Evaluation of school-based mental health promotion for adolescents

Focus on knowledge, stigma, help-seeking behaviour and resources

Antonía María Gestsdóttir

Thesis for the degree of Master of Public Health Sciences
University of Iceland
School of Health Sciences

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Supervisor: Guðrún Bryndís Guðmundsdóttir

Masters committee: Ragnhildur Guðmundsdóttir,
Salbjörg Bjarnadóttir and Sveinbjörn Kristjánsson

Faculty of Medicine

Centre of Public Health Sciences

School of Health Sciences

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Mat á skólamiðaðri geðheilsufræðslu fyrir unglinga

Áhersla á þekkingu, viðhorf, hjálparsækni og úrræði

Antonía María Gestsdóttir

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Umsjónarkennari: Guðrún Bryndís Guðmundsdóttir

Meistaranefnd: Ragnhildur Guðmundsdóttir,
Salbjörg Bjarnadóttir og Sveinbjörn Kristjánsson

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ABSTRACT

Mental health problems in children and adolescents are common; approximately one in five experience some form of emotional disorder. Mental health promotion has been seen as one of the keystones in reducing mental health problems in young people.

This study had two aims. First, to measure the basic *knowledge* of, *attitudes* toward, *help-seeking behaviour* and *resources* regarding mental health problems of 111 secondary school students in two schools, participating in a school-based mental health intervention. Second, to evaluate the impact of the school-based mental health intervention on these four factors for the intervention group relative to their control group in each school.

A non-equivalent control group design was used, with pre-testing and post-testing one week prior to and one week after the intervention. The intervention was a short presentation, delivered by one mental health professional and three consumers of the mental health service. The intervention consisted of education, discussions and handouts.

The results reveal that students in intervention group in School A had greater knowledge of mental illness, more positive attitudes and more previous contact with mental health problems at pre-test than their peers in School B. The effect of the intervention on the four subscales was substantial for both schools. After the intervention, knowledge, help-seeking behaviour and resources of the students in School A significantly increased. In School B knowledge and positive attitudes of students increased significantly after the intervention, as well as their resources.

In conclusion, a brief mental health intervention can be effective in increasing adolescents' knowledge of, positive attitudes toward, help-seeking behaviour and resources regarding mental health problems. School authorities should emphasize implanting more health-promoting education into schools as a part of the school curriculum and focus on a whole-school strategy of supporting the wellbeing of students, their parents and school staff.

ÁGRIP

Geðrænn vandi barna og unglinga er algengur, um það bil einn af hverjum fimm upplifir eitthvað form tilfinningalegs vanda. Geðheilsuefling hefur verið talin einn af lykilþáttum þess að minnka geðheilsuvanda ungs fólks.

Markmið rannsóknarinnar voru tvö. Hið fyrra var að mæla grundvallar *þekkingu, viðhorf, hjálparsækni* og *bjargráð* gagnvart geðheilsuvanda, hjá 111 nemendum í tveimur grunnskólum sem tóku þátt í skólamiðaðri geðheilsu íhlutun. Seinna markmiðið var að meta áhrif íhlutunarinnar á þessa fjóra þætti hjá íhlutunarhóp borið saman við samanburðarhóp.

Lagður var fyrir spurningalisti viku fyrir íhlutun og aftur viku eftir íhlutun og borinn saman við samanburðarhóp *(non-equivalent control group)*. Íhlutunin var stutt fræðsla sem flutt var af einum fagaðila innan geðheilbrigðisþjónustunnar og þremur notendum geðheilbrigðisþjónustunnar. Íhlutunin samanstóð af fræðslu, umræðum og dreifiritum.

Niðurstöður leiddu í ljós að nemendur í skóla A voru með meiri þekkingu á geðröskunum, höfðu jákvæðara viðhorf, og meiri fyrri þekkingu af geðrænum erfiðleikum á forprófi samanborið við jafnaldra sína í skóla B. Áhrif íhlutunarinnar á undirþættina fjóra voru umtalsverð. Þekking, hjálparsækni og bjargráð nemenda í íhlutunarhóp í skóla A jukust marktækt eftir íhlutun. Í skóla B jukust þekking og viðhorf nemenda í íhlutunarhóp marktækt auk þess að jákvæðar breytingar urðu á bjargráðum.

Niðurstöður gefa til kynna að stutt geðheilsufræðsla getur verið áhrifarík til að auka þekkingu unglinga, jákvæð viðhorf þeirra, hjálparsækni og bjargráð gagnvart geðheilsuvanda. Skólayfirvöld ættu að leggja áherslu á að auka heilseflandi geðfræðslu inn í skólana sem hluta af kennsluskrá skólans. Áhersla ætti einnig að vera sett á heildarstefnumótun til að styðja við vellíðan nemenda, foreldra þeirra og starfsfólks skólans.

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INTRODUCTION

Over the past decade there has been increasing interest, research and discussion of mental health needs and the challenges experienced by children and young people. Mental ill health has been reported as one of the biggest challenges facing every country in the European Region, with young people considered to be especially at risk [1]. Figures indicate that mental health problems are common in adolescents; approximately one in five experience some form of emotional disorder [2]. If the focus is extended beyond the limited perspective on diagnosable mental disorders, to include the number of young people experiencing psychosocial problems and those at risk of not maturing into responsible adults, the picture worsens. Well over half the students in many large urban schools manifest significant learning, behavioural, and emotional problems [3].

Given all the suffering, functional impairment, exposure to negative attitudes and discrimination and increased risk of premature death linked with mental disorders in children and adolescents, the public health significance is obvious. This significance multiplies since mental disorders in young people tend to persist into adulthood [4, 5]. Findings from Kessler et al. reveal that 50% of all lifelong mental disorders start by age 14 and 75% by age 24 [6].

Studies on the mental health of Icelandic children and adolescents have illustrated increased mental health problems, such as anxiety and depression [7]. Icelandic children also have the second highest prevalence of psychosomatic complaints in the Nordic countries [8]. Additionally, visits to healthcare specialists, i.e., psychiatrists, psychologists and social workers, have increased significantly from 1997 to 2006 [7]. In one nationwide Icelandic study, 11 430 students in the 8^{th}, 9^{th} and 10^{th} grades in secondary schools were asked about their emotions one week before an evaluation of how often, if ever, they had felt lonely, cried or felt like crying, been depressed or sad or felt like the future was hopeless. Of those answering 'often' or 'sometimes', 14.6% boys and 26.2% girl felt lonely; 5.6% boys and 32.5%

girls cried or felt like crying, 12% boys and 26.4% girls felt depressed or sad, and 9.4% boys and 12.6% girls felt the future was hopeless[9].

The consequences of mental health problems are seen in many arenas although most remarkably at school [3, 10]. It is therefore important to start implementing mental health promoting strategies early to reduce stigmatizing attitudes, increase factual knowledge about mental illness and teach young people where they can seek for help, and what they can do when feeling ill or down. Such timing provides an obvious gain for the adolescents, their families, the school system and the community over the long term.

Schools and mental health promotion

Given the role schooling plays in the lives of children and young people, the school setting has been identified as a critical environment for promoting and supporting mental and emotional wellbeing as well as identifying children and adolescents experiencing emotional stress [11]. Placing mental health promotion in schools has been seen as attractive for many reasons. Promoting mental health and wellbeing will not only improve young people's lives now but will also help reduce the future impact of mental illness, which can take a high toll on individuals as well as the community. Mental health promotion targets an entire population (e.g., a whole class in a school) and aims to enable and foster positive mental health. The focus is on positive terms concerning mental health problems instead of negative ones, i.e., teaching about common mental health problems instead of focusing on disorders and symptoms [12].

Schools have almost universal access to young people [11, 13, 14]; most children and adolescents spend a large proportion of their time in school, and there is no other setting where such a large proportion of children can be reached [15]; schools, being the major setting for formal education, present an efficient venue for obtaining the attention of the

majority of young people [16]. Additionally, the schools are known to have significant influence on children's behaviour and development [15]. Moreover, compelling evidence shows not only that there are strong positive associations between mental health and academic success, but also that emotional and behavioural health problems are significant barriers to learning [17-19] and increase the risk of early termination of education [20].

