

SweSRII 2026



The 15th Swedish Congress on Internet Interventions
Campus Norrköping of the Linköping University
3-4 June 2026

SweSR11

15th Swedish Congress on Internet Interventions

Campus **Norrköping** of the Linköping University

3-4th June 2026

On behalf of the Organizing Committee, it is our great pleasure to welcome you to the 15th Swedish Congress on Internet Interventions (SweSR11). The Congress is hosted on Campus Norrköping of the Linköping University.

We have invited researchers from Sweden and all over the world to share their knowledge and experiences on using and developing Internet-based interventions. The aim of our conference is to contribute to the development and dissemination of best possible psychological interventions to help people in need.

The Organizing Committee



Gerhard Andersson
Professor
Linköping University
(Head of the Scientific
Committee)



Peter Johansson
Professor
Linköping University
(Chairman, Scientific
Committee)



Ghassan Mourad
Assistant Professor
Linköping University
(Chairman, Scientific
Committee)



Johan Lundgren
University Lecturer
Linköping University
(Chairman, Scientific
Committee)



Per Carlbring
Professor
Stockholm University
(Chairman, Scientific
Committee)



Victoria Aminoff
Doctor of Psychology
Linköping University
(Chairman, Scientific
Committee)



George Vlaescu
System developer
Linköping University
(Head of support)

Practical information

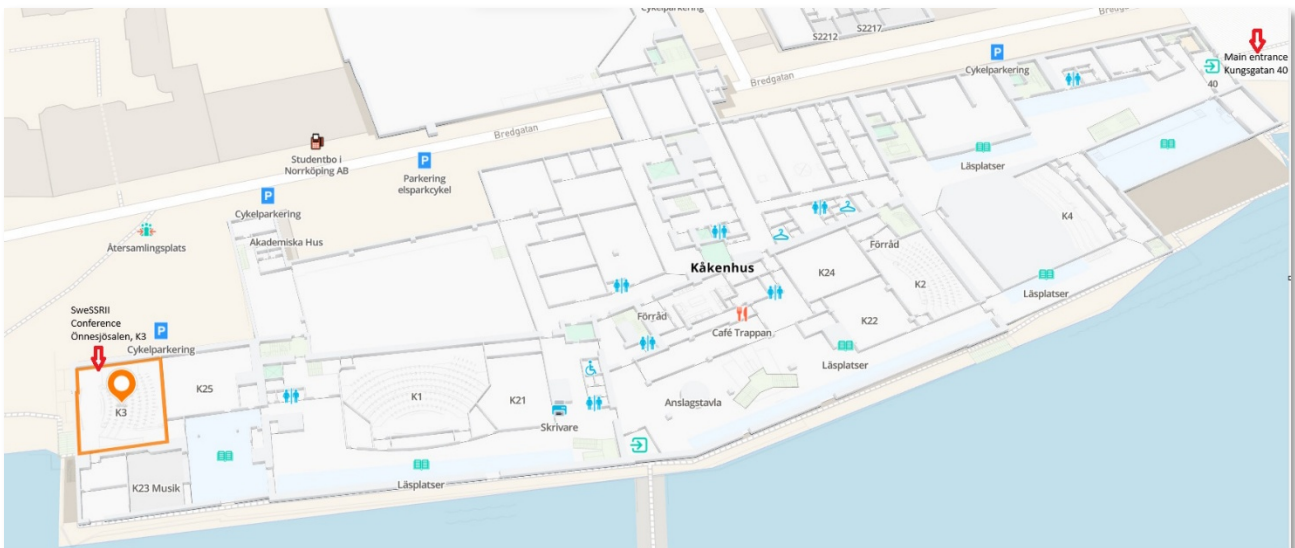
Address: Kungsgatan 40, Norrköping, Sweden

Meeting location: Kåkenhus, room Önnesjösalen (K3)

Link/QR-code for [Google Maps](#):



Map of the premises:



Main entrance:



Scientific Program

Day 1, 3 June (13:00-17:35)

