

Project title: <i>PROMENTAL: Promoting Student Mental Health and Wellbeing in Gjøvik and Trondheim through Service Design and Relational Welfare</i>	
Project leader: <i>Brita Fladvad Nielsen</i>	Department and faculty affiliation: <i>Department of design, AD Faculty</i>
Principal investigators:	
Names and position: - Ottar Ness, professor - Nina Petersen Reed, associate professor - Mari Bjerek, associate professor	Department and faculty affiliation: - Dept of Lifelong Learning (IPL) - Dept of Mental Health (IPH) - Dept of Design (ID)
Prioritized Area (check one of the areas): Psykisk helse/Mental health and wellbeing	<input checked="" type="checkbox"/> Mental Health <input type="checkbox"/> Personalized/Precision Medicine <input type="checkbox"/> Digitization and use of digitized health data

Project summary:
*PROMENTAL brings together a strong team of practice-oriented researchers, students and staff from three study programs, student welfare organizations and municipality services of two student cities **Trondheim** and **Gjøvik**, in a novel and ambitious approach to tackle the quickly increasing and dramatic situation of the mental wellbeing of our student population.*

*The novel approach is the **integration of relational welfare with service design**, in which service design provides the methodological framework to propose communicative and strategic interventions on four levels: the (individual) **student**, the **community**, the (service) **system**, and the **future** (of tackling mental health issues in student cities). Relational welfare provides frameworks, theories and mindsets into how chronic issues such as mental health and wellbeing in the student population can be addressed from a community perspective. The study environment is here to be regarded as the community.*

*The project will reinforce the role of the **study environment** (fellow students, teaching staff, student consultants, coursework, pedagogical principles, expectations etc.) and enable this as the space of opportunity for changed practices that can strengthen the mental health of students. Service design will contribute by identifying stressors, best practices, culture, attitudes and awareness of mental health. Service design combined with relational welfare research can further identify challenges within the student journeys that result in feelings such as inadequacy, loneliness and lack of mastering, and identifies the potential within each student environment for improving the general feeling of belonging and **matter**ing in the four study environments. PROMENTAL will also map and provide **visual and digital blueprints** of the existing formal and informal services available at a campus level and at a municipality level and identify strategic interventions that can ensure that targeted services are available to the students that need professional healthcare.*

*Finally, new concepts, **strategic interventions** and a **new vocabulary** for talking about and addressing mental health and wellbeing at NTNU will be co-produced by directly including students, staff and practitioners across disciplines and institutions, resulting in concrete examples of how the study environment can become **enabling places** that promote wellbeing. A strong collaboration between NTNU, SiT, Velferdstinget, Trondheim Municipality, and Gjøvik Municipality, provides the opportunity not only to design services and study environments that are **evidence-based and empathic** but also makes it feasible to **test** the suggested interventions in study programs and study environments, as well as in municipal and student health services. The interventions depend upon the design insights, yet they can be expected to include **service interventions** suggesting new ways for NTNU, SiT and municipal health service systems to collaborate and interact systematically; capacity building and new practices for universities to address mental health and wellbeing amongst their students at a course, study program and department level; **policy recommendations** for addressing and implement changes at an institutional level at NTNU, **visual storytelling** communicating student experiences, and new methodological tools for working with **communities** and **public value** to strengthen the wellbeing of individuals.*

1. State of the art, knowledge needs and objectives

The quality-of-life measurements for Statistics Norway (2021) and FHI (2021) show that it is currently the youngest age groups that have the lowest levels of quality of life. Over a long period of time, a number of qualitative and quantitative studies have established that the younger part of the population is increasingly suffering from stress, anxiety, feelings of depression and loneliness and that it affects quality of life and life opportunities (Støren, 2021). University students contribute to this alarming picture, by reporting a record amount of negative thought patterns and poor mental health. There is an increase in what is described as severe psychological symptoms amongst Norwegian students, from 16% to 29% in the last eight years. One in four students report that they have had serious thoughts about ending their own lives. This is not particular to Norway, since university students' mental health has been a public health problem with growing concern globally, with an empirical research showing that university students are generally a "high-risk population" for mental illness (e.g. (Baik et al., 2019, Larcombe et al., 2016).