Knowledge

Education on mental health is a successful strategy to improve knowledge and to reduce negative attitudes and misconceptions about mental health and mental illness. Those who are more knowledgeable about mental illness are less likely to endorse stigma and discrimination as prejudice about mental illness has been shown to go hand in hand with ignorance [21-23]. Additionally, providing correct information about mental illness can help reduce the fears, myths and mistaken beliefs that some people have about mental disorders [24]. Programs aiming at increasing young people's knowledge of mental health through education have shown positive results in reducing negative attitudes towards people with mental illness [22, 25, 26]. Furthermore, improving the understanding of mental health problems will not only affect the individual who is educated but also the community. Rahman et al. illustrated that educating students in secondary schools about mental illness not only affected their understanding of mental health but that these children shared their new understanding with their family, friends and neighbours. Education is therefore a strong tool for enhancing knowledge and reducing negative attitudes towards mental health problems [27].

Attitudes

Negative attitudes often stem from a lack of accurate knowledge about mental disorders, where mental disorders are generally a topic that is frequently not discussed and often not openly addressed. This limited opportunity for education and learning then allows misunderstandings about mental illness to be maintained [28]. Stigma on people suffering from mental illness has serious consequences. Research has demonstrated a strong connection between perceived stigma and negative consequences for the stigmatised individual, such as lower self-esteem [23], decreased medical adherence [29], reduced social adaption [30] as well as reduced help-seeking behaviours [31-33].

Adolescence is regarded as a strategically vital time for implementing anti-stigma interventions mainly for two major reasons [34]. First, negative attitudes are evident in young children as young as five. Even though young children do not have clear understanding or characterization of people with mental illness, they seem to know that they are undesirable and to be avoided. Yet, even though their understanding becomes more sophisticated as children get older, they also show increased negative attitudes towards mental illness [35]. It is therefore important to address possible negative attitudes early on to be able to change them. Second, interventions aimed at reducing negative attitudes can promote help-seeking behaviour of young people facing the risk of a number of mental illnesses [36].

Research has found that successful strategies for reducing negative attitudes towards mental health problems should include education of the public about mental illness and facilitate contact between the public and people with mental illness [21, 23, 37, 38]. It has been shown that negative perceptions can change when people interact positively with individuals with mental illness. By providing accurate information and opening up a dialogue between students and individuals who have experienced mental illness, insight is provided into living with mental illness [24]. A growing body of research on young people suggests

that personal contact with people with mental illness can reduce negative attitudes towards mental ill health [21, 23, 24, 28, 38-40]. There is also evidence of more positive attitudes when people can relate their own experience to mental illness of others or family and friends [39, 41-43].

Some studies have shown promising results on students' initial attitudes towards mental illness were participants did not strongly support negative attitudes rather they indicated they were uncertain about many aspect of mental disorders [26, 39, 44].

Help-seeking behaviour

Only a minority of young people with mental health problems seek help from professionals [45]. The unwillingness of young people to seek professional help for mental health problems is increasingly being acknowledged as a challenge to successful early intervention approaches. Engaging children and adolescents in appropriate help is widely recognised as a basic preventive factor concerning mental health problems. Early treatment and prevention are fundamental during adolescence and young adulthood (age 12-24) because of the high prevalence of mental health problems at this stage of life [6].

Barriers to young people seeking help for their mental health problems range from concern over confidentiality from service providers or because of being seen going to a service to embarrassment and discomfort addressing their concerns. There are also structural factors like the opening hours of the service, cost and location [46]. Other barriers mentioned are, e.g., lack of factual knowledge on mental disorders, prejudice toward mental disorders and those availing themselves of mental health service, embarrassment about what others might say [33]; failure to recognize a problem as something to seek help for, unwillingness to seek help and lack of social norms supporting doing so, lack of access to proper services and

difficulty choosing a source of help [47] as well as lack of experience of the mental health system and how it is structured [48].

When adolescents do seek help for their mental health problems, it is generally from someone they know and trust. Decisive evidence from research shows that adolescents most frequently seek help from their family and friends [22, 33, 46, 48-51]. Other sources of help, after friends and family, are information on the Internet [52-54], from doctors, teachers, school counsellors [22, 53] and school nurses [22, 55, 56]. However, some adolescents still report they would not seek help from anyone [45, 48]. In one Australian study where young people (aged 12-17) were asked from whom they most frequently sought help, about half of all participants, mainly boys, reported not seeking help from anyone at all. If they sought help, it was from someone close, like friends and parents [46]. Another study at a Norwegian school of 11 154 students, aged 15-16, revealed that even at the highest level of symptoms for anxiety and depression, only about one third would seek help for their problem [45].

Differences in age and gender concerning help-seeking have also been reported in adolescents. Children and younger adolescents are generally more positive towards seeking help than older adolescents. This may be related to greater self-reliance and more autonomy in older adolescents than the younger ones, who are still more dependent on help from adults [46, 57]. In addition, adolescents seek help less often than adults, where help-seeking seems to increase with age [49]. Furthermore, girls are more willing to seek help for mental health problems than boys [33, 46, 49, 57, 58].

In an Icelandic study of 81 fourteen year-old children, more than half (54%) reported turning to their family for support when feeling unwell, then to friends (25%) [22]. Another Icelandic study of older students (16-20 years) shows similar results except for the older students revealing first looking to friends for help (47%) and then a family member (29%)

[48]. The younger students also looked for help from other resources i.e., 20% from a school counsellor, 18% from a doctor and 5% from a school nurse [22]. None of the older students mentioned other help-seeking resources, except 3.9% mentioned they would help themselves or not seek help at all. No gender difference was found in either of these studies concerning help-seeking behaviour.

Even though some studies demonstrate that students report little or no help-seeking behaviour inside school, increasing evidence is emerging that mental health problems in adolescents are increasing in schools [48, 55, 56]. A Swedish study on school nurses' views on schoolchildren's health, reveals psychosocial ill health is increasing although the children were physically healthy [56]. Results from an Icelandic study of nurses working in upper secondary schools (young people aged 16-20) revealed that even though most of the students sought help for physical problems, most of the school nurses' time was spent on those with mental health problems. The nurses explained that a large part of their work was spent on referrals to appropriate professionals or to different resources inside the healthcare system. Students did not seem to know where to seek help from the healthcare system, where to seek help for their health-related problems, or whether they had a general practitioner, and to what healthcare clinic they belonged. In the same study, when 205 students were asked where they would look for help when having mental health problems, no student reported they would seek help from school nurses [48].

It is of great public health importance to reduce the barriers to adolescents seeking help and multiply their choice of resources when they need help for mental health problems.

Resources

Emotional and mental health wellbeing does not mean never going through bad times or having emotional problems. Everyone experiences disappointments, loss, and change. While

these are normal parts of life, they can still cause sadness, anxiety, and stress. Consequently, it is important for children and adolescents to have resources to help them deal positively with their emotions, mental health and wellbeing [59].

First, it is worth mentioning adolescents' resilience (their ability to bounce back from negative events by using positive emotions to cope), and how resilience can enhance positive mental health. Resilient children are those who master normative developmental tasks in spite of experiencing significant adversity [60-63]. Two individuals facing the same family and social pressures may react differently, based on an unobserved trait like resilience [64]. The literature has indicated that factors associated with resilience lie on three levels: the individual, the family and the community, and all of these factors contribute to an individual's resilience [61, 63, 65]. Masten & Coatworth summarized the features of children and adolescents' resilience. Individual factor is having: good intellectual functioning, being sociable, easygoing disposition, high self-esteem and talents. Family factors include a close relationship to a caring parent figure, authoritative parenting providing warmth, structure and high expectations, socioeconomic advantages, and connections to extended supportive family networks. Examples of assets outside the family, in the community, are include having bonds with prosocial adults, connections with prosocial organizations, and attending effective schools [63].

