

HEALTH PROMOTION THROUGH FACILITATING MASTERY, PARTICIPATION AND MOTIVATION IN SECONDARY SCHOOL

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Abstract

Mental health issues have been on the increase for years in Norway, and after the pandemic, school absence has also increased. To meet these challenges, several national initiatives have been launched. New curricula emphasizing life mastery and public health have been implemented. In addition, various health promotion projects have been developed and executed in schools as part of a national public health program. The current study will present experiences from a project called SAMM – A systematic approach to mastery, participation, and motivation, where a five-step method has been applied, and relate this to a recently developed framework for health promotion in school. The five-step method for mastery, participation, and motivation applied included the following questions: 1) What is important in your life, and what goals do you have? 2) What about yourself and your life is good? Can you use this to achieve your goals? 3) Is there something in yourself or in general that stops you from reaching your goals? 4) What do you choose to work with the next month to achieve your goals? and 5) What will you do to carry this out? A quasi-experimental study with test and control groups was carried out, including an intervention of four sessions spread over about a month. In the first session, the teacher led a class discussion concerning how the students felt they mastered school and life in general, what was easy, and what was difficult; then, the students wrote anonymous answers to the three first questions, which the teacher collected. In the second session, the teacher summed up the answers from the students, and the final two questions were discussed before they wrote individual, anonymous answers. In the final two sessions, the students evaluated their own plans and efforts and adjusted for the next period. Seven upper secondary school classes were included as test groups, resulting in 132 student participants. Five control groups were included, resulting in 132 control students. Finding an appropriate scale to measure the effects of the intervention proved challenging. The General self-efficacy scale was used despite a rather limited focus. An ANOVA analysis was carried out, and no significant difference was observed between the test and control groups over time. However, the approach in the intervention relates to several aspects of health promotion, and a more extensive scale covering more of these aspects would perhaps have been more adequate to measure possible effects.

Keywords: Health promotion, mastery, participation, motivation, secondary school.

1. Introduction

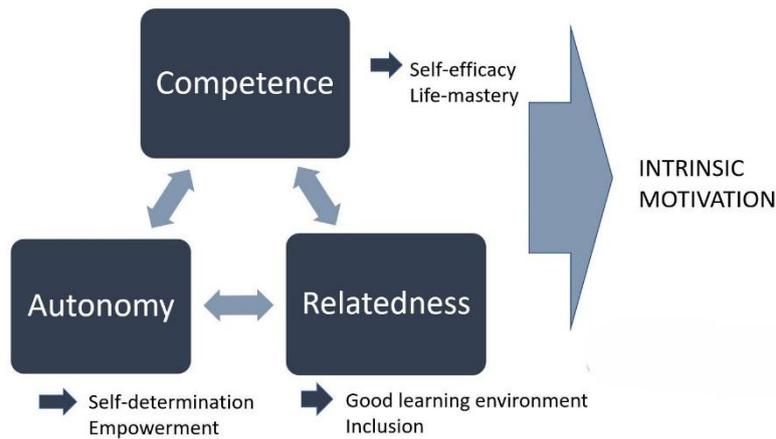
Mental health issues have been on the increase for years in Norway (Reneflot, 2018), and school absence has also been an increasing problem (Alver, 2020). Some of the problems students report, concern lack of motivation, pressure, varying degrees of anxiety, high drop-out, loneliness, and increased degree of bullying (Bakken, 2024; Enstad & Bakken, 2022, Parlikar et al., 2023). To meet these challenges, several national initiatives have been launched. The Norwegian schools renewed curricula emphasizing life mastery and public health have been implemented (The Norwegian Directorate of Education, 2017). In addition, various health promotion projects have been developed and executed in schools as part of a national public health program (Helmersen & Stiberg-Jamt, 2019). The current study presents one of these health promoting initiatives - a project called SAMM – A Systematic Approach to Mastery, Participation and Motivation, and investigates the potential of a five-step approach developed in this project. The five-step approach in SAMM builds on a combination of self-determination theory (Ryan & Deci, 2017) and health promotion theory (Antonovsky, 2012), which will be elaborated on below. The following research questions will be discussed: How can secondary school students be supported in experiencing mastery, participation, and motivation? How can this be measured? To answer these questions, a

quasi-experiment has been carried out, and the results will be discussed in relation to self-reported evaluations from students, as well as a framework for health promotion.

2. Self-determination and health promotion

According to Ryan and Deci's (2017) self-determination theory, intrinsic motivation is achieved when the basic needs of competence, autonomy, and relatedness are met (see figure 1). Competence concerns mastering tasks in everyday life, and this could be related to Bandura's (1997) theory on self-efficacy – if a person masters something, the expectation to master again, or the self-efficacy, is strengthened. Autonomy concerns participating in making decisions and having agency, setting one's own goals, and working towards these. Relatedness concerns having relations with others, which, for example, may be achieved by feeling included in a learning environment.

Figure 1. Self-determination theory and intrinsic motivation.



The theory on intrinsic motivation has some parallels to health promotion theory, or more specifically, Antonovsky's (2012) salutogenic theory. Antonovsky (2012) was concerned about identifying what made people experience good health rather than focusing on symptoms causing health problems. He identified three factors that made people resilient and robust enough to handle stress in everyday life through having a strong sense of coherence: comprehensibility, manageability, and meaningfulness (figure 2). Comprehensibility concerns understanding a situation and one's own role in that situation, manageability is about identifying one's own resources and resources in one's surroundings, and meaningfulness includes seeing the value of one's own contribution and feeling a possibility to influence a situation.

Figure 2. Health promotion theory and sense of coherence.



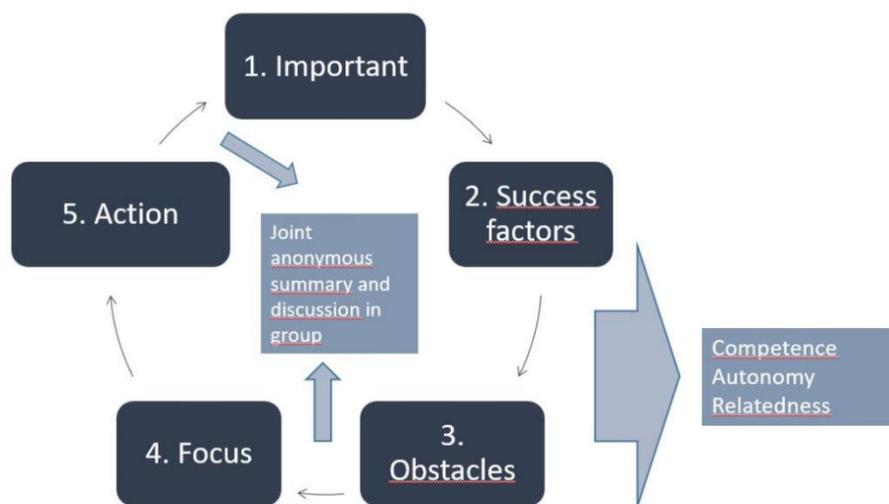
3. Research methodology

This study includes a quasi-experiment (Shadish et al., 2002) with test and control groups but without randomization. Convenience sampling was applied, due to limited possibilities to randomize within the context of the study. An intervention with the five-step approach, described below, was implemented in sessions every two to four weeks throughout the school year. The General Self-Efficacy scale (Schwartz & Jerusalem, 1995) was used to measure at the beginning and the end of the school year, as pre- and post-tests. All data was collected anonymously and on paper, and students were informed that it was voluntary to participate in the research. As there was no way to identify the respondents, the project was not reported to the Norwegian data protection services for research. A two-way repeated measures ANOVA was used to analyze possible significant differences between test and control groups.

3.1. Intervention

The five steps include the following questions the students were to discuss and answer: 1) What is important in your life, and what goals do you have? 2) What about yourself and your life is good? Can you use this to achieve your goals? 3) Is there something in yourself or in general that stops you from reaching your goals? 4) What do you choose to work with the next month to achieve your goals? and 5) What will you do to carry this out?

Figure 3. The five-step approach in SAMM.



The first question, what is important in life, invites students to think about what they really want in life. It is important to reflect on this because often other persons tell them what to do and what matters – learning grammar, achieving higher grades in mathematics, etcetera. In addition, youths are affected by friends and social media on how to act, look or think. When they reflect on what is important to them, they typically list friends, family, education, good grades, a good job, and sports. To the second question, about what is good about themselves and their lives, they highlight personal qualities such as kindness, honesty, caring, and practical skills. To question three, many students list grades, tests, pressure, stress, lack of sleep, levels of anxiety, sadness, mental issues, and lack of motivation as obstacles. Dyslexia and disruptions from social media are also mentioned. Questions four and five are about choosing focus areas and making plans, and the students say that they want to focus on their concentration, grades, rest, homework, and on being social. Their action plans concern increasing their focus and efforts on schoolwork, as well as exercising and getting more sleep by going to bed earlier.