13:00	Conference opening	
13:05	Victoria Aminoff	<i>Mental health problems related to economy: Can internet-based cognitive behavioral therapy be effective?</i>
13:20	Tomas Lindegaard	<i>Does Internet-delivered Psychodynamic Therapy reduce trait Neuroticism: Results from a Randomized Controlled Trial</i>
13:35	Sandra Fröojd	<i>Held over a distance: Patient experiences of ICBT for antenatal depression with added live support sessions</i>
13:50	Ulrika Ehrén	<i>"When I'm stressed, breathing gets hard, which makes it worse" - Anxiety, Fear and Avoidance in Pediatric Asthma: A Qualitative Study</i>
14:05	Camilla Thuen	<i>Internet-delivered cognitive behavioural therapy and FODMAP diet for adults with irritable bowel syndrome: A randomized controlled trial</i>
14:20	Josefin Brehmer	<i>A Smartphone-based Serious Game to Improve Mental Health and Medication Adherence in Adults with Depression: A Randomised Controlled Trial</i>
14:35	Group photo and break	
15:20	Vilgot Huhn	<i>Not just spontaneous remission: Time-dependent and independent effects in pre-intervention symptom reduction</i>
15:35	Henrik Bischoff	<i>FoMO, Phubbing, and Ghosting in Online Relationships: The Role of Attachment Styles, Personality Traits, and Mentalization Ability - Evidence from an International Study</i>
15:50	Nils Hedman	<i>Internet-delivered CBT is effective in reducing cardiac anxiety in patients with non-cardiac chest pain: preliminary RCT findings</i>
16:05	Magnus Karlsson-Good, Vilgot Huhn	<i>What Are We Estimating? How Causal Reasoning Can Improve Predictor and Moderator Research in Internet Interventions</i>
16:20	Break	
16:35	Michael Endale Mengesha, Amanda Simonsson	<i>Resource use and costs associated with response to internet-delivered cognitive behavioral therapy (ICBT) for common mental disorders</i>
16:50	Jenny Görling	<i>Feasibility of an Abbreviated Internet-Delivered Parent-Child Interaction Therapy (iPCIT) for Parents of Young Children with Disruptive Behaviors</i>
17:05	Magdalena Pietrzak	<i>What Do Games Mean? Exploring Young People's Narratives to Inform Serious Game Design</i>
17:20	Gerhard Andersson	<i>Leftovers in internet interventions research. Should we publish our old trials?</i>

Day 2, 4 June (08:30-12:20)

08:30	Sonja Togmat Malki	<i>Development of an Internet-Based Support Program for informal caregivers in Sweden: A Delphi Study</i>
08:45	Per Carlbring	<i>What you get vs. what you think you get: Comparison of Human and AI (CHAI) feedback in ICBT for social anxiety</i>
09:00	Kristina Nilsson	<i>Evaluating an Internet Based Education and Support Program for Kidney Transplant Candidates: A Pilot Randomized Controlled Feasibility Study</i>
09:15	Helene Skaarnes	<i>Current landscape of digital mental health interventions for children, adolescent and young adults' anxiety and depression: a scoping review</i>
09:30	Louise Lind	<i>Identifying early indicators of symptom improvement in routine digital primary care: A machine learning analysis</i>
09:45	Kristofer Vernmark	<i>Use of Generative AI and Digital Competencies Among Swedish Psychologists: Descriptive Findings from a National Survey</i>
10:00	Break	
10:45	Nike Lindhe	<i>ClimateCope 2.0: An updated intervention for climate change-related distress</i>
11:00	Jón Ingi Hlynsson	<i>ZeroOCD: Enhancing Exposure Therapy with Augmented Reality</i>
11:15	Jan Maciejewski	<i>Why targeting adherence self-efficacy failed to improve adherence in internet interventions: insights from two randomized studies</i>
11:30	Karin Romberg	<i>Lifefulness - feasibility and acceptability of a self-guided digital intervention promoting mental health among older adults in Sweden</i>
11:45	Cecilia Maria Malberti	<i>Social Media Exposure and the Plasticity of Bodily Identity: An Experimental Study of Enfacement</i>
12:00	Davide Peiti	<i>Investigating Flow During Social Media Scrolling: A Multimodal Approach</i>
12:15	<i>Conference ending</i>	

Presentation Abstracts

(ordered by the time in the agenda)

Day 1, 13:05: **Victoria Aminoff**, Linköping University

Mental health problems related to economy: Can internet-based cognitive behavioral therapy be effective?