Other resources suggested as influencing adolescents emotional wellbeing and mental health include physical activity [66-68], good nutrition [69], and getting enough rest/night sleep [70-72]. Other factors like positive emotions (joy, play, exploration) [73-75] and humour and laughter [76] and positive thinking [77] are also known to affect mental health positively. Furthermore, perceived capability to control one's own feelings and external stress factors has been shown to be important when dealing with emotions [78]. So have creative activities, such as art, music, dance and leisure [79-81].

Aim of study

The purpose of the study was to investigate two primary questions: first, what is Icelandic secondary school students' baseline: their self-reported *knowledge* of mental health; *attitudes* towards people with mental health problems; *help-seeking behaviour*, as in where do students look for help*;* and *resources*, what do they do to feel better when feeling down. Second, does participation in an intervention about mental health and ill health improve these four components related to mental illness? Our hypothesis was that the intervention group would show greater positive change between the pre-test and the post-test evaluations than the control group in respect of (1) *knowledge*; (2) *attitudes*; (3) *help-seeking behaviour;* and (4) *resources*.

To our best knowledge there is no study including all four components in health promotion education for adolescents. We argue that giving students more factual knowledge of common mental health problems in adolescence, contact with consumers of the mental health services, information on where to look for help, and what can be done when feeling down will increase their knowledge, help-seeking behaviour and resources as well as reduce possible stigma regarding mental illness.

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Evaluation on school-based mental health promotion for adolescents

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Antonía M. Gestsdóttir, Guðrún B. Guðmundsdóttir, Ragnhildur Guðmundsdóttir, Sveinbjörn Kristjánsson and Salbjörg Bjarnadóttir

Correspondence: Antonía María Gestsdóttir, Centre of Public Health Sciences, University of Iceland, Stapi v/Hringbraut, 101 Reykjavík, Iceland

amg1@hi.is

Abstract

The study had two aims: (1) to measure the basic *knowledge* of, *attitudes* toward, *help-seeking behaviour* and *resources* regarding mental health problems of 111 secondary school students in two schools, participating in a school-based mental health intervention; (2) to evaluate the impact of the school-based mental health intervention on these four factors.

A non-equivalent control group design was used, with pre- and post-testing. The intervention was a short presentation, delivered by mental health professional and consumers of the mental health service.

The results reveal difference between the schools at pre-test, students in School A had greater knowledge of mental illness, more positive attitudes and more previous contact with mental health problems than their peers in School B. The effect of the intervention on the four subscales was substantial for intervention group in both schools. Knowledge, help-seeking behaviour and resources of students in School A increased significantly. In School B knowledge and positive attitudes of students increased significantly after the intervention, as well as their resources.

In conclusion, a brief mental health intervention can have significant effect on adolescents' mental health. Future research should emphasize implanting more health-promoting education into schools as a part of the school curriculum.

Introduction

Figures indicate that mental health problems are common in adolescents; approximately one in five experience some form of emotional disorder [2]. Findings reveal that 50% of all lifelong mental disorders start by age 14 and 75% by age 24 [6]. If the focus is extended beyond the limited perspective on diagnosable mental disorders, to include the number of young people experiencing psychosocial problems and those at risk of not maturing into responsible adults, the picture worsens. Well over half the students in many large urban schools manifest significant learning, behavioural, and emotional problems [3]. Given the role schooling plays in the lives of children and young people, the school setting has been identified as a critical environment for promoting and supporting mental and emotional wellbeing as well as identifying children and adolescents experiencing emotional stress [11].

The purpose of the study was to investigate two primary questions: first, what is Icelandic secondary school students' baseline: their self-reported *knowledge* of mental health; *attitudes* towards people with mental health problems; *help-seeking behaviour,* as in where do students look for help*;* and *resources*, what do they do to feel better when feeling down. Second, does participation in an intervention about mental health and ill health improve these four components related to mental illness? Our hypothesis was that the intervention group would show greater positive change between the pre-test and the post-test evaluations than the control group in respect of (1) *knowledge*; (2) *attitudes*; (3) *help-seeking behaviour;* and (4) *resources*.

Methods

Design and settings

This was a quantitative intervention study with a design of a non-equivalent control group with pre- and post-testing [82]. The participants answered the same questionnaire a week before the intervention and a week after the intervention. The control group in each school filled out the questionnaires parallel to the students participating in the project. For ethical reasons, the control groups in both schools were able to participate in the intervention immediately after post-testing had been completed.

The study was carried out in two secondary schools in Reykjavik, Iceland. They were chosen because of their size, location and access to or lack of children's mental health care service in the area. The size of these schools was similar. School A was exclusively for adolescents in classes 8-10. The students come from three different schools in the neighbourhood where they have attended grades 1-7. School A is located close to the centre of Reykjavik and has no access to children's mental healthcare services. School B has classes ranging from grade 1 to 10, where most of the children had been together since first grade. It is situated in one of Reykjavik's suburb, and is one of few schools in Reykjavik with access to a Children's Mental Health Team inside the primary health care centre in the neighbourhood.

A letter was sent to the pupils and their parents containing information about the study, its design and the voluntary nature of the participation. Both parents and students had to give their consent for a student to be able to participate in the research. Furthermore, permission for the study was obtained from the schools' principals, the Educational Department of the City of Reykjavik, the National Bioethics Committee, and The Data Protection Authority.

Intervention

The intervention consisted of a presentation of 90 minutes, with handouts and discussions. The presentation was introduced to 10th grade students as part of a school subject called 'Life-skills'. The intervention was delivered by four people: a health professional working in the field of mental health and three persons who had experienced mental illness themselves. Two interventions programs were created and performed, one for the school staff and one for the students of each school, but this paper will only report the students' results.

The presentation was split into two 45 minutes parts. The part one was delivered by a health professional experienced in working with children and adolescents with mental illness. The presentation consisted of education on the common feelings of adolescents experiencing mental ill health (such as sadness, anger and stress), decreasing the stigma of mental illness, and increasing students' resilience when they are feeling down or in a crisis through, for example, advice on where in their environment they could turn for help, and what they could do to feel better. Furthermore, students received handouts with information about helpful websites in their own language, where they could enhance knowledge, information on help-seeking and resources and aid phone number 1717 at the Icelandic Red Cross. This provided students with 'tools' to help them develop and maintain their mental health. The second presentation was delivered by consumers of mental health services. Each time, two persons who had experienced mental illness shared their experience of depression or schizophrenia with the students. They discussed the symptoms of their disease, how it had affected their lives, what had helped them in their battle with the disease, and how their lives are now. In both lectures common and helpful advice was also imparted to the students, e.g., do not abandon your friends, do talk to someone you trust, as well as where to look for help [83]. Additionally, there was time for discussion after each lecture.

In both schools arrangements were made for a place students could turn to after the intervention if they did not feel well. The students were given the name and telephone number of a child and adolescent health professional working in the mental health field to whom they could turn after the lecture if they did not feel well. The school nurses in both schools were also available to talk to students if needed after the lecture.

In designing the intervention, special emphasis was laid on generating genuine interest in mental health issues in the adolescents through the structure of the lecture and materials and meeting a person with mental illness. While creating the intervention program, numerous helpful websites concerning children's and adolescence mental health were used [84-88].

Participants

Seven classes were randomly chosen to intervention classes (3 from School A, 2 from School B) and control classes (one from each school), total sum of 156 students. Of these 156 students, 111 participated in the study, completing both the pre- and post-test, and handing in consents for participation. The remaining 45 students were excluded from the study for failing to complete all the questionnaires due to absenteeism, turning in incomplete questionnaires or not having consent for participation.

Questionnaire

A questionnaire was constructed to measure the effect of the intervention. The questionnaire included both open and closed questions about the student's self-reported knowledge on mental health and mental illness (9 questions), attitudes toward people with mental illness (15 questions), from whom they seek help (14 questions), as well as their resources to feel better (7 questions). The statements were answered on a five-point Likert scale, from 'applies very well to me' to 'applies not very well to me' or from 'I strongly agree' to 'I strongly disagree'.

