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This publication is also available online in a web-accessible version at https://pub.norden.org/temanord2022-560.

1.0 Introduction

1.1 Preface

Denmark held the presidency of the Nordic Council of Ministers in 2020 and initiated in this context the *Mental Distress among Nordic Youth Project*. As part of the project, the National Board of Social Services in Denmark has established a Nordic Network (hereinafter referred to as 'the Network') consisting of representatives from Denmark, Finland, Iceland, Norway, Sweden, the Faroe Islands and Greenland. During the project period 2020–2022, the network has been tasked with:

- Mapping out and describing relevant research-based knowledge across the Nordic region on the causes of increases in mental distress among youth aged 13–25 years, including knowledge about risk and protective factors for mental distress.
- Describing the cross-sectoral collaboration between social and health sectors in the Nordic countries in relation to youth regarding mental distress and mapping out national examples of practices within coherent cross-sectoral interventions towards youth who express mental distress.
- 3. Preparing a final report summarising the main results of the two discoveries of the causes and practical examples, respectively, and describing the Network's recommendations for a possible joint Nordic research project that can shed future light on the causes of mental distress and effective countermeasures.

The National Board of Social Services has published two publications based on the work done by the Network. One describes the results of the Network's mapping of knowledge on the risk and protective factors for mental distress among adolescents¹. The second describes the cross-sectoral collaboration between the social and health sectors in the Nordic countries in relation to youth regarding mental distress as well as examples of practices within coherent cross-sectoral interventions towards youth in mental distress².

This publication summarises the main results of the previous two mappings of risk and protective factors and examples of practices, respectively, and concludes the Mental Distress among Nordic Youth Project with the Network's recommendations for a future joint Nordic research project focusing on Nordic youth in mental distress. The report also describes lessons learned from the cooperation among the participants of the Network, including what has worked well and what has worked less well.

More detailed information on the findings in the first two publications are available for download from www.norden.org/en.

^{1.} https://pub.norden.org/temanord2022-522/

^{2.} https://pub.norden.org/temanord2022-502/

The report is addressed to the Nordic Council of Ministers, including the Committee of Civil Servants for Social and Health Policy (EK-S) which funded the project, and the Ministry of Social Affairs and Senior Citizens and the Ministry of Children and Education in Denmark.

The National Board of Social Services in Denmark would like to thank all the participants in the Network for good and constructive cooperation over the past two years and for their contributions to both this and the previous two publications. We would also like to thank The Norwegian Institute of Public Health, The Ministry of Social Affairs and Senior Citizens in Denmark, The Nordic Council of Ministers, NordForsk, The Nordic Welfare Centre and Nordregio, that have contributed with input to the Network's recommendations for a future joint Nordic research project focusing on mental distress among Nordic youth.

The representatives of the Nordic Network:

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1.2 Background information about the project

According to several surveys, the Nordic nations are among the happiest countries in the world³. However, this does not mean that all people in the Nordic region experience a high degree of life satisfaction and well-being. There has been a worrying increase in the number of young people who express mental distress and show signs of mental disorders across the Nordic countries in recent years.

A 2018 study showed that life satisfaction is uneven across different places in Scandinavia⁴. The same study shows that a considerable number of people in the Nordic region experience poor mental well-being. 13.5 percent of all young people in the Nordic region in the 18–23 age group express either dissatisfaction with their life or unhappiness⁵.

Among youths, some are at greater risk of experiencing mental distress and developing mental disorders than others. The overall pattern is that a greater proportion of young women than young men indicate either being dissatisfied or unhappy (Ibid.).

Several studies also document that young people with less socio-economic resources are at greater risk of developing severe mental distress than youth with strong socio-economic backgrounds⁶. Likewise, children of parents with severe mental disorders⁷, children and adolescents who have been subjected to abuse, or children and adolescents who are placed outside the home are at particular risk of experiencing mental distress and developing mental disorders (Ibid.).

Purpose of the project

The purpose of the project has therefore been to create more knowledge about the reasons for the increase in mental distress among youth in the Nordic region and gain more knowledge about projects and practices with positive outcomes for the target group implemented across the social and health sectors.

Secondly, the purpose of the project is, based on the findings, to describe recommendations for a possible joint Nordic research project that can shed future light on the causes of mental distress and effective countermeasures.

In the long term, the goal is thus to create a stronger knowledge base for future efforts to address the needs of youth who experience and express mental distress, so that efforts by the social and health care sectors to a greater extent are based on effective efforts, and that a more coherent effort is created across the two sectors.

^{3.} https://worldhappiness.report/archive/

^{4.} Birkjær, M. (2018): In the shadow of happiness. Nordic Council of Ministers, 2018

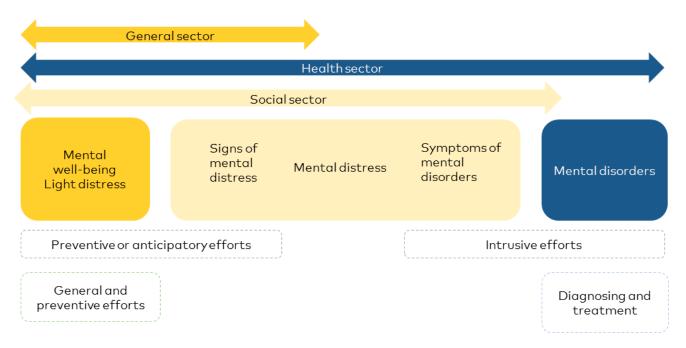
^{5.} Birkjær, M. (2018): In the shadow of happiness. Nordic Council of Ministers, 2018

Nordic Journal of Youth Research (2021): New vulnerability: nuances in our understanding of mental distress. Year 2, #2-2021, pp. 83–103

Merikukka, M., Ristikari, T., Tuulio-Henriksson, A., Gissler, M., & Laaksonen, M. (2018). Childhood determinants for early psychiatric disability pension: a 10-year follow-up study of the 1987 Finnish Birth Cohort. International Journal of Social Psychiatry, 64(8), 715–725.