3.2. Sample

The sample included seven test groups and five control groups from the same upper secondary school, in the southern region of Norway, in total 132 student participants in each group. The school where the study took place is a combined upper secondary school with both general study students and vocational students, as well as students taking a third extra year to build on vocational studies to achieve competence to be admitted to universities.

Table 1. Participants.

Test or control group	Year in uss. (and age)	Type of group	Number of students
Test group 1	1 (15-16 y.)	General studies class with media specialization	22
Test group 2	1 (15-16 y.)	Vocational class – sales and transport	14
Test group 3	2 (16-17 y.)	Vocational class – sales and transport	4
Test group 4	2 (16-17 y.)	Vocational class – child and youth worker	12
Test group 5	3 (17-18 y.)	Extra year vocational class to achieve study comp.	25
Test group 6	1 (15-16 y.)	General studies class	30
Test group 7	2 (15-16 y.)	General studies class	25
Control group 1	1 (15-16 y.)	General studies class	25
Control group 2	3 (17-18 y.)	Extra year vocational class to achieve study comp.	26
Control group 3	1 (15-16 y.)	General studies class	29
Control group 4	2 (16-17 y.)	General studies class	24
Control group 5	2 (16.17 y.)	General studies class	28

Note. uss. = upper secondary school

4. Findings and discussion

This study aimed to investigate the potential of a five-step approach to support mastery and motivation for upper secondary school students. The results of the ANOVA analysis showed no significant difference between the groups. Although the statistical analysis did not show significant effects, it is important to consider that the self-efficacy scale may not fully capture the broader impacts of the intervention. Despite this, the observed trend in mean self-efficacy improvement favored the intervention group. This finding suggests a potential for further exploration in future studies that employ larger sample sizes. In line with this, the students' feedback on using the method, in general, has been positive: they report that they like it, and many students report becoming more motivated and better at planning and following up on their plans (Horverak et al., 2020, Horverak, 2020). Another study where the method was applied in a second language learning setting showed the potential of the method to help students choose strategies for language learning and to reduce foreign language anxiety (Horverak et al., 2022). The five-step approach is dynamic and is adjusted to the students' needs, whether it concerns life skills or challenges in a subject. The dynamic nature of the five-step approach makes it difficult to carry out an effect study, covering all aspects that may have been influenced by the approach.

One of the benefits of applying the five-step approach is that it gives students acknowledgment and respect by giving them an opportunity to focus on their qualities and success factors (Langeland & Horverak, 2021). Reflecting on personal qualities is extra important for young people because they are easily influenced and concerned with what others think, which can cause them to overlook or underestimate what is positive about themselves (Langeland & Horverak, 2021). Applying the five-step approach may help students balance their focus on the positive aspects of their situation and possible challenges and find solutions through discussions in the class. An essential goal of using this method, is that the students develop robustness and ability to deal with challenges (Langeland & Horverak, 2021). Identifying resources and solutions together with others may support students to experience intrinsic motivation through autonomy, competence, and relatedness (Ryan & Deci, 2017), as well as a strong sense of coherence through comprehensibility, manageability, and meaningfulness (Antonovsky, 2012).

Finding an appropriate scale to measure the effects of the intervention proved challenging, as the purpose of using the method includes a multitude of different aspects related to the students' general well-being. The chosen measuring instrument was limited to measuring self-efficacy (Schwartz & Jerusalem, 1995). The method's main purpose is to contribute to the students' experience of intrinsic motivation, mastering, and participation (Langeland & Horverak, 2021; Ryan & Deci, 2017), and to achieve this, there is a need for experiencing trust, autonomy, competence, relatedness, safe surroundings, recognition and respect, aspects incorporated in a newly developed framework for health promotion (Horverak et al., 2024a; 2024b). A scale covering more aspects would be more adequate to measure possible effects.

5. Conclusion

To conclude, the results of this study show that applying the approach described above had no effect on students' self-efficacy, although there was a positive trend in the results in favor of the intervention group. However, the five-step method for working with mastery, participation, and motivation relates to several aspects of self-determination and health promotion. A more extensive scale is needed to investigate possible effects, covering more aspects of universal health promoting initiatives aimed at supporting students experiencing mastery and motivation.

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