The higher score indicating more self-reported knowledge, more positive attitudes, increased help-seeking behaviour and resources. At the end of the questionnaire, participants were given the chance to answer some open-ended questions about what they liked and disliked about the presentation.

Items from other questionnaires were used as models, such as from Talking About Mental Illness-student version [24], Attitude Scale for Mental Illness (A modified version of the questionnaire), Opinions about Mental Illness in the Chinese Community (OMICC) [41], and Attitudes Toward Serious Mental Illness Scale – Adolescent version [44]. The questionnaire was pretested before use, on students of the same age. Subsequently, a few questions were rephrased. All the questionnaires were encrypted, so participants could not be identified at any point in the research.

Data analysis

The effects of the intervention were analyzed within each group by comparing the means of the four subtests (i.e., knowledge, attitude, help-seeking behaviour and resources) at pre-test and post-test, using the paired sample *t* test. Differences between both the intervention and control group within each school and differences between the schools on the four subtests were measured with the independent *t* test.

For further analyses, students were grouped by having previous contact with mental illness or not. To see whether a student had previous contact with mental illness, three questions were taken into consideration; I have had mental illness, I know someone well who has had mental illness (i.e., a family member or close friend) and I am acquainted with someone with mental illness (i.e., a schoolmate or neighbour). These three questions were recoded into a new variable named previous contact: students either had previous contact or

not. If appropriate in the analyses, answers from both schools were combined to gain more statistical power for comparing the data.

To get more information about the subtests, further analysis was performed. In the analysis of students help seeking behaviour, 13 answer possibilities were recoded into four new variables; help from friends, parents (i.e., mother and father), school staff inside the school (i.e., nurse, student counsellor, teacher, division manager, headmaster and other school staff) and help from resources in the community (i.e., primary health care, significant other, Internet and aid telephone line). Students' resources were examined more closely; the students answers were divided into six different resources; exercise, creation, isolation, consumption of food/drinks, companionship with others and release of emotions.

No significant gender difference was observed in any of the measured variables, in either the pre- or post-test, and gender is therefore not presented separately in the evaluation. The level of significance was $P < 0.05$ in all statistical analyses. Analyses were performed using the statistical software SPSS for Windows, version 17.0 (SPSS Inc., Chicago, IL, USA).

A pilot study was conducted in two classes in each school, with one intervention group and one control group. The pilot study collected information on the intervention program and materials, particularly in assessing the content and process of the program, related to the age of participants, time frame and set-up of the presentation, and students' acceptance of the program. Findings from the pilot study resulted in a different set-up of the presentation and reduction of the lecture material to make more time for discussion.

Results

A total of 111 students (71% response rate) completed the measures on both the pre-test and post-test (Table I). School A consisted of 54 students, 34 of them (63%) were in the intervention group and 20 (37%) in control group. The sample was 58.8% male in the intervention group versus 50% male in the control group. School B consisted of 57 students, 31 (54.4%) in the intervention group and 26 (45.6%) in the control group. The intervention group was 64.5% male the control group was 61.5%.

No significant differences were found in the pre-test between the intervention and control group in each school. However, there was a significant difference in students' knowledge between the intervention groups in School A vs. School B. At pre-test, the students in School A had more knowledge of mental health problems and more positive attitudes towards mental health problems than their peers in School B (Table II). It was of interest to find how many of the students had previous contact with mental illness. The results revealed a considerably higher number of students in school A than school B had had previous contact with mental illness (52.3% vs. 22.2%) (Table I). Students' help-seeking behaviour, where they would turn *first* for help, showed that students in School A (total score) turned first for help to their parents (34.9%) then equally to friends (30.2%) and resources in the community (30.2%). Only 4.7% of the students reported seeking help from school staff. The majority of students in School B (total scores) turned first for help to their parents (64.6%), their friends (25%) and from resources in the community (10.4%). No student looked for help first from school staff. The number of non-responders, those who did not respond to certain questions, from School A was considerably higher regarding previous contact than in school B (18.5% vs. 5.2%) and regarding where students would turn first for help (20.3% vs. 15.7%) (Table I).

The intervention groups in both schools show a positive effect from the intervention (Table II). Students in School A showed significant changes on three out of four subtests:

enhanced knowledge, greater help-seeking behaviour and increased use of resources. The intervention group in School B showed significant changes on two of the four subtests: increased knowledge and reduced negative attitudes. Positive changes in resources were also seen in School B even though they were not statistically significant. No changes were found in either of the control groups in School A or in School B on any of the four subtests from pre- to post test.

Furthermore, students in the intervention group in School B showed a statistically significant difference in knowledge after the intervention, compared with their control group (mean difference 6.7, p 0.001) (Table II). The intervention group in School A showed the same positive tendency concerning knowledge after the intervention, but the difference did not reach statistical significance. The other three subtests did not show as much change, but students' help-seeking behaviour in School A and attitudes in School B had clearly tended towards statistical significance at post-test (not in Table).

Students with prior experience of mental illness had significantly more knowledge of mental illness than their co-students, within both the intervention group (mean 25.2 vs. 15.2) and control group (mean 24.9, vs. 17.1) (Table III). After the presentation, the intervention group with previous experience of mental illness increased their knowledge (mean difference 2.8). Nevertheless, students having no previous contact with mental illness before the intervention increased their knowledge significantly after the intervention (mean difference 7.7). No changes in knowledge were detected at post-test in either of the control groups, whether they had previous contact or not. No significant differences were detected on the other three components: attitudes, help-seeking behaviour and resources.

The effect of the intervention on students' *general* help-seeking behaviour indicates that students in the intervention group in School A looked significantly more for help from their

parents after the intervention (Table IV). Students in School B who mainly looked for help from their parents at pre-test kept doing so after the intervention. As well, a positive increase was seen in help-seeking from friends. Additionally, intervention groups in both schools significantly improved their help-seeking sources from outside the school, especially from primary health care, the Internet and from help lines (not in table). No change was noted, from pre-test to post-test, in seeking help from school staff. No significant changes in help-seeking behaviour were seen in either of the control groups in School A and School B.

Students in interventions groups in both schools showed positive changes in their resources (Table V). After the intervention students in the intervention groups revealed significant positive changes in their resources when feeling down; they exercised more to feel better, utilized creation more in dealing with their emotions, sought more companionship with others when feeling down and more often used ways to release their emotions. Isolation and consumption of unhealthy food and drinks did not change. No changes were noted in the resources of control groups from pre-test to post-test. Students were offered to add other resources, than mentioned, that they use but that possibility was not used.

Discussion

Findings from the study suggest that a short-duration school-based intervention on mental health problems effectively increases students' self-reported knowledge of mental health, reduces negative attitudes towards mental health problems, encourages help-seeking behaviour and adds to people's resources for coping when feeling down. This study had two aims. The first was to measure the basic knowledge, attitudes, help-seeking behaviour and resources regarding mental health problems in the 111 secondary school students participating in the school-based mental health intervention. The second aim was to evaluate the impact of the intervention on these four factors for the intervention group relative to their control group in each school.

Regarding the first aim, the results of the pre-test reveal that students in School A had greater knowledge, more previous contact with mental illness and more positive attitudes than their peers in School B. One explanation for this difference between the schools at pre-test could be that since School A is exclusively a youth division, and adolescence is known to be the main period for onset of mental health problems [6], students in School A would be more exposed to mental health problems among peers than in School B. These findings are consistent with results from other studies that have found a positive association between better knowledge and understanding of mental health problems and less stigmatizing attitudes towards mental illness [23], and between previous contact with mental illness and more positive attitudes [39, 41-43].

Previous contact with mental illness was a significant factor for students' greater knowledge of mental health problems, both pre- and post-test. Interestingly, students indicating previous contact with mental illness did not score significantly differently on any of the other subcomponents: attitudes, help-seeking behaviour or resources. Findings from other

studies vary, some showing that when adolescents have family member with mental illness, they are less likely to support negative attitudes [22, 40, 43, 44], while other research found previous contact to be connected with greater blame and increased stigma [89].