Target group

The target group for this project is young people aged 13–25 who either show signs of mental distress, are in mental distress and/or show signs of mental disorders. Model 1 illustrates the target group (the light-yellow box).



Model 1. Description of the target group in relation to sector areas

The mental health problems among adolescents manifest themselves in stress, depression, anxiety, self-harm, consumption of antidepressant medications and, in extreme cases, suicide. Suicide is a particularly the case in Greenland and Finland. Although suicide is the cause of a third of all deaths among 15 to 24-year-olds⁸ in these two countries, Finland, ranks as the happiest country according to the World Happiness Report for 2020.

There are both societal and socio-economic consequences of an increasing number of youths experiencing mental distress. The mental distress can obviously vary in severity and duration and can be accompanied by more or less extensive social and health problems. The consequences of mental distress will be different for each young person and how this affects their well-being and development. For some youth, it can be difficult to attend school or work. For others it can be difficult to structure everyday life and participate in social activities together with other young people.

This all speaks to a greater scientific and professional focus on creating the right conditions *for young people to thrive*. Not only will it benefit the youth affected by mental distress and their relatives, but it will also have positive socio-economic effects (Ibid.).

^{8.} Birkjaer, M. (2018): In the shadow of happiness. Nordic Council of Ministers, 2018

Despite a great amount of research on risk and protective factors to mental health in general, there is a lack of knowledge across the Nordic countries about the causes of the increase in mental distress among young people during the last decade and limited knowledge about which initiatives may strengthen mental health among youth and how.

A Nordic analysis investigates unhappiness and life circumstances. It finds poor mental health as one of several reasons for unhappiness in the Nordic region and points to a need for further future research in general structures in society that can affect mental health⁹.

Mental health initiatives are either implemented in the social services sector or the health sector in the Nordic region. Therefore, it is relevant to investigate current coherent and coordinated initiatives across the health care and social services to illustrate possible challenges to the inclusion of young people in normal everyday life at school, in spare time jobs and in activities with other children and youth.

^{9.} Birkjaer, M. (2018): In the shadow of happiness. Nordic Council of Ministers, 2018

2.0 Main results — "A cross-Nordic mapping of associative factors to the increase of mental distress among youth"

2.1 Introduction

The Network has been tasked with covering relevant knowledge about the causes of the increase in mental distress among youth in the Nordic region, including knowledge about risk and protective factors for mental distress. Each of the participating Nordic countries conducted systematic searches for peer-reviewed research published in the period 2010–2020 based on national data. Knowledge was sought about risk and protective factors associated with mental distress among youth, aged 13–25 years.

This document presents the main points from the literature study. The comprehensive report from the literature study is described in the report entitled: Nordic Cooperation on Young People's Mental Health. A Cross-Nordic Mapping of Associative Factors to the Increase of Mental Distress Among Youth¹⁰.

2.2 Results

Overall, the literature search showed limited knowledge about specific *causes* of the increase in mental distress among young people in the Nordic countries. The literature included in the study therefore does not point to causes, but to correlations or associations between mental distress and various factors.

Based on the literature study, it is therefore not possible to conclude anything about causal relationships of the increase in mental distress among youth, but rather point to different risk and protective factors associated with mental distress.

It should be noted that mental well-being is complex. Mental well-being is an interplay of several different element that, in addition to our personal resources, opportunities and challenges, deal with social and societal influences. Therefore, explanations for mental well-being can often not be channeled down into individual topics, but they each carry a part of the explanatory factors.

The risk and protective factors are categorised as individual, social and structural factors, respectively, in the table below.

Table 1. Protective and risk factors linked to the increase in mental distress among young people

	Protective factors	Risk factors
Individual level	Active use of social media	Time spent on social media
	Young people who perceive themselves as culturally	Passive use of social media
	competent	
		Excessive dee or computer games
		Negative life events
		• Loneliness
		Low grades at school
		Poor performance at school
		Dissatisfaction with own appearance
		Negative body image
		Sedentary behaviour
		Lack of or poor sleep
		Consumption of intoxicants
		• Smoking
		Unaccompanied refugee minors
Social level	Strong offline relationships	Victim of internet bullying and traditional bullying
	Parents who show empathy, respect and	Victim of cybercrime
	consideration for young people	Problematic gaming behaviour
	 A good social environment in the classroom and at the school in general 	A bad social environment at school
	•	Parents with mental health problems
Structural level		Exposure to harmful online content
		Easily access to consumer credit and quick loans
		Placement in residential care, familial foster care or foster care
		Budget cuts in schools
		Lack of work or education
		Low socio-economic status in the family

Table 1 illustrates a gap in identified studies focusing on protective factors on an individual level and especially with none identified studies on protective factors on a structural level.

The identified risk and protective factors from the literature study are discussed in chapters 2.2.1. through 2.2.7.

2.2.1 Factors related to school and education

Factors related to school and education are relevant to look further into for understanding mental distress. In general, existing studies from the literature search show a connection between academic outcomes, the educational environment and student well-being.

Twelve of the studies found in the literature search investigate the link between different risk factors related to school and education such as low grades, bullying, budget cuts, lack of education, etc., and mental distress.

