A longitudinal study on identity and loneliness. *Child Development*, *90*(5), 1579–1588. https://doi.org/10.1111/cdev. 13294



- Kekkonen, V., Tolmunen, T., Kraav, S.-L., Hintikka, J., Kivimäki, P., Kaarre, O., & Laukkanen, E. (2020). Adolescents' peer contacts promote life satisfaction in young adulthood a connection mediated by the subjective experience of not being lonely. *Personality and Individual Differences*, 167, 110264. https://doi.org/10.1016/j.paid.2020.110264
- Kitiş, Y., Dağci, B., Köse, N., & Geniş, Ç. (2022). The use of social media among high school students and its relationship with the perception of loneliness: A pilot study. *Journal of Child and Adolescent Psychiatric Nursing*, 35(4), 341–348. https://doi.org/10.1111/jcap.12388
- Korzhina, Y., Hemberg, J., Nyman-Kurkiala, P., & Fagerström, L. (2022). Causes of involuntary loneliness among adolescents and young adults: An integrative review. *International Journal of Adolescence and Youth*, 27(1), 493–514. https://doi.org/10.1080/02673843.2022.2150088
- Lempinen, L., Junttila, N., & Sourander, A. (2018). Loneliness and friendships among eight-year-old children: Time-trends over a 24-year period. *Journal of Child Psychology and Psychiatry*, 59(2), 171–179. https://doi.org/10.1111/jcpp.12807
- Lindholm, L. (1998). The health and suffering of the young individual. (in Swedish: Den unga människans hälsa och lidande). Department of Caring Science: Åbo Akademi University.
- Lyyra, N., Junttila, N., Gustafsson, J., Lahti, H., & Paakkari, L. (2022). Adolescents' online communication and well-being: Findings from the 2018 health behavior in school-aged children (HBSC) study. *Frontiers in Psychiatry*, *13*, 976404. https://doi.org/10.3389/fpsyt.2022.976404
- Marchini, S., Zaurino, E., Bouziotis, J., Brondino, N., Delvenne, V., & Delhaye, M. (2021). Study of resilience and loneliness in youth (18-25 years old) during the COVID-19 pandemic lockdown measures. *Journal of Community Psychology*, 49 (2), 468–480. https://doi.org/10.1002/jcop.22473
- Marttila, E., Koivula, A., & Räsänen, P. (2021). Does excessive social media use decrease subjective well-being? A longitudinal analysis of the relationship between problematic use, loneliness and life satisfaction. *Telematics and Informatics*, 59.
- Matthews, T., Danese, A., Wertz, J., Odgers, C. L., Ambler, A., Moffitt, T. E., & Arseneault, L. (2016). Social isolation, loneliness and depression in young adulthood: A behavioural genetic analysis. *Social Psychiatry and Psychiatric Epidemiology*, *51*(3), 339–348. https://doi.org/10.1007/s00127-016-1178-7
- Mikkelsen, H. T., Haraldstad, K., Helseth, S., Skarstein, S., Småstuen, M. C., & Rohde, G. (2020). Health-related quality of life is strongly associated with self-efficacy, self-esteem, loneliness, and stress in 14-15-year-old adolescents: A cross-sectional study. *Health and Quality of Life Outcomes*, 18(1), 352. https://doi.org/10.1186/s12955-020-01585-9
- Nowland, R., Necka, E. A., & Cacioppo, J. T. (2018). Loneliness and social internet use: Pathways to reconnection in a digital world? *Perspectives on Psychological Science*, 13(1), 70–87. https://doi.org/10.1177/1745691617713052
- Peplau, L., & Perlman, D. (1982). Loneliness: A source book of current theory, research and therapy. John Wiley.
- Perlman, D., & Peplau, L. A. (1998). Loneliness. Encyclopedia of Mental Health, 2, 571–581.
- Primack, B. A., Shensa, A., Sidani, J. E., Whaite, E. O., Lin, L., Rosen, D., Colditz, J. B., Radovic, A., & Miller, E. (2017). Social media use and perceived social isolation among young adults in the U.S. *The American*, *53*(1), 1–8. https://doi.org/10.1016/j.amepre.2017.01.010
- Rich Madsen, K., Tjørnhøj-Thomsen, T., Jervelund, S. S., Qualter, P., & Holstein, B. E. (2021). Lonely, but not alone: Qualitative study among immigrant and native-born adolescents. *International Journal of Environmental Research and Public Health*, 18(21), 1142. https://doi.org/10.3390/ijerph182111425
- Rogers, A. A., Ha, T., & Ockey, S. (2021). Adolescents' perceived socio-emotional impact of COVID-19 and implications for mental health: Results from a U.S.-based mixed-methods study. *Journal of Adolescent Health*, 68(1), 43–52. https://doi.org/10.1016/j.jadohealth.2020.09.039
- Ruiz-Casares, M. (2012). "When It's just me at home, it hits me that I'm completely alone": An online survey of adolescents in self-care. *The Journal of Psychology*, *146*(1–2), 135–153. https://doi.org/10.1080/00223980.2011. 604361
- Sundqvist, A., & Hemberg, J. (2021). Adolescents' and young adults' experiences of loneliness and their thoughts about its alleviation. *International Journal of Adolescence and Youth*, 26(1), 238–255. https://doi.org/10.1080/02673843.2021.
- Thomas, L., Orme, E., & Kerrigan, F. (2020). Student loneliness: The role of social media through life transitions. *Computers & Education*, 146, 103754. https://doi.org/10.1016/j.compedu.2019.103754
- Twenge, J. M., Haidt, J., Blake, A. B., McAllister, C., Lemon, H., & Le Roy, A. (2021). Worldwide increases in adolescent loneliness. *Journal of Adolescence*, 93(1), 257–269. https://doi.org/10.1016/j.adolescence.2021.06.006
- Twenge, J. M., Spitzberg, B. H., & Campbell, W. K. (2019). Less in-person social interaction with peers among U.S. adolescents in the 21st century and links to loneliness. *Journal of Social and Personal Relationships*, *36*(6), 1892–1913. https://doi.org/10.1177/0265407519836170
- Verity, L., Schellekens, T., Adam, T., Sillis, F., Majorano, M., Wigelsworth, M., Qualter, P., Peters, B., Stajniak, S., & Maes, M. (2021). Tell me about loneliness: Interviews with young people about what loneliness is and how to cope with it. *International Journal of Environmental Research and Public Health*, 18(22), 11904. https://doi.org/10.3390/ijerph182211904
- von Soest, T., Luhmann, M., & Gerstorf, D. (2020). The development of loneliness through adolescence and young adulthood: Its nature, correlates, and midlife outcomes. *Developmental Psychology*, *56*(10), 1919–1934. https://doi.org/10.1037/dev0001102



Wang, K., Frison, E., Eggermont, S., & Vandenbosch, L. (2018). Active public Facebook use and adolescents' feelings of loneliness: Evidence for a curvilinear relationship. Journal of Adolescence, 67(1), 35-44. https://doi.org/10.1016/j. adolescence.2018.05.008

Weiss, R. (1973). Loneliness: The experience of emotional and social isolation. The MIT press.

Weiss, R. S. (1987). Reflections on the present state of loneliness research. Journal of Social Behavior and Personality, 2(2),

World Health Organization. (2023). WHO Commission on Social Connection. Retrieved December 23, 2023: https://www. who.int/groups/commission-on-social-connection