Regarding the second aim, the results show that the intervention was effective. Students in School A demonstrated significant changes in three out of four factors: their knowledge of mental health, increased help-seeking behaviour and improvement in their resources for feeling better when feeling down. Students in School B illustrated significant changes in two out of four factors: in their knowledge of mental health and in their attitudes towards mental illness. In addition, a positive effect was also noted in students' increased resources. Our hypothesis that the intervention groups would show greater increase on post-test than their control groups was supported for School B concerning students' knowledge. Positive tendencies were seen regarding knowledge in School A and in help-seeking behaviour in both schools although this was not statistically significant. It is possible that the sample was too small to see a greater effect between the intervention and control groups.

Students in both intervention groups stated that their *knowledge* of mental illness had increased in general, with greater knowledge of symptoms, sources of help and resources.

Students' *attitudes* tended to become more positive towards mental health problems after the intervention, though changes were not as great as expected due to the students' positive attitudes at pre-test. Still, significant positive attitude changes were noted in School B but remained unchanged in School A. When responding to statements, it was more common students to report being 'unsure' about the statements, instead of taking a position either way, e.g., 'I strongly agree/I strongly disagree'. These results are consistent with results from Schulze et al. where students did not strongly endorse negative attitudes; rather, they indicated that they were uncertain about many aspects of mental illness [39]. This could be due to

students not being used to being asked their opinion on this subject; they might have wanted to answer in a socially desirable manner to please the questioner or simply might not have formulated their own opinion on the subject.

Appropriate *help-seeking* is widely recognized as a protective and successful factor for reducing the long-term impact of many mental health problems during adolescence [32, 47]. The results from the study reveal that students help-seeking behaviour, e.g., where students would turn 'first' for help or where they would look for help 'in general' when feeling down was ranked as similar. Both before and after the intervention, the majority of students would mainly turn for help to their parents, then friends and, last but not the least, community resources. These findings are consistent with other studies; adolescents turn primarily to family and friends for help [22, 33, 46, 48, 50, 51]. Seeking help from school staff was rare. In this research as well as in Sonja et al., findings suggest that students do not view the school staff as a source of help [48]. Students themselves do not report seeking help within the school, neither as their first source of help nor in general if they are feeling down and need help. During the intervention discussions students revealed different reasons for not seeking assistance within the school; the most discussed barrier was fearing a lack of confidentiality among school staff. Evidence is still emerging of increased emotional problems among children and adolescents in schools [48, 55, 56]. It is therefore important for students to know how and where to seek help within the school. They should know that school nurses and school counsellors are available and accessible to them for emotional problems as well as physical and educational problems. Help-seeking in the community increased significantly in the intervention groups in both schools, especially from Primary Health Care, the Internet and help lines. Studies of adolescents' use of Internet information have also indicated an increase in the use of the Internet in searching for health information [52, 53]. The help-seeking

behaviour of young people is fundamental to their mental health and wellbeing. Adolescents should be encouraged to seek help early and from appropriate sources [90].

During the education about *resources*, commonly used and healthy resources were emphasized, such as being together with others, releasing emotions, exercising and using different kinds of creativity to feel better, getting enough sleep and reducing stress. In that way helping the students to raise their awareness of their own strength and the role they can have in their own health. Students were alerted not to isolate themselves as well as to avoid consuming unhealthy food/drinks to change their feelings. During discussion students were encouraged to share their own resources to feel better. After the intervention significant positive changes were noted in the resources students said they would use to feel better. Among these resources were increased exercise, creative activities, increased time spent with others and use of more ways to release emotions. No resources were right or wrong; instead, the aim was to increase the number of resources students have to choose from in dealing with distress and present them with different methods for doing so as well as strengthening their own resources. It is of great importance that students have diverse resources for positively affecting their well-being. Resources are powerful tools for combating the first symptoms of mental health problems as well as being future resources for other difficulties students might face later in life.

Several clinical observations were made regarding the sample. Students' appearance and behaviour in the intervention differed between these two schools. Students in School A looked more adult, especially in their clothing and make-up; they were more interactive during the intervention and unabashed about asking questions during the presentation. Students in School B looked more their age, were quieter, listened to the presentation and then asked questions. Students in School A reported more previous contact with mental health

problems than their peers in School B (52% vs. 22%), but they also had lower response rate on that question, which could indicate that there is an association between previous contact and response on these questions, but this would have to be confirmed in independent observations.

An important clinical issue, noted after the intervention, is the necessity of having a health professional or other professional in mental health working together with consumers of the mental health service on this intervention. This is especially important for the discussions in class after the intervention. In our study several students opened up on difficult personal experiences, either their own or an experience of someone close to them suffering from mental health disorders. It is therefore, important that a health professional is ready to lead the discussion, evaluate the need for additional help and refer the student further if necessary. Three students in this study were referred to further mental health services after the intervention.

This study has somesums limitations. The response rate was average because of having to get written consent from a parent of every child in the study as well as consent from the students. Getting parents' signatures back turned out to be complicated. The main reasons were that the students forgot to deliver the consent form to their parents or bring it back to school. Furthermore, follow-up measures were not possible. Consequently, the long-term effect of the presentation cannot be determined, i.e., whether the improvements will persist or fade. Evidence from other studies of educational interventions indicates that improvements may persist in the short term (up to one month), at least for the subcomponent attitude [39, 40]. A decision was made to have intervention and control classes in each school instead of dividing schools into control and intervention schools. This was done to minimize selection bias, i.e. differences in socioeconomic status of students between schools and local history of

education on policy between schools as well as sources of help resources between the schools. This may perhaps decrease the effect of the intervention due to contamination between intervention and control groups in each school.

Future research should emphasize incorporating more health-promoting education into schools as part of the school curriculum and focusing on a whole-school strategy of supporting the wellbeing of students, their parents and school staff. The mental health training should be given more time in order to achieve better results. Closer study would be worthwhile of students' help-seeking behaviour, and why they tend not to seek help within their school, e.g., from school nurses and school counsellors, as they should be a source of help for them. Studies on school nurses' work reveal that mental problems are increasing among students [48, 55, 56]. The statistics behind this increase would be worth studying. Are the same students returning again and again? Are the cases getting more difficult? Studies have shown that younger children are more willing than older ones to seek help [46, 57]. What is the age distribution for children and adolescents seeking help?

Getting information on students' help-seeking behaviour is important, particularly when mental health education is being planned for adolescents. According to this study's findings, emphasis should be put on educating parents (family) and friends since they are generally the first to encounter adolescents' mental health problem. The focus should be on providing these persons with a basic knowledge of mental health problems – for example, the first stages of help and what can be done when someone is feeling down. However, the role of the school cannot be underrated. The problems exist even though students themselves do not report turning to school staff for help. It is therefore important for school-staff, especially school nurses, school counsellors, teachers or other professionals working within the school, to be capable and ready to respond to students dealing with emerging mental health problems.

There should be increased emphasis in the schools on teaching students where to seek help with their emotional problems, what they can do to feel better and reduce negative attitudes towards mental illness.

The high prevalence of mental and emotional problems calls for alternative approaches to reducing child and adolescent mental health problems. There are simply not enough trained clinicians to meet this need, making specialized programs providing face-to-face care for all of those with problems unlikely [91]. School-based mental health promotion can therefore be an effective approach since it educates all of the students in a class, not just those with emotional problems. Potentially, it can also help identify children with mental health needs not already evident [92].