It is a paradox that this high-risk population live in '**student cities**' where they could ideally spend the best years of their lives. For example, in Trondheim and Gjøvik, there are a high number of social and volunteer activities available to provide a sense of belonging beyond the studies. Nevertheless, the Student Welfare Council (**Velferdstinget**) is worried that while social and voluntary activities contribute to the social wellbeing of many, the many options could inversely make problems such as loneliness, pressure from grades or mental illness even more shameful and hidden for those who do not feel included. While there has been an increase in low-threshold therapy and community-based services in Trondheim and Gjøvik, the waiting lists for mental healthcare are still too long, and the services cannot suffice.

NTNU spanning across Trondheim, Gjøvik and Ålesund is the largest Norwegian university with 40 000 students, and thus has enormous impact potential in terms of improving students' quality of life. While the students' psychosocial wellbeing has led to an increase in voluntary activities, student associations and engagement *outside* the study environment, there has been less focus on understanding what can be done *in, through* and *in connection with* the study programs and within the framework of the educational institution.

The political and scholarly discourse on '**relational welfare**' becomes relevant here as it challenges the traditional mindset and framework for working with student welfare by stressing the role of the larger human society and communities in preventing chronic distress and social exclusion (Cottam, 2015). A study environment can precisely be such a 'community' from which we can seek to understand student distress with a new and more public value-based model for solving chronic problems. It is also becoming clearer with the severity of the symptoms of individuals, that if more and more people are to have access to low-threshold mental health services, there will be less resources available to care for those who need urgent, continuous, and professional long-term assistance to deal with serious mental illness. There is also a high chance that serious mental disorders are triggered or discovered during the study period. Students, who are temporary citizens of the student cities, must therefore be guaranteed access to professional public health care. The need to diagnose, and provide people with professional care *early*, is undoubtedly a very important aspect of ensuring access to good quality of life and equal opportunities, such as higher education.

Mordal and Ness (2021) look at how students feel and what they know works to improve their situation; identifying for example that conversation groups and student facilitation demonstrably has an effect in the learning environment. Studies show that psychotherapy have shown an effect on depression and anxiety, but not on students' management of *coping expectations* (Li et al., 2018) which the study environment might be better positioned to influence. A study of Baik and colleagues (Baik et al., 2019) show various recommendations from students on role of the study environments. These findings exemplify that university educators and administrators can play a role in preventing the high incidence of poor mental health (Baik et al., 2019). Also, the Student association SiT, StudyTrondheim and Velferdstinget has launched a project which currently gathers and shares experiences from students on why they struggle and how Trondheim can become the best student city to live in (<https://www.inmyexperience.no/>).

We will use insight from these studies as a backdrop to explore the context of students, system and community empirically and creatively within the framework of the two university cities Trondheim and Gjøvik to develop evidence-based proposals and future scenarios. The **primary objective** of this proposed research project is to deliver proposals of how study environments, university and municipal services in collaboration can contribute to students' mental wellbeing; with concrete, evidence-based and replicable

concepts tested in three study programs and two student cities. This will include the co-design of narratives, visual prototypes in terms of service blueprints, and the development of characteristics that are key to transition the study environment into enabling places for mental wellbeing (Duff, 2011): including insight into which competence gaps are relevant for the study programs to give students meaning, identity and mattering. The characteristics of enabling places will indicate how university staff and students can work more strategically and knowledge-based to tackle the increase in symptoms. Blueprints will also communicate holistically, the combination of formal and informal services that impact student's wellbeing during the duration of their studies. The co-creation process will also result in a new roadmap for how to address mental health, and policy recommendations for how university, municipality and student welfare services best can work together to promote mental health. The **secondary objective** is to develop a robust relational service design research and design platform at NTNU for combining theoretical frameworks of relational welfare with visual and tangible methods of service design; concretizing the potential of such a platform by delivering practice-based examples of how relational welfare and service design can deliver innovation, exemplified through co-creation in Trondheim and Gjøvik.