Introduction: Associations between financial difficulties and depression as well as other forms of mental health problems have been documented. However, few studies have examined whether and how mental health problems related to financial difficulties can be effectively treated. The present pilot study aims to evaluate the feasibility and preliminary effects of an internet-based cognitive behavioral therapy (ICBT) intervention adapted to target mental health problems related to economy.

Methods: Using a within-group design, 48 included participants receive an eight-week long ICBT with weekly therapist support. Outcome measures include financial stress/well-being, depression, anxiety, and secondary outcome measures such as stress and experienced quality of life.

Results: Data collection and treatment delivery are currently ongoing (spring 2026). Therefore, results are not available for now and will be preliminary.

Discussion: Preliminary findings will be discussed in terms of feasibility, adherence, and potential treatment effects. Based on these results, a larger randomized controlled trial is planned. This project represents an initial step toward developing an evidence-based psychological intervention specifically targeting mental health problems related to mental health problems related to economy.

*Victoria Aminoff, Alfiya Laxmidhar, Ellen Zetterlind, Ornina Tolo,
Mikael Ludvigsson & Gerhard Andersson*

Day 1, 13:20: **Tomas Lindegaard**, Linköping University

Does Internet-delivered Psychodynamic Therapy reduce trait Neuroticism: Results from a Randomized Controlled Trial

Neuroticism is a personality trait linked to psychical and mental disorder. Previous research indicates that even short psychotherapy interventions can reduce neuroticism. However, controversy remains as to what extent this change reflects true trait-level change, as opposed to state-level variance. The aim of the present study was to investigate the immediate and long-term effects of internet-delivered psychodynamic therapy (IPDT) on trait neuroticism in a sample with mixed anxiety and depressive symptoms, while also controlling for state-level change in depressive and anxiety symptoms. In total, 115 participants were included and randomized to treatment or a wait-list control condition. Self-reported neuroticism as measured with the IPIP-NEO 300 was used as the primary outcome measure. Secondary outcomes of depression, anxiety, quality of life, neuroticism, emotion regulation and defense mechanism adaptiveness were also included. Level of neuroticism was significantly reduced following the intervention Cohen's $d = 0.75$, [.30, 1.19]. The effect of the treatment on neuroticism remained significant when controlling for state-level change. Significant medium to large effects were found across secondary outcome measures.

Results from the not yet collected one-year follow-up will also be presented. The results indicate that IPDT leads to moderate reductions in trait neuroticism partially independent of state-level change.

Tomas Lindegaard, Anton Käll, Matilda Berg, Moa Hallberg, Lukas Brunzell, Alexandra Wilson Petterson, Josefina Lönnroth, Ebba Tengroth Landquist, Elin Kronberg, Siri Romedahl, Sara Keran, Daria Kuchinskaya, Ronald J Frederick & Gerhard Andersson

Day 1, 13:35: **Sandra Frööjd**, Karolinska Institutet

Held over a distance: Patient experiences of ICBT for antenatal depression with added live support sessions

Introduction: Antenatal depression is common and often remains untreated. Few studies have evaluated pregnancy-adapted internet-based cognitive behavioural therapy (ICBT). Although these studies indicate promising treatment effects, participants frequently report feelings of loneliness, being overwhelmed, and a desire for increased interaction. With the DANA-project, we attempt to address these needs by incorporating live support sessions to a pregnancy-adapted ICBT-treatment, providing increased support and contact with two clinicians. This presentation will explore participants' experience of this treatment.

Methods: We conducted a qualitative study using semi-structured interviews with participants (n=20) who had received a 10-week guided ICBT for antenatal depression, complemented with live support sessions delivered by a midwife over video or telephone. The data were analysed using reflexive thematic analysis.

Results: One overarching theme was generated, named 'Feeling held over a distance – the interplay of Support and Obligation', comprising three themes representing the participants' experiences of the treatment. Participants described the treatment as supportive and validating, with many elements perceived as helpful, indicating that the key elements of the treatment were well received. Participants emphasized the value of the therapeutic relationship, the relevance of the content, and the emotional resonance of the treatment. At the same time, they experienced the program as demanding, reporting a high level of burden, both related to the illness itself, the treatment, and other life circumstances. A strong wish for personal tailoring was evident. The support sessions were valued, offering opportunities for individualised guidance and contributing to a deeper therapeutic relationship.