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Table I. Sample description

Frequencies	School A Intervention	School A Control	School A Total	School B Intervention	School B Control	School B Total
N	34 (63%)	20 (37%)	54 (100%)	31 (54.4%)	26 (45.6%)	57 (100%)
Gender						
Male	20 (58.8%)	10 (50%)	30 (55.6%)	20 (64.5%)	16 (61.5%)	36 (63.2%)
Female	14 (41.2%)	10 (50%)	24 (44.4%)	11 (35.5%)	10 (38.5%)	21 (36.8%)
Previous Contact [a]						
No	12 (42.9%)	9 (56.2%)	21 (47.7%)	22 (73.3%)	20 (83.3%)	42 (77.8%)
Yes	16 (57.1%)	7 (43.8%)	23 (52.3%)	8 (26.7%)	4 (16.7%)	12 (22.2%)
Thereof:						
Myself	5 (31.3%)	1 (14.3%)	6 (26.1%)	2 (25%)	2 (50%)	4 (33.3%)
Close friend/relative	9 (56.3%)	5 (71.4%)	14 (60.9%)	5 (62.5%)	2 (50%)	7 (58.3%)
Acquaintance	12 (75%)	4 (57.1%)	16 (69.6%)	3 (37.5%)	2 (50%)	5 (41.7%)
Help seeking behaviour [a]						
Friends	7 (25.9%)	6 (37.5%)	13 (30.2%)	6 (25%)	6 (25%)	12 (25%)
Parents	9 (33.3%)	6 (37.5%)	15 (34.9%)	15 (62.5%)	16 (66.7%)	31 (64.6%)
School staff	2 (7.4%)	0 (0%)	2 (4.7%)	0 (0%)	0 (0%)	0 (0%)
Resources in community	9 (33.3%)	4 (25%)	13 (30.2%)	3 (12.5%)	2 (8.3%)	5 (10.4%)

[a] Variation in total denominator is due to missing information.

Table II. Effect of intervention on students' knowledge, attitudes, help-seeking behaviour and resources

		Pre-test				Post-test		Pre-test vs. Post-test			
		Mean Score		Mean Difference (95%CI)		Mean Score		Mean Difference (95%CI) from pre-test		Mean Difference (95%CI) from pre-test	
		Intervention Group	Control Group		P	Intervention Group	Control Group	Intervention Group	P	Control Group	P
School A	Knowledge [c]	20.6 [a]	19.7	1.5 (-2.5 to 5.5)	0.461	25.8	22.3	5.2 (2.8 to 7.6)	< 0.001	2.6 (-1.0 to 6.2)	0.144
	Attitude [d]	50.9	50.0	1.9 (-3.0 to 6.8)	0.432	51.0	50.2	0.1 (-2.8 to 2.9)	0.959	0.2 (-2.4 to 2.8)	0.869
	Help-seeking [e]	28.0	26.1	2.6 (-1.4 to 6.5)	0.197	31.9	27.4	3.9 (1.2 to 6.7)	0.007	1.3 (-0.9 to 3.4)	0.225
	Resources [f]	19.6	19.1	0.2 (-1.7 to 2.2)	0.793	21.1	20.4	1.5 (0.4 to 2.7)	0.011	1.3 (-0.6 to 3.3)	0.162
School B	Knowledge [c]	17.8 [a]	17.1	-1.4 (-4.8 to 2.0)	0.424	24.1	16.7	6.3 (4.4 to 8.2) [b]	< 0.001	-0.4 (-2.5 to 1.7) [b]	0.707
	Attitude [d]	47.5	47.7	-0.2 (-4.4 to 4.1)	0.938	50.7	48.7	3.1 (0.7 to 5.6)	0.014	1.0 (-1.6 to 3.7)	0.421
	Help-seeking [e]	31.9	29.9	0.9 (-3.9 to 5.8)	0.704	32.3	32.1	0.4 (-1.7 to 2.5)	0.703	2.2 (-2.2 to 6.7)	0.311
	Resources [f]	19.4	20.6	-1.2 (-3.7 to 1.2)	0.312	20.7	20.7	1.3 (-0.1 to 2.7)	0.052	0.2 (-1.1 to 1.5)	0.785

[a] Significant difference (mean difference 3.9, p 0.030)

[b] Significant difference (mean difference 6.7, p 0.001)

[c] Score range: 9-40

[d] Score range: 15-78

[e] Score range: 14-65

[f] Score range: 6-30

Table III. Effect of the intervention on students' knowledge, attitudes, help-seeking behaviour and resources through previous contact with mental illness

	Intervention groups						Control groups					
	No previous contact		Previous contact				No previous contact		Previous contact			
	N	Mean score	N	Mean score	Mean difference (95% CI)	Significance	N	Mean score	N	Mean score	Mean difference (95% CI)	Significance
Pre-test												
Knowledge	34	15.2	24	25.2	10.0 (7.3 to 12.7)	< 0.001	29	17.1	11	24.9	7.8 (4.2 to 11.5)	< 0.001
Attitude	34	49.3	24	49.4	0.1 (-4.6 to 4.7)	0.972	29	47.6	11	50.7	3.1 (-2.1 to 8.3)	0.232
Help-seeking	34	29.8	24	30.9	1.1 (-3.5 to 5.7)	0.636	28	28.3	11	28.9	0.6 (-5.0 to 6.2)	0.833
Resource	34	19.0	24	19.5	0.4 (-1.8 to 2.6)	0.698	28	19.9	11	20.4	0.4 (-2.2 to 3.1)	0.742
Difference variables												
Knowledge difference	32	7.7	22	2.8	-4.8 (-7.7 to 2.0)	0.001	28	0.1	7	4.4	4.4 (-0.5 to 9.2)	0.078
Attitude difference	32	1.1	22	2.1	1.0 (-2.9 to 5.0)	0.603	28	0.8	7	1.4	0.6 (-4.2 to 5.5)	0.788
Help-seeking difference	32	2.8	22	0.8	-2.0 (-5.7 to 1.7)	0.279	28	2.2	7	1.7	-0.5 (-7.9 to 6.9)	0.892
Resource difference	32	1.3	22	1.6	0.3 (-1.5 to 2.1)	0.770	28	0.4	7	0.4	0.0 (-2.7 to 2.8)	0.979

Table IV. Help-seeking behaviour, where students seek help in general when feeling down

	School A								School B							
	Intervention group				Control group				Intervention group				Control group			
	N	Pre-test	Post-test	P	N	Pre-test	Post-test	P	N	Pre-test	Post-test	P	N	Pre-test	Post-test	P
Friends [a]	28	3.3	3.3	0.857	15	3.3	3.6	0.217	28	3.7	3.6	0.573	23	3.5	3.7	0.203
Parents [b]	25	5.9	6.9	0.020	14	6.4	6.6	0.557	28	7.7	7.6	0.708	22	6.9	7.6	0.204
HS-from school staff [c]	26	10.9	11.0	0.874	13	7.7	7.2	0.068	28	12.1	11.2	0.163	23	10.4	12.4	0.155
HS-outside school [d]	20	8.7	11.3	0.001	15	8.8	10.0	0.051	25	8.4	9.8	0.025	19	9.9	9.0	0.120

[a] Score range: 1-6

[b] Score range: 2-10

[c] Score range: 6-30

[d] Score range: 4-20

Table V. Resources, what students' do to feel better when feeling down

	Intervention group				Control group			
	N	Pre-test	Post-test	P	N	Pre-test	Post-test	P
Exercise [a]	56	3.6	3.9	0.020	38	3.4	3.4	0.729
Creation [a]	54	3.0	3.2	0.025	36	2.9	3.1	0.353
Isolation [a]	56	3.5	3.5	0.655	38	3.9	4.0	0.500
Consumption of food/drinks [a]	56	2.9	3.0	0.381	38	3.1	3.2	0.744
Companionship with others [a]	56	3.6	3.9	0.034	38	3.5	3.6	0.350
Release of emotions [a]	56	3.0	3.4	0.004	38	3.4	3.4	0.806

[a] Score range: 1-5

CONCLUSION

The present work represents the impact of a short-duration school-based mental health intervention for adolescents. Findings from this study suggest that a school-based intervention on mental health problems is effective in increasing students' self-reported knowledge on mental health, reducing negative attitudes towards mental health problems, encouraging help-seeking behaviour and adding to their resources of things to do when feeling down.

The results from this study are encouraging for those working towards mental health through promotion, prevention and education. Although there is much to be studied, research like this suggests that providing adolescents with a basic knowledge of mental health problems can affect their attitudes as well as increase their help-seeking behaviour and give them more 'tools' to work with to improve their mental health. School authorities should emphasize implanting more health-promoting education into schools as a part of the school curriculum and focus on a whole-school strategy of supporting the wellbeing of students, their parents and school staff.