2. Methodology, approach and research questions

The main *methodological and innovation framework* for the study is **Service design (SD)** (Stickdorn et al., 2018). SD provides a methodological and processual framework that can develop interventions based on holistic overview, visualization, evidencing, user-centeredness and co-design. SD will build a deeper understanding within study environments about how students experience their lives at the university. Codesign tools ensures anchoring in the municipality and within the selected university departments. Design researchers can visualize the complex setup of municipal, academic and informal services involved in the students' mental wellbeing. From this holistic work through service design, scenarios will be built on how to approach students' wellbeing directly through interventions proposed through the codesign activities. These activities will bring in experts across three departments from the fields of pedagogy, relational welfare and community building, psychology, psychiatry, and mental wellbeing. The collaborative process will result in specific interventions to be tested in study programs in Gjøvik and Trondheim to increase the replicability of findings in different service and actor landscapes, and in collaboration with the stakeholders.

The main *theoretical and transitional frame* is "**Relational welfare**", which emphasizes that meaningful and supportive relationships are fundamental for people to experience quality of life. The approach thus focuses on quality in relationships as crucial to the success of the welfare mission, whether it is about the relationship between the professional and the citizen himself or connecting people who can be supported in each other's everyday life. In this way, a relational approach to welfare is one where professionals, residents and actors in the local community explore new paths together and think of welfare as a common task. Relationships with other people are a prerequisite for people to be able to experience what (Prilleltensky, 2020) refers to as "mattering"; to be recognized for who you are, and at the same time make a difference for other people, working life and social life. **Co-creation** of welfare caters for people to matter; to both feeling valued and adding value in developing conditions for wellness, fairness and worthiness, and understanding the characters of enabling places and what it takes to make the study environments 'enabling places' for the promotion of healthy student lives implies a collaborative approach (Duff, 2011).

Work packages and organization of activities

PROMENTAL will center its methods around four work packages and 3PhDs divided into levels of "Student", "Community", "System" and "Future". This a tactical choice, as different design methods have been developed and are at play to work user-oriented/empathic, community oriented, systems-oriented, and future oriented. PROMENTAL will early on select classes of students from the 1st and 3rd grade of the three study programs, to follow a group of students from the beginning, but also to provide a synergy of knowledge about study environments and mental health between students in senior years and new students.

WPI "Student" (WP Lead: ID, NTNU Trondheim)

Objective: Developing tangible and impact-oriented examples of service systems and student access to community level, low threshold and preventative services and professional mental health care

PhD 1 (ID) How do individual students that have experienced moderate or severe mental health problems relate to today's services in Trondheim and Gjøvik? PhD 1+PhD3 will answer: What different stressors, expectations, life situations and identity aspects play a role in the various study environments and at various

times, and how do this manifest in the student journey? These RQs will need REK approval and will apply a qualitative service design study through graphic elicitation interviews, focus groups and user journey methods with students, health care professionals, staff at each study, study consultants and experts. The 3 study programs provide the possibility to involve full time students, students with family, international students, and students with direct practice in work life as a part of their studies. SD will group students' experiences, stressors and vulnerabilities into user groups and persona. 'Student journeys' will be developed to communicate visually the individual students journey and value of interaction with study environment, low threshold health services, specialist health services, and factors s.a. experiences with competence, attitudes and culture. Improved user journeys will show how staff and students can better support mental health; how low-threshold services can be created and sustained across university and municipality.

WP2 "Community" (WP Leader IPL)

Objective: Making study environments enabling places for improved student mental health

Task 2.1 PhD2 (IPL) How can study environments be co-created where students and staff develops relational skills, experience mattering self-efficacy and develop personal and professional autonomy? What characterizes an 'enabling study environment' as seen from different students? How, and by whom, can study environments be developed to promote healthy student journeys?

Task 2.2 PhD3 (IPH) What resources and barriers for students' mental health and wellbeing exist within the different study environments? How can student mental health services best empower educational institutions to turn around the negative mental health wave in their student population?

Based in two faculties (MH and SU) and with participation from four study programs, PhD2 and PhD3 will seek to understand, through participatory observation, interviews and focus groups, the different characteristics between the study environments in the four departments; and co-create new thinking, cross-institutional learning, identify stories and present models of what can be done on the basis of the study environments, with design education, social educator education and counselling science and upbringing and education as living laboratories. Interventions will be tested in collaboration with selected course-responsible and student-assistants. PhD 2 will also conduct a literature review and desk study of how relational welfare and mattering principles can be included in practice in educational settings, while PhD3 will contribute to the research of mental health through the development of methods for how places can be developed through co-creation to promote mental wellbeing.

WP3 "System" (WP Leader ID)

Objective: proposing strategic design interventions that can lead to larger positive impact on student mental wellbeing within the existing service context

PhD1 (ID) will facilitate the co-design process with PhD2/3 and work through three disciplinary perspectives to understand 'How can existing formal and informal health services and service systems in Trondheim and Gjøvik be designed and implemented in a more useful, sustainable and holistic way?' WP 3 will close gaps between practice, research and policymaking, through ethnographic stays within the mental health services, and action research approaches within the existing service systems, parallel to providing overview of existing policies and practices that bridge and separate municipal and university services. This work will move alongside PhD1s design research in which mapping of existing formal and informal actors and services at both the university and the municipalities, as well as visualization of various user journeys describing groups of the student population, greater pain points and similarities.

WP4 "Future" (WP Leader IPH)

Objective: Develop a future scenario for how the student cities can address and talk about mental health, and provide a framework of transition through policy and practice

PhD1, 2 and 3 will answer: How can we grow a healthy culture for addressing university mental health.

How can design and relational approaches design a new vocabulary for mental health? Work package four will focus on exploratory and experimental approaches including relational mapping (Ulloa and Paulsen, 2017), with strong elements of co-creation with students, employees, volunteers, user organizations, municipal service providers, SiT, the Welfare Council and interdisciplinary experts. In recent years, service design has been increasingly focused on developing innovative ways of talking about mental health, and this can be used to achieve new understandings and new visions of the future. Based on forecasting and

backcasting (Ilstedt and Wangel, 2014), new proposals for roadmaps for better mental health will then be developed among students at NTNU. This will include policy and implementation proposals.

Key stakeholders and roles

Students and staff at the three NTNU departments are considered key stakeholders together with **SiT, Velferdstinget, StudyTrondheim and Trondheim municipalities' health and welfare services**. Dept. of design in Gjøvik will also bring onboard Gjøvik municipality. The mandate of the Student Association SiT is to, in collaboration with the students, develop attractive welfare services. SiT's organizational division "SiT Welfare" includes counseling, courses, mental health services, medical center, health center, dental health reimbursement and preventive health work. Velferdstinget consists of elected student members whose task is to take care of and improve welfare services for students. These advice on how the Student Association (SiT) in Gjøvik, Ålesund and Trondheim should prioritize. Velferdstinget aims to ensure that the municipality takes greater responsibility for services to students with mental health issues, while SiT has an established cooperation with the municipalities and Velferdstinget to look at how to improve student health. This collaboration ensures PROMENTAL students, municipal service providers and practitioner engagement, and increases the feasibility of reaching decision-makers. Stakeholders will be directly involved in problem framing, testing of blueprints, study environment interventions and policy recommendation.