Conclusions: Participants in therapist-guided ICBT for antenatal depression with added live support sessions delivered by a counsellor, appreciated the treatment but reported substantial burden that may affect perceived feasibility. Personal tailoring of both structure and content was highly valued, and although this was described as present, participants expressed a desire for more. Feeling seen was repeatedly highlighted as a valued aspect of the intervention. These findings may inform refinement of perinatal digital interventions and guide future implementation efforts.

Sandra Frööjd, Ida Emilsson, Hanna Ulfsdottir, Maude Johansson, Erik Forsell, Viktor Kaldo, & Marie Bendix

Day 1, 13:50: **Ulrika Ehrén**, Department of Clinical Neuroscience, Karolinska Institutet

"When I'm stressed, breathing gets hard, which makes it worse" - Anxiety, Fear and Avoidance in Pediatric Asthma: A Qualitative Study

Introduction: Asthma is a common chronic condition with substantial global social and economic impact. In Sweden, 6-9% of children are affected, and up to one in three also experience anxiety. This comorbidity

worsens symptoms, lowers quality of life, and increases healthcare use. Although cognitive behavioral therapy (CBT) is effective for anxiety, its use for asthma-related anxiety in children remains underexplored. Our previous research on internet-based CBT (iCBT) for adults showed promising results, supporting adaptation for children. However, more knowledge is needed about children, adolescents, and parents' experiences of asthma-related anxiety.

Aim This study aimed to investigate the experiences of asthma-related anxiety in children and adolescents with asthma, to inform the adaptation of iCBT for this population.

Methods: Semi-structured interviews were conducted separately with nine children and adolescents (aged 8-17) with asthma and one parent per family (ten in total). Interviews were analyzed using content analysis within a behavioral analytical framework to identify emotional and behavioral patterns.

Results: Five main categories were identified: (1) Anticipatory anxiety about breathlessness, reflecting emotional responses to expected symptoms; (2) Fear of mismanaging asthma, concerning symptom control and medication use; (3) Fear of being different, highlighting social comparison; (4) Asthma control efforts, encompassing management behaviors; and (5) Acts to minimize risk, describing self-regulation strategies to reduce anxiety and triggers.

Discussion: A pattern of asthma-related anxiety, fear, and avoidance was observed in children and adolescents. Past exacerbations or distressing symptoms often triggered fear and stress, leading to avoidance. Participants also struggled to distinguish between asthma and anxiety symptoms. Future treatment should promote adaptive coping, reduce excessive avoidance, and support symptom differentiation.

*Ulrika Ehrén, Sara Ingvarsson, Catarina Almqvist, Tobias Lundgren,
Charlotte Ulrikka Rask, Josefin Särholm & Marianne Bonnert*

Day 1, 14:05: **Camilla Thuen**, Haukeland University Hospital / University of Bergen

Internet-delivered cognitive behavioural therapy and FODMAP diet for adults with irritable bowel syndrome: A randomized controlled trial

Background: Irritable bowel syndrome (IBS) is a prevalent gastrointestinal disorder associated with reduced quality of life and psychological distress. Although several effective self-management interventions exist, patient access is often limited. Internet-delivered interventions may enhance accessibility and scalability. We aimed to evaluate the effectiveness of a CBT-based module, a FODMAP diet module, or their combination, when added to internet-delivered general patient education, compared to general patient education alone, on IBS symptom severity in adults.

Methods: In this four-arm randomized controlled trial, 642 adults with IBS were allocated to (1) internet-delivered general patient education alone (control) or with the addition of (2) a CBT-based module, (3) a FODMAP diet module, or (4) both the CBT-based module and the FODMAP diet module. All groups could receive personalized guidance from a clinical dietitian via the platform's asynchronous messaging function. The primary outcome was the proportion of IBS symptom responders at 3 months, defined as a ≥ 50 -point reduction on the IBS severity scoring system. Secondary outcomes included IBS-related quality of life, psychological symptoms, treatment adherence, and treatment satisfaction.