Associative factors from the literature search are:

- The psychosocial environment at school. There is a link between factors such as bullying, lack of social support from schoolmates, teachers and parents; schoolrelated stress, confidence in the classroom, trust and mental distress¹¹.
- 2. **The academic competencies of young people**. Two studies look at the link between the academic skills (grades) and mental health and show divergent results as to whether grades affect mental health in school¹².
- 3. Societal conditions. One study showed a link between budget cuts at schools and the subsequent development of psychiatric disorders and the risk of being on welfare in those children affected by the cuts. Another study shows that young people who are neither in work nor in education are at an increased risk of having low quality of life compared to young people in work or education¹³.

^{11.} Brandseth et al. 2019; Ringdal et al. 2020; Nielsen et al. 2015; Meilstrup et al. 2015; Uusitalo-Malmivaara 2014; Lönnfjord and Hagquist 2020; Nygren and Hagquist 2019

^{12.} Metsäpelto et al. 2020; Parhiala et al. 2017

^{13.} Huurre et al. 2014; Kivijärvi et al. 2018

2.2.2 Lifestyle factors and mental distress

The literature search identifies twenty-one studies. Among other things, the studies investigate factors such as the participation of young people in physical activity, their sleeping habits, smoking and alcohol consumption and the link between these habits and mental health.

It is important to emphasize that the studies consider links or correlations between different lifestyle factors and mental health rather than causes.

Associative factors from the literature search are:

- Physical activity. Eight of the studies included look at the link between physical
 activity and the presence of good or poor mental health among young people.
 One study showed no significant relationship between sedentary behavior and
 mental distress, but self-reported screen time was significantly associated with
 increased mental distress¹⁴.
- 2. Body image. Four studies have looked into links between different lifestyle factors, body image or satisfaction with one's own appearance and symptoms of mental distress. According to the studies, several symptoms of mental distress appear to have a link with the degree to which young people are satisfied with their own bodies and appearance¹⁵.
- 3. **Sleep**. Four studies indicate a link between sleep and mental distress in young people as well as a significantly greater risk of experiencing psychiatric problems. Energy drinks are associated with lack of sleep and therefore lower mental health¹⁶.
- 4. Smoking, alcohol and substance use. Five studies show that young people young people who drink alcohol and who smoke cigarettes and/or cannabis, have more depressive symptoms and a lower quality of life than their peers who abstain from this. The extent of consumption and onset age e.g. when youth start consuming is associated to mental health¹⁷.

Several of the studies on lifestyle factors and mental health have looked at potential gender differences and concluded that young women generally report more symptoms of mental distress than young men, which concurs with several studies into the extent and development of mental distress among young people in the Nordic Region.

^{14.} Baldursdottir et al. 2016; Gisladottir et al. 2013; Kleppang et al. 2018; Opdal et al. 2019; Appelqvist-Schmidlechner et al. 2020; Vedøy et al. 2020; Sigvartsen et al. 2016; Opdal et al. 2020

^{15.} Gestdottir et al. 2017; Hestetun and Svendsen 2019; Eidsdottir et al. 2013; Lankinen et al. 2018

^{16.} Koivusilta et al. 2016; Kortesoja et al. 2020;

^{17.} Pedersen et al. 2018; Ranjit et al. 2019; Sæther et al. 2019; Johannessen et al. 2017; Martikainen et al. 2018

2.2.3. Psychosocial problems and mental distress

14 studies from the literature search look at psychosocial problems such as loneliness, negative life events, bullying, self-harm, sexual abuse, the risk of psychiatric diagnoses among children in care, the link between the life satisfaction of parents and their children, emotional well-being, sexual orientation and transgenderism.

Associative factors from the literature search are:

- 1. Loneliness and negative life events. Young people are particularly vulnerable to negative life events such as physical violence in the home, divorce, rejection by friends and illness¹⁸. The studies point to the importance of actively preventing loneliness among vulnerable young people.
- 2. Bullying, self-harm, eating disorders and depressive symptoms. Bullying is linked to the increase in depressive symptoms¹⁹, and there is a link between self-harm and depressive symptoms²⁰ as well as a link between eating disorders, cannabis consumption and satisfaction with one's own appearance can help to explain the rising trend of depressive symptoms²¹. Girls are more likely to report symptoms of anxiety and depression than boys are 22.
- 3. Parents and life satisfaction in youth. Parent's life satisfaction and possible psychological disorders is associated to mental health among youth. Girls are more than twice as likely to suffer sexual abuse as boys are. The prevalence of sexual abuse in families with a low socio-economic status is greater among girls than among boys.²³
- 4. **Sexual orientation and identity.** Research shows that homosexual and transgender young people (LGBT+ youth) continue to experience different reactions from their family, friends and society. These reactions can have a negative impact on their mental well-being in a variety of different ways. Sexual minority youth report more emotional and behavioral symptoms from bullying compared with heterosexual youth. Social support from family and friends in particular is an important source of mental well-being among transgender youth²⁴.
- 5. **Being placed into care.** International studies show that children and young people in care are disproportionately more often afflicted by mental difficulties compared to other children and young people in general. The results of a study show that children in care are at a greater risk of substance abuse, psychotic or bipolar disorders, depression and anxiety as well as neurological disorders, compared to children who are not taken into care²⁵.

^{18.} Mann et al, 2014; Lyyra et al. 2018

^{19.} Sainio et al. 2013

^{20.} Tørmoen et al. 2020

^{21.} Von Soest et al. 2014

^{22.} Thorisdottir et al 2019

^{23.} Duineveld et al. 2017; Nielsen et al. 2016; Dobewall et al. 2019; Runarsdottir et al. 2019

^{24.} Thorsteinsson et al 2017; Alanko & Lund 2020; Kurgi-Kangas et al 2020

^{25.} Côtê et al. 2018

2.2.4 Ethnicity and migration

Five studies from the literature search were identified as relating to immigrant youth and mental distress.