Possible risks

Ethical risks are apparent in this project due to the potential sensitive and stigmatized issues that can appear when researching mental health. The students have the right to protection and ethical management will need to be an integrated part of the project. We will apply for permission to interview people (students, university staff, service providers etc.). There will be additional ethical and practical challenges related to consent during exploratory co-design phases. This is because co-design processes are creative and not always a matter of pre-planned structures. This will be mitigated through continuous dialogue with the research ethics advisory board, and through advice from experts from the dept. of mental health, as well as student advisors.

3. Potential impact

Mental health problems cause disability in young adults which can be prevented through health-promoting study environments. Investments in interventions that embrace broadly and create good lives, and reduces pressure on the specialist health service, have societal relevance. **Socioeconomically**, student dropouts result in economic losses. An important premise is to create conditions for "not leaving anyone behind" (LNB) which is a principle of the SDGs, that provide strong guidelines for creating communities where all people live dignified lives. Our approach to this ethical imperative is to develop societies that make all citizens feel significant. To ensure direct impact, each key stakeholder will have clear roles in testing of concepts: and the partners are strategically selected to ensure direct impact into study programs, study environments, and service providers. 'Service research and service innovation' is a key priority in the program plan of the Norwegian Research Council of 2017-2025. To **maximize** the impact, we therefore aim at delivering a collaborative research application by February 2023. PROMENTAL will produce concepts that can be **replicated and scaled up** by other universities and student cities. The dissemination will include public debate in media, student media, SoMe, open meetings, exchange sharing seminars and breakfast dialogues at campus and in the city. The conference Services for All ran by the project team for the second time, has decided that the 2023 theme will be "University for All". 'WellFare', the Nordic Research Center for Wellbeing and Social Sustainability will increase international outreach: WellFare leads transdisciplinary research to transform communities and welfare systems towards fairer, healthier and socially sustainable futures and is becoming a WHO Collaborating Centre for Wellbeing and Social Sustainability.

4. Implementation

Dept. of Design with ass. prof. Nielsen will take the project lead and facilitate the overarching co-design together with ass. prof. Bjerck who contributes with her anthropology background to strengthen the appropriateness of design methods. Nielsen and Bjerck both teach and lead courses on service design, and are study program leaders strategically placed in the industrial design and interaction design study programs at Trondheim and Gjøvik, anchoring the collaborations in both student cities. Reed is an associate professor bringing in knowledge to the process from health sciences at the Dept. of mental health (IPH). IPH educates bachelor students in social education, master's and postgraduate students in mental health, as well as

PROMENTAL

medical- and doctoral students. Reed leads the research group “Mental health in relational and societal contexts”, focusing on mental health as a contextual phenomenon, co-created within everyday environments and everyday activities. Ness is Professor of Counselling at the Dept. of Education and Lifelong Learning (IPL) and is Head of the Nordic Research Centre for Wellbeing and Social Sustainability and Editor-in-Chief of the Nordic Journal of Wellbeing and Sustainable Welfare Development and brings into PROMENTAL competence on wellbeing and mental health, recovery processes and relational welfare and social justice. IPL educates bachelor, master and continuing education students in childhood and adolescence, school, education and working life. IPLs study and research have relevance to all areas of PROMENTAL: education, adult learning, counselling science, educational development and child research.

Timeline(Figure 1): Activities are sequenced in line with a **design process**, moving through two iterations of (1) Discover, moving into a collective (2) Define phase with key stakeholders to influence the design brief and problem definition. Next, concepts for change will be (3) Developed for and within the four levels (student-community-system-future) and finally we will (4) Deliver new concepts. The columns across illustrate co-creation that anchor and ensure learning across the WPs for integrated concept development.

	2023				2024				2025				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
WP1 Student	Design interviews, sampling, ethical approval.	Design of student journeys and stakeholder maps. Lit.review.			Solving the right problem : workshops	Co-design of improved student “user journeys “ with key stakeholders		Concept development, prototyping of blueprints, improved user journeys		Testing blueprints with key stakeholders		Final concept and implementation workshops	Finalization of PhDs
WP2 Community	Lit. review of study environment, relational welfare and smh	Analysis and trust building in 3 study environments: observational, interviews, FGDs				Identification of stressors and the study environment’s role in improving student mental health		New practices and policy recommendations for study environments and capacity building delivered to NTNU					
WP3 System	Mapping of formal and informal service system for student mental health at NTNU. Service design and design ethnography					Relational mapping of services and identification of potential areas of intervention		Improved service journeys and blueprints showing new ways of organizing formal and informal services, with a firm standing point in the study environments and educational institutions.					
WP4 Future	Cultural, power relations and awareness mapping. FGDs and Co creation. Identification of opportunities, best international practices and gaps. Relational co-design method development.					Experimental phase, exploring new and common language for students mental health and wellbeing, insights and scenario building		Backcasting towards common visions: Public debate phase with SiT and Velferdstinget, panel debates and university media					
Milestones	PM1	JP1	P1-4 TFA Conference		PM2		P5-9		JP3	PM3			
DESIGN PHASE	DISCOVER			DEFINE (Design brief)		DEVELOP			DELIVER		TEST		

Figure 1: WPs and timeline. PM=Partner meeting, P= Publication, JP=Joint Publication

5. Budget

PhDs (NTNU Helse)				In-kind from research time invested					
	2023	2024	2025						
				Nielsen 10%	86390	90710	95245		
PhD ID	765002	788717	813167	Ness 10%	119316	125282	131546		
PhD ISM	765002	788717	813167	Bjerck 10%	86390	90710	95246		
PhD IPL	765002	788717	813167	Reed 10%	86390	90710	95246		
TOTAL	2295006	2366151	2439501	7100658	TOTAL	378486	397412	417283	1193181

6. References

- BAIK, C., LARCOMBE, W. & BROOKER, A. 2019. How universities can enhance student mental wellbeing: The student perspective. *Higher Education Research & Development*, 38, 674-687.
- COTTAM, H. 2015. Social Services are broken: how we can fix them. *Ted Global > London*.
- DUFF, C. 2011. Networks, resources and agencies: On the character and production of enabling places. *Health & place*, 17, 149-156.
- ILSTEDT, S. & WANGEL, J. Altering expectations: How design fictions and backcasting can leverage sustainable lifestyles. DRS (Design Research Society) 2014: Design's Big Debates-Pushing the Boundaries of Design Research. Umeå, Sweden, June 16-19 2014, 2014.
- LARCOMBE, W., FINCH, S., SORE, R., MURRAY, C. M., KENTISH, S., MULDER, R. A., LEE-STECUM, P., BAIK, C., TOKATLIDIS, O. & WILLIAMS, D. A. 2016. Prevalence and socio-demographic correlates of psychological distress among students at an Australian university. *Studies in Higher Education*, 41, 1074-1091.
- LI, C., YIN, H., ZHAO, J., SHANG, B., HU, M., ZHANG, P. & CHEN, L. 2018. Interventions to promote mental health in nursing students: A systematic review and meta-analysis of randomized controlled trials. *Journal of Advanced Nursing*, 74, 2727-2741.
- PRILLELENSKY, I. 2020. Mattering at the intersection of psychology, philosophy, and politics. *American Journal of Community Psychology*, 65, 16-34.
- STICKDORN, M., HORMESS, M. E., LAWRENCE, A. & SCHNEIDER, J. 2018. *This is service design doing: applying service design thinking in the real world*, " O'Reilly Media, Inc."
- STØREN, K. S. 2021. *Livskvalitet i Norge 2021*, Oslo: Statistisk sentralbyrå.
- ULLOA, M. A. & PAULSEN, A. 2017. Co-designing with relationships in mind Introducing relational material mapping. *FORMakademisk*, 10.