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APPENDIX A

Questionnaire I – Pre-test

Hvað veist þú um geðraskanir?

Drengur ☐ Stúlka ☐ Dagsetning:_____

Fyllti út mat I ☐
Hlustaði á fræðslu, veitta af Antoníu iðjuþjálfa, Steindóri og Hallgrími frá Hugarafli ☐

1. Hvað er geðheilsa?_____
_____
_____

Hér er spurt um þekkingu á geðröskunum.
Hversu vel eiga eftirfarandi fullyrðingar við um þig?
Merktu í EINN reit í HVERJUM lið.

	Á mjög vel við um mig	Á frekar vel við um mig	Hvorki né	Á frekar illa við um mig	Á mjög illa við um mig
2. Ég veit mikið um geðraskanir almennt	☐	☐	☐	☐	☐
3. Ég þekki einkenni geðraskana	☐	☐	☐	☐	☐
4. Ég veit mikið um hvernig fólki getur liðið sem er með geðröskun	☐	☐	☐	☐	☐
5. Ég þekki vel einhvern sem þjáist af geðröskun *(t.d. fjölskyldumeðlimur, góður vinur)*	☐	☐	☐	☐	☐
6. Ég kannast við einhvern sem þjáist af geðröskun *(t.d. skólafélagi, nágranni)*	☐	☐	☐	☐	☐
7. Ég hef verið með geðrænan vanda	☐	☐	☐	☐	☐
8. Ég þekki mismunandi úrræði, hvert hægt er að leita, þegar mér líður illa tilfinningalega	☐	☐	☐	☐	☐
9. Ég þekki mismunandi leiðir til að láta mér líða betur	☐	☐	☐	☐	☐

Hér er spurt um viðhorf til geðraskana.
Hversu sammála eða ósammála ertu eftirfarandi fullyrðingum?
Merktu í EINN reit í HVERJUM lið.

	Mjög sammála	Frekar sammála	Hvorki né	Frekar ósammála	Mjög ósammála
10. Ef ég ætti ættingja með geðröskun, vildi ég ekki að neinn vissi af því	☐	☐	☐	☐	☐
11. Flestir vina minna myndu finnast ég veikburða ef þeir héldu að ég hefði geðröskun	☐	☐	☐	☐	☐
12. Fólk með geðröskun hræðir mig	☐	☐	☐	☐	☐
13. Mér finnst fólk með geðröskun skrítið	☐	☐	☐	☐	☐
14.Ég held að það sé í raun ekkert sem heitir geðröskun; sumir eru bara öðruvísi	☐	☐	☐	☐	☐
15.Ég hef stundum áhyggjur af því að ég geti verið með geðrænan vanda	☐	☐	☐	☐	☐
16. Ég myndi ekki umgangast manneskju með geðröskun	☐	☐	☐	☐	☐
17. Það er auðvelt sjá hver er með geðröskun	☐	☐	☐	☐	☐
18. Ef maður veikist af geðröskun er líf manns nánast ónýtt	☐	☐	☐	☐	☐
19. Ég held að allir geti fengið geðröskun, líka ég	☐	☐	☐	☐	☐
20. Mér finnst fólk fordómafullt gagnvart þeim sem eru með geðröskun	☐	☐	☐	☐	☐
21. Fólk með geðröskun er ofbeldisfullt	☐	☐	☐	☐	☐
22. Unglingar með geðröskun eiga erfitt með að eiga góða vini	☐	☐	☐	☐	☐
23. Unglingar með geðröskun eiga erfitt með að komast aftur inn í vinahópinn eftir veikindi	☐	☐	☐	☐	☐
24. Stuðningur fjölskyldu og vina getur hjálpað unglingi með geðröskun að ná bata	☐	☐	☐	☐	☐

Hér er spurt um val á úrræðum, hvert þú myndir leita í vanlíðan.
Hversu vel eiga eftirfarandi fullyrðingar við um þig?
Merktu í EINN reit í HVERJUM lið

	Á mjög vel við um mig	Á frekar vel við um mig	Hvorki né	Á frekar illa við um mig	Á mjög illa við um mig
25. Ef mér liði illa myndi ég tala við vini mína	☐	☐	☐	☐	☐
26. Ef mér liði illa myndi ég tala við móður mína	☐	☐	☐	☐	☐
27. Ef mér liði illa myndi ég tala við föður minn	☐	☐	☐	☐	☐
28. Ef mér liði illa myndi ég tala við skólahjúkrunarfræðing	☐	☐	☐	☐	☐
29. Ef mér liði illa myndi ég tala við námsráðgjafa	☐	☐	☐	☐	☐
30. Ef mér liði illa myndi ég tala við kennara	☐	☐	☐	☐	☐
31. Ef mér liði illa myndi ég tala við deildarstjóra skólans	☐	☐	☐	☐	☐
32. Ef mér liði illa myndi ég tala við skólastjóra	☐	☐	☐	☐	☐
33. Ef mér liði illa myndi ég tala við aðra starfsmenn skólans	☐	☐	☐	☐	☐
34. Ef mér liði illa myndi ég tala við Heilsugæsluna	☐	☐	☐	☐	☐
35. Ef mér liði illa myndi ég tala við annan aðila *(t.d. nágranna, foreldra vina minna).* Hvern?_____	☐	☐	☐	☐	☐
36. Ef mér liði illa myndi ég leita mér upplýsinga á netinu eða senda fyrirspurn á vefsíðu	☐	☐	☐	☐	☐
37. Ef mér liði illa myndi ég hringja í hjálparlínur *(t.d. hjálparsíma Rauða krossins 1717)*	☐	☐	☐	☐	☐
38. Hvern af ofantöldum aðilum (sp 24-37) myndir þú ræða fyrst við? Skrifaðu númerið á spurningunni, þar sem spurt er um þann sem þú myndir leita til, hér í reitinn.	☐				

Hér er spurt um leiðir til að takast á við vanlíðan.
Hversu vel eiga eftirfarandi fullyrðingar við um þig?
Merktu í EINN reit í HVERJUM lið

	Á mjög vel við um mig	Á frekar vel við um mig	Hvorki né	Á frekar illa við um mig	Á mjög illa við um mig
39. Ef mér liði illa myndi ég stunda hreyfingu (*t.d. íþróttir, jóga, hjóla, líkamsrækt*)	☐	☐	☐	☐	☐
40. Ef mér liði illa myndi ég skapa *(t.d. teikna, mála, spila á hljóðfæri, skrifa dagbók/ljóð, syngja, dansa)*	☐	☐	☐	☐	☐
41. Ef mér liði illa myndi ég kjósa einveru *(t.d. vera ein/n út af fyrir mig, fara í heita sturtu eða bað, hlusta á tónlist, hugleiða eða biðja, horfi á sjónvarp, vera í tölvunni án þess að vera í samskiptum við aðra, anda djúpt, sofa)*	☐	☐	☐	☐	☐
42. Ef mér liði illa myndi ég kjósa að neyta matar/drykkjar (*t.d. borða, fara út að borða, drekka gos, borða sælgæti)*	☐	☐	☐	☐	☐
43. Ef mér liði illa myndi ég sækja í samveru við aðra *(t.d. fara í bíó, spjalla við vin/i, heimsæki vin/i, tala í síma, tala við vini á netinu, fara í félagsmiðstöðina)*	☐	☐	☐	☐	☐
44. Ef mér liði illa myndi ég kjósa að fá útrás *(t.d. öskra, hlaupa langa vegalengd, stunda kynlíf, teygja á vöðvum, henda frá mér hlutum, fara í göngutúr, gráta)*	☐	☐	☐	☐	☐
45. Ef mér liði illa myndi ég gera: _____	☐	☐	☐	☐	☐

Takk fyrir

APPENDIX B

Questionnaire II – Post-test

Hvað veist þú um geðraskanir?

Drengur ☐ Stúlka ☐ Dagsetning:_____

Fyllti út mat I ☐
Hlustaði á fræðslu, veitta af Antoníu iðjuþjálfa, Steindóri og Hallgrími frá Hugarafli ☐
Fyllti út mat II ☐

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1. Hvað er geðheilsa?_____
_____
_____

Hér er spurt um þekkingu á geðröskunum.
Hversu vel eiga eftirfarandi fullyrðingar við um þig?
Merktu í EINN reit í HVERJUM lið.

	Á mjög vel við um mig	Á frekar vel við um mig	Hvorki né	Á frekar illa við um mig	Á mjög illa við um mig
2. Ég veit mikið um geðraskanir almennt	☐	☐	☐	☐	☐
3. Ég þekki einkenni geðraskana	☐	☐	☐	☐	☐
4. Ég veit mikið um hvernig fólki getur liðið sem er með geðröskun	☐	☐	☐	☐	☐
5. Ég þekki vel einhvern sem þjáist af geðröskun *(t.d. fjölskyldumeðlimur, góður vinur)*	☐	☐	☐	☐	☐
6. Ég kannast við einhvern sem þjáist af geðröskun *(t.d. skólafélagi, nágranni)*	☐	☐	☐	☐	☐
7. Ég hef verið með geðrænan vanda	☐	☐	☐	☐	☐
8. Ég þekki mismunandi úrræði, hvert hægt er að leita, þegar mér líður illa tilfinningalega	☐	☐	☐	☐	☐
9. Ég þekki mismunandi leiðir til að láta mér líða betur	☐	☐	☐	☐	☐

Hér er spurt um viðhorf til geðraskana.
Hversu sammála eða ósammála ertu eftirfarandi fullyrðingum?
Merktu í EINN reit í HVERJUM lið.

	Mjög sammála	Frekar sammála	Hvorki né	Frekar ósammála	Mjög ósammála
10. Ef ég ætti ættingja með geðröskun, vildi ég ekki að neinn vissi af því	☐	☐	☐	☐	☐
11. Flestir vina minna myndu finnast ég veikburða ef þeir héldu að ég hefði geðröskun	☐	☐	☐	☐	☐
12. Fólk með geðröskun hræðir mig	☐	☐	☐	☐	☐
13. Mér finnst fólk með geðröskun skrítið	☐	☐	☐	☐	☐
14.Ég held að það sé í raun ekkert sem heitir geðröskun; sumir eru bara öðruvísi	☐	☐	☐	☐	☐
15.Ég hef stundum áhyggjur af því að ég geti verið með geðrænan vanda	☐	☐	☐	☐	☐
16. Ég myndi ekki umgangast manneskju með geðröskun	☐	☐	☐	☐	☐
17. Það er auðvelt sjá hver er með geðröskun	☐	☐	☐	☐	☐
18. Ef maður veikist af geðröskun er líf manns nánast ónýtt	☐	☐	☐	☐	☐
19. Ég held að allir geti fengið geðröskun, líka ég	☐	☐	☐	☐	☐
20. Mér finnst fólk fordómafullt gagnvart þeim sem eru með geðröskun	☐	☐	☐	☐	☐
21. Fólk með geðröskun er ofbeldisfullt	☐	☐	☐	☐	☐
22. Unglingar með geðröskun eiga erfitt með að eiga góða vini	☐	☐	☐	☐	☐
23. Unglingar með geðröskun eiga erfitt með að komast aftur inn í vinahópinn eftir veikindi	☐	☐	☐	☐	☐
24. Stuðningur fjölskyldu og vina getur hjálpað unglingi með geðröskun að ná bata	☐	☐	☐	☐	☐

Hér er spurt um val á úrræðum, hvert þú myndir leita í vanlíðan.
Hversu vel eiga eftirfarandi fullyrðingar við um þig?
Merktu í EINN reit í HVERJUM lið

	Á mjög vel við um mig	Á frekar vel við um mig	Hvorki né	Á frekar illa við um mig	Á mjög illa við um mig
25. Ef mér liði illa myndi ég tala við vini mína	☐	☐	☐	☐	☐
26. Ef mér liði illa myndi ég tala við móður mína	☐	☐	☐	☐	☐
27. Ef mér liði illa myndi ég tala við föður minn	☐	☐	☐	☐	☐
28. Ef mér liði illa myndi ég tala við skólahjúkrunarfræðing	☐	☐	☐	☐	☐
29. Ef mér liði illa myndi ég tala við námsráðgjafa	☐	☐	☐	☐	☐
30. Ef mér liði illa myndi ég tala við kennara	☐	☐	☐	☐	☐
31. Ef mér liði illa myndi ég tala við deildarstjóra skólans	☐	☐	☐	☐	☐
32. Ef mér liði illa myndi ég tala við skólastjóra	☐	☐	☐	☐	☐
33. Ef mér liði illa myndi ég tala við aðra starfsmenn skólans	☐	☐	☐	☐	☐
34. Ef mér liði illa myndi ég tala við Heilsugæsluna	☐	☐	☐	☐	☐
35. Ef mér liði illa myndi ég tala við annan aðila *(t.d. nágranna, foreldra vina minna).* Hvern?_____	☐	☐	☐	☐	☐
36. Ef mér liði illa myndi ég leita mér upplýsinga á netinu eða senda fyrirspurn á vefsíðu	☐	☐	☐	☐	☐
37. Ef mér liði illa myndi ég hringja í hjálparlínur *(t.d. hjálparsíma Rauða krossins 1717)*	☐	☐	☐	☐	☐
38. Hvern af ofantöldum aðilum (sp 24-37) myndir þú ræða fyrst við? Skrifaðu númerið á spurningunni, þar sem spurt er um þann sem þú myndir leita til, hér í reitinn.	☐				

Hér er spurt um leiðir til að takast á við vanlíðan.
Hversu vel eiga eftirfarandi fullyrðingar við um þig?
Merktu í EINN reit í HVERJUM lið

	Á mjög vel við um mig	Á frekar vel við um mig	Hvorki né	Á frekar illa við um mig	Á mjög illa við um mig
39. Ef mér liði illa myndi ég stunda hreyfingu (*t.d. íþróttir, jóga, hjóla, líkamsrækt*)	☐	☐	☐	☐	☐
40. Ef mér liði illa myndi ég skapa *(t.d. teikna, mála, spila á hljóðfæri, skrifa dagbók/ljóð, syngja, dansa)*	☐	☐	☐	☐	☐
41. Ef mér liði illa myndi ég kjósa einveru *(t.d. vera ein/n út af fyrir mig, fara í heita sturtu eða bað, hlusta á tónlist, hugleiða eða biðja, horfi á sjónvarp, vera í tölvunni án þess að vera í samskiptum við aðra, anda djúpt, sofa)*	☐	☐	☐	☐	☐
42. Ef mér liði illa myndi ég kjósa að neyta matar/drykkjar (*t.d. borða, fara út að borða, drekka gos, borða sælgæti)*	☐	☐	☐	☐	☐
43. Ef mér liði illa myndi ég sækja í samveru við aðra *(t.d. fara í bíó, spjalla við vin/i, heimsæki vin/i, tala í síma, tala við vini á netinu, fara í félagsmiðstöðina)*	☐	☐	☐	☐	☐
44. Ef mér liði illa myndi ég kjósa að fá útrás *(t.d. öskra, hlaupa langa vegalengd, stunda kynlíf, teygja á vöðvum, henda frá mér hlutum, fara í göngutúr, gráta)*	☐	☐	☐	☐	☐
45. Ef mér liði illa myndi ég gera: _____	☐	☐	☐	☐	☐

1. Það sem mér líkaði **best** við fræðsluna var:
_____
_____
_____

2. Það sem mér líkaði **minnst/síst** við fræðsluna var:
_____
_____
_____

3. Ef þú hefur fleiri athugasemdir eða vilt koma með ábendingar til að bæta fræðsluna, bættu þeim þá vinsamlegast hér fyrir neðan.
_____
_____
_____

Takk fyrir