Young men's mental illhealth in the Nordics

A research overview encompassing education and training, the workplace and the pandemic



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This publication is also available online in a web-accessible version at: <u>https://pub.norden.org/temanord2023-549</u>

Summary

Mental ill-health is a significant social and public health problem in the Nordic countries. Multiple studies also show that mental health problems have increased in the Nordic countries in recent years, particularly among young people. According to the studies included in this research overview, there are gender differences when it comes to mental ill-health. It is apparent that gender, sexuality and masculinity norms play an important role in how young men manage and experience their mental health.

This research overview is based on a systematic overview of research and relevant literature from the Nordic countries between 2018 and 2022, with a focus on young men between the ages of 15 and 30 years. The overall purpose of the overview is to highlight current knowledge about young men's mental health problems by investigating what causes these problems, and their consequences. The overview focuses in particular on knowledge about young men's mental health in relation to current conditions and challenges in education and training and the workplace in the Nordic countries. The study also highlights knowledge about the impacts of the pandemic on young men's mental health, where increased unemployment, distance teaching and isolation have risked reinforcing negative spirals in mental well-being.

The overview does not claim to be comprehensive, although there has been an endeavour to present current research on the topic from a Nordic countries' perspective. The overview also presents research and grey literature from all the Nordic countries. It also sets out the practical implications of improving support and initiatives to promote young men's mental health, including early detection, accessible psychosocial support in schools, and individualised measures for young people who are not in education, employment or training (NEETs).

Young men's health and masculinity norms are closely intertwined and are embedded in social discourse. Traditional masculinity norms emphasise traits that have been shown to be obstacles to seeking help. They are also an obstacle to valuing connection and relationships that increase well-being and can provide resilience against many forms of mental ill-health. Young men's lower propensity to seek help compared to young women is well known, and feeling that they must deal with their difficulties alone, without having anyone to turn to, can lead to increased stress, anxiety and depression, and ultimately an increased risk of suicide.

The studies included in this overview also show that health problems such as depression and anxiety can lead to poor attachment to or non-completion of education and training and subsequent poor attachment to the labour market. The studies also suggest that unemployment is linked to an increased risk of mental health problems, including depression and anxiety, among young people. Precarious employment conditions are also linked to mental health problems, and young workers with precarious employment conditions are at an increased risk of mental health problems and poorer mental health compared to those who have more stable employment.

The relationship between mental health on the one hand and education and training and the workplace on the other is complex. Mental health and well-being are the strongest predictors of a positive experience of school. But this overview also shows that mental ill-health can largely be seen as a product of poor experiences of education and training systems and a poor work environment. Education and training institutions and workplaces can also reproduce norms and notions of masculinity and thus hinder practices such as seeking help or establishing meaningful relationships.

The COVID-19 pandemic has exacerbated this negative health spiral and affected young people's lives in multiple areas. The pandemic has had severe consequences for young people – for pupils and students as well as those in work. Studies in the overview show that an insecure labour market and increased unemployment, especially among young adults, distance teaching, social isolation and reduced opportunities for leisure activities, have had a negative impact on mental well-being.

Some of these factors were defining factors for young men's health during the pandemic. For example, they were at risk of increased substance abuse, increased online gambling and gaming, and decreased sleep. This may have been due to factors such as lack of access to activities and a society that had shut down, where social life was being lived in new ways. From the research overview, it can be seen that suicide rates increased among teenage boys and young men in the Nordic countries. Furthermore, the rate of self-injury in adolescents with non-binary gender identity increased drastically. This shows that non-binary young people are a very vulnerable group who are in need of extra support.

In summary, young men face many challenges when it comes to contemporary masculinity in the Nordic countries, although the impact of masculinity norms on mental health can vary between groups and countries. From the collected material, a number of needs for knowledge and knowledge gaps can be identified. The material demonstrates that there is a great need to better understand and address the increase in mental health problems among young men in the Nordic countries. Given the ongoing challenges in the wake of the pandemic, it is important to prioritise measures and initiatives.

Research overview point by point

- **Mental ill-health and gender:** Men find it more difficult to seek help for mental health problems because of masculinity norms and mental ill-health being stigmatised.
- **School effects:** School closures and distance teaching during the pandemic have negatively affected young people's well-being and learning, in particular young men.
- Education and training and the workplace: Young men who are neither studying nor working pose a challenge and need individualised support to enter the labour market.
- **Effects of the pandemic:** The COVID-19 pandemic has had a significant negative impact on young people's mental health, with increased anxiety and depressive symptoms, especially among young women.
- **Physical activity and lifestyle:** Physical activity has positive effects on young people's mental health and performance at work, but many young men reduced their physical activity during the pandemic.
- **Gambling addiction and high-risk behaviours:** Problematic gambling is more common among young men than young women and has a negative impact on their schooling as well as their working lives.
- **Body dissatisfaction:** When teenagers feel dissatisfied with their bodies, it affects their school performance and well-being.
- Intervention and support: Early interventions, access to psychosocial support at school, and reducing the stigma around mental ill-health are important measures for promoting young men's mental health.

Sammanfattning

Den psykiska ohälsan utgör ett betydande samhälls- och folkhälsoproblem i de nordiska länderna. Flera studier visar dessutom att den psykiska ohälsan i Norden har ökat de senaste åren, särskilt bland unga. Enligt studierna i denna forskningsöversikt finns det könsskillnader i psykisk ohälsa. Det blir tydligt att normer om kön, sexualitet och maskulinitet spelar en viktig roll i hur unga män hanterar och upplever sin psykiska hälsa.

Denna forskningsöversikt bygger på en systematisk genomgång av forskning och relevant litteratur från de nordiska länderna mellan åren 2018–2022, med ett fokus på unga män mellan 15–30 år. Det övergripande syftet med översikten är att redogöra för aktuell kunskap om unga mäns psykiska ohälsa genom att undersöka vad som orsakar problemen och uppkomna konsekvenser. Översikten fokuserar särskilt på kunskap om unga mäns psykiska hälsa i relation till dagens villkor och utmaningar inom utbildning och arbetsliv i Norden. Studien lyfter även kunskap om vilka konsekvenser pandemin har fått för unga mäns psykiska hälsa, då ökad arbetslöshet, distansundervisning och isolering har riskerat att förstärka en negativ utveckling av det psykiska måendet.

Översikten gör inte anspråk på att vara heltäckande, däremot finns en strävan efter att presentera aktuell forskning i ämnet ur ett nordiskt perspektiv, och forskning och grå litteratur från samtliga nordiska länder presenteras. Den ger också praktiska implikationer för att förbättra stödet och insatserna för unga mäns psykiska hälsa, inklusive tidig upptäckt, tillgängligt psykosocialt stöd i skolan, och individanpassade åtgärder för unga som inte är i utbildning eller arbete

Unga mäns hälsa och maskulinitetsnormer är nära sammanflätade och inbäddade i samhällsdiskursen. Traditionella maskulinitetsnormer betonar egenskaper som har visat sig stå i vägen för hjälpsökande. De utgör också ett hinder för att värdera sammanhang och relationer som ökar välbefinnande och kan fungera som motståndskraftighet mot många former av psykisk ohälsa. Unga mäns lägre benägenhet att söka hjälp i jämförelse med unga kvinnor är välkänt och att ensam behöv bära på svårigheter utan att ha någon att vända sig till kan leda till ökad stress, ångest och depression och i slutändan ökad risk för suicid.

Studierna som inkluderats i översikten visar vidare att ohälsa såsom depression och ångest kan leda till dålig förankring eller avhopp från utbildning och senare dålig förankring på arbetsmarknaden. Studierna menar också att arbetslöshet är kopplat till en ökad risk för psykiska problem, inklusive depression och ångest, bland unga. Även otrygga anställningsförhållanden är kopplade till psykisk hälsa och unga arbetstagare med osäkra anställningsvillkor har en ökad risk för psykiska problem och sämre psykisk hälsa jämfört med de som har mer stabila anställningar. Relationen mellan psykisk hälsa å ena sidan och utbildning och arbetsliv å andra är komplex. Bra psykisk hälsa och mående är den starkaste prediktorn för positiva skolupplevelser. Samtidigt visar denna översikt att den psykisk ohälsa i hög grad kan ses som sprungen ur dåliga upplevelser av utbildningssystem och dålig arbetsmiljö. Utbildningsinstitutioner och arbetsplatser kan också reproducera normer och föreställningar om maskulinitet och därmed hindra praktiker så som hjälpsökande eller att etablera meningsfulla relationer.

Covid-19-pandemin har på flera områden förvärrat den negativa hälsoutvecklingen och påverkat unga människors liv. Pandemin har lett till svåra konsekvenser för ungdomar, både för studerande och yrkesverksamma. Studier i översikten visar att osäker arbetsmarknad och ökad arbetslöshet speciellt bland unga vuxna, distansundervisning, social isolering och minskade möjligheter till fritidsaktiviteter påverkade det psykiska måendet negativt.

Några aspekter var utmärkande för unga mäns hälsa under pandemin. De löpte exempelvis risk för ökat missbruk, utökat online-spelande (gambling och gaming) och minskad sömn. Detta kan ha berott på faktorer såsom bristande tillgång på aktiviteter och ett stängt samhälle där det sociala livet levdes på ett nytt sätt. Det framkommer av forskningsöversikten att suicidstankarna ökade hos tonårspojkar och unga män i de nordiska länderna. Dessutom ökade andelen självskador hos ungdomar med icke-binär könsidentitet drastiskt. Detta visar att de icke-binära ungdomarna är en mycket sårbar grupp som är i behov av extra stödinsatser.

Sammanfattningsvis finns det många utmaningar som unga män möter när det kommer till samtida manlighet i de nordiska länderna, även om inverkan av maskulinitetsnormer på psykisk hälsa kan variera mellan grupper och länder. Genom det samlade materialet kan flera kunskapsbehov och brister identifieras. Materialet påvisar att det finns ett stort behov av att bättre förstå och adressera den ökande psykiska ohälsan bland unga män i de nordiska länderna. Med tanke på de pågående utmaningarna i efterdyningarna av pandemin är det viktigt att åtgärder och insatser prioriteras.

Forskningsöversikten i punkter

- **Psykisk ohälsa och kön:** Män har svårare att söka hjälp för psykisk ohälsa på grund av normer och stigma kopplade till maskulinitet.
- **Skoleffekter:** Skolrestriktioner och distansundervisning under pandemin har påverkat ungdomars välmående och lärande negativt, särskilt unga mäns.
- **Utbildning och arbetsliv:** Unga män som varken studerar eller arbetar utgör en utmaning och behöver individanpassat stöd för att komma in på arbetsmarknaden.
- **Pandemins effekter:** Covid-19-pandemin har haft en betydande negativ påverkan på ungdomars psykiska hälsa, med ökad ångest och depressiva symtom, särskilt bland unga kvinnor.
- **Fysisk aktivitet och livsstil:** Fysisk aktivitet har positiva effekter på unga människors psykiska hälsa och arbetsprestation, men många unga män minskade sin fysiska aktivitet under pandemin.
- **Spelberoende och riskbeteende:** Problematiskt spelande är vanligare bland unga män än unga kvinnor och påverkar både skolgång och arbetsliv negativt.
- **Kroppsmissnöje:** Missnöje med kroppen påverkar både skolprestationer och välbefinnande bland tonåringar.
- Intervention och stöd: Tidiga interventioner, tillgång till psykosocialt stöd i skolan, och att minska stigmat kring psykisk ohälsa är viktiga åtgärder för att främja unga mäns psykiska hälsa.

About the report

Equal access to good health, health care and social care is one of the goals of official Nordic co-operation in the area of gender equality. Gender equality work that focuses on men and masculinity is one of the strategic areas of intervention in official Nordic co-operation in the policy area of gender equality, which emphasises that men and masculinity issues need to be explicitly highlighted in work to promote gender equality. The Norwegian Presidency of the Nordic Council of Ministers in 2020 therefore initiated a project to shed light on young men's mental ill-health in the Nordic countries.

The Nordic Council of Ministers' co-operation body Nordic Information on Gender (NIKK), located at the Swedish Secretariat for Gender Research in Gothenburg, was commissioned to produce an overview of research that would document and analyse the knowledge that exists in the Nordic countries, and that would enable this knowledge to be shared between the Nordic countries and across different areas of knowledge. The research overview has been written by Eva Randell, Associate Professor of Social Work at Uppsala University.

The overall purpose of the overview is to describe current knowledge about young men's mental health problems by examining what causes these problems and their consequences. The overview is intended to highlight knowledge about young men's mental health in relation to current conditions and challenges in schools and the workplace in the Nordic countries in particular. The study is also intended to highlight knowledge about the consequences of the COVID-19 pandemic on young men's mental ill-health, where increased unemployment, distance teaching and isolation have risked reinforcing negative spirals in mental well-being.

The research overview contains three themes that are described in detail below:

- To highlight knowledge about young men's mental health in relation to current conditions and challenges in schools and the workplace in the Nordic countries in particular.
- To highlight knowledge about the consequences that the COVID-19 pandemic has had on young men's mental ill-health.
- To demonstrate the relationships between ill-health and prevailing masculinity norms, and to investigate and show how to create alternative, more health-promoting masculinity norms and what this requires.

The overview begins with an introduction to the terms health/ill-health, and masculinity in relation to health. Then follows a section on methodology and the search terms and databases used and the search process. The results from the searches are presented in two parts: young men's mental health in relation to the current conditions and challenges in schools and the workplace in the Nordic countries, and the impacts that the pandemic has had on young men's mental ill-health. The concluding part of the report summarises and discusses the results and presents the knowledge gaps.

The author would like to thank:

Alena Lindfors and Ulrika Gabrielsson, librarians at Dalarna University Librarians at KvinnSam in the University of Gothenburg Library Camilla Udo, Associate Professor of Social Work at Dalarna University Elin Engström, NIKK at the Swedish Secretariat for Gender Research. Kajsa Widegren, NIKK at the Swedish Secretariat for Gender Research Maria Grönroos, NIKK at the Swedish Secretariat for Gender Research

Introduction

A common social problem and a major public health challenge in the Nordic countries is mental ill-health, and several previous studies show that mental illhealth is on the rise, particularly among young adults. Girls and young women suffer from mental ill-health to a greater extent, but it is also growing among boys and young men. There is a link between expressions of mental ill-health and limiting gender norms. Masculinity norms negatively impact the health of men in the form of an increased risk of suicide, non-health-promoting behaviours, poorer social support, substance abuse, and a variety of high-risk behaviours in traffic and workplaces for example. Boys and men sometimes also exhibit different symptoms of mental ill-health than do girls and women, which means that it is not always detected and that they do not get the right help and treatment. Mental ill-health risks leading to aggression, self-destructive behaviours, and violence towards oneself and others. More broadly speaking, conditions in schools and workplaces can affect young men's health, and the reverse is also true: that young men's illhealth and destructive masculinity norms can affect their future educational choices and their establishment in the labour market.

A number of national studies show that mental well-being has deteriorated in most groups over the past ten years, across both women and men and different age groups. Several studies, including the Norwegian commission of inquiry Jenterom, gutterom og mulighetsrom (NOU 2019: 19), show that mental ill-health is on the rise, in particular among young people. The Norwegian investigation also highlights that the extent of mental ill-health is often measured by self-assessment in surveys, and that it is mainly girls and young women who rate their mental health as poor. At the same time, boys and young men are overrepresented in the death by suicide statistics. In the report Inequalities in mental health in Sweden (2022), the Public Health Agency of Sweden shows that mental health is not equal and that certain groups – homosexual and bisexual, recipients of financial assistance, unemployed young adults, single mothers and persons with disabilities - are particularly vulnerable. Even at an early age, there is an unequal distribution of mental health issues depending on the socioeconomic status of the family. For example, children and young people who are less well-off more often report mental ill-health and psychosomatic illnesses. Mental problems can subsequently develop into more serious mental illnesses, which can have consequences in adulthood. Other factors, such as the country of birth and level of education of their parents and the type of family in which a child grows up, also affect the mental health of children and adolescents.

There are gender differences in health, and the report *Inequalities in mental health* (Public Health Agency of Sweden, 2019) shows that younger boys (0–12 years) have both more and other forms of mental health problems than girls. For example, boys exhibit more neurodevelopmental problems and externalising symptoms than girls. Girls, on the other hand, have a higher incidence of eating disorders and internalising symptoms such as psychosomatic disorders, depression and anxiety. Analyses of Swedish patient data show that boys between the ages of 7 and 17 are diagnosed with mental disorders in specialised outpatient care more often than girls, but between the ages of 18 and 24 the opposite is the case.

It is difficult to identify men's and boys' mental health issues in time because they generally seek help less often, and at a later stage than women and girls (Swedish Association of Local Authorities and Regions, 2018). A research overview of the sub-goal Equal health in Sweden's gender equality policy highlights in particular medical research concerning masculinity and ill-health (Swedish Gender Equality Agency, 2021), and shows that school performance and how much parental leave is taken has links to men's ill-health long-term.

A number of international studies compiled by the Public Health Agency of Sweden in the report *Is the COVID-19 pandemic affecting the mental health of the population?* indicate that mental ill-health has increased during the pandemic. The results of these studies indicate that young adults are feeling less mentally well. They also show that there is a connection between mental ill-health and sociocultural patterns with regard to gender expression (SOU, 2014).

Distance teaching that has been widespread across the Nordic countries also has gendered implications. Specifically, studies indicate that deficiencies in teaching and the quality of schooling disadvantage boys in particular, as they are more in need of special support in schools – a need that has been difficult to meet during the pandemic. Overall, the pandemic has affected mental health in the community negatively in both the short and long term.

Health and ill-health

In this report, the focus is on self-assessed mental health, i.e. research where the person's own experience and subjective assessment of their health constitute the research material. Objective assessments of health made by the health care system have been systematically excluded from this overview.

To discuss the concept of ill-health, we need to start from the concept of health. The easiest way to look at health is that a person without disease is healthy, that is, that health is the absence of disease (Sartorius, 2006). Health is more than absence of disease as defined by Boorse in the 1970s (Boorse, 1977). However, in the perhaps most widespread definition of health, the World Health Organization (WHO) problematises this definition: "Health is a state of complete physical,

mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). The WHO definition takes a holistic approach to health and wellbeing and includes physical, mental and social aspects. *Physical* health refers to physical capabilities and functional levels; *mental* health includes emotional health and well-being; and social health can be described as the degree to which the individual has well-functioning social networks, and at the societal level how well they are able to participate in society's organisations. The WHO definition describes a kind of ideal state of health and this definition has been criticised as utopian and impossible to achieve. Nordenfeldt (1991) contributed an additional perspective with his action-oriented approach to health. This approach emphasises the ability of individuals to achieve their goals, provided that these goals are realistic and achievable. Nordenfeldt argued that there must be a balance between the individual's ability to act and their goals, and that a person who cannot achieve their goals has some form of ill-health. This definition has a strongly individual perspective, which can be contrasted with a public health science definition. The Public Health Agency of Sweden is tasked with regularly monitoring public health in Sweden and underlines the importance of good health on equal terms. The Agency emphasises that "good public health means that health is as good and as equal as possible across different groups in the community. The health of the population is shaped by an interaction of factors - from individual hereditary factors to lifestyle habits, living conditions and circumstances" (Public Health Agency of Sweden, n.d.). This perspective thus means that ill-health cannot be understood solely in relation to individual goals and the individual's ability to act. Social structures that shape the individual's circumstances can stand in the way of achieving their goals, but also contribute to ill-health or the reverse - to better health. Most definitions describe some kind of relationship between the individual and the social context, as for example in Randell (2016), which describes health in the context of young men, such as feeling good in body and mind and having access to relationships of trust.

The WHO has also formulated a more specific definition of mental health as a state of mental well-being where each individual can realise their potential, cope with ordinary stresses, work productively and contribute to the society in which they live. According to the WHO, mental health is thus not the same as the absence of mental illness. A report on ill-health from Forte: the Swedish Research Council for Health, Working Life and Welfare (Vingård, 2015) discusses the WHO definition: "deviations from this ideal state would appear to be part of everyday life. In cases where these deviations, or disturbances, are short-lived and/or mild, they are seen in most cultures as part of life, while more tangible effects on well-being lead to what is commonly described as ill-health" (Vingård, 2015:1). The problem with a very broad and inclusive understanding of mental ill-health is that it includes everything from mentally impaired well-being to serious mental illnesses. More everyday 'normal psychological' conditions that may be due to difficult situations or stresses in life get mixed in with serious and/or more permanent conditions. The Swedish National Board of Health and Welfare (2019) writes in a report that

mental ill-health can be a temporary state of worry, low mood or sleep problems, but the term is also used to describe mental illnesses such as anxiety or depression. What characterises all mental ill-health is that it affects our well-being and makes us function differently than usual.

Health and mental health are thus multifaceted concepts that individuals experience on a sliding scale, from excellent health or excellent mental health to very poor health or ill-health, where the different aspects of health –mental, social and physical – are interrelated and influence each other. Mental ill-health can give rise to different types of physical problems that are experienced as being physical, which makes establishing clear boundaries between mental and physical ill-health very difficult. Health and ill-health are often discussed in terms of psychosomatic disorders. These can include feeling down or having difficulty sleeping. It is not always possible to clearly identify the origins of ill-health or whether the body or the person's mental state is the cause. They are interconnected.

In recent years, reports from the Public Health Agency of Sweden and other documents that deal with health have generally noted a shift from an ill-health perspective to a health perspective, as well as an increased use of salutogenic, preventive and health-promoting perspectives. A salutogenic perspective means focusing on what factors cause and maintain health more than what causes disease. All in all, with a broad concept of ill-health that encompasses social contexts and attaches importance to societal norms and the way society is organised, changes in education and training systems and the labour market, as well as a focus on young people who are often facing crucial decisions about their future educational and career choices at this time of life, young men's mental health problems emerge as a complex problem. But education and training and the workplace can also be the cause of mental ill-health and offer health promotion, depending on a number of factors, while unemployment and being outside the education and training systems can also lead to mental ill-health. Where education and training and the workplace are strongly gender-segregated, it is also important to get a perspective on the relationship between mental ill-health and masculinity.

Masculinity norms and health

Men's perceived health is paradoxical. In countless studies, men report better subjective, self-assessed health than women and are also less likely to experience that they have health problems and to seek help for them. At the same time, boys and men have a higher rate of death by suicide, even though girls and women attempt suicide more often than boys and men (Kimmel, 2010; McLoughlin, Gould, & Malone, 2015). The suicide rate, especially among teenage boys aged 15–19 and among young adult men, is a problem in the Nordic countries and in the rest of the world (Breland & Park, 2008; Kõlves & De Leo, 2016). Studies show that men are more likely to adopt an unhealthy lifestyle, expose themselves to dangers and risks, and are at greater risk for all leading causes of death (Courtenay, 2003; Courtenay & Keeling, 2000; Oliffe et al., 2010). This pattern is also evident in teenage boys, who in studies rate their health higher than teenage girls do (Ciarrochi, Deane, Wilson, & Rickwood, 2002; Johansson, Brunnberg & Eriksson, 2007; MacLean, Hunt & Sweeting, 2013). At the same time, more boys have more neurodevelopmental diagnoses and difficulties such as attention deficit, hyperactivity or behavioural disorders that can lead to impulsive behaviour and the need for support in school. Boys and men are more often involved in accidents, and they are more likely to be both the perpetrators and victims of violence than girls and women. Young men also generally have an increased risk of accidents and violence, and teenage boys are much more likely than girls to engage in high-risk behaviours (Boyle et al., 2011).

Masculinity norms can have a significant impact on the mental health and wellbeing of teenage boys and young men. Traditional masculinity norms often emphasise traits such as control, self-reliance, and toughness, which can cause young men to conceal their emotions and avoid seeking help for mental health problems. Boys' lower propensity to seek help compared to girls is known from previous research (Granrud, Bisholt, Anderzèn-Carlsson & Steffenak, 2020; Wirback, Forsell, Larsson, Engström & Edhborg, 2018). In addition, societal expectations of what it means to be a 'real young man' can lead to feelings of shame and inadequacy for young men who do not fit into or comply with these norms, which can make them feel even less well mentally. Having to bear the burden of your own difficulties without having anyone to turn to can result in increased stress, anxiety and depression, which ultimately risks leading to suicide. It is important to demonstrate alternative masculinities to young men to promote their mental health and well-being, and to challenge and redefine the kinds of traditional masculinity norms that can be harmful to young men's health.

Heteronormativity and homosociality

The concept of masculinity was developed to analyse how norms for men are maintained by maintaining differences between men as a group and women as a group in various ways, and through hierarchies within men as a group, where those who do not act in accordance with the masculinity norms are subordinated (De Visser, Smith & McDonnell, 2009; Messerschmidt, 2009). Using the concept of masculinity in the plural means acknowledging these hierarchies within men as a group and that power is often exercised within the group by defining subordinate positions as 'feminine'. Masculinity is constructed in multiple arenas and homosocial narratives are a way to assert masculinity (Vaynman, Sandberg & Pedersen, 2020). The term 'homosociality' refers to how men identify with and understand their social position in relation to other men. Homosociality can explain why it may be experienced as shameful to seek help and show weakness, since this is linked to 'being feminised'. Given this emphasis on homosociality, it is easy to imagine that young men who violate heteronormative expectations and orient themselves sexually toward other men are exposed to various forms of physical and psychological violence, discrimination and threats. In comparison with many others, the Nordic countries are streets ahead in certain areas of equality, but the reiteration of hegemonic masculinity norms in the Nordic countries still excludes and still identifies non-white, non-heterosexual and disabled men as 'other' (Egeberg Holmgren, 2011).

Masculinity norms are embedded in society's norms, and these norms, although they are constantly developing and changing, shape and contribute to young men's health and health behaviours; thus, individual and structural factors interact in complex ways (Robertson, 2007; Thorpe & Halkitis, 2016). Thus, masculinity norms can be limiting for boys' and young men's health even though masculinities are constantly changing and allowing for new, more health-promoting masculinities to be created.

The impact of the equality discourse

Over the past fifty years, the Nordic countries have experienced a shift in gender roles, changing family structures and the development of new social norms. These are still changing, especially when it comes to family policy and taking parental leave. Men are expected to take both a productive responsibility in the labour market and an increased reproductive responsibility at home. These dual expectations are termed 'dual emancipation' (SOU 2014). A strong emphasis on gender equality can sometimes lead to confusion for young men trying to manage and live up to what are often very narrow gender roles that society permits them to take on. To be a teenage boy and feel the pressure to be both masculine and strong in a traditional way, and at the same time sensitive and caring, can be experienced as challenging (Randell, Jerdén, Ohman, Starrin & Flacking, 2015). Masculinity norms can be understood at the individual level as creating a sense of security, which makes the issue of masculinity norms and ill-health even more complex. An interview study about young men in Reykjavik has reported that changed masculinity norms, permeated by gender equality norms, are seen as a common goal. Young men are strongly influenced by the gender equality discourse and welcome changes in behaviour patterns (Jóhannsdóttir & Gíslason, 2018). At the same time, they say that they feel uncertain when they describe what has changed and what has remained stable in what is expected of them as men. There are clear indications that masculinity is now more broadly defined than previously, that more things are now 'allowed'.

Relational support for increased well-being

Loosening up masculinity norms can lead to better mental health, if it means a greater opportunity to express oneself about one's feelings. Bearing the burden of your own difficulties without having anyone to turn to can result in increased stress, anxiety and depressiveness, which ultimately risks leading to suicide. Different masculinities and expressions of emotion are strongly intertwined and how a person handles their emotions in everyday life is crucial for well-being. Having self-esteem, access to relationships with trusted others, and having the courage to resist traditional masculinity norms without losing status contributes positively to teenage boys' well-being. Researchers and professionals who come into contact with young men need to take into account the complexity involved in assessing their health, since norms, values, relationships and gender constitute its social determinants (Randell, 2016).

Social class and socio-economic status are also very important factors for mental health. There are studies that indicate that the hegemonic norms affecting young men from the working class can be countered through education. In an education and training context where there is relational support, young men can benefit from this support, and be strengthened in terms of their well-being (Roberts, 2018; Ward, 2018). One study shows that masculine identities and capacity for caring in young men who have experience of difficult relationships or drug problems in their lives can also be positively influenced by close and caring relationships with their mother or other female relatives (O'Dell, Brownlow, & Bertilsdotter-Rosqvist, 2017). Furlong (2009) also emphasises the importance of intergenerational relationships and points out that how well young adults fare is dependent on a 'joint enterprise' between the child and its parents.

Heteronormativity creates health challenges

Society's norms have become more permissive when it comes to sexuality, sexual identity and expression, gender and relationships, but there are still strong heteronormative norms in society. Even quantitative research which lacks a problematising approach to gender categories is part of this norm reproduction. Given these current societal norms, it can be difficult for young people who identify as non-binary to be open about this identification. Openness and visibility for LGBTI people has helped break down traditional gender norms and led to greater variation in masculine positions. However, studies show that people outside the heteronorm still face challenges that affect their health negatively. Ill-health among transgender and non-binary young people is cause for concern, and shows that there is a need for greater attention to this matter.

A number of studies show that adolescents who identify as transgender or nonbinary have multiple and complex health challenges. In addition, the number of young people and young adults suffering from gender dysphoria is increasing. A Swedish study (Durbeej et al., 2021) among teenagers shows that adolescents who identify as non-binary constitute a vulnerable group when it comes to mental health, but at the same time also exhibit a greater willingness to exert influence and be involved in municipal policy issues such as social policy development, education and training, municipal services and drug and alcohol policy than cis gender people (25.3% versus 38.0%). Adolescents who identify as non-binary have a higher risk of mental health problems and report more truancy than cis gender people (36.5% versus 49.6%) (see also Gisladottir, Gronfeldt, Kristjansson, & Sigfusdottir, 2018; Vehmas, Holopainen, Suomalainen, & Savolainen-Peltonen, 2022).

Personal accounts can provide significant insights into the dynamic and complex creation of sexual identities, providing valuable clues about the person's vulnerabilities and strengths. The accounts of LBTQ individuals were investigated in a Norwegian study (Synnes & Malterud, 2019). The participants were of different ages and backgrounds. The study shows that they had all experienced minority stress related to their sexual orientation, with a significant impact on their identity, even when significant others were encouraging and supportive. These accounts indicate that personal resilience and sympathetic environments can support mental health and counteract the negative effects of these kinds of processes that contribute to minority stress such as heteronormativity and subtle microaggression.

Method

Systematic searches

This research overview is based on a systematic overview of research studies from the Nordic countries published between the years 2018 and 2022. Searches were conducted in international and national databases in all the Nordic countries and in the various Nordic languages as well as in English. These systematic searches were conducted in March–May 2022 with the help of staff from the library at Dalarna University.

Inclusion and exclusion criteria

Inclusion criteria were teenage boys/young men aged 15–30 years. The included studies were conducted in one or more of the Nordic countries and were published in the years 2018–2022. Some longitudinal studies that compared health-related factors before and after the pandemic were included even though they were sometimes initiated before the defined time period for this overview. Studies that included individuals who were younger than 15 or in some cases over 30 years old at the start of the survey were also included in this overview, as the longitudinal approach meant that they were relevant to this research overview.

Exclusion criteria were serious mental illness, i.e. psychiatric conditions that are expressed in the form of a syndrome that can be verified based on various diagnostic criteria. Physical/somatic diseases such as rheumatism, cardiovascular disease, etc. in relation to COVID-19 were also excluded.

Furthermore, all studies where the findings section did not clearly show findings for teenage boys/young men in age group 15–30 years were excluded. The searches generated a large number of multinational studies concerning COVID-19 in which one or more Nordic countries participated along with many other countries. Most of these studies reported data on the number of men and women participants. However, when looking at the studies more closely, one of the following criteria for this research overview was often missing: the right age group, gender or country at the variable level, which meant that the study was excluded.

Supplementary search

The systematic searches were also supplemented with other relevant studies and reports from organisations and public authorities, which were searched more broadly. This search was conducted by KvinnSam, the national library for gender research at the University of Gothenburg.

Search process

The databases where the search was conducted are set out in Appendix 1.

At the start of this assignment, it was difficult to imagine the quantity of scholarly articles that have been written on the topic of young men's ill-health in relation to the COVID-19 pandemic, school, the workplace and masculinity. The searches for relevant articles yielded several thousand hits concerning young men's health linked to school, the workplace, masculinity and the pandemic. The search terms were sometimes adjusted, but even after some limitations were put in place, a very large number of published articles from the period 2018–2022 remained. The work included reading and analysing the abstracts to identify relevant studies. It was clear on closer examination of the studies that among the articles concerning the pandemic for example, it was possible to separate out data and/or statistics concerning young men as a group in only a few cases. The search was later supplemented with reports written in each country in the Nordic region. The presentation of the results thus includes both scholarly articles and relevant reports.

In spite of this broad search, there are certainly studies that have been missed, in the original time period and those that have been published in the last year. This research overview does not claim to be complete, but rather describes in broad terms what the identified studies show. It should be seen primarily as a snapshot of a broad field of research on young men's health and ill-health that relates to school, the workplace and masculinity. The period studied was very unusual because it was marked by the pandemic, varying restrictions and varying degrees of social isolation that affected all of us, including boys and young men. The research overview also seeks to reproduce research with a particular focus on the latter.

The search term "covid-19/corona och psykisk ohälsa"(COVID-19/coronavirus and mental ill-health) resulted in 781 studies, of which 23 studies were included after reading them and assessing their relevance. The basis for the selection was that 1) teenage boys or young men aged 15–30 were highlighted in the study; and 2) that the study had been conducted in one of the Nordic countries.

However, it was rarely possible to specifically identify the group 'young men aged 15–30' in these studies. Either the age group was wider, for example 18–40 years old, or the correct age group in one or other of the Nordic countries was combined with the same age group in countries outside the Nordic region. This made it impossible to discern young men in a Nordic country in this group.

The search term "skola, arbetsliv och psykisk ohälsa" (school, the workplace and mental ill-health) resulted in 2307 identified studies and the search term "psykisk ohälsa och maskulinitet" (mental ill-health and masculinity) resulted in 3406 search results. The most relevant articles were identified and included after reading the summary and findings of each study. The basis for the selection was that 1) teenage boys or young men aged 15–30 were highlighted in the study and 2) that the study had been conducted in one of the Nordic countries. Based on these criteria, about 200 articles remained from each search. The findings/results sections of these more than 400 articles were read through in their entirety.

The search process concerning "mental ill-health and masculinity" generated 3619 studies. After an assessment of their content, 220 of these studies were included for further analysis and to be used in the discussion.

Reporting of results

Given the scope of this research overview, it is not possible to present all relevant studies in detail. It was necessary to impose limitations. A number of themes became apparent in the included studies and these themes have been named below. A few studies have been highlighted within each theme that specifically shed light on the area. Since young men's ill-health is the focus, the overview presents studies that concern schools and the workplace and which relate to ill-health or behaviours related to ill-health in terms of either causes of ill-health or consequences, i.e. factors that lead to ill-health. The results of the studies are discussed in relation to masculinities.

In the research compiled in this overview, a variety of terms are used for similar concepts, for example, the investigated group may be called "boys", "young men", "guys" etc. In the commentary on the individual studies, the original terminology is used. In analyses of the research compiled in this overview, however, "young men" is used throughout to denote the group.

Research overview

Mental ill-health in relation to education and training and the workplace

Emerging adulthood is a crucial period in a person's development, when many behaviours are established and the emergence of certain conditions such as mental ill-health shape future health and circumstances in life (Arnett, 2000). Unemployment and early exclusion from education and training and the labour market risk affecting health and well-being at the individual level, but also constitute an economic burden at the societal level.

The concept of social health focuses on the relationship between the individual's illhealth and the organisational and social structures that surround the individual, as well as questions about social interaction and supportive relationships. A mutual dependency between the school's capacity to support pupils and the pupil's capacity to remain in school is demonstrative of the relationship between the individual and organisational and social structures. Ill-health can lead to poor attachment in education and training, but it also works the other way around – that the conditions that prevail in schools exceed the pupil's capacity and the school context can generate ill-health. School absences are a major problem and lead to lost schooling and loss of relationships, making it harder to gain an upper secondary school qualification. Gaining an upper secondary school qualification represents an important transition in life for future educational opportunities and employment, and completion of school education is therefore an important goal for both the individual and society.

Thus, there are major health benefits in both the short and long term if young people complete basic and further education and training, and are integrated into the workplace. But mental ill-health can also be an effect of organisational and structural conditions in schools and workplaces and additionally in contexts where masculinity norms are upheld.

The situation in schools and mental ill-health

High levels of school absenteeism from compulsory school is a serious problem. As part of a Danish study by Dannow, Esbjørn and Risum (2020) of pupils with high absenteeism, three lower secondary school boys and their parents were interviewed. The study shows that students with anxiety-related school absences experienced that they *were* motivated to go to school. However, many schoolrelated factors such as social (e.g. pupil-teacher, pupil-peer relationships) and structural (e.g. academic level, learning environment) were experienced as having a negative effect on the pupil's capacity to attend school. When it came to absencerelated factors associated with the parents, families reported that they were in need of guidance from professionals to effectively eliminate school absences, but it was found that the school as an organisation was absent in this context, leaving the parents with the primary responsibility.

At the individual level, ambivalence about schooling emerged, which means conflicting thoughts about going to school. The cause was anxiety, which also caused frustration due to missed schooling and missed social relationships. One of the boys described these conflicting feelings thus:

I think that it's a big pity [not going to school] because I want to go and see all my friends and say 'hi.' And it's really, it's really, really a shame that I can't go and see them." (Bjørn).

At the school and organisational level, it was large gatherings with many pupils in the class that were the obstacle. There were also challenges at the relationship level between teacher and pupil, and between the pupils in the class. When the individual does not feel that they belong in the class, has had negative experiences of relationships and has few friends, this was experienced as challenging by the boys in the study. This study shows that the school context plays an important role in anxiety-related school absences.

A Danish study of upper secondary school pupils (S. Andersen, Davidsen, Nielsen & Tolstrup, 2021) shows that the drop-out rate from school was highest among firstyear pupils and among those pupils who were languishing (felt a lack of engagement). This group, as well as pupils who felt emotionally challenged or had moderate mental health, had a risk of dropping out of high school about 1.5 to 3 times higher than the group of flourishing pupils, and the gender distribution in the dropout group was comparable for younger men and women. Four groups were identified in the study: flourishing (young women: 38%, young men: 55%), moderate mental health (women: 15%, men: 20%), emotionally challenged (women: 28%, men: 15%) and languishing pupils (women: 19%, men: 10%). The drop-out rate from school was lowest in the flourishing group (men: 5.0%; women: 2.4%) and highest in the languishing group (men: 12.1%; women: 7.8%). This study points to the importance of paying particular attention during the first year of upper secondary school which is when most pupils drop out of school.

Although boys exhibit externalising behavioural problems to a higher degree than girls who tend to internalise, a Swedish study of pupils in year 9 (Bortes, Strandh & Nilsson, 2019) shows that both types of problems, i.e. both externalising and internalising problems have comparable negative effects on school performance. The study examined the relationship between health problems during lower secondary school and school grades in year 9. The study shows that girls in this age group are more likely to suffer from mental and behavioural disorders that require hospitalisation than boys, and that health problems of that kind have particularly strong negative impacts on school performance.

Well-being at school

One study (Tiikkaja & Tindberg, 2021) analyses the relationship between poor school-related well-being and disabilities or ADHD among adolescents aged 15–18 in Sweden. Young people with disabilities or ADHD reported that their disability had a negative impact on their schooling and compared to peers without disabilities, those with disabilities have an increased risk of poor school-related well-being. This risk doubled for adolescents who reported having ADHD and there were mostly boys in this group. In summary, adolescents who have ADHD are a particularly vulnerable group in schools, being at greater risk of poor school-related well-being.

In a longitudinal Swedish study (Gunnarsdottir, Hensing & Hammarström, 2021), a group was monitored from the age of 16 to adulthood. Poor or weak contact and connectedness with school in adolescence were associated with depressiveness in adulthood, but there was no such association between a poor family climate such as relationship problems and later depressiveness.

A qualitative study (Logdberg, Nilsson & Kostenius, 2018) investigated how young people who are not in employment, education or training (NEET) in Sweden perceived their life experiences in relation to health and well-being. In the study, interviews were conducted with 16 participants aged 16–20 years who were unemployed and lacked the entry requirements for upper secondary school, or who had dropped out of school. Three themes emerged from the analysis that illustrate how these young people experienced their life experiences in relation to health and well-being: struggling with hardships in the absence of caring connections, feeling good when closely connected to others, and being forced to question what has been taken for granted. The young people described school as an unpredictable context where quarrels with other classmates, harassment from teachers and bullying occurred. They gave expression to experiences of psychological violence and abuse. One young boy said:

"... my teacher was harassing me too ... He got on my case all the time when someone else in the class talked and told me to be quiet—not anyone else ... He picked on me because I have ADD [Attention Deficit Hyperactivity Disorder] and problems with concentration..." (18-year-old male, P8) (Logdberg et al., 2018).

Based on the young people's narrated experiences in the study above, health can be understood as something created in relation to others and in relation to the person's social and cultural context: as something dynamic and changeable, as the ability to adapt and respond to challenges, and finally as something that exists on collective as well as individual level.

Those who seek help in a school environment

Mental health problems often begin in adolescence. Nevertheless, these problems are seriously under-treated in this age group. Young people must first identify the symptoms themselves, and secondly, they must have the courage to seek help. A survey among upper secondary school pupils in Norway (Haavik, Joa, Hatloy, Stain & Langeveld, 2019) showed that sex plays a significant, but not exclusive, role in a person's propensity to seek professional help for mental health problems. Young women were better at identifying mental health problems associated with anxiety and trauma, knew more about where and how to seek help, but experienced more obstacles to actually seeking help due to costs and waiting times. When it came to utilising the health care system for the treatment of mental health problems, the effect of the person's form of education was greater than the effect of sex.

Boys' tendency to seek help being less than that of girls is known from previous research. An interview study in Norway (Granrud, Bisholt, Anderzèn-Carlsson & Steffenak, 2020) investigated the propensity to seek help in upper secondary school among teenage boys aged 16–21. The study shows that it is challenging for teenage boys to visit the school nurse for mental health problems. Although the school health service is relatively easily accessible in schools, teenage boys experienced some obstacles to visiting the school nurse. Among other things, school nurses were sometimes responsible for several schools and were therefore not present at the same school every day. The boys wanted a more accessible school nurse and needed to feel that they could trust the school nurse to uphold their obligation to maintain professional secrecy. The boys felt that it was a violation of a norm to talk about mental health problems and they felt stigmatised. Once they had overcome these barriers, they felt positive about their visit to the school nurse and felt that they had gained a new perspective on their problems. The teenage boys stated that it was important to get a different view on their mental health problems:

"I get most advice about how I can deal with my problems. I get another point of view on my problems which makes it easier to handle it."

Long-term NEET and its consequences for schools and the workplace

Young adults (16–30 years) who are not in employment, education or training (NEET) and have little or no contact with society are at great risk of becoming permanently excluded from society (Bäckman & Nilsson, 2016). Being excluded from society for a long time, sometimes permanently, has severe consequences for mental health with great suffering for the individual as a result.

Young adults who are not in education, employment or training (NEET) are a problem in all European countries, including the Nordic countries. Other terms for this group that exist internationally are the Japanese word *hikikomori* and the

Swedish term *hemmasittare*. The latter term describes socially withdrawn or isolated individuals who stay home from school, often for long periods of time (Ministry of Education, 2015). While it is sometimes a matter of temporary interruptions in the transition from school-to-school or school-to-work, or short-term inactivity, some young adults represent a more vulnerable group at risk of not gaining entry to the labour market. The NEET abbreviation is used to describe young people who lack a connection to both the labour and the education system. The NEET terminology has been criticised for not paying attention to the fact that there are differences within the group 'young people'. Young people are unemployed for longer or shorter periods of time, young people take care of their children, are temporarily ill or permanently disabled and some take only a short break from work or education for travel (Furlong, 2006). However, the NEET indicator is considered to be a better measure than traditional measures of unemployment that measure job seeking in the shorter term (Bäckman & Nilsson, 2016).

In the third quarter of 2022, over 10% of 15–29-year-olds in Finland were not in education, employment or training (NEET), making it the Nordic country with the biggest problem with NEETs. In Sweden, the incidence was only 5.6%, the lowest of the five countries. Denmark and Norway were equal at 7.8% and Iceland had an incidence of 6.2%. In 2021, 13.1% of 15–29-year-olds were assessed as belonging to the NEET group in the EU. Despite the fact that all Nordic countries lie below the EU average, this is a problem that should be addressed because a large number of studies show that being NEET is a serious problem for the individual that can have negative health consequences. Below is a selection of different studies that all deal with NEETs.

Lack of support and school drop-outs

Understanding why young people drop out of school is of great importance to understanding people who are NEET. In an interview study, Ramsdal, Bergvik & Wynn (2018) conducted interviews with seven young adults who had dropped out of school. The study indicated that internalised symptoms may be problematic to identify. In this study, a combination of more severe internalising symptoms and a lack of appropriate adult support is described as the cause of difficulties in establishing an autonomous adult life, years after having dropped out of upper secondary school. Those who dropped out stated that their problems were not noticed by their teachers or the other pupils. Their internalised symptoms and learning difficulties were therefore not given much attention in the classroom, which resulted in them largely having to fend for themselves. These young adults experienced a lack of support and lack of access to resources while they struggled to stay in school. One of the young men said: "Well, there have been periods when I have been kind of depressed and stuff, by social things, with my schoolwork going down the drain."

One example of this was the fact that, among the six participants who experienced mental health problems, only one stated that there were outreach initiatives from their school during their school years. The others only got help after they dropped out.

A study that addressed the conditions and circumstances that risk leading to a status of NEET was conducted in Northern Norway in a multicultural young adult population (Bania, Eckhoff & Kvernmo, 2019). The purpose of this study was to investigate predictors of a NEET status: its frequency and development over time. The study is based on self-reports from the participants followed up by a study based on register analyses 8–10 years later. In the first study, all 5877 year 10 pupils in Northern Norway aged 15–16 years participated, representing 83% of the total age group from all 87 municipalities. The follow-up studies included 3987 young people, 365 of whom were of Sami ethnicity.

The study showed that a NEET status in young adulthood was clearly higher among women (20.9%) than among men (16.2%). There were ethnic differences too: a NEET status among Sami men was clearly higher than among non-Sami men, being 23.0% and 15.2%, respectively. The study identified important causes of a NEET status. In male participants, these causes concerned peer problems, behavioural problems and musculoskeletal problems. Hyperactivity problems and relationship problems were associated with a NEET status emerging later among young women. The level of education of the participants' parents was an important factor for a NEET status, where a low level of education is clearly associated with a NEET status subsequently emerging among both young adult men and women.

A Swedish qualitative in-depth study identified emotional stages that can be associated with the development of a NEET status (Hammarström & Ahlgren, 2019). In this longitudinal study, how young people classified as NEET experienced their health was analysed in relation to their position in the labour market, from the time of having left school to early adulthood. The study included six women and eight men in a town in northern Sweden who had become unemployed immediately after completing compulsory school. In-person interviews were conducted regularly with them from the age of 16 to the age of 33. The study shows that how they perceive their health develops through different phases: leaving school, entering the labour market, being unemployed, and gaining employment. The informants' experiences during each of these phases included feelings of disappointment and setbacks, hopelessness and resignation, and finally in the case of the individual finally getting a job feeling that they needed to accept an adverse work situation. The study shows that how a person experiences their health can be linked to both context and process and was related to these different phases. It is a process where the young person initially feels relief and hope on completing compulsory

school, but then entry into the labour market is related to setbacks and disappointments as well as both health-impairing and health-promoting experiences, depending on their actual position in the labour market. The overall theme of the study *Living in the shadow of unemployment – an unhealthy life situation* means that it is not only the actual situation of being unemployed that is problematic, but that the other phases are coloured by the young person's previous experiences of unemployment. The study highlights that social processes affect and interact with how the individual experiences their health.

Tools to prevent NEET

It is important to investigate what can prevent and counteract a NEET status. Norwegian register data were used to investigate whether early work experience in the teenage years (16–18 years) can help young people at risk of becoming NEETs to improve their chances of getting work or gaining entry to education and training programmes as a young adult, and whether early work experience is a protective factor (Ballo, Heglum, Nilsen & Bernstrøm, 2022). An entire birth cohort of about 50,000 individuals was included in the study and this cohort was followed from ages 16 to 29 years. The results show that early work experience is related to a lower risk of NEET for all, but the link was stronger for young people with disabilities and for young people who left school early. This finding supports the importance of early work experience as a potentially important protective factor against a later NEET status, especially among vulnerable young people.

That depressive symptoms are associated with unemployment is already known, but a Danish study investigated whether the timing and duration of depressive symptoms in the teenage years, or education level attained, affect NEET in young adulthood (at 23 years of age) (Veldman et al., 2022). The incidence of depressive symptoms was measured on three occasions: at the ages of 14, 18 and 21. Among boys, depressive symptoms at ages 14 and 21 increased the risk of NEET. Among girls, this risk was related to depressive symptoms at ages 18 and 21. The duration of depressive symptoms among boys increased the risk of NEET. Among girls, only prolonged depressive symptoms increased the risk of NEET. Thus, both the timing and duration of depressive symptoms in the teenage years are significant for a NEET status in young adulthood. Those with both depressive symptoms and low levels of education are particularly at risk. The results underline the importance of support for those experiencing depressive symptoms in the transition from school to work. In addition, the study suggests that boys who exhibit depressive symptoms in their early teens need attention.

Early exclusion from the labour market entails a risk of mental ill-health and impaired well-being. In a Norwegian study, self-perceived causes of ill-health and social and health-related problems were investigated among young adults at risk of early work disability (Sveinsdottir, Eriksen, Baste, Hetland & Reme, 2018). 96 young adults participated in the study, the average age was 24 years, and two-thirds were men. One third of the young adults in the study reported reading and writing difficulties, and 40% had an education level lower than an upper secondary school qualification. The majority had experienced bullying (66%) or violence (39%) and 53% reported dangerous alcohol use.

Anxiety is the most common health problem, and women generally report more physical and mental health problems than men. Self-perceived causes are mainly related to relationship problems followed by health behaviours, heredity/genetics and external environmental factors. This study provides an in-depth insight into a vulnerable group's significant challenges related to negative social experiences, anxiety and alcohol use. Relationship problems are highlighted as the main cause of ill-health.

In the same study population as above, the authors also examined whether Supported Employment (IPS, Swedish abbreviation for individuell placering och stöd) can be an effective initiative to help people with mental illnesses to gain employment (Sveinsdottir et al., 2020). Young adults in particular are at risk of early work disability due to various social and health-related problems. Participants who belonged to the NEET group received temporary benefits due to social or health-related problems and were eligible for traditional vocational rehabilitation (TYR, Swedish abbreviation for "traditionell yrkesinriktad rehabilitering"). Selfreported data was collected at the start and at six- and twelve-month follow-ups. The primary goal of the participants during the follow-up period was to get some form of paid employment in the competitive labour market. Physical and mental health, well-being, coping, alcohol consumption and drug use were also investigated.

Significantly more IPS participants had got jobs in the competitive labour market compared to TYR participants at the 12-month follow-up: 48% versus 8%. The IPS group reported significantly better results than the TYR group on subjective assessments of health problems, helplessness and hopelessness. The IPS group also reported significantly better results in terms of disability levels, optimism about future well-being, and drug use. The study shows that supported employment is more effective than vocational rehabilitation for young adults at risk of early work disability in gaining employment in the competitive labour market.

Personalised support

A Danish observational and interview study on activation programmes for young adults (J. H. Andersen, Tjornhoj-Thomsen, Reventlow & Davidsen, 2019) shows that the possibilities of addressing the complexity of the participants' problems within the programme are limited. Although the young adults expressed the complexity of their problems during the activities in the programme, these activities were dominated by 'biographical techniques', which meant that the participants were themselves responsible for their own biographies and were expected to be able to solve their problems themselves. The programme included physical activity, exercises in cooperation, and exercises for personal change, such as achieving a healthy lifestyle, setting goals, breaking negative behavioural patterns, changing negative thoughts and structuring their everyday lives. The participants' specific diagnoses or mental health problems were rarely talked about and then only when initiated by the participant. However, many participants felt that the activities were irrelevant. Those who appreciated the programme felt that it was nice to have something to get up for every day, and they enjoyed the company of others and liked the mentors. What made the programme meaningful to them was the social interaction rather than its content.

Young adults aged 20 to 30 who were long-term unemployed were interviewed about their lives in Finland (Husu & Ylilahti, 2020). Most of the participants described feelings of not belonging anywhere, and a lack of trust in family relationships and/or peer relationships had arisen. According to them, this had arisen either as a result of a comparison process, i.e. that others had something that they do not have, or through experiences of neglect. The lack of emotional capital arising from these young adults' early life histories, which was then repeated in various contexts such as school and in peer relationships, could lead to mental health problems and a feeling of alienation in adulthood. There is consensus that emotional capital is related to parental emotional engagement and investment in the child's well-being, and that it involves emotional skills and assets that children can attain through family relationships. The lack of emotional capital capital capital health problems and a family relationships.

Challenges in the workplace

Difficulties such as mental ill-health during one's school years affect both the transition to the workplace and the type of work that is then available. Young unskilled workers, including those who drop out of school, have been identified as particularly vulnerable groups, for example when it comes to occupational accidents. Apprentices and young skilled workers are vulnerable to work-related diseases.

In an overview concerning the Nordic countries, mechanical factors such as heavy lifting, psychosocial factors such as poor control over the pace of work and organisational factors such as the occupational health and safety environment are all associated with increased risk of injury for young workers in the Nordic countries (Hanvold et al., 2019). Heavy lifting and awkward postures are risk factors for lower back pain, and high demands in jobs are risk factors for mental ill-health. Marginalisation from the labour market, i.e. serious difficulties in finding and keeping a job, are common among young adults with attention deficit/hyperactivity disorder (ADHD). In a population-based register study (Helgesson et al., 2021), more than 6000 young adults, aged 22–29 years, who had their first primary or secondary diagnosis of ADHD were examined. About 61% of young adults exhibit increased marginalisation after being diagnosed with ADHD. The study highlights the fact that the community should pay particular attention to young adults diagnosed with a low level of education and diagnosed with ADHD in order to avoid marginalisation.

A Danish study (Just-Noerregaard, Andersen, Nohr, Vestergaard & Winding, 2021) shows that employment and engagement in leisure activities during adolescence are important for young people in developing a stable connection to the labour market in adulthood. In both mid and later adolescence, part-time work was positively associated with education and training and work. Leisure activities in mid adolescence were also associated with connection to education and training and work. Among men, engagement with society in the form of leisure activities and part-time jobs in mid adolescence showed the strongest association with a later connection to education or work. The study shows that young people's engagement in society correlates positively with later educational attainment and employment, with a stronger effect from part-time work compared to leisure activities.

The importance of physical activity for health, education and training, and the workplace

Previous studies have shown that regular physical activity among teenagers has positive effects on their cognitive functions such as better working memory and attention and academic performance in school (Donnelly et al., 2017; Khan & Hillman, 2014). Being physically active is also important for working life, and a systematic overview shows that physical activity has positive effects on productivity, work performance and work-related well-being in both men and women (Conn, Hafdahl & Mehr, 2011). Regular physical activity promotes cognitive, emotional and motor function, and reduces anxiety and negative impacts. It has a preventive role in anxiety and depressive states, and facilitates psychological wellbeing in both adolescents and adults (Archer, Josefsson & Lindwall, 2014). Thus, physical activity has associations with both education and training and working life, and regular physical activity is related to well-being.

Physical activity is associated with mental health and a Finnish study (Appelqvist-Schmidlechner et al., 2020) among young adult men shows that physical activity during leisure time plays an important role, especially for men whose mental health is at a low level. In addition to lack of interest, time and energy, the study highlights unwillingness to play a sport alone as a significant cause of physical inactivity in this target group, which underlines the importance of social contexts. Being able to participate in various physical activities in social contexts during leisure time creates opportunities for socialising with others. The study shows that physical activity during leisure time that involves social interactions is especially important for men with a lower level of mental well-being.

Body image is about how an individual perceives their body and how they feel about it, including factors such as body weight, appearance and self-esteem. Previous studies show that a negative body image can negatively affect school performance in teenage boys and girls. A negative body image is related to low mood, lower selfesteem, and poorer school performance, but the effects may be more prominent in girls (Bucchianeri, Arikian, Hannan, Eisenberg & Neumark-Sztainer, 2013; Paxton, Neumark-Sztainer, Hannan & Eisenberg, 2006).

Discussion of mental ill-health in relation to education and training and the workplace

There is a strong connection between mental ill-health, education and training, and the workplace. Conditions in both schools and workplaces can lead to stress and mental ill-health. Mental ill-health also affects the individual's motivation to complete their education and increases the risk of a precarious attachment to the labour market.

Young women generally have a higher degree of ill-health than young men, but other social factors also have important impacts on health, such as their parents' level of education. Masculinity norms seem to be an obstacle to young men seeking help. In many of the studies, the results show that the education and training structures have failed to offer support to young men suffering mental ill-health. The studies presented here show that health problems such as depression and anxiety can lead to poor attachment to or non-completion of education and training and subsequent poor attachment to the labour market. A disruptive school environment, lack of organisation and support for young people in school and young workers can lead to ill-health. School, as it is organised today, risks leading to young people with social phobias or anxiety problems for example, not completing their education. They are then at risk of not entering the labour market at all.

When young men get support or care in the health care system, it seems that it is primarily social factors that are raised as health promoting, that is, being supported in expressing their feelings and talking about their experiences, being listened to and being part of a social context. Different measurements have been used to capture children's and young people's connection to school, including factors such as grades, participation and engagement, as well as affective dimensions such as liking school and feelings of belonging. Regardless of which factors are measured, connection to school has been shown to have a strong correlation with adolescents' academic results and later depressive symptoms (Gunnarsdottir et al., 2021). Young people who have failed in school, i.e. those whose schooling has not been continuous and whose academic performance was poor, have a significantly higher risk of suicide attempts than those who performed better academically. The risk is particularly high (over six times higher) among those who dropped out of their schooling (Castellví et al., 2020).

Young people are particularly vulnerable to health problems when they are unemployed or in precarious employment. Active labour market and training programmes, including social security measures, improved working conditions and targeted health programmes are important for addressing this vulnerability (Vancea & Utzet, 2017). One aspect of being in education or training, or being in a workplace, is that these are important arenas for interventions and health promotion efforts.

Unemployment is linked to an increased risk of mental health problems, including depression and anxiety, among young adults. Precarious employment conditions are also linked to mental health problems, and young workers with precarious employment conditions are at an increased risk of mental health problems and poorer mental health compared to those who have more stable employment. Studies show that adverse working conditions, high work-related stress, a high workload and lack of support from the employer can affect mental health negatively.

Prevention work

This research overview suggests that young men who are not in employment and who feel depressed have an individualised and holistic need for support where social factors need to be considered and highlighted in conversations with them. The number of socially isolated young adults is high in multiple countries, according to figures from the International Labour Organization in 2014. However, it is important to emphasise that the group 'socially isolated young adults' is not a heterogeneous group but comprised of individuals with unique needs and a variety of circumstances in life. Many young adult men have experiences of poverty, trauma, violence and discrimination, which increases their risk of being marginalised and excluded. The studies presented in this research overview all point in the same direction, namely that efforts need to be tailored and individualised in order to be successful and provide the support expected.

In order to break the isolation of young NEETs, professionals need to motivate them to engage with society and strengthen and support their own capacity to act. There is a need for individual support measures as well as comprehensive and coordinated initiatives by professionals who encounter young adults in their work. Supporting young adults, and their often complex needs, requires a holistic approach. Such an approach is based on an empowerment-oriented perspective, where the unique needs of young adults are taken into account (Ayoub, Udo, & Randell, 2021). This means focusing on the person's strengths and supporting and strengthening what is working in their lives so that these things can grow. It is therefore important that adults and professionals have the capacity and knowledge required to identify, interpret and understand the initial signs indicating that adolescents and young adults are experiencing negative emotions. Sveinsdottir et al. (2020) show that supported employment is a more effective approach than traditional vocational rehabilitation to helping people with health problems to find employment.

In order to tackle exclusion from education and training and the workplace, particular emphasis must be placed on supporting young people in upper secondary schools who are struggling with mental and physical health problems. In this research overview, a number of factors have been identified that are relevant for practice. Findings based on longitudinal population data for Norwegian adolescents show that early work experience in adolescence (ages 16-18) may reduce the risk of NEET status in early adulthood (ages 25–29). Taken together, the findings from studies of NEETs further indicate a need for a broad focus on psychological and social factors in vocational rehabilitation efforts targeting young adults at risk of early work disability. A comprehensive perspective and a holistic approach are needed. Supported employment has proven to be superior to vocational rehabilitation and should be offered in order to improve the rate of employment of young vulnerable adults with various health-related problems and barriers to employment. Active measures are needed to prevent and address the issue of NEETs, with concerted efforts from the school system, social services, the health care system and employment agencies, where the focus should be on health promotion efforts that strengthen the individual.

With an understanding of health as something dynamic and mutable, which exists in relationship to social contexts, communication and emotional states which are factors that are affected at the collective as well as the organisational and individual levels, it also becomes important to consider masculinity norms. Orienting oneself toward practices other than those traditionally associated with masculinity can break patterns that cause mental ill-health. Engaging with and caring for others, training emotional skills and the ability to express oneself are part of health promotion processes for young men. **Research overview**

The consequences of the pandemic for young men's mental health

Given the complex connections between young men's mental ill-health and the conditions in schools and the workplace, it is also particularly important to compile knowledge about how mental health is affected when these social structures undergo a rapid and urgent change. During the COVID-19 pandemic, school attendance was affected by profound changes, with school closures and changes in the type of instruction. Teleworking, redundancy notices and a sudden deterioration in access to work in industries that have traditionally employed young people make the pandemic an important situation to investigate.

The pandemic affected people of all ages throughout the Nordic countries. However, the reduction in and restriction of social contacts have been particularly challenging for young people, who have a great need to gradually increase their independence and for social contacts with their peers.

This part of the research overview summarises research on how young men's health was affected by the temporary societal level changes that the pandemic entailed, with a particular focus on education and training and the workplace for young people. In addition, this section brings together the research that compares the prevalence of ill-health before and during the pandemic for the group 'young men in the Nordic countries'.

Education and training, restrictions and mental health

School closures were used to varying degrees and for different periods during the pandemic in the Nordic countries, and entailed major changes in young people's everyday lives and education. It can be assumed that distance teaching and reduced opportunities for social gatherings affected mental health negatively for pupils and students. A report on distance teaching in all Nordic countries shows that the quality of the teaching probably deteriorated during the pandemic and that the use of distance teaching has had negative effects (Hall, Hardoy & Lundin, 2022). The picture is the same in an interview study conducted by the Public Health Agency of Sweden, where the participants describe distance teaching as the most pervasive change during the pandemic, with less support and assistance from teachers and a lack of motivation and effective study routines (Public Health

Agency of Sweden, 2022). The negative effects are likely to be greater among younger pupils, children in need of special support, and among pupils with poorer conditions for study at home as well as among newly arrived immigrant groups. The report also highlights that pupils in vocational education and training (VET) programmes are a group that had particular difficulties during the pandemic, as the opportunities for practical training and workplace-based learning were limited.

A Norwegian study investigated the perceived consequences of the pandemic for everyday life, intended learning outcomes, family relationships, sleep problems and worries about infection, friends and their future, among young people aged 12–19 years over three weeks of school closures in Norway (Lehmann et al., 2021). Young people in the municipality of Bergen were invited via SMS to participate in a 15minute online survey and a total of 2,997 young people (1,242 young men) responded, with an average age of 17 years. Overall, one-third of the respondents reported feeling that they had been slightly too much affected by their school having closed, while just under two-thirds reported learning less during the period compared to before.

The results show that school closures during the pandemic have had varying effects on boys and girls. A higher percentage of girls report feeling affected by school closures to some degree compared to boys. In addition, girls seem to have experienced nightmares and been more worried about becoming infected, while boys were more worried about their family members becoming infected. The perceived consequences and degree of worry varied with age, gender, socioeconomic status and to some extent country of birth. Girls, older adolescents, young people with a lower socio-economic background and those with immigrant backgrounds seemed to experience the closures as more difficult, and the study accentuates the need for support for these groups.

In spring 2020, the pandemic resulted in schools closing and social restrictions being imposed throughout Norway. A study by von Soest et al. (2020) investigated whether these school closures and social restrictions affected young people's satisfaction with life and subjective quality of life. The study reported that young people in Oslo experienced a pronounced reduction in satisfaction with life and a lowered subjective quality of life after the restrictions were introduced. Young people's socio-economic status was of less importance for their satisfaction with life. Especially among boys, the share with a high life satisfaction fell clearly from just under 90% in the years before the pandemic, to below 71% after the introduction of the restrictions. The corresponding figure for girls was 80% before the pandemic and 62% during the pandemic restrictions.

Public health recommendations in Sweden relied on personal responsibility. Universities were one of the few public institutions that were at times completely closed, which meant that students had to quickly adapt to distance teaching. A study (Berman et al., 2022) investigated compliance with the recommendations, as well as the associations with self-reported symptoms of COVID-19, effects on their mental health and academic self-efficacy among university students in Sweden in May to June 2020. A total of 4,495 students participated, of which 30% were young men. The study shows that students generally complied with the public health recommendations during the closures of universities, but many reported significant negative consequences related to mental health and academic selfefficacy. Unfortunately, the tables in the study do not show separately the shares of men and women who experienced these negative effects. Nevertheless, the study indicates that the mental health of many students has been affected.

Studies included in a research overview on the effects of the pandemic on young people with regard to education and training, work and health (Olofsson & Kvist, 2022) show that mental health deteriorated during the pandemic, but the picture is not clear-cut. Support from school pupil health services seems not to have been sufficient during the pandemic. The study presents some preliminary results: that school closures and distance teaching have had a negative impact on young people's learning to varying degrees, that the effects have been the most negative for pupils in need of special support, and that the transition from school to work was made more complicated and more prolonged.

A Finnish yearbook *Poikkeuksellinen nuoruus korona-aikaan – Nuorten elinolot 2022* (Exceptional youth during the COVID-19 pandemic – young people's living conditions yearbook 2022) compares satisfaction with life among young people over 15 years of age before and after the outbreak of the pandemic. At first sight, the results directly strengthen the assumption that the pandemic has had negative effects, but on closer examination the study also nuances this assumption. The empirical studies in the Yearbook show that on the one hand the students' experiences of how distance teaching was organised were positive and served to support their own studies, and on the other hand, it complicated their studies. What is most important with distance teaching is that the teacher structures it well and provides support for the student's learning. Digital learning environments thus open up new opportunities, but for distance teaching to promote pupil wellbeing, attention must be paid to how it is implemented, i.e. distance teaching is conducted in a way that strengthens the pupil's agency and inclusion.

The workplace and health during the pandemic

The pandemic affected young people's mental health due to poorer conditions for those who were about to take the step from school to the workplace during this period. Engdahl in Sjögren et al. (2021) describes negative effects on labour market attachment for young people entering the labour market during a recession, as was the case during the pandemic. The pandemic greatly affected the industries where many young people get their first jobs such as the service, hotel and restaurant industries, which means that young people were particularly vulnerable to unemployment during this crisis (Sjogren et al., 2021). In the Public Health Agency of Sweden's report *Unga och covid-19-pandemin – ungas livsvillkor, levnadsvanor och hälsa* (2022) (Youth and the COVID-19 pandemic – young people's living conditions, lifestyles and health) where the target group was adolescents and young adults aged 16–29 in Sweden, it emerges that for young people who are already living in circumstances of social, economic or health disadvantage, the COVID-19 pandemic appears to have interacted with these prior circumstances and in some cases augmented existing challenges. Overall findings regarding both sexes are presented in the report, which also includes an interview study and a literature study. The study shows that young NEETs feel that their physical and/or mental health has deteriorated as a result of loneliness, isolation and reduced opportunities for employment. But they also state that the pandemic, at least in part, brought opportunities for rest and recovery.

A research overview (Olofsson & Kvist, 2022) highlights the consequences of the pandemic for young people in Sweden with regard to education and training, work and health. Overall, the report concludes that the negative effects on young people's educational outcomes appear to have been smaller in Sweden in comparison to many other countries, and that the immediate negative effects on health do not appear to be as pronounced as in some other countries. The study also highlights that the pandemic consistently had a negative impact on the labour market for young people, as it is industries such as the hospitality industry and retail trade that were most affected during the pandemic, and also have a significant proportion of young workers. Young people are over-represented in precarious employment and were also those who lost their jobs first in parallel with there being fewer job vacancies to apply for. Young people with a low level of education were hit by difficulties in supporting themselves, and during the pandemic the number of long-term welfare recipients increased.

A Finnish study (Ranta, Silinskas & Wilska, 2020) focused on how young adults aged 18–29 dealt with the COVID-19 pandemic in comparison to an older comparison group (30–65 years). The study shows that young adults were significantly more concerned about the effects of the COVID-19 pandemic on their mental well-being, career/studies and financial situation than older people. Young women were more concerned about their mental well-being than young men. Among young people, lower satisfaction with life was related to concerns about mental well-being and lower satisfaction with their financial situation was related to concerns about career/studies and their financial situation.

Higher unemployment during the pandemic in Sweden was associated with two factors: being young and being foreign born (Campa, Roine & Stromberg, 2021). However, gender does not seem to have played any great role in the context of Sweden. The results of the study support earlier findings on the most vulnerable having been hit the hardest.

Housing environment during restrictive measures

A Danish study (Groot et al., 2022) investigated 7,445 adolescents/young adults (median age 20 years) from the Danish National Birth Cohort (DNBC) to determine whether the decline in adolescent mental health during the period when restrictive measures were in place was related to their housing environment. Data were collected at the age of 18 and again three weeks into the first national lockdown in April 2020. The associations between housing environment (access to outdoor spaces, urbanicity, household density and household composition) and changes in mental health (mental well-being, guality of life, and loneliness) were investigated. The study shows that young people without access to outdoor spaces experienced greater deterioration in their mental well-being compared to those who had access to a garden for example. Living alone more than doubled the risk of feelings of loneliness compared to living with their parents. Young people living alone, in denser households and without direct access to outdoor spaces were particularly vulnerable to a deterioration in their mental health. Young men experienced greater deterioration in their mental well-being if they lived alone or in shared households, and in denser households, and experienced greater loneliness when living alone. Women living alone experienced a greater deterioration in their quality of life than those who were living with their partner.

Psychosocial changes

A Norwegian study (von Soest et al., 2022) compared nationwide data from 2014– 2021 to investigate psychosocial outcomes in adolescents before and during the pandemic. The study shows that they reported higher depressive symptoms and less optimistic expectations for their future lives during the pandemic. Alcohol and cannabis use decreased but screen time increased. However, the effects of all observed changes during the pandemic were relatively small. All in all, behavioural problems and satisfaction with social relationships remain stable. Girls, younger adolescents and young people from low socio-economic backgrounds demonstrated more negative changes during the pandemic. Estimated changes in psychosocial outcomes varied little in relation to municipal infection rates and restrictions.

Another Norwegian study found that social isolation during the restrictions was a burden for upper secondary school pupils (Bekkhus, von Soest & Fredriksen, 2020). Lack of physical contact with friends was associated with both depression and loneliness among adolescents during the pandemic. On average, girls felt lonelier than boys, and reported more symptoms of anxiety and depression than boys. These results are consistent with previous research showing that girls report more internalised mental health problems than boys. The report *Konsekvenser av covid-19-pandemien for barn og unges liv og psykiske helse: oppdatering av en hurtigoversikt* (Consequences of the COVID-19 pandemic for children and young people's lives and mental health: a brief updated overview) (Nøkleby, Borge & Johansen, 2021) included a study that investigated whether the pandemic restrictions could be linked to changes in symptoms of depression, anxiety and loneliness in 3,545 young people aged 13–16 years compared to before the lockdown (Hafstad et al. 2021). Higher rates of symptoms were found among young people in lower-income households or single-parent households, with parents with mental health problems or alcohol/drug abuse, or with a history of abuse compared to peers without this background. High levels of depression and anxiety symptoms prior to the pandemic also predicted high levels of depression and anxiety symptoms during the pandemic.

In the concluding discussion, the authors note that the social context (family, school, conditions in the immediate neighbourhood) can generally be seen as a potential buffer against the negative effects of the COVID-19 pandemic. The report also highlights that home schooling as a result of the pandemic restrictions may have been beneficial for children with social anxiety, relationship difficulties with peers, or children who have been bullied at school. Home schooling may have helped to reduce stress and improve mental health outcomes. Regarding gender differences, the report concludes that a majority of international studies show that girls were more affected by emotional difficulties and symptoms of depression, both before and during the pandemic. For boys, overall a higher rate of behavioural difficulties was reported compared to girls, with these problems having increased slightly during the pandemic.

Satisfaction with life during the pandemic

Schools were closed and strict restrictions were in place in Norway when an electronic survey was sent out to nearly 2,500 upper secondary school pupils in May 2020. The results were compared with similar surveys conducted annually in the same counties from 2014. The study shows that the prevalence of boys and girls who reported a high quality of life decreased significantly and their satisfaction with life decreased significantly compared to the pre-pandemic period (by an average of ten percentage points). The lockdowns were only associated with a higher risk of girls reporting higher levels of depressive symptoms. The most socio-economically disadvantaged groups showed the greatest psychological suffering (Myhr, Naper, Samarawickrema, & Vesterbekkmo, 2021).

In another Norwegian study among just over 8,000 upper secondary school pupils in Oslo, young people's satisfaction with life during the pandemic was compared with corresponding surveys conducted in Oslo (2018) and several other counties before the pandemic (van Soest, Bakken, Pedersen & Sletten, 2020). The study showed that young people experienced a pronounced reduction in satisfaction with life and a lowered subjective quality of life after the COVID-19 restrictions were introduced. Young people's socio-economic status was of less importance for their satisfaction with life. Especially among boys, the proportion with a high level of satisfaction with life fell clearly (6 points or higher on a ten-point scale).

Satisfaction with life decreased among women and men aged 20–24, but not among boys aged 16–19 in relation to other groups. One explanation for this may be that the deterioration in opportunities to support themselves that arose during the pandemic among respondents aged 20–24 years was what they perceived as a deterioration in living conditions during the pandemic.

The studies in the yearbook *Poikkeuksellinen nuoruus korona-aikaan – Nuorten elinolot 2022* (Exceptional youth during the COVID-19 pandemic – young people's living conditions yearbook 2022) show that inclusion during the pandemic seems to have been polarised and girls' experience of inclusion deteriorated. Although satisfaction with life declined among young people during the pandemic, one important observation is that it declined in particular among young people who belong to gender and sexual minorities. A quarter of higher education students felt lonely quite often or all the time, and women felt lonely more often than men. A feeling of loneliness is associated with mental strain. It was more difficult for higher education students to establish social contacts during the pandemic and they were forced to think consciously about how and where they wanted to meet other people and who they wanted to meet. Studies show that affinity with and trust in other people decreases when young people's feelings of inclusion deteriorate.

Risk perception and worry

The prevalence of worry about infection was investigated in upper secondary school pupils in Norway (Andreas & Brunborg, 2022). The study shows that most upper secondary school pupils were moderately worried about COVID-19 infection during the year of the pandemic. 10.2% of girls said they felt excessively worried about their schooling. Many different circumstances are associated with this worry, such as female sex, oldest age group (school year 13), the existence of a mental health risk, a history of illness or death in the family, and being resident in places with high rates of infection. Another Norwegian study showed no significant gender differences in worry about getting COVID-19, that a loved one or friends would get it (Dyregrov, Fjaerestad, Gjestad & Thimm, 2021). However, girls scored significantly higher (more anxiety) than boys. Furthermore, the study showed that young people's perceptions of risk are related to their worry about spreading the virus to loved ones. They also worry about their future in terms of their education and social life. They want more information targeted at young people. Being well-informed and being able to trust the information you receive reduces anxiety.

Being exposed to COVID-19

A Swedish study investigated possible differences between those exposed to COVID-19 and those not exposed (Chen, Osika, Henriksson, Dahlstrand & Friberg, 2022). The study shows no significant differences between the two groups in terms of sex. Adolescents reported higher levels of stress and psychosomatic symptoms and lower levels of happiness at follow-up compared to the time of the first measurement. These changes were also detected in both the control group and the group exposed to COVID-19. Similarly, the group exposed to COVID-19 showed no deterioration in peer relationships or relationships with parents compared to controls.

The changes over the 2-year period are similar among boys and girls, except when it comes to psychosomatic symptoms. Boys report a decreased level of psychosomatic symptoms and girls report an increased level over the 2-year period. Days involving at least 60 minutes of physical activity per week had decreased significantly among girls, but not among boys. There were no significant differences between groups that had been exposed to COVID-19 in terms of overnight sleep duration and physical activity. The conclusion is that Swedish adolescents exposed to COVID-19 for most of 2020 do not show longitudinal changes in mental health, relationships with parents and peers, and health behaviours compared to those not exposed to COVID-19.

Psychological well-being

A large international meta-analysis (Kerekes et al., 2021) in which Sweden was the only Nordic country to participate shows that a significantly larger proportion of female pupils (15–18 years) reported stress after the outbreak of the pandemic. A significant proportion of the pupils reported reduced time outdoors and fewer physical meetings with friends as well as poorer performance at school, while reporting that they had more time for things they didn't have time for before. Only a small percentage of the respondents reported increased substance abuse or vulnerability. The overall impact of the pandemic on adolescents' lives was genderspecific and the study further shows that female students felt more anxious, depressed or sad and that their sleep was less regular compared to male adolescents.

Similar results were found in a Norwegian study (Ulset, Bakken & von Soest, 2021) which showed that fewer boys than girls reported negative consequences of the pandemic. While 43% of boys responded that the COVID-19 pandemic had affected their lives somewhat, a lot, or a lot negatively, the same figure for girls was 55%. Sex differences were particularly great with regard to mental health, where the percentage of girls who reported negative changes was almost twice as high as for boys (Ulset, Bakken & von Soest, 2021).

A Norwegian study (Hafstad, Saetren, Wentzel-Larsen & August, 2021) investigated the potential negative consequences of lockdowns and the pandemic for the mental health of adolescents. The prevalence of anxiety and depressive symptoms was evaluated in 3,572 adolescents aged 13–16 years in a representative longitudinal study between February 2019 and June 2020. The study showed that clinical levels of anxiety and depression overall increased slightly during this period. The observed change was influenced by increasing age between the assessments. Being a girl, having pre-existing mental health issues, and living in a single-parent household were predictors of higher levels of anxiety and depressive symptoms at the second assessment. Living in a single-parent household was associated with a significant increase in symptoms.

The study indicates that anxiety and depressive symptoms increased slightly among Norwegian adolescents between 2019 and 2020, but this change seems to have been driven by increasing age rather than by pandemic-related restrictions. However, living in a poor family or having a history of substance abuse was associated with a significantly lower increase in symptoms. Symptom levels were unevenly distributed across demographic groups both before and during the pandemic, suggesting that health differences persist for young people in risk groups even during a pandemic.

A Finnish report on Pandemia ja nuorten mielenterveys - Kouluterveyskysely 2021 (The pandemic and adolescents' mental health) (Aalto et al., 2021) presents the findings from a school health survey. This survey was a national survey conducted in 2021 among compulsory school and upper secondary school pupils, and among pupils in vocational education and training schools who were under the age of 21. The study was conducted during the third wave of the pandemic in Finland, and at the time of the study, the pandemic had been going on for more than a year. During the academic year, most of the adolescents in the survey had participated in distance teaching during autumn 2020 and/or spring 2021. When the survey was filled in, in spring 2021, the pupils had returned to school. Some upper secondary school pupils were still receiving instruction via distance teaching. The school health survey had also been conducted in 2019, which allowed for comparisons to be made. About 30% of girls and 8% of boys reported moderate or severe anxiety in 2021. Worry had increased since the 2019 survey in both boys and girls. For girls, the increase was around ten percentage points higher than for boys. Depressive symptoms had increased in all respondent groups. In spring 2021, the increase in symptoms was greater in girls than in boys, and depressive symptoms lasting more than two weeks were reported by more than 30% of the girls in all respondent groups (compulsory school, upper secondary school and VET school). Among boys, depressive symptoms were most common among upper secondary school pupils (15%). The report also found that about a tenth of the boys and a quarter of the girls reported feeling lonely quite often or constantly. Loneliness was most common among girls who were studying at VET schools. During the follow-up period, feeling lonely had become more common in all respondent groups.

Based on the results of the school health survey, the mental health of Finnish adolescents had deteriorated during the pandemic. The reliability of the results was strengthened by the large population sample covering the entire age group, and in particular by the good response rate obtained in the respondent groups of pupils in years 8 and 9, and upper secondary school pupils (about 75%).

A Danish study investigated the potential effects of the COVID-19 pandemic on general health, mental well-being and locus of control compared to the prepandemic period (Wurtzen et al., 2022). Young men (18–24 years), young women (18–24 years) and older women (65–74 years) reported poorer mental well-being during the early phase of the pandemic compared to the results from 2016. In 2020, both women and men reported significantly poorer mental well-being as measured by internal locus of control compared to the 2016 sample. This was especially true for young men and women. There were no statistically significant differences in overall health between the population groups. This study partly supports the hypothesis that the COVID-19 pandemic negatively affects mental well-being among younger people.

An Icelandic study investigated sex differences in adolescent well-being during the COVID-19 pandemic and possible explanations for these differences (Halldorsdottir et al., 2021). Mental health problems during the pandemic were compared with expected scores based on nationwide ratings of same-aged peers in 2018. Although both boys and girls appear to be affected, girls reported a greater negative impact on all broad indicators of well-being and behavioural changes during COVID-19 than boys did, and girls' depressive symptoms were above and beyond the expected nationwide scores. Higher depressive symptoms were associated with increased passive use of social media and decreased contact with family members via phone or social media among girls, and decreased sleep and increased online gaming only among boys. Concerns that others might become ill with COVID-19, changes in daily routines and school routines, and not being able to meet friends in person were among the main contributors to mental ill-health identified by the adolescents, in particular the girls. The study shows that adolescents were generally negatively affected by the COVID-19 pandemic and its associated restrictions and that this negative impact was more pronounced in girls. The findings suggest that a steady routine and staying socially active can help adolescents cope with the uncertainty and social restrictions associated with a pandemic.

University students are a group who were affected by the pandemic due to changes in how they studied. An Icelandic study (Gestsdottir, Gislagottir, et al., 2021) compared mental and physical health and well-being before and during the pandemic in female and male first-year university students. A total of 115 students (just over half men) answered questions about their mental and physical health: they were asked to rate their physical activity, loneliness, stress and sleep quality. The study showed that young men had fewer symptoms of anxiety and depression, and that self-esteem was higher in the men than in the women. Over half of both sexes rated their mental health as worse during the pandemic. A larger proportion of men (69%) compared to women (38%) assessed that their physical health had deteriorated compared to before the pandemic. A larger proportion of women (38%) than men (14%) experienced increased loneliness and stress. Over 70% assessed that they had become more sedentary, and a larger proportion of men compared to women assessed that they were less physically active during the pandemic than before it. About half of the participants assessed that the quality of their sleep had deteriorated. The study shows that university students of both sexes rated their mental and physical health as having significantly deteriorated during the pandemic.

The aim of a Finnish study by Sarasjarvi et al. (2022) was to understand which pandemic-related issues could predict mental well-being during the pandemic. The study showed that the pandemic did have an impact on the mental well-being of higher education students. Mental well-being was found to be the lowest among non-binary students. The deterioration in mental well-being was least among doctoral students.

The study used cross-sectional data collected in May 2020 and data collected in April 2019. The study respondents were higher education students, of whom just under half were men. The analyses show a significant deterioration in overall mental well-being during the pandemic, along with higher mental well-being among men and older age groups at both data collection points. No interaction effects were found between mental well-being and socio-demographic variables at these two data collection points. This can be partly explained by the homogeneity of the student sample. Higher levels of mental well-being were associated with lower levels of academic stress and pandemic-related worry, along with a higher satisfaction with information from their higher education institution and the government. Pandemic-related symptoms and infections showed no impact on students' mental well-being during the outbreak. Small to moderate effects were detected over time, suggesting a total deterioration in mental well-being during the outbreak.

Mental health problems, suicidal thoughts and self-injury/self-harm

The aim of a Norwegian study (Sivertsen et al., 2022) was to investigate changes in and the incidence of mental health problems, suicidal thoughts and suicidal behaviours, and their associations with COVID-19 related restrictions.

The study shows that there was a significant increase in the incidence of mental health problems from 2010 to 2021, and a particularly great increase between 2018 and 2021. A similar pattern was also observed for suicidal thoughts. The figures are consistently slightly higher for young men compared to young women. Unlike in previous measurements, there were large geographical differences in mental health problems in 2021 that can be related to the different levels of COVID-19 cases and regional COVID-19-related restrictions. The fewer the days spent on campus in the previous two weeks, the higher the levels of mental health problems experienced

over the same period of time. An association was also found between the number of days on campus and a higher incidence of suicidal thoughts, non-suicidal selfinjury (NSSI) and suicide attempts in the past year. Thus, this study shows a sharp increase and worrying levels of mental health problems and suicide risk among students in general, but in particular higher among male students, during the COVID-19 pandemic.

Lifetime prevalence of NSSI has consistently been found to be around 17% in a representative sample of young people in Sweden and in other countries. NSSI is defined as bodily injury without suicidal intent and is done to deal with painful feelings and thoughts (Zetterqvist, Jonsson, Landberg & Svedin, 2021). Because COVID-19 posed a threat to young people's mental health, self-injury among upper secondary school pupils in Sweden was investigated and the same questions were asked on three different occasions and the responses compared. The results from measurements I (2011) and II (2014) were very similar, showing a lifetime prevalence of self-injury of 17.2% and 17.7%, respectively. Sex differences are also fairly consistent, with 26.4% compared to 24.7% of girls, and 8.0% compared to 8.8% of boys reporting lifetime prevalence of self-injury for the first two measurement points. Results from measurement III (2020–2021) showed a jump in lifetime prevalence to 27.6%, with 36.3% of girls and 16.0% of boys confirming NSSI. In addition, the rate of self-injury in adolescents with a non-binary identity increased from 28.3% in 2014 to 69.2% in 2020–2021 (Zetterqvist et al., 2021).

Alcohol consumption and substance use during the pandemic

As the impact of the pandemic on alcohol consumption was not known, a study was conducted on the impact of the pandemic on alcohol consumption and hazardous drinking during the initial phase of the pandemic in Norway (Alpers et al., 2021). The study showed that drinking was more common among people who reported money worries, among those who were in quarantine, and among those who were studying or working at home. In terms of average alcohol consumption, men had a higher total consumption (4.0 units/week) compared to women (2.4 units/week). Alcohol consumption is highest in the age group 18–29 years, and the same age group also has the highest proportion of frequent binge drinkers (30%).

The effect of the COVID-19 pandemic on mental health and drug/substance use during adolescence was investigated in an Icelandic study (Thorisdottir et al., 2021). This study showed an increase in depressive symptoms and deterioration in mental well-being in all age groups during the pandemic compared to same-age peers in previous measurements. These findings showed a significantly worse deterioration in teenage girls than in teenage boys. However, substance use decreased for both boys and girls. The findings suggest that the COVID-19 pandemic and its consequences significantly worsened adolescents' mental health. The decrease in substance use observed during the pandemic may be an unintended benefit as a result of their isolation.

Gambling and problematic gaming during the pandemic

A Swedish study investigated whether self-reported gambling increased during the pandemic, and potential associations with such a change (Hakansson, 2020). The study compared data collected in 2016 with data collected during the pandemic. The study included 1,022 men, of whom 309 were in the age group 18–29 years. In total, 4% reported an increase in gambling during the pandemic. In the age group 19–24 years, this figure was 19% and for 25–29 year olds, it was 18%. In summary, only a minority of all participants in the study reported increased gambling during the pandemic. However, this group reported significantly higher problem gambling and changes in alcohol consumption. The results thus indicate a subgroup with a particularly high vulnerability.

Stability and changes in Internet and offline gaming and its association with physical inactivity among young people in Norway were investigated during the pandemic (Haug et al., 2022). A total of 2,940 young people (42% boys) participated in an online longitudinal study during the first Norwegian national lockdown. They responded to one survey in April and another in December 2020. Physical activity and gaming behaviours were evaluated at both times. Among boys, 41% reported much more gaming and 35% slightly more in the first survey compared to before the national lockdown. The corresponding figures for girls were 14% and 23%. The analysis shows that a pattern of increased gaming reported in the first survey, followed by a further increase in gaming reported in the second survey, was associated with more physical inactivity. In summary, the study shows increased gaming among many adolescents, more among boys, and a correlation with physical inactivity during the first phase of the COVID-19 pandemic.

Discussion of mental ill-health in relation to the pandemic

The COVID-19 pandemic dramatically restricted the lives of young people. Given how important education and the workplace are as places for interventions for good health and social support, the effects of the pandemic on young people were particularly severe. The negative impact was more pronounced for girls and young women than for boys and young men, although many of the negative consequences of the pandemic were the same for all. In addition, there were some specific behaviours that were more pronounced among young men, such as how increased gaming seems to have replaced physical activity – a combination that increases vulnerability to mental ill-health. The reduction in and restriction of social contacts were particularly challenging for young people, who have a great need to gradually increase their independence and for social contacts with their peers.

Distance teaching has been described as the most profound change during the pandemic, with consequences such as poorer assistance from teachers and a lack of motivation and study routines. School closures and distance teaching affected young people's learning negatively to varying degrees, and the effects were most negative for pupils in need of special support. The support from school pupil health services seems to have also been insufficient during the pandemic, which affected both the group that already needed extra support and help, and those who were specifically negatively affected by the restrictions. During the pandemic, the transition from education and training to the workplace was also more difficult and more prolonged. Restrictive measures were also implemented in various sports facilities and hobby activities, further reducing opportunities for social interaction. The social support that young people receive through sharing with each other decreased, as did young people's contacts with other important adults in their lives such as teachers, sports coaches and grandparents. However some studies also highlight that home schooling as a result of the pandemic restrictions may have been beneficial for children with social anxiety, relationship difficulties with peers, or children who have been bullied at school. Home schooling may have helped to reduce stress and improve mental health outcomes. The research indicates that distance teaching is inferior to traditional teaching, especially for pupils who are less able academically, and pupils with poorer socio-economic circumstances. Technological development in society and the digitalisation that has taken place in the Swedish school in recent years, with each pupil having access to a computer of their own even before the pandemic, created better conditions for a rapid transition to remote learning and distance teaching (Sjögren et al., 2021).

Although gender-related patterns are important for understanding how masculinity norms affect young men's mental health in these circumstances, the studies in this overview show that an intersectional perspective is also important for separating out particularly vulnerable groups. For example, the negative effects are greater among younger pupils and pupils with poorer conditions for study at home. Children in need of special support and newly arrived immigrant groups are also particularly vulnerable in this context. Although satisfaction with life declined among young people during the pandemic, one important observation is that it declined in particular among young LGBTI people.

The pandemic has had a devastating impact on higher education, with the closures of student campuses and a more or less immediate transition to online studies and digital contacts. Many reported significant negative consequences related to their mental health and academic performance. But even though mental well-being declined among higher education students, the support provided by their higher education institution, along with its actions and ways of dealing with the outbreak, played a significant role for students' mental well-being.

The number of young people with a low level of education who experience difficulties establishing themselves in the labour market risks growing in the context of crises, as in the case of the pandemic. Young people are the group that find it the most difficult to get permanent and secure employment conditions and the transition from education to the workplace was more difficult during the pandemic (Olofsson & Kvist, 2022). Young people who belong to the least privileged socio-economic groups experienced the greatest mental suffering (Myhr et al., 2021). Health inequalities related to living circumstances became particularly apparent during the pandemic.

Some of these factors were defining factors for young men's health during the pandemic. For example, they were at risk of increased substance abuse (Alpers et al., 2021), increased online gambling and gaming, and decreased sleep (Halldorsdottir et al., 2021). This may have been due to factors such as lack of access to activities and a society that had shut down, where social life was being lived in a new way. Increased boredom may have led to both increased drinking and gaming. Feeling lonely increased among all respondent groups: lower secondary school pupils, upper secondary school pupils, and vocational education and training school pupils. Social isolation and loneliness constitute risk factors for young people's mental health (Pietrabissa & Simpson, 2020). Young men being less physically active and more sedentary in their lifestyles may also have significant public health consequences, albeit temporary ones (Gestsdottir & Gisladottir, et al., 2021).

The risk of depressive symptoms developing was significantly lower among those who reported being physically active at least three times per week, using social media less than three hours per day, and engaging in gaming less than three hours per day. Both frequent gaming and extensive use of social media can be related to depressive symptoms (Løvheim Kleppang, Håvås Haugland, Bakken & Holte Stea, 2021). However, it is problematic to compare the use of social media for the period before and after the pandemic, because lockdowns, and closures of schools and opportunities for physical activity limited young people's opportunities for social interaction. At certain times, online contacts were the only social window on the outside world, that is, the only opportunity for a social life.

From the research overview, it emerges that suicide rates increased among teenage boys and young men in the Nordic countries. The lifetime prevalence of non-suicidal self-injury has consistently been found to be around 17% in Sweden and in other countries (Zetterqvist et al., 2021). When non-suicidal self-injury was investigated among upper secondary school pupils in Sweden, the results from the measurement during the pandemic showed a lifetime prevalence of 27.6%. In addition, the rate of self-injury in adolescents with non-binary gender identity increased drastically (Zetterqvist et al., 2021). This shows that non-binary young people are a very vulnerable group that is in need of extra support.

The pandemic has thus had a significant impact on the mental health of teenage boys and young men in the Nordic countries. Studies show increased levels of anxiety and depression, which may be due to factors such as social isolation, uncertainty about the future and a changed everyday life. The consequences of school closures and new routines due to changes in school type, studies and difficulties in entering the labour market were also clear. Feeling uncertain about their future in terms of their education or training and work, as well as the social isolation that these young people were subjected to, may have contributed to increased anxiety, financial stress and a feeling of having lost their footing. Since boys more often than girls are in need of special education interventions at school, distance teaching can further impair their schooling and increase their worries about their performance in school and their future prospects.

Concluding discussion

Young men's health and masculinity norms are closely intertwined. And masculinity norms are embedded in society's norms. These norms, although they are constantly changing, shape and contribute to young men's health and health behaviours; thus, individual and structural factors interact in complex ways (Robertson, 2007; Thorpe & Halkitis, 2016). Masculinity norms are limiting for boys' and young men's health even though masculinities are constantly changing and allowing for new, more health-promoting masculinities to be created.

Traditional masculinity norms emphasise traits that have been shown to be obstacles to seeking help. These norms are also an obstacle to valuing connection and relationships that increase well-being and can provide resilience against many forms of mental ill-health. Young men's lower propensity to seek help compared to young women is well-known (Granrud, Bisholt, Anderzèn-Carlsson & Steffenak, 2020; Wirback, Forsell, Larsson, Engström & Edhborg, 2018). Having to bear the burden of your own difficulties without having anyone to turn to can result in increased stress, anxiety and depression, which ultimately risks leading to suicide. The term 'homosociality' refers to how men identify with and understand their social position in relation to other men. Homosociality can explain why it may be experienced as shameful to seek help and show weakness, since this is linked to 'being feminised'. In comparison with many others, the Nordic countries are streets ahead in certain areas of equality, but the reiteration of hegemonic masculinity norms in the Nordic countries still excludes and still identifies non-white, nonheterosexual and disabled men as 'other' (Egeberg Holmgren, 2011). Important contexts for well-being such as education or training and the workplace also tend to be places where hierarchies based on hegemonic masculinity are repeated and cemented, while these are also places where young men can come into contact with health promotion efforts and support.

The overall aim of this research overview was to highlight knowledge about young men's mental health in relation to current conditions and challenges in schools and the workplace in the Nordic countries in particular. In addition, the overview highlights knowledge about the consequences that the COVID-19 pandemic has had on young men's mental ill-health. The pandemic has had severe consequences for young people in schools and those in work. Studies in the overview show that an insecure labour market and increased unemployment, especially among young adults, distance teaching, social isolation and reduced opportunities for leisure activities, have had a negative impact on mental well-being.

Schools and workplaces are important places for offering support to young men and for changing masculinity norms that tend to be antagonistic to practices that are health-promoting. But the relationship between mental ill-health on the one hand and education and training and the workplace on the other is complex. Mental health and well-being alone are the strongest predictors for a positive experience of school, and getting to participate in sports, having a positive body image and satisfactory sleep nearly double pupils' opportunities for a positive experience of school according to Forsberg et al. (2019). The context that a workplace provides can also provide support for young men. But this overview also shows that much of this mental ill-health can be seen as a product of poor experiences of education and training systems and a poor work environment. Education and training institutions and workplaces can also reproduce norms and notions of masculinity and thus hinder practices such as seeking help or establishing meaningful relationships.

In most of the studies included in this research overview, no analyses were made from a theory of masculinity perspective; instead, the division into sex categories is taken for granted and implies a stable way of looking at gender. This way of looking at the groups *men* and *women* can provide important knowledge about how current categorisations can have different effects in the two groups but can also stand in the way of a perspective on masculinity as something historically and socially dynamic. It is important to highlight the concept of social health – which emphasises how health and ill-health are directly related to social relationships and hierarchies, as well as to experiences of being capable of change and influence – in order to understand many of the results of this overview. It is important to demonstrate alternative masculinities to young men to promote their mental health and well-being, and to challenge and redefine the kinds of traditional masculinity norms that can be harmful to young men's health. Thus, viewing masculinity as dynamic can both increase the quality of research on young men's mental ill-health and help in work to prevent ill-health among young men.

In summary, young men face many challenges when it comes to contemporary masculinity in the Nordic countries, although the impact of masculinity norms on mental health can vary between groups and countries. The potentially negative effects of certain masculinity norms need to be addressed in order to demonstrate alternative masculinities. School is perhaps the most important arena where you can reach everyone. Therefore, all schoolchildren should be offered a talk with a school counsellor, similar to health talks with the school pupil health service, in order to avoid the stigma of seeking help for mental health issues. When an intervention targets all, no one feels stigmatised and therefore access to support can be on equal terms, and thus support can be provided on equal terms, regardless of socio-economic status or gender. Being able to talk about health from a holistic point of view comprising mental, physical and social aspects, where body, mind and relationships are all included, can improve understanding of how a person's experience of their health is related to multiple aspects. Relational health, that is, how well the person feels in their social relationships, has proven to be crucial for

young men's development, and social health can also affect mental health. Good health is a prerequisite for coping with the challenges of school and the workplace and for resilience in the face of negative and limiting masculinity norms.

Practical implications

The studies have the following practical implications for young men's health:

- Young men find it more difficult to seek help and counselling and admit mental ill-health. A more inclusive and supportive attitude to young people's mental health and enabling early and accessible support for young people is therefore desirable.
- It is important that schools detect young men with mental health issues early and address questions of mental ill-health among pupils in order to reduce the stigma and shame associated with mental ill-health.
- Access to psychosocial support in the form of a school counsellor should be readily accessible, and young people should be offered a visit to the school counsellor to reduce stigma around seeking psychosocial support.
- Early intervention can prevent mental ill-health later in life and general interventions, information and discussion among school pupils can constitute preventive intervention.
- For some young men, the transition from education or training to the workplace can be a challenging period and increased support is needed for a smooth transition.
- Young men who are NEETs need immediate, individually adapted measures.
- In future action plans, intensified measures are needed to mitigate inequalities, particularly when it comes to the health of young people.
- Some groups are especially exposed and vulnerable in times of crisis and they need specific, targeted interventions. More knowledge is needed about which interventions, for whom and when, do the most good. Social and health policies should direct support to these least privileged groups.
- Should society face a similar crisis in the future, with such a pervasive impact as the pandemic had on young people, preparedness in the health care system, municipalities, social services, school pupil health services and occupational health services must do better at meeting the needs for psychosocial support of young people who exhibit signs of impaired psychosocial functioning, increased stress and vulnerability.
- Risks for mental ill-health do not exist at the individual level alone, but also involve the family, social network and structural levels. It is important to consider the wider context and include entire families in the formulation of interventions in the event of a future situation similar to the pandemic.

Identified knowledge gaps

All the Nordic countries have addressed the consequences of the pandemic, and for all the Nordic countries there are research studies and reports on education and training, the workplace, health and masculinity. However, some knowledge gaps have been identified. The knowledge gaps identified in this research overview are listed below.

- This overview consistently took an interest in studies related to ill-health. However, it is of great importance in future studies to investigate factors that contribute to health from a salutogenic perspective.
- Longitudinal studies are needed to investigate the possible long-term effects of crises on mental health and well-being.
- More qualitative studies are needed to investigate the profound consequences of such crises and increase understanding of young people's perspectives.
- While there are plenty of studies of young men who are NEETs, it has been difficult to identify studies of the mental health of young men in the workplace. This indicates that more knowledge is needed regarding the specific challenges they face in the workplace.
- More knowledge is needed about the specific challenges that young men face in understanding and managing their mental health, in education and training as well as in the workplace.
- More knowledge is needed about how we can promote mental health in young men. An understanding-oriented, holistic approach to health and a supportive, solution-focused approach can contribute to this.
- Another area of knowledge that needs to be strengthened is how young men can overcome the stigma attached to seeking help for mental ill-health in time.
- In order to strengthen the state of the knowledge in this area, it is important to report gender at the variable level in quantitative studies.
- This overview indicates that young people with a non-binary gender identity can be subject to negative consequences for their health and also stigmatisation, discrimination and lack of access to support. Future studies should therefore include non-binary as a variable to a greater extent.
- The gender dimension needs to be highlighted in future studies, and include questions that relate specifically to gender identity in order to highlight and strengthen knowledge about possible differences.
- The category of age also needs to be clarified in more studies to enable further analyses.

References

Alpers, S. E., Skogen, J. C., Maeland, S., Pallesen, S., Rabben, A. K., Lunde, L. H., & Fadnes, L. T. (2021). Alcohol Consumption during a Pandemic Lockdown Period and Change in Alcohol Consumption Related to Worries and Pandemic Measures. *International Journal of Environmental Research & Public Health [Electronic Resource], 18*(3), 29. doi: <u>https://dx.doi.org/10.3390/ijerph18031220</u>

Andersen, S., Davidsen, M., Nielsen, L., & Tolstrup, J. S. (2021). Mental health groups in high school students and later school dropout: a latent class and register-based follow-up analysis of the Danish National Youth Study. *BMC psychology*, *9*(1), 122. doi: <u>https://dx.doi.org/10.1186/s40359-021-00621-7</u>

Andersen, J. H., Tjornhoj-Thomsen, T., Reventlow, S., & Davidsen, A. S. (2019). Initiating Change: Negotiations of Subjectivity in a Danish Activation Programme for Young Adults with Psychosocial Problems and Common Mental Disorders. *Culture, Medicine and Psychiatry, 43*(3), 425-441. doi: <u>https://dx.doi.org/10.1007/s11013-019-09630-z</u>

André, F., Broman, N., Håkansson, A., & Claesdotter-Knutsson, E. (2020). Gaming addiction, problematic gaming and engaged gaming – Prevalence and associated characteristics. *Addictive Behaviors Reports, 12*, 7. doi: <u>https://doi.org/10.1016/j.abrep.2020.100324</u>

Andreas, J. B., & Brunborg, G. S. (2022). Individual, Family, and Community Characteristics Associated With COVID-19-Specific Worry and Lack of Worry Among Norwegian High School Students in First Pandemic Year. *JAMA NETWORK OPEN*, *5*(2). <u>doi:10.1001/jamanetworkopen.2022.0337</u>

Appelqvist-Schmidlechner, K., Vaara, J. P., Vasankari, T., Hakkinen, A., Mantysaari, M., & Kyrolainen, H. (2020). Relationship between different domains of physical activity and positive mental health among young adult men. *BMC Public Health*, *20*(1), 1116. doi: <u>https://dx.doi.org/10.1186/s12889-020-09175-6</u>

Archer, T., Josefsson, T., & Lindwall, M. (2014). Effects of physical exercise on depressive symptoms and biomarkers in depression. *CNS & Neurological Disorders-Drug Targets (Formerly Current Drug Targets-CNS & Neurological Disorders)*, *13*(10), 1640-1653.

Arnett, J. J. (2000). Emerging adulthood. A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480.

Ayoub, M., Udo, C., & Randell, E. (2021). Promoting social engagement for young adults living in social isolation in Sweden: social workers and health care professionals' perceptions of success factors. *Nordic Social Work Research*, 1-13. doi:10.1080/2156857X.2021.1946710

Baker, J. H., Higgins Neyland, M. K., Thornton, L. M., Runfola, C. D., Larsson, H., Lichtenstein, P., & Bulik, C. (2019). Body dissatisfaction in adolescent boys. *Developmental Psychology, 55*(7), 1566-1578. doi: <u>https://dx.doi.org/10.1037/dev0000724</u>

Ballo, J. G., Heglum, M. A., Nilsen, W., & Bernstrøm, V. H. (2022). Can adolescent work experience protect vulnerable youth? A population wide longitudinal study of young adults not in education, employment or training (NEET). *Journal of Education and Work*, *35*(5), 502-520. <u>doi:10.1080/13639080.2022.2099534</u>

Bania, E. V., Eckhoff, C., & Kvernmo, S. (2019). Not engaged in education, employment or training (NEET) in an Arctic sociocultural context: the NAAHS cohort study. *BMJ Open*, *9*(3), e023705. doi: <u>https://dx.doi.org/10.1136/bmjopen-</u> <u>2018-023705</u>

Beckman, K., Lysell, H., Haglund, A., & Dahlin, M. (2019). Prognoses after self-harm in youth: exploring the gender factor. *Social Psychiatry and Psychiatric Epidemiology*, *54*(4), 437-444. doi: <u>https://dx.doi.org/10.1007/s00127-018-1618-7</u>

Berman, A. H., Bendtsen, M., Molander, O., Lindfors, P., Lindner, P., Granlund, L., . . . Andersson, C. (2022). Compliance with recommendations limiting COVID-19 contagion among university students in Sweden: associations with self-reported symptoms, mental health and academic self-efficacy. *Scandinavian Journal of Public Health, 50*(1), 70-84. doi: <u>https://dx.doi.org/10.1177/14034948211027824</u>

Boorse, C. (1977). Health as a Theoretical Concept. *Philosophy of science*, 44(4), 542-573. <u>doi:10.1086/288768</u>

Bortes, C., Strandh, M., & Nilsson, K. (2019). Is the effect of ill health on school achievement among Swedish adolescents gendered? *SSM-POPULATION HEALTH*, *8*. <u>doi:10.1016/j.ssmph.2019.100408</u>

Boyle, C. A., Boulet, S., Schieve, L. A., Cohen, R. A., Blumberg, S. J., Yeargin-Allsopp, M., . . . Kogan, M. D. (2011). Trends in the Prevalence of Developmental Disabilities in US Children, 1997–2008. *Pediatrics, 127*(6), 1034-1042. <u>doi:10.1542/peds.2010-2989</u>

Breland, D. J., & Park, M. J. (2008). Depression: focus on the adolescent male. *Am J Mens Health, 2*(1), 87-93. <u>doi:10.1177/1557988307310958</u>

Bucchianeri, M. M., Arikian, A. J., Hannan, P. J., Eisenberg, M. E., & Neumark-Sztainer, D.(2013). Body dissatisfaction from adolescence to young adulthood: Findings from a 10-year longitudinal study. *Body image, 10*(1), 1-7. Burdzovic Andreas, J., Sivertsen, B., Lonning, K. J., & Skogen, J. C. (2021). Cannabis use among Norwegian university students: Gender differences, legalization support and use intentions, risk perceptions, and use disorder. *Addictive Behaviors Reports, 13*, 100339. doi: <u>https://dx.doi.org/10.1016/j.abrep.2021.100339</u>

Bäckman, O., & Nilsson, A. (2016). Long-term consequences of being not in employment, education or training as a young adult. Stability and change in three Swedish birth cohorts. *European Societies, 18*(2), 136-157.

Calzo, J. P., Sonneville, K. R., Haines, J., Blood, E. A., Field, A. E., & Austin, S. B. (2012). The development of associations among body mass index, body dissatisfaction, and weight and shape concern in adolescent boys and girls. *Journal of Adolescent Health, 51*(5), 517-523.

Campa, P., Roine, J., & Stromberg, S. (2021). Unemployment inequality in the pandemic: Evidence from Sweden. <u>*CEPR Discussion Paper No. DP16330*</u>

Castellví, P., Miranda-Mendizábal, A., Alayo, I., Parés-Badell, O., Almenara, J., Alonso, I., . . . Alonso, J. (2020). Assessing the relationship between school failure and suicidal behavior in adolescents and young adults: A systematic review and meta-analysis of longitudinal studies. *School Mental Health: A Multidisciplinary Research and Practice Journal, 12*(3), 429-441. doi: <u>https://doi.org/10.1007/s12310-020-09363-0</u>

Chen, Y., Osika, W., Henriksson, G., Dahlstrand, J., & Friberg, P. (2022). Impact of COVID-19 pandemic on mental health and health behaviors in Swedish adolescents. *Scandinavian Journal of Public Health, 50*(1), 26-32. doi: <u>https://dx.doi.org/10.1177/14034948211021724</u>

Ciarrochi, J., Deane, F. P., Wilson, C. J., & Rickwood, D. (2002). Adolescents who need help the most are the least likely to seek it: The relationship between low emotional competence and low intention to seek help. *British Journal of Guidance* & *Counselling*, *30*(2), 173-188. <u>doi:10.1080/03069880220128047</u>

Claesdotter-Knutsson, E., Andre, F., Fridh, M., Delfin, C., Hakansson, A., & Lindstrom, M. (2022). Gender Differences and Associated Factors Influencing Problem Gambling in Adolescents in Sweden: Cross-sectional Investigation. *JMIR Pediatrics and Parenting, 5*(1), e35207. doi: <u>https://dx.doi.org/10.2196/35207</u>

Conn, V. S., Hafdahl, A. R., & Mehr, D. R. (2011). Interventions to increase physical activity among healthy adults: meta-analysis of outcomes. *American Journal of Public Health*, *101*(4), 751-758.

Courtenay, W. H. (2003). Key determinants of the health and well-being of men and boys. *International Journal of Men's Health, 2*(1), 1-30.

Courtenay, W. H., & Keeling, R. P. (2000). Men, gender, and health: toward an interdisciplinary approach. *J Am Coll Health, 48*(6), 243-246. <u>doi:10.1080/07448480009596265</u>

Dannow, M. C., Esbjørn, B. H., & Risom, S. W. (2020). The perceptions of anxietyrelated school absenteeism in youth: A qualitative study involving youth, mother, and father. *Scandinavian Journal of Educational Research, 64*(1), 22-36. doi: <u>https://doi.org/10.1080/00313831.2018.1479302</u>

De Visser, R. O., Smith, J. A., & McDonnell, E. J. (2009). 'That's not masculine': masculine capital and health-related behaviour. *J Health Psychol*, *1*4(7), 1047-1058. doi:10.1177/1359105309342299

Deuchar, R., & Weide, R. D. (2019). Journeys in gang masculinity: Insights from international case studies of interventions. *Deviant Behavior, 40*(7), 851-865. doi: <u>https://doi.org/10.1080/01639625.2018.1443761</u>

Dion, J., Blackburn, M.-E., Auclair, J., Laberge, L., Veillette, S., Gaudreault, M., . . . Touchette, E. (2015). Development and aetiology of body dissatisfaction in adolescent boys and girls. *International journal of adolescence and youth, 20*(2), 151-166.

Donnelly, J. E., Hillman, C. H., Greene, J. L., Hansen, D. M., Gibson, C. A., Sullivan, D. K., . . . Szabo-Reed, A. N. (2017). Physical activity and academic achievement across the curriculum: Results from a 3-year cluster-randomized trial. *Preventive Medicine*, *99*, 140-145.

Dufour, M., Brunelle, N., Tremblay, J., Leclerc, D., Cousineau, M.-M., Khazaal, Y., . . . Berbiche, D. (2016). Gender difference in internet use and internet problems among Quebec high school students. *The Canadian Journal of Psychiatry, 61*(10), 663-668.

Durbeej, N., Abrahamsson, N., Papadopoulos, F. C., Beijer, K., Salari, R., & Sarkadi, A. (2021). Outside the norm: Mental health, school adjustment and community engagement in non-binary youth. *Scandinavian Journal of Public Health*, *49*(5), 529-538. doi: <u>https://dx.doi.org/10.1177/1403494819890994</u>

Dyregrov, A., Fjaerestad, A., Gjestad, R., & Thimm, J. (2021). Young People's Risk Perception and Experience in Connection with COVID-19. *Journal of Loss & Trauma*, *26*(7), 597-610. <u>doi:10.1080/15325024.2020.1853974</u>

Egeberg Holmgren, L. (2011). *IngenMansLand: om män som feminister, intervjuframträdanden och passerandets politik.* Acta Universitatis Upsaliensis

Fadum, E. A., Carlsen, E. O., Ramberg, M., Strand, L. A., Haberg, S. E., Borud, E., & Martinussen, M. (2021). Social and life skills in adolescents who have self-harmed: analysis of survey responses from a national sample of adolescents in Norway. *BMJ Open, 11*(11), e054707. doi: <u>https://dx.doi.org/10.1136/bmjopen-2021-054707</u>

Forsberg, H., Carlerby, H., Norstrand, A., Risberg, A., & Kostenius, C. (2019). Positive self-reported health might be an important determinant of student's experiences of high school in northern Sweden. *International Journal of Circumpolar Health*, *78*(1), 1598758. doi: <u>https://dx.doi.org/10.1080/22423982.2019.1598758</u>

Furlong, A. (2006). Not a very NEET solution:representing problematic labour market transitions among early school-leavers. *Work, Employment and Society, 20*(3), 553-569. <u>doi:10.1177/0950017006067001</u>

Furlong, A. (2009). Handbook of youth and young adulthood. *New perspectives and agendas*. London: Routledge

Gestsdottir, S., Gisladottir, T., Stefansdottir, R., Johannsson, E., Jakobsdottir, G., & Rognvaldsdottir, V. (2021). Health and well-being of university students before and during COVID-19 pandemic: A gender comparison. *PLoS ONE [Electronic Resource], 16*(12),e0261346. doi: <u>https://dx.doi.org/10.1371/journal.pone.0261346</u>

Gestsdottir, S., Kristjansdottir, H., Sigurdsson, H., & Sigfusdottir, I. D. (2021). Prevalence, mental health and substance use of anabolic steroid users: a population-based study on young individuals. *Scandinavian Journal of Public Health, 49*(5), 555-562. doi: <u>https://dx.doi.org/10.1177/1403494820973096</u>

Gisladottir, B., Gronfeldt, B., Kristjansson, A. L., & Sigfusdottir, I. D. (2018). Psychological well-being of sexual minority young adults in Iceland: Assessing differences by sexual attraction and gender. *Sex Roles: A Journal of Research, 78*(11-12), 822-832. doi: <u>https://doi.org/10.1007/s11199-017-0847-7</u>

Granrud, M. D., Bisholt, B., Anderzèn-Carlsson, A., & Steffenak, A. K. M. (2020). Overcoming barriers to reach for a helping hand: Adolescent boys' experience of visiting the public health nurse for mental health problems. *International journal of adolescence and youth, 25*(1), 649-660. doi: <u>https://doi.org/10.1080/02673843.2020.1711529</u>

Groot, J., Keller, A., Joensen, A., Tri-Long, N., Nybo, A. A.-M., & Strandberg-Larsen, K. (2022). Impact of housing conditions on changes in youth's mental health following the initial national COVID-19 lockdown: a cohort study. *Scientific Reports (Nature Publisher Group)*, *12*(1). doi: <u>http://dx.doi.org/10.1038/s41598-022-04909-5</u>

Gunnarsdottir, H., Hensing, G., & Hammarstrom, A. (2021). Poor school connectedness in adolescence and adulthood depressiveness: a longitudinal theorydriven study from the Northern Sweden Cohort. *European Journal of Public Health*, *31*(4), 797-802. doi: <u>https://dx.doi.org/10.1093/eurpub/ckab027</u>

Gustafsson, J.-E., Allodi Westling, M., Alin Åkerman, B., Eriksson, C., Eriksson, L., Fischbein, S., . . . Ogden, T. (2010). School, learning and mental health: A systematic review. URN: <u>urn:nbn:se:hj:diva-41913</u> ISBN: 978-91-7190-138-5

Haavik, L., Joa, I., Hatloy, K., Stain, H. J., & Langeveld, J. (2019). Help seeking for mental health problems in an adolescent population: the effect of gender. *Journal of Mental Health, 28*(5), 467-474. doi:

https://dx.doi.org/10.1080/09638237.2017.1340630

Hafstad, G. S., Saetren, S. S., Wentzel-Larsen, T., & Augusti, E. M. (2021). Adolescents' symptoms of anxiety and depression before and during the Covid-19 outbreak - A prospective population-based study of teenagers in Norway. *The Lancet Regional Health. Europe, 5*, 100093. doi: <u>https://dx.doi.org/10.1016/j.lanepe.2021.100093</u>

Hall, C., Hardoy, I., & Lundin, M. (2022). *Covid-19 och distansundervisning i Norden*: IFAU- Institutet för arbetsmarknads-och utbildningspolitisk utvärdering.

Halldorsdottir, T., Ingibjorg Eva, T., Meyers, C. C. A., Bryndis Bjork, A., Alfgeir Logi, K., Valdimarsdottir, H. B., . . . Sigfusdottir, I. D. (2021). Adolescent well-being amid the COVID-19 pandemic: Are girls struggling more than boys? *JCPP Advances, 1*(2).doi: <u>http://dx.doi.org/10.1002/jcv2.12027</u>

Hammarstrom, A., & Ahlgren, C. (2019). Living in the shadow of unemployment -an unhealthy life situation: a qualitative study of young people from leaving school until early adult life. *BMC Public Health, 19*(1), 1661. doi: <u>https://dx.doi.org/10.1186/s12889-019-8005-5</u>

Hanvold, T. N., Kines, P., Nykänen, M., Thomée, S., Holte, K. A., Vuori, J., . . . Veiersted, K. B.(2019). Occupational safety and health among young workers in the Nordic countries: a systematic literature review. *Safety and health at work, 10*(1), 3-20.

Haraldstad, K., Kvarme, L. G., Christophersen, K. A., & Helseth, S. (2019). Associations between self-efficacy, bullying and health-related quality of life in a school sample of adolescents: a cross-sectional study. *BMC Public Health, 19*(1), 757. doi: <u>https://dx.doi.org/10.1186/s12889-019-7115-4</u>

Haug, E., Maeland, S., Lehmann, S., Bjorknes, R., Fadnes, L. T., Sandal, G. M., & Skogen, J. C. (2022). Increased Gaming During COVID-19 Predicts Physical Inactivity Among Youth in Norway-A Two-Wave Longitudinal Cohort Study. *Frontiers in Public Health, 10*, 812932. doi: <u>https://dx.doi.org/10.3389/fpubh.2022.812932</u>

Helgesson, M., Rahman, S., Bjorkenstam, E., Gustafsson, K., Amin, R., Taipale, H., . . .
Mittendorfer-Rutz, E. (2021). Trajectories of labour market marginalisation among young adults with newly diagnosed attention-deficit/hyperactivity disorder
(ADHD). *Epidemiology & Psychiatric Science, 30*, e67. doi: https://dx.doi.org/10.1017/S2045796021000536

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), 362-384. Hoprekstad, O. L., Hetland, J., Wold, B., Torp, H., & Valvatne Einarsen, S. (2021). Exposure to Bullying Behaviors at Work and Depressive Tendencies: The Moderating Role of Victimization From Bullying During Adolescence. *Journal of Interpersonal Violence, 36*(23-24), 11576-11601. doi: <u>https://dx.doi.org/10.1177/0886260519900272</u>

Hrafnkelsdottir, S. M., Brychta, R. J., Rognvaldsdottir, V., Gestsdottir, S., Chen, K. Y., Johannsson, E., . . . Arngrimsson, S. A. (2018). Less screen time and more frequent vigorous physical activity is associated with lower risk of reporting negative mental health symptoms among Icelandic adolescents. *PLoS ONE [Electronic Resource]*, *13*(4), e0196286. doi: <u>https://dx.doi.org/10.1371/journal.pone.0196286</u>

Husu, H. M., & Ylilahti, M. (2020). The formation of long-term unemployed young adults' emotional capital during childhood: a Bourdieusian approach to emotional harm. *Journal of Youth Studies*, *23*(9), 1161-1177. <u>doi:10.1080/13676261.2019.1657563</u>

Håkansson, A. (2020). Changes in Gambling Behavior during the COVID-19 Pandemic—A Web Survey Study in Sweden. *International Journal of Environmental Research and Public Health*, *17*(11), 4013. doi: <u>http://dx.doi.org/10.3390/ijerph17114013</u>

Joffer, J., Flacking, R., Bergström, E., Randell, E., & Jerdén, L. (2019). Self-rated health, subjective social status in school and socioeconomic status in adolescents: a cross-sectional study.

Jóhannsdóttir, Á., & Gíslason, I. V. (2018). Young icelandic men's perception of masculinities. *The Journal of Men's Studies, 26*(1), 3-19. doi: <u>https://doi.org/10.1177/1060826517711161</u>

Johansson, A., Brunnberg, E., & Eriksson, C. (2007). Adolescent Girls' and Boys' Perceptions of Mental Health. *Journal of Youth Studies, 10*(2), 183-202. <u>doi:10.1080/13676260601055409</u>

Just-Noerregaard, V., Andersen, J. H., Nohr, E. A., Vestergaard, J. M., & Winding, T. N. (2021). How does engagement in society in adolescence affect educational attainment and employment in early adulthood: A prospective cohort study. *PloS One, 16*(4), 18. <u>doi:10.1371/journal.pone.0249312</u>

Kerekes, N., Bador, K., Sfendla, A., Belaatar, M., Abdennour El, M., Jovic, V., . . . Zouini, B. (2021). Changes in Adolescents' Psychosocial Functioning and Well-Being as a Consequence of Long-Term COVID-19 Restrictions. *International Journal of Environmental Research and Public Health, 18*(16), 8755. doi: <u>http://dx.doi.org/10.3390/ijerph18168755</u>

Khan, N. A., & Hillman, C. H. (2014). The relation of childhood physical activity and aerobic fitness to brain function and cognition: a review. *Pediatric Exercise Science*, *26*(2), 138-146.

Kimmel, M. (2010). *Boys and School: A Background Paper on the Boy Crisis*. (SOU 2010:53). Stockholm: Swedish Government Official Report

Kleppang, A. L., Haugland, S. H., Bakken, A., & Stea, T. H. (2021). Lifestyle habits and depressive symptoms in Norwegian adolescents: a national cross-sectional study. *BMC Public Health*, *21*(1), 816. doi: <u>https://dx.doi.org/10.1186/s12889-021-10846-1</u>

Kõlves, K., & De Leo, D. (2016). Adolescent Suicide Rates Between 1990 and 2009: Analysis of Age Group 15–19 Years Worldwide. *Journal of Adolescent Health*, *58*(1), 69-77. doi: <u>http://dx.doi.org/10.1016/j.jadohealth.2015.09.014</u>

Latvala, T., Castren, S., Alho, H., & Salonen, A. (2018). Compulsory school achievement and gambling among men and women aged 18-29 in Finland. *Scandinavian Journal of Public Health*, *46*(5), 505-513. doi: <u>https://dx.doi.org/10.1177/1403494817726621</u>

Lehmann, S., Skogen, J. C., Haug, E., Maeland, S., Fadnes, L. T., Sandal, G. M., . . . Bjorknes, R. (2021). Perceived consequences and worries among youth in Norway during the COVID-19 pandemic lockdown. *Scandinavian Journal of Public Health*, *49*(7), 755-765. doi: <u>https://dx.doi.org/10.1177/1403494821993714</u>

Lemola, S., Brand, S., Vogler, N., Perkinson-Gloor, N., Allemand, M., & Grob, A. (2011). Habitual computer game playing at night is related to depressive symptoms. *Personality and Individual Differences, 51*(2), 117-122.

Logdberg, U., Nilsson, B., & Kostenius, C. (2018). "Thinking about the future, what's gonna happen?"-How young people in Sweden who neither work nor study perceive life experiences in relation to health and well-being. *International Journal of Qualitative Studies on Health and Well-being, 13*(1), 1422662. doi: https://dx.doi.org/10.1080/17482631.2017.1422662

MacLean, A., Hunt, K., & Sweeting, H. (2013). Symptoms of Mental Health Problems: Children's and Adolescents' Understandings and Implications for Gender Differences in Help Seeking. *Children & Society, 27*(3), 161-173. <u>doi:10.1111/j.1099-</u> <u>0860.2011.00406.x</u>

McLoughlin, A. B., Gould, M. S., & Malone, K. M. (2015). Global trends in teenage suicide: 2003–2014. *QJM, 108*(10), 765-780. <u>doi:10.1093/qjmed/hcv026</u>

Messerschmidt, J. W. (2009). "Doing Gender": The Impact and Future of a Salient Sociological Concept. *Gender & Society, 23*(1), 85-88. <u>doi:10.1177/0891243208326253</u>

Myhr, A., Naper, L. R., Samarawickrema, I., & Vesterbekkmo, R. K. (2021). Impact of COVID-19 Pandemic Lockdown on Mental Well-Being of Norwegian Adolescents During the First Wave-Socioeconomic Position and Gender Differences. *Frontiers in Public Health, 9*, 717747. doi: <u>https://dx.doi.org/10.3389/fpubh.2021.717747</u>

Männikkö, N., Ruotsalainen, H., Tolvanen, A., & Kääriäinen, M. (2020). Problematic gaming is associated with some health-related behaviors among Finnish vocational school students. *International Journal of Mental Health and Addiction, 18*(4), 993-1007. doi: <u>https://doi.org/10.1007/s11469-019-00100-6</u>

O'Dell, L., Brownlow, C., & Bertilsdotter-Rosqvist, H. (2017). *Different childhoods: Non/normative development and transgressive trajectories*: Routledge.

Oliffe, J. L., Kelly, M. T., Johnson, J. L., Bottorff, J. L., Gray, R. E., Ogrodniczuk, J. S., & Galdas, P. M. (2010). Masculinities and college men's depression: Recursive relationships. *Health Sociology Review*, *19*(4), 465-477.

Olofsson, J., & Kvist, M. (2022). Sociala utmaningar for unga i spåren av pandemin– en kunskapsoversikt.[Social challenges for young people in the wake of the pandemic– a knowledge overview].

Pallesen, S., Mentzoni, R. A., Morken, A. M., Engebø, J., Kaur, P., & Erevik, E. K. (2021). Changes over time and predictors of online gambling in three Norwegian population studies 2013–2019. *Frontiers in Psychiatry, 12*, 11. doi: <u>https://doi.org/10.3389/fpsyt.2021.597615</u>

Paxton, S. J., Neumark-Sztainer, D., Hannan, P. J., & Eisenberg, M. E. (2006). Body dissatisfaction prospectively predicts depressive mood and low self-esteem in adolescent girls and boys. *Journal of Clinical Child and Adolescent Psychology, 35*(4), 539-549.

Pedersen, M. T., Andersen, T. O., Clotworthy, A., Jensen, A. K., Strandberg-Larsen, K., Rod, N. H., & Varga, T. V. (2022). Time trends in mental health indicators during the initial 16 months of the COVID-19 pandemic in Denmark. *BMC Psychiatry, 22*, 13.

Pietrabissa, G., & Simpson, S. G. (2020). Psychological consequences of social isolation during COVID-19 outbreak. *Frontiers in Psychology, 11*, 2201.

Ramsdal, G. H., Bergvik, S., & Wynn, R. (2018). Long-term dropout from school and work and mental health in young adults in Norway: A qualitative interview-based study. *Cogent Psychology, 5*(1), 16. doi: <u>https://doi.org/10.1080/23311908.2018.1455365</u>

Randell, E. (2016). *Adolescent boys' health : managing emotions, masculinities and subjective social status*. Umeå: Umeå universitet.

Randell, E., Jerdén, L., Öhman, A., Starrin, B., & Flacking, R. (2015). Tough, sensitive and sincere: how adolescent boys manage masculinities and emotions. *International Journal of Adolescence and Youth*, 1-13.

Ranta, M., Silinskas, G., & Wilska, T.-A. (2020). Young adults' personal concerns during the COVID-19 pandemic in Finland: an issue for social concern. *International Journal of Sociology and Social Policy, 40*(9/10), 1201-1219.

Rehbein, F., Kliem, S., Baier, D., Mößle, T., & Petry, N. M. (2015). Prevalence of internet gaming disorder in German adolescents: diagnostic contribution of the nine DSM-5 criteria in a state-wide representative sample. *Addiction, 110*(5), 842-851. doi: <u>https://doi.org/10.1111/add.12849</u>

Roberts, S. (2018). *Young working-class men in transition*: Routledge.

Robertson, S. (2007). *Understanding men's health : masculinities, identity and wellbeing*. Maidenhead: Open University Press.

Sarasjarvi, K. K., Vuolanto, P. H., Solin, P. C. M., Appelqvist-Schmidlechner, K. L., Tamminen, N. M., Elovainio, M., & Therman, S. (2022). Subjective mental well-being among higher education students in Finland during the first wave of COVID-19. *SCANDINAVIAN JOURNAL OF PUBLIC HEALTH*. <u>doi:10.1177/14034948221075433</u>

Sartorius N. The meanings of health and its promotion. Croat Med J. 2006 Aug;47(4):662-4. PMID: 16909464; PMCID: PMC2080455. <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2080455</u>

Sivertsen, B., Knapstad, M., Petrie, K., O'Connor, R., Lonning, K. J., & Hysing, M. (2022). Changes in mental health problems and suicidal behaviour in students and their associations with COVID-19-related restrictions in Norway: a national repeated cross-sectional analysis. *BMJ Open, 12*(2), e057492. doi: <u>https://dx.doi.org/10.1136/bmjopen-2021-057492</u>

Sjögren, A., Engdahl, M., Hall, C. K. B., Holmlund, H., Lundin, M., Mühlrad, H., & Öckert, B. (2021). *Barn och unga under coronapandemin: lärdomar från forskning om uppväxtmiljö, skolgång, utbildning och arbetsmarknadsinträde*: Ehof Grafiska AB.

Soest, T. V., Bakken, A., Pedersen, W., & Sletten, M. A. (2020). Life satisfaction among adolescents before and during the COVID-19 pandemic. *Tidsskrift for den Norske Laegeforening, 140*(10), 30. doi: <u>https://dx.doi.org/10.4045/tidsskr.20.0437</u> Vid det tredje kvartalet Statista. Percentage of young people not in education, employment or training (NEET) in the Nordics from 1st quarter 2018 to 3rd quarter 2022. 2023 <u>https://www.statista.com/statistics/1233099/percentage-of-young-</u> <u>people-who-were-neet-the-nordics/</u> (hämtad 2023-10-05)

Sveinsdottir, V., Eriksen, H. R., Baste, V., Hetland, J., & Reme, S. E. (2018). Young adults at risk of early work disability: who are they? *BMC Public Health*, *18*(1), 1176. doi: <u>https://dx.doi.org/10.1186/s12889-018-6095-0</u>

Sveinsdottir, V., Lie, S. A., Bond, G. R., Eriksen, H. R., Tveito, T. H., Grasdal, A. L., & Reme, S. E. (2020). Individual placement and support for young adults at risk of early work disability (the SEED trial). A randomized controlled trial. *Scandinavian Journal of Work, Environment and Health, 46*(1), 50-59. doi: <u>https://dx.doi.org/10.5271/sjweh.3837</u>

Svensson, J., & Sundqvist, K. (2019). Gambling among Swedish youth: Predictors and prevalence among 15- and 17-year-old students. *Nordisk Alkohol- & Narkotikatidskrift, 36*(2), 177-189. doi: <u>https://dx.doi.org/10.1177/1455072518807788</u> Synnes, O., & Malterud, K. (2019). Queer narratives and minority stress: Stories from lesbian, gay and bisexual individuals in Norway. *Scandinavian Journal of Public Health, 47*(2), 105-114. doi: <u>https://dx.doi.org/10.1177/1403494818759841</u>

Thorhauge, A. M., & Gregersen, A. (2019). Individual pastime or focused social interaction: Gendered gaming practices among Danish youth. *New Media & Society, 21*(7), 1444-1464. doi: <u>https://doi.org/10.1177/1461444818823546</u>

Thorisdottir, I. E., Asgeirsdottir, B. B., Kristjansson, A. L., Valdimarsdottir, H. B., Jonsdottir Tolgyes, E. M., Sigfusson, J., . . . Halldorsdottir, T. (2021). Depressive symptoms, mental wellbeing, and substance use among adolescents before and during the COVID-19 pandemic in Iceland: a longitudinal, population-based study. *The Lancet. Psychiatry, 8*(8), 663-672.doi: <u>https://dx.doi.org/10.1016/S2215-</u> <u>0366(21)00156-5</u>

Thorpe, R. J., & Halkitis, P. N. (2016). Biopsychosocial Determinants of the Health of Boys and Men Across the Lifespan. *Behavioral Medicine, 42*(3), 129-131. <u>doi:10.1080/08964289.2016.1191231</u>

Tiikkaja, S., & Tindberg, Y. (2021). Poor School-Related Well-Being among Adolescents with Disabilities or ADHD. *International Journal of Environmental Research & Public Health [Electronic Resource], 19*(1), 21. doi: <u>https://dx.doi.org/10.3390/ijerph19010008</u>

Törrönen, J., Samuelsson, E., & Roumeliotis, F. (2020). Health, risk-taking and wellbeing: Doing gender in relation to discourses and practices of heavy drinking and health among young people. *Health, Risk & Society, 22*(5-6), 305-323. doi: <u>https://doi.org/10.1080/13698575.2020.1825640</u>

Ulset, V. S., Bakken, A., & von Soest, T. (2021). Adolescents' assessments of consequences of the pandemic after one year of COVID-19 restrictions. *Tidsskrift for den Norske Laegeforening, 141*(09), 28. doi: <u>https://dx.doi.org/10.4045/tidsskr.21.0335</u>

Vancea, M., & Utzet, M. (2017). How unemployment and precarious employment affect the health of young people: A scoping study on social determinants. *Scandinavian journal of public health, 45*(1), 73-84.

Vaynman, M. J., Sandberg, S., & Pedersen, W. (2020). 'Locker room talk': Male bonding and sexual degradation in drinking stories. *Culture, Health & Sexuality, 22*(11), 1235-1252. doi: <u>https://doi.org/10.1080/13691058.2019.1670864</u>

Vehmas, N., Holopainen, E., Suomalainen, L., & Savolainen-Peltonen, H. (2022). Somatic Health and Psychosocial Background Among Finnish Adolescents with Gender Dysphoria Seeking Hormonal Interventions. *Transgender health*, *7*(6), 505-513. Veldman, K., Reijneveld, S. A., Hviid Andersen, J., Nohr Winding, T., Labriola, M., Lund, T., & Bultmann, U. (2022). The timing and duration of depressive symptoms from adolescence to young adulthood and young adults' NEET status: the role of educational attainment. *Social Psychiatry and Psychiatric Epidemiology, 57*(1), 83-93. doi: <u>https://dx.doi.org/10.1007/s00127-021-02142-5</u>

von Soest, T., Kozak, M., Rodriguez-Cano, R., Fluit, D. H., Cortes-Garcia, L., Ulset, V. S., . . . Bakken, A. (2022). Adolescents' psychosocial well-being one year after the outbreak of the COVID-19 pandemic in Norway. *Nature Human Behaviour, 6*(2), 217-228. doi: <u>https://dx.doi.org/10.1038/s41562-021-01255-w</u>

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. doi:10.1037/dev0001102

Ward, M. R. (2018). Acceptable masculinities: Working-class young men and vocational education and training courses. *British Journal of Educational Studies*, *66*(2), 225-242.

Wirback, T., Forsell, Y., Larsson, J.-O., Engström, K., & Edhborg, M. (2018). Experiences of depression and help-seeking described by young Swedish men. *Psychology of Men & Masculinity, 19*(3), 407-417. doi: <u>https://doi.org/10.1037/men0000110</u>

Wurtzen, H., Clausen, L. H., Andersen, P. B., Santini, Z. I., Erkmen, J., & Pedersen, H. F. (2022). Mental well-being, health, and locus of control in Danish adults before and during COVID-19. *ACTA NEUROPSYCHIATRICA*. doi:10.1017/neu.2021.37

Zetterqvist, M., Jonsson, L. S., Landberg, A., & Svedin, C. G. (2021). A potential increase in adolescent nonsuicidal self-injury during covid-19: A comparison of data from three different time points during 2011 - 2021. *Psychiatry Research, 305*, 114208. doi: <u>https://dx.doi.org/10.1016/j.psychres.2021.114208</u>

Åkerstedt, T., Mittendorfer-Rutz, E., & Rahman, S. (2020). Sleep disturbance and work-related mental strain: A national prospective cohort study of the prediction of subsequent long-term sickness absence, disability pension and mortality. *Scandinavian Journal of Public Health, 48*(8), 888-895. <u>doi:10.1177/1403494820911813</u>

Reports

Aalto-Setälä T, Suvisaari J, Appelqvist-Schmidlechner K, Kiviruusu O, 2021. *Pandemia ja nuorten mielenterveys - Kouluterveyskysely* 2021. Tutkimuksesta tiiviisti 55/2021. Terveyden ja hyvinvoinnin laitos, Helsinki

Betydningen af Covid-19 krisen for mental sundhed, helbred og arbejdsmiljø Sanne Pagh Møller, Ola Ekholm, Lau Caspar Thygesen, 2021. Statens Institut for Folkesundhed, SDU, Elektronisk udgave: ISBN 978-87-7899-534-6

En ovanlig ungdom under coronatiden – Ungas levnadsförhållanden årsbok 2022. Årsboken Poikkeuksellinen nuoruus korona-aikaan – Nuorten elinolot 2022 (En ovanlig ungdom under coronatiden – Ungas levnadsförhållanden 2022) <u>https://urn.fi/URN:ISBN:978-952-343-937-5</u>

Nøkleby H, Borge TC, Johansen TB. *Konsekvenser av Covid-19-pandemien for barn og unges liv og psykiske helse: oppdatering av en hurtigoversikt*. [The effects of the Covid-19 pandemic on children and youth's life and mental health: An update of a rapid review] –2021. Oslo: Folkehelseinstituttet, 2021. ISBN 978-82-8406-230-3

NOU, Norges offentlige utredninger (2019) *Jenterom, gutterom og mulighetsrom. Likestillingsutfordringer blant barn og unge*.

Ojämlikheter i psykisk hälsa – Kunskapssammanställning (2019) Folkhälsomyndigheten

Pandemia ja nuorten mielenterveys: Kouluterveyskysely 2021. Aalto-Setälä, Terhi; Suvisaari, Jaana; Appelqvist-Schmidlechner, Kaija; Kiviruusu, Olli (2021) <u>https://urn.fi/URN:ISBN:978-952-343-738-8</u>

Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948.

Sociala utmaningar för unga i spåren av pandemin. Jonas Olofsson och Martin Kvist; FORTE, ISBN: 978-91-88561-41-1.

SOU. (2014). *Män och jämställdhet: betänkande*. Stockholm: Fritze.

Tilmann von Soest, Anders Bakken, Willy Pedersen & Mira A Sletten. 2020. Livstilfredshet blant ungdom før og under Covid-19-pandemien. *Tidsskr Nor Legeforen*. DOI: 10.4045/tidsskr.20.0437

Unga och Covid-19-pandemin – ungas livsvillkor, levnadsvanor och hälsa, (2022) Folkhälsomyndigheten

Vingård, E. (2015). *En kunskapsöversikt: Psykisk ohälsa, arbetsliv och sjukfrånvaro.* Stockholm: Forskningsrådet för hälsa, arbetsliv och välfärd.

Annex 1: Systematic literature search – methodology

A systematic literature search was conducted by two librarians, Alena Lindfors and Ulrika Gabrielsson, at Dalarna University. Based on the identified main areas of school and the workplace, the COVID-19 pandemic and notions and norms of masculinity, three sub-searches were created. The searches around the main theme of the pandemic were conducted in March 2022 in four databases, the searches around the main theme of masculinity were conducted in May 2022 in three databases, and the search around the main theme of school and the workplace was conducted in June 2022 in three databases. A detailed description of the searches as well as all search strategies can be found in the Appendix.

Literature search by the library at Dalarna University

Librarians Alena Lindfors and Ulrika Gabrielsson at Dalarna University developed the search strategy on mental ill-health among young men in the Nordic countries in consultation with the researcher. They then conducted the literature searches in various international databases and purged any duplicates from the search results. This Appendix describes the literature search strategy in more detail.

Search strategy

The librarians at Dalarna University, in consultation with the researcher, developed the search strategy based on the project description and the three questions in focus. Due to the large number of results that the test searches gave, it was decided to split the search into three sub-searches and search for each subquestion separately. Thus it ended up being one search for the area 'young men's mental ill-health in connection with the COVID-19 pandemic, one for young men's mental ill-health in connection with notions and norms of masculinity and norms, and one search for young men's mental ill-health in connection with school and the workplace.

The searches were divided into three basic search blocks: one for mental health, one for young men, and one for the Nordic countries. The search block for mental health was a modification of the search strategy used by the Public Health Agency of Sweden in its snapshot report *Is the COVID-19 pandemic affecting the mental health of the population?* (Public Health Agency of Sweden, 2020). All searches were limited to the publication years 2018–2020.

An additional specifically adapted search block was added to each sub-search. The sub-search on mental ill-health among young men in the Nordic countries in connection with the pandemic also contained a search block for the COVID-19 virus. The sub-search on mental ill-health among young men in the Nordic countries in connection with notions and norms of masculinity also contained a search block for masculinity, and the sub-search for school and the workplace contains a search block for school and the workplace.

All search blocks consisted of subject headings in the databases that use subject headings, and free text, partially truncated, that should be found in the title, abstract or keyword fields. The individual search terms in the search blocks were combined with the Boolean operator OR, and the search blocks in turn were combined with the Boolean operator AND so that at least one term from each search block was included in the results.

Databases, quality control and duplicate checks

The literature searches were conducted in the English-language databases Medline (Ovid), PsycInfo (ProQuest) and Web of Science, and the partial search concerning the pandemic was also conducted in the Coronavirus Research Database (ProQuest). Medline covers international literature in biomedicine and is produced by the United States' National Library of Medicine. PsycInfo is produced by the American Psychological Association (APA) and is the largest database of scholarly literature in the fields of mental health and behavioural sciences. The search block on mental health was omitted from the PsycInfo database search due to the database's focus. Web of Science is an interdisciplinary database owned and produced by the company Clarivate. The Coronavirus Research Database brings together openly accessible research on the coronavirus. In the Coronavirus Research Database, the COVID-19 virus search block was omitted due to the database's orientation, and the search strategy was simplified due to the database's performance limitations. The simplification consisted of a search with the field code noft, which means "anywhere except full text", instead of with the field codes for title, abstract and subject heading.

The search strategies were developed in the Medline database. The results were reviewed by researchers and librarians and then translated for the other databases. Librarians reviewed each other's search strategies using the Guideline Checklist (McGowan et al., 2016) of Peer Review of Electronic Search Strategies (PRESS) 2015 to assure the quality of the search strategies. The checklist is divided into points concerning translation of the search query, the use of Boolean operators and proximity operators, the use of subject headings and free text, spelling, syntax, line numbering, and limitations and filters. When completed, the search strategies were run by the librarians in the database. The sub-search concerning the pandemic was carried out on 24 March 2022, the sub-search concerning notions and norms of masculinity on 11 May 2022 and the sub-search concerning school and the workplace on 7 and 8 June 2022. The references were then loaded into the reference management program EndNote. A separate EndNote library was created for each sub-search. Finally, the librarians purged the references of duplicates according to the Bramer method for deduplication (Bramer et al., 2016).

References

Bramer, W. M., Giustini, D., de Jonge, G. B., Holland, L., & Bekhuis, T. (2016). Deduplication of database search results for systematic reviews in EndNote. *J Med Libr Assoc*, *104*(3), 240-243. <u>https://doi.org/10.3163/1536-5050.104.3.014</u>

Folkhälsomyndigheten. (2020). Påverkar covid-19-pandemin befolkningens psykiska hälsa? En snabb systematisk Forskningsöversikt ("rapid review") Version 1.0. <u>https://www.folkhalsomyndigheten.se/publikationer-och-</u> <u>material/publikationsarkiv/p/paverkar-covid-19-pandemin-befolkningens-psykiska-</u> <u>halsa/?pub=78907</u>

McGowan, J., Sampson, M., Salzwedel, D. M., Cogo, E., Foerster, V., & Lefebvre, C. (2016). PRESS Peer Review of Electronic Search Strategies: 2015 Guideline Statement. *J Clin Epidemiol*, *75*, 40-46. <u>https://doi.org/10.1016/j.jclinepi.2016.01.021</u>

About this publication

Young men's mental ill-health in the Nordics

A research overview encompassing education and training, the workplace and the pandemic

Eva Randell for NIKK, Nordic Information on Gender

TemaNord 2023:549

ISBN 978-92-893-7733-1 (PDF) ISBN 978-92-893-7734-8 (ONLINE) http://dx.doi.org/10.6027/temanord2023-549

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Cover photo: Nick Fancher/Unsplash Published: 28/11/2023

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