Results: Of 557 participants who received their allocated intervention, 373 (67%) completed questionnaires at the primary endpoint at 3 months. Responder rates were comparable across all groups at 3 months ranging from 42.6% to 45.1%, with no significant between-group differences in the primary outcome (OR (95% CI) = 0.97 (0.54 to 1.72), $p = 0.989$). All groups showed within-group improvements in IBS symptoms

and IBS-related quality of life in secondary continuous analyses, but these did not translate into between-group effects.

Conclusion: All intervention groups, including internet-delivered general patient education alone and general patient education with an additional CBT-based and/or FODMAP diet module, demonstrated clinically and statistically meaningful improvements in IBS symptoms and IBS-related quality of life. However, no additional benefit for the content-specific modules were observed. These findings highlight the value of low-intensity internet-delivered interventions for IBS within resource-constrained health systems and emphasize the importance of addressing adherence and engagement in future research.

Camilla Thuen, Robin Maria Francisca Kenter, Jörg Assmus, Elisabeth Kjelsvik Steinsvik, Linn Anja Slåke Vikøren, Gülen Arslan Lied & Birgitte Berentsen

Day 1, 14:20: **Josefin Brehmer**, Linköping University

A Smartphone-based Serious Game to Improve Mental Health and Medication Adherence in Adults with Depression: A Randomised Controlled Trial

Introduction: Serious games constitute a relevant subject of research in the aim of making psychological digital treatment increasingly engaging, accessible and resource-efficient. It is thus motivated to investigate if a serious game administered in an ICBT milieu can reduce depression in participants consuming antidepressants.

Methods: Participants (18+ years with a stable medical treatment for depression) received access to an unguided intervention consisting of the CBT-based serious smartphone game Fig: The Game for Depression and 25 optional ICBT modules with on-demand therapist support for a duration of 9 weeks, or assignment to a waitlisted control condition. The primary outcome was depression symptomatology (MADRS-S). Secondary outcomes were anxiety symptomatology (GAD-7), medication adherence (MMAS-8) and quality of life (BBQ). Outcomes were analysed using linear regression models considering pre-treatment scores as a continuous covariate and assigned condition as a binary covariate, utilising using full information maximum likelihood estimation (FIML) to handle missing data.

Results: Regression models showed significant differences between the treatment and control conditions regarding depression ($d = 0.74$) and anxiety ($d = 0.67$) symptomatology as well as medication adherence ($d = 0.46$) at post-treatment, favouring the treatment condition. No significant difference was found regarding quality of life. Most participants (79 %) installed Fig. Therapists were contacted by 31.6 % of participants, and 27.6 % answered ≥ 1 ICBT worksheet throughout treatment.

Conclusions: The results indicate that Fig can be administered as a resource-efficient adjunct to care consisting of antidepressants, access to on-demand therapist contact and ICBT modules, to reduce depression and anxiety symptoms as well as increase medication adherence. Still, non-significant changes in quality of life indicate that there may be additional needs that were not fully met by the studied intervention.

Josefin Brehmer, Matilda Berg, Gabriel Astudillo, Tomas Lindegaard, Amalie Englund Find, Per Carlbring, Mikael Ludvigsson, & Gerhard Andersson.

Day 1, 15:20: **Vilgot Huhn**, Karolinska Institutet

Not just spontaneous remission: Time-dependent and independent effects in pre-intervention symptom reduction

Psychological symptoms tend to change over time, even in the absence of clinical intervention. For example, self-ratings are often higher at screening compared to start of treatment. A plausible hypothesis is that this is due to patients' self-referring when their gradually fluctuating symptoms are worse than usual. That hypothesis predicts that patients that wait longer will have had longer time to return to their average symptom level. On the other hand, other processes related to measurement reactivity, contact with a clinician, or regression towards the mean, do not predict a time-dependent relationship.

Our aim was to estimate the extent of this hypothesized symptom reduction in depression, social anxiety disorder, panic disorder, health anxiety and insomnia (both total reduction and the relationship with time). The sample included adults (N = 8744) from an outpatient psychiatric clinic providing ICBT in Swedish routine care. Time-dependent effects were estimated with linear regression for both primary symptoms and secondary depressive symptoms. A simulation of symptom fluctuations was built to estimate power and further contextualize the effects.