Associative factors from the literature search are:

- The sense of belonging. Feeling belongingness and social identification connects
 to mental well-being²⁶. A study finds that immigrants but not descendants of
 immigrants have an increased risk of loneliness compared to adolescents with
 the majority origin²⁷. Socio-economic background affects mental well-being
 among immigrant youth²⁸.
- Post-migration issues. Discrimination is a risk factor to mental distress among an examined refugee minority group regardless of any pre-migration traumatic events. Higher levels of majority culture competencies/integration is a protective factor to social anxiety²⁹.

2.2.5. Culture, indigenous youth and mental distress

Indigenous youth in communities across the Circumpolar North experience significant health disparities and poorer mental health, irrespective of the measurement method, than non-indigenous youth³⁰. Arctic communities have experienced significant social and economic transitions and transformations over the last 50 years due to rapid changes in lifestyles and livelihoods across the Arctic. In the Nordic region, indigenous populations live in Greenland, Norway, Sweden, and Finland (Sapmi area).

Two scoping reviews in the literature search finds evidence of indigenous youth in communities across the Circumpolar North experiencing significant health issues and poorer mental health than non-indigenous youth. The children and youth of the Inuit and Sami population in the Nordic countries can be identified as a vulnerable group compared to the Nordic majority youth populations. Young Sami and Inuit especially in Greenland experience a higher degree of violence, abuse, suicidal thoughts, and suicide rates compared to their peers in the majority populations in the Nordic countries³¹.

There is a transition in research to emphasizing resilience and supporting protective factors such as knowledge in traditions and indigenous culture, ethnic pride, kinship, close relationship with parents etc. to enhancing indigenous youth mental health.

^{26.} Bratt 2015

^{27.} Madsen et al 2016

^{28.} Runarsdottir et al 2015

^{29.} Jensen et al, 2019; Jore et al 2020

^{30.} MacDonald et al. 2013

^{31.} Ingemann et al. 2018; MacDonald et al 2013

2.2.6. Use of digital media and mental distress

The literature search has shown no direct causal relation between the increase in mental distress among young people and the use of the internet and social media. Nevertheless, there are indications that excessive use of social media may contribute to the development of young people's mental distress³².

13 studies from the literature search illustrate in different ways how the use of digital media can be a risk or a protective factor for mental distress.

Associative factors from the literature search are:

- 1. Gaming, gambling behavior, cyberbullying and exposure to online information. The studies³³ look at young people's use of social media, gaming and gambling patterns and behavior, cyberbullying and exposure to online information as associative factors to young people's mental distress. The results indicate that young people's online gaming/gambling and gaming/gambling behavior in general can explain a number of psychological, social, and physical symptoms. In addition, gaming/gambling behavior can negatively influence young people's sleep, which can lead to depressive symptoms.
- 2. Social media use. Studies³⁴ show that internet use can have consequences for young people's mental well-being. According to a study³⁵, a distinction can be made between passive and active use of social media, where passive use is seemingly related to increased symptoms of anxiety and depression. The same symptoms are also seen in relation to young people's time spent on social media. Active use of social media is related to reduced symptoms of anxiety and depression. The association between time spent on social media and mental distress is greater for girls than boys.

^{32.} Ottosen & Andreasen, 2020

^{33.} Oksanen et al. 2018; Mannikkö et al. 2015; Nuutinen et al. 2014; Salmela-Aro et al. 2017; Sinkkonen et al 2018; Keipi et al 2015; Craig et al. 2020; Arnarsson et al. 2020; Bendixen et al. 2017; Kaaninen et al. 2017; Tiiri et al. 2020

^{34.} Thorisdottir et al. 2019; Thorisdottir et al. 2020

^{35.} Thorisdottir et al. 2019

2.2.7. Socio-economic factors to mental distress

Several Nordic studies indicate an association between inequalities in society and the prevalence of emotional symptoms among youths in the last decade. Socioeconomic factors are strongly associated with low mental well-being in a similar way to their association with common mental disorders, but they do not show a similarly strong association with high mental well-being.

Associative factors from the literature search are:

- Inequalities in society, childhood poverty and low parental socio-economic
 position. Research indicates that a low parental socio-economic status
 combined with parental psychiatric problems is associated with youth mental
 health. Research from the literature search have also identified family affluence
 and childhood poverty as associative factors to youth mental distress³⁶. Several
 studies indicate gender differences in the self-reported prevalence of mental
 distress, where females reported a higher prevalence and are more at risk of
 suffering from depression and socio-economic factors than males.
- 2. **Positive mental health and socio-economic status**. A positive mental health positively relates to socio-economic background³⁷. Relational or recreational behaviors are positively associated as predictors of positive mental health³⁸. These are defined as seeing family, friends, colleagues, volunteering, and being an active member of a community or social group, having someone to rely on for social support, and engaging in challenging activities/hobbies.
- 3. **Unemployment and subjective social status.** Youth unemployment is associated with mental distress³⁹. However, there are not enough findings from the literature search to reach a determination on whether unemployment has been researched as an explanatory factor on the increase in mental distress among youth in the years 2010 through 2020.
- 4. **Parental psychiatric problems**. Having a parent with a with a psychiatric disorder increase the risk of mental problems among youth⁴⁰.

For a detailed description of the identified risk and protection factors as well as associative factors to the increase in mental distress, see the paper entitled *Nordic Cooperation on Young People's Mental Health – A Cross-Nordic Mapping of Associative Factors to the Increase of Mental Distress among Youth* 41 .

^{36.} Due et al. 2019; Vilhjalmsdottir et al. 2018; Abebe et al. 2015; Torikka et al. 2014; Ristikari et al. 2018; Ristikari et al 2019

^{37.} Nielsen et al. 2016

^{38.} Santini et al. 2020

^{39.} Reneflot et al. 2014; Steen et al. 2020

^{40.} Merikukka et al. 2018

^{41.} https://pub.norden.org/temanord2022-522/

3.0 Main results — "Cross-Nordic collaboration and practice examples"

The Network's task has also been to map and describe interfaces between the health care and social services sectors in the Nordic region and provide examples of interventions or models of cooperation that cut across the two sectors based on a criterion of evidence of effect. The results of the mapping appear in the paper "Cross-Nordic collaboration and practice examples".

The paper describes the organization of the health and social sectors in the Nordic countries as well as 17 examples of interventions for youth who express mental distress and/or with mental disorders that cut across the social and health sectors. The purpose of describing the organization of efforts in each country is to create an overview of the context in which the examples of practices can operate. The identified examples of interventions from practices can be used as inspiration for the implementation and/or development of identical or similar interventions across the Nordic region. The examples of practices were selected based on a number of specific criteria inter alia including being evaluated with positive results, having a clearly defined target group, being cross-cutting, that is involve both the health care and social services sectors and a clearly defined and described target group based on the Network's defined target group.

Cross-sectoral collaboration in the Nordic countries

Overall, our work shows that the division of responsibilities and cooperation between the health and social sectors in relation to the response to the mental health problems and mental disorders of youth vary across the Nordic countries. The countries are divided into regions and municipalities, which respond to the mental health problems suffered by youth in many ways. Since the division of responsibilities is different between countries, so is the cross-sectoral collaboration.

Examples of practices

The examples of practices, all of which to a greater or lesser extent involve both the health care and the social services sector, target young people in mental distress or who have mental or emotional disorders. The examples are divided according to whether they are interventions or collaborative models/strategies. The interventions, in turn, are divided according to whether they are universal, selective or indicated interventions⁴². Most examples of practices are categorised as being selective efforts, but there are also a few examples of universal efforts and a single indicated effort.

^{42.} Universal interventions are interventions targeted at all youth, while selective and indicated interventions are targeted at youth who are at risk of developing a mental disorder and young people with incipient symptoms or signs of illness.

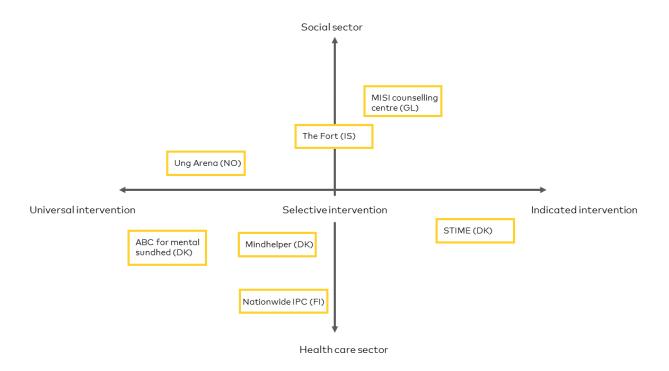


Figure 1. Practice examples: Universal, selective and indicated interventions

Overall, our work shows that the most common elements of the identified collaboration models and strategies are interdisciplinary collaboration and formalised and standardised methods, respectively. Interdisciplinary collaboration in this context means that the professionals organize themselves into interdisciplinary teams to ensure a more comprehensive effort. The teams provide counselling to professionals who support youth in the target group or direct counselling to the young people themselves. The formalised and standardised methods show examples of how working from strategies and standardised and formalised methods can contribute to a clear framework for professionals.

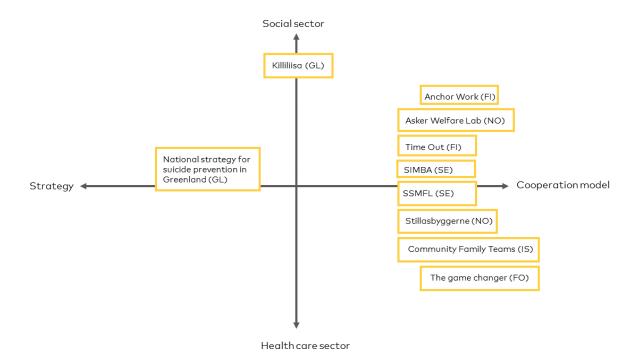


Figure 2. Practice examples of cross-sectoral national strategy or collaboration models

For a detailed description of how health and social sectors are organized in the Nordic countries and the 17 examples of interventions for young people who express mental distress or who have mental or emotional disorders, please see the paper: *Cross-Nordic collaboration and practice examples*⁴³.

^{43.} https://pub.norden.org/temanord2022-502/

4.0 Proposals for a future Nordic research project

As a conclusion to *Mental Distress Among Nordic Youth Project*, the Network is tasked with proposing a future joint Nordic research project that builds on the knowledge generated in connection with the Network's work on risk and protective factors for mental distress and effective cross-sectoral efforts.

In the first half of 2022, the Nordic network therefore held meetings with representatives from the Ministry of Social Affairs and Senior Citizens in Denmark, the Nordic Council of Ministers, and NordForsk⁴⁴. The Network also arranged meetings with the Nordic Welfare Centre⁴⁵ and Nordregio⁴⁶ to gather their opinions and perspectives for more cross-Nordic knowledge about youth in mental distress. In addition, the Nordic network wanted their input to a future research project and their suggestions for funding sources and research institutions that will be able to carry out the research project. A description of the various proposals for topics of a future cross-Nordic research project, which were mentioned at the meetings is found below. The proposals from the meetings for possible sources of funding and research institutions that could carry out a cross-Nordic research project are described thereafter.

The following proposals originates partly from the findings in the literature search as well as from the specific knowledge and perspectives found in the Nordic Network.

41 Proposal 1: A study on frameworks and structures in schools

One of the studies included in our work showed that structural conditions can have a negative impact on the psychological and emotional well-being of school pupils, and that large classes with many pupils, schools with limited material resources and lack of access to special education can negatively affect the well-being of children and youth. A study of the framework and structures in schools could therefore be a good extension to the Nordic Network's identification of risk and protective factors for mental distress among youth; ref. Chapter 2.

According to the Nordic Network, it will be relevant to focus on the importance of frameworks and structures in primary and secondary schools for the well-being of children and youth in a future Nordic research project. The thesis behind the proposal is that there are various kinds of frameworks for schools in the Nordic countries. It may be differences in legislation and rules on e.g. the number of students in each class, the length of the school day, rules on the inclusion of pupils with special needs and special education, as well as on examinations, tests, assignments and grading, etc. In the same way, there may be differences in rules and legislation on physical school environments across the Nordic countries, including e.g. differences in rules regarding the layout and size of classrooms, indoor climate, outdoor areas and facilities, as well as opportunities for exercise and movement during the school day.

^{44.} An organization under the Nordic Council of Ministers that supports research cooperations between Nordic research groups.

^{45.} An institution in the Nordic Council of Ministers' social and health sector.

^{46.} A Nordic research, advisory and analysis institute under the Nordic Council of Ministers.

A comparison of legislation and frameworks for schools in the individual Nordic countries as well as data on pupil well-being will give an indication of whether and how legislation and structural frameworks affect well-being, and whether certain frameworks and structures have a particularly negative or positive impact on the well-being of children and young people. The purpose of the study will thus be to contribute with knowledge about the importance of structures and frameworks in schools for the psychological well-being of children, and how to create the best framework for promoting well-being among children. What factors it will be relevant to investigate to compile a comparable picture of the framework across the Nordic countries will need to be clarified before any research project is initiated.

According to the Nordic Network, it will also be relevant to make a similar comparison of the structures and frameworks of secondary and higher education and the importance of this for the well-being of young people.

In 2019, the Icelandic Directorate for Health conducted a questionnaire survey, to which most kindergartens and primary schools and all secondary schools in Iceland responded. The purpose of the survey was to gain oversight of the status of mental health promotion in schools, prevention and support for children and youth in schools, and how the schools are promoting mental health and wellbeing among students. The survey also included questions to school staff on what they think is most needed to enhance promotion of mental health among students. The survey focused on ten different areas, including school policies and practices, equality and participation, and behaviour and communication.⁴⁷ The study may be used as an inspiration in connection with the implementation of the proposed research project on the importance of structures and frameworks in school for promoting well-being among children and youth.

42 Proposal 2: Interventions to promote mental health in schools

Seven of the studies included in the Network's identification of risk and protective factors have examined associations between mental distress and various factors such as bullying, social support from schoolmates, teachers and parents, school-related stress, and trust in the classroom. And a Among other things, the studies show that experiencing social support from one's classmates and homeroom teacher, and going to a class with a high degree of trust among pupils and between pupils and teachers, increases the mental and emotional well-being of the pupils. Conversely, being subjected to bullying or attending a class with a low degree of trust and high degree of bullying increases mental distress among the pupils. One of the studies also concludes that efforts to prevent and reduce bullying and improve the social climate of the classroom are important elements in the work to promote good mental health and well-being of schoolchildren. In a future research project, it may therefore be relevant to investigate which school-based initiatives exist to prevent and reduce bullying and improve the social climate in schools in the Nordic countries.

^{47.} Embætti Landlæknis, Directorate of Health (2019): Geðrækt, forvarnir og stuðningur við börn og ungmenni í skólum á Íslandi Niðurstöður landskönnunar.

^{48.} Brandseth et al. 2019; Ringdal et al. 2020; Nielsen et al. 2015; Meilstrup et al. 2015; Uusitalo-Malmivaara 2014; Lönnfjord and Hagquist 2020; Nygren and Hagquist 2019.

As a supplement to the research project mentioned under chapter 4.2, or as an independent research project, the Network proposes a study on existing initiatives to promote mental health in primary schools in the Nordic region. Relevant research questions could be: 1) what promising or effective school-based initiatives to promote childhood mental health are there in the Nordic countries, and (2) what common features, if any, are there in the initiatives that have shown good effect?

The research project would be a contribution to existing knowledge on effective school-based initiatives in the Nordic region and their common features, so schools and other operators in the field in the Nordic countries can learn from each other's experiences and develop initiatives to promote the mental health and well-being of children and youth based on a qualified knowledge base.

43 Proposal 3: Modern Parenting and Child Rearing

Several of the included studies in the Nordic Network's work on risk and protective factors deal with children and adolescents' relationships with their parents and the correlation of this with their mental health and well-being⁴⁹. The studies show, among other things, that the satisfaction parents express about life, and their socioeconomic status, have an impact on their children's mental health and well-being, and that poverty in childhood in particular is a significant risk factor for future mental distress. However, none of the studies focuses on the importance of parenting and child rearing for the well-being of children and young people.

Based on the research mentioned above, a topic that will be relevant for a joint Nordic research project is current parenting and child-rearing practices and their importance for the mental and emotional well-being of children and young people.

In modern Nordic welfare societies, most children and youth spend many hours outside the home in day-care centres and schools. Although the primary responsibility for raising children remains with the parents, the responsibility is in our modern society divided between the home and the kindergarten, day care centre and the school. At the same time, parenting styles in the Nordic countries have changed, so that children and youth are being included and heard and asked about how they feel and what they want, in a greater extent than ever before. Children's opinions are taken more seriously, and they are involved in decisions, which in many ways is positive because it equips them to dare to express themselves and makes them committed and interactive citizens. However, the disadvantage of the participatory and permissive parents that dominates in the Nordic region may be that some children and adolescents lack a solid framework for making their own decisions and may find it difficult to deal with the freedom and responsibility that comes with it.

In a future cross-Nordic research project, it will be relevant to examine characteristics on parenting and child rearing in the Nordic countries today, and what impact parents' way of raising children has on the development and well-being of their children. Relevant research questions could be; what expectations are there for parenting today, and whether parents experience greater uncertainty and anxiety about doing something wrong in parenting than in the past? What impact does it have on the well-being of children and young people that they have more freedom, co-determination and responsibility than before, and that they spend more time in an institution and less time with their parents?

^{49.} Duineveld et al. 2017; Nielsen et al. 2016; Dobewall et al. 2019; Runarsdottir et al. 2019.

44 Proposal 4: The impact of digital media on the mental health of children and youth

Finally, the Nordic Network proposes a joint Nordic research project focusing on the impact of social media on the mental health and well-being of children and youth. Over the past few decades, children and youth are using social media such as Facebook, Instagram etc. in a tremendously increasing trend across the Nordic region. According to a report by The Happiness Research Institute prepared for the Nordic Council of Ministers, Nordic youth are heavy consumers of social media and their consumption is significantly higher than consumption among youth in the rest of Europe⁵⁰.

In parallel with the increasing consumption of social media among young people, as we know already, there has also been an increase in the proportion of young people who report symptoms of mental distress. Researchers in the field disagree as to whether there is a correlation between the two trends.

On the one hand, there are researchers who argue that social media and digital technology in general, are the cause of the observed negative trends regarding the mental health of our youth. Several of the included studies in the Nordic Network's work examine the association between young people's use of digital media. Several of the studies examine the association between young people's use of digital media and mental well-being at the individual level. The results of these studies⁵¹ indicate that young people's online behaviour in general can explain a number of psychological, social, and physical symptoms among young people, as well as how gaming/gambling behaviour can negatively influence young people's sleep, which can lead to depressive symptoms.⁵²

The report from The Happiness Research Institute concludes that the use of social media among young people cannot be judged as something clearly positive or negative for their well-being without addressing the context in which social media is used at the same time.⁵³ For example, it depends on which platforms young people use, whether they are active or passive social media users,⁵⁴ how much time they spend on social media, etc.

One of the studies included in the Network's work on risk and protective factors shows, in line with this, that passive use of social media by young people is related to increased symptoms of anxiety and depression, while active use of social media is related to reduced symptoms of anxiety and depression⁵⁵.

The report from The Happiness Research Institute further concludes that – despite great public interest in the importance of social media consumption – there is still a lack of knowledge about how social media affects the well-being of young people, as the vast majority of studies cannot determine what is cause and what is effect. The

^{50.} The Happiness Research Institute (2019): The report entitled #StyrPåSoMe – Is social media actually a threat to the well-being of our youth? was prepared for the Nordic Council of Ministers.

Oksanen et al. 2018; Mannikkö et al. 2015; Nuutinen et al. 2014; Salmela-Aro et al. 2017; Thorisdottir et al. 2020; Thorisdottir et al. 2019

^{52.} Oksanen et al. 2018; Mannikkö et al. 2015

^{53.} Oksanen et al. 2018; Mannikkö et al. 2015

^{54.} Thorisdottir et al., (2019) defines active use of social media an act that "involves chatting, sharing photos, or status updates with a specific audience or posting other personal content that others can then comment or give likes" whereas "passive use refers to browsing, scrolling, reposting links, or looking at content from others"

^{55.} Thorisdottir et al. 2019

Network's coverage includes several studies pointing out that – over the past decade – social media is now a major part of young people's life" of young people, and quite little is known about how such media can affect young people's mental well-being. Two studies have investigated the association between young people's use of social media and their mental well-being⁵⁶ where passive use is seemingly related to increased symptoms of anxiety and depression. The same symptoms are also seen in relation to young people's time spent on social media. The association between time spent on social media and mental distress is greater for girls than boys.

It is therefore still an open question whether the use of social media creates dissatisfaction among young people, or whether young people who fail to thrive are more likely to use social media. In a future cross-Nordic research project, it will therefore be relevant to establish data that can follow the development of the well-being of young people and consumption of social media over a longer period and thus contribute with knowledge about cause-and-effect relationships.

4.5 Sources of funding

Several different sources of funding exist for a future cross-Nordic research project. Below are the two funding sources that the Nordic Network has identified as relevant, both of which fund research across the Nordic region.

- NordForsk (www.nordforsk.org) is an organization under the Nordic Council of
 Ministers that provides funding for and facilitates Nordic cooperation on
 research and research infrastructure. NordForsk was established in 2005 by the
 Nordic Council of Ministers for strengthening Nordic research. NordForsk's key
 stakeholders comprise the national research councils, universities, and other
 research-funding bodies. NordForsk seeks to enhance the quality, impact, and
 efficiency of Nordic research cooperation, thereby helping the Nordic region to
 become a world leader in research and innovation.
- **European Commission** (www.europa.eu): European Research Infrastructures are facilities that provide resources and services for research communities to conduct research and foster innovation. They can be used beyond research e.g. for education or public services and they may be single-sited, distributed, or virtual.

They include

- Major scientific equipment or sets of instruments
- Collections, archives, or scientific data
- Computing systems and communication networks
- Any other research and innovation infrastructure of a unique nature which is open to external users

There are several other sources of funding that are more or less relevant and should therefore be identified according to the topics of the research.

^{56.} Thorisdottir et al. 2020; Thorisdottir et al. 2019; Thorisdottir et al. 2020

4.6 Executing research institutions

There are also several different research institutions in the Nordic countries that can be both collaborators and that can execute a future cross-Nordic research project. Below are the institutions that the Nordic Network wishes to highlight:

Norwegian Institute of Public Health, Norway (http://www.fhi.no/en/)

The Norwegian Institute of Public Health is a government agency under the Ministry of Health and Care Services. Their mission is to produce, summarise and communicate knowledge to contribute to better public health, both in Norway and globally. The Norwegian Institute of Public Health executes its mission by producing primary research on mental and physical health, performing systematic reviews of existing research and evaluating efforts to improve health. The Norwegian Institute of Public Health has a national responsibility for coordinating research and data on mental health among young people in Norway, in order to increase knowledge of risk and protective factors, and about change in mental distress and well-being in this group.

• THL, Finland (www.thl.fi)

The Finnish Institute for Health and Welfare (THL) studies, monitors, and develops measures to promote the well-being and health of the population in Finland. They gather and produce information based on research and register data. They also provide expertise and solutions to support decision-making. They serve various parties: the government, municipal and provincial decision-makers, actors in the social welfare and health sector, organizations, the research community, and the public.

• VIVE, Denmark (www.vive.dk)

VIVE is an independent research and analysis centre operating under the Ministry of Social Affairs and Senior Citizens that carries out research and analysis projects in all the major aspects of welfare and the welfare state. VIVE initiates analyses and research projects and accept research commissions from a large number of clients including Danish municipal and regional authorities, agencies, government ministries and other organizations. VIVE's knowledge of welfare covers the areas of health, children, education, the elderly, employment, social services, management and impact measurement.

Karolinska, Sweden (www.ki.se)

Karolinska Institute is one of the world's leading medical universities with the vision to drive the development of knowledge about life and work for better health for all. In Sweden, Karolinska Institute accounts for the single largest proportion of medical academic research and has the largest range of medical educations.

• **Directorate of Health, Iceland** (www.landlaeknir.is)

The Directorate of Health is a government agency under the authority of the Ministry of Health. Its principal role is to promote high-quality and safe health

care of Iceland, health promotion and effective disease prevention measures. The Directorate of Health collaborates with the Icelandic Universities and affiliated research centres on various projects. In addition, the Directorate participates in numerous international projects.

• Almannaverkið, The Faroe Islands (www.av.fo)

Almannaverkið is the Department of Social Services in the Faroe Islands. Almannaverkið is the cornerstone of the Faroese welfare system. Its main function is to provide social services to our citizens.

• Centre for Public Health, Greenland (www.sdu.dk)

Research on the health of Greenland's population is placed in the Centre for Public Health in Greenland. The Centre conducts research pertaining to health and morbidity based on nationwide population surveys among adult Greenlanders. Population surveys are carried out by mandate from Greenland's Self Government, with the aim of ensuring that public health is monitored soundly.

5.0 Experience from co-operation in the Nordic Network

During the fifth meeting of the Network in May 2022, an evaluation of the functioning and cooperation of the Network was carried out.

Overall, the members of the Network agree that the project on mental distress among Nordic youth has been interesting and relevant.

However, it should also be mentioned that the project has been affected by COVID-19. Due to the pandemic, there have only been one physical meeting , which is considered to have had an impact on cooperation across the Nordic region.

5.1 The Network's accumulated cooperation

The members of the Network highlight the following positive elements of the cross-Nordic cooperation:

- It has been a productive network that has given rise to strengthening knowledge about the mental distress and mental health among young people across the Nordic region.
- The work has been characterised by high commitment from all members, which has contributed to relevant input to the three reports
- It has worked well for the members that one country has had overall management and responsibility for the project
- The frequency of meetings, with six meetings over three years, has been sufficient for the preparation of the project's three papers.
- The members agree that the project has been carried out with a good project management that has been organized in a good and meaningful way
- The members agree that the focus has been on an important and relevant topic for all countries in the Nordic region, where the challenges are largely the same.
- Members experienced a high degree of opportunity to share important knowledge and experiences across countries

The members of the Network highlight the following challenges of cross-Nordic cooperation:

- The purpose of the Network's work and tasks should have been clearer from the start. An initial meeting between The Nordic Council of Ministers and the Network could have framed the project from the start.
- To some extent, the COVID-19 pandemic made collaboration difficult and it has been challenging to create a community in the project. Therefore, the Network agrees that more physical meetings would have benefited the community positively.
- Among some of the members of the Network, it is mentioned that the Network should have consisted of researchers and the project could have been carried out under the framework of research.
- Throughout the duration of the project, there have been several replacements in both project management and among project participants. This is a vulnerability to the coherent work and to the network itself.
- Members therefore agree that more participants from each country should be appointed, also because the tasks have required different competences.

The members of the Nordic Network highlight the following points for future cross-Nordic cooperation:

- The members agree that a cross-Nordic network can be advantageously managed and managed by an organization/agency in one of the countries. Here it can be helpful to have one contact person in each of the Nordic countries.
- The members agree that it should be decided whether any future cross-Nordic network should have a research or practice focus.
- A cross-Nordic network can strengthen knowledge sharing about new research and new practice knowledge. The network could aid in identifying relevant areas of research that can influence the funding possibilities.
- A cross-Nordic network can benefit from meeting twice a year with fixed themes, hosting meetings alternating between countries, where the representatives to a certain extent can advantageously be homogeneous in terms of professional backgrounds depending on the topic.

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