Patients improved on average from screening to the start of the intervention, but this varied substantially depending on diagnosis and questionnaire used. The waiting time weakly predicted the degree of improvement both for primary depressive symptoms and comorbid depressive symptoms. The estimate for primary depressive symptoms was sensitive to modeling choices, shrinking towards zero when modeled with fat-tailed residuals. The preponderance of "immediate" reductions in symptoms have implications for reporting standards of pre-treatment-measurements, especially in single-group intervention studies.

*Vilgot Huhn, Nils Hentati Isacson, Marie Bendix, Martin Kraepelien,
Hanna Sahlin, Viktor Kaldo, & Erik Forsell*

Day 1, 15:35: **Henrik Bischoff**, SFU Vienna

FoMO, Phubbing, and Ghosting in Online Relationships: The Role of Attachment Styles, Personality Traits, and Mentalization Ability - Evidence from an International Study

Background: Digital modes of communication have profoundly transformed how young adults experience interpersonal relationships worldwide. Behaviors such as fear of missing out (FoMO), phubbing, and ghosting have become increasingly common topics in psychotherapeutic practice. Previous research has suggested potential associations with loneliness, affective distress, insecure attachment patterns, and mentalization-related processes; however, existing studies are predominantly based on nationally confined samples. A systematic, cross-cultural psychological investigation of these phenomena is still lacking.

Aims: The present international cross-sectional study aims to examine how FoMO, phubbing, and ghosting are associated with interpersonal attachment styles, personality traits, and mentalization ability. In addition, the study seeks to explore whether these associations are consistent across different cultural contexts.

Methods: The study is based on an international sample drawn from Germany, Austria, Bahrain, Jordan, Pakistan, South Africa, and Turkey (total sample size: N ≈ 2,374). FoMO, phubbing, and ghosting, as well as attachment styles (ECR-RD12), personality traits (BFI-10), and mentalization ability (MZQ), are assessed using standardized online questionnaires. Data analyses include correlational and multivariate statistical approaches.

Outlook / Significance: By adopting a cross-cultural perspective, this study aims to advance a more nuanced psychological understanding of digitally mediated relational behaviors. The findings are expected to contribute to the further development of attachment- and mentalization-based theoretical models and to inform differentiated psychotherapeutic approaches to FoMO, phubbing, and ghosting.

Henrik Bischoff, Christiane Eichenberg

Day 1, 15:50: **Nils Hedman**, Linköping University

Internet-delivered CBT is effective in reducing cardiac anxiety in patients with non-cardiac chest pain: preliminary RCT findings

Background: Non-cardiac chest pain (NCCP) is recurrent chest pain without a cardiac cause, often accompanied by cardiac anxiety. Internet-delivered cognitive behavioral therapy (iCBT) has shown effectiveness in treating anxiety but has not been extensively studied for NCCP.

Purpose: To evaluate the effects of an 8-week therapist-guided iCBT program on cardiac anxiety compared to non-specific online support.

Method: A total of 126 participants are planned. To date, 99 have been randomized, with 47 having completed their participation in either the intervention (n=23) or control (n=26) arm. Mean age was 50.7 years (SD = 10.6), and 53.1% of participants were female. Inclusion required a CAQ (Cardiac Anxiety Questionnaire) score of ≥ 24 . The intervention group received iCBT with weekly therapist feedback, including psychoeducation, mindfulness, physical activity, exposure, and acceptance strategies. The control group received 8-week non-specific online support. Cardiac anxiety at post-intervention was analyzed using ANCOVA, adjusting for baseline CAQ scores.

Preliminary results: Pre-intervention CAQ scores were similar for the intervention (M = 38.94, SD = 7.75) and control groups (M = 38.61, SD = 9.47). Post-intervention scores dropped to (M = 24.87, SD = 9.42) in the intervention group but remained higher in the control group (M = 36.96, SD = 11.77). An ANCOVA showed a significant between-group effect (F = 36.57, $p < .001$). Adjusted R^2 was .632, indicating a strong model fit.

Conclusion: These preliminary results are promising and suggest that guided iCBT may effectively reduce cardiac anxiety in patients with NCCP. Further analyses, including long-term follow-ups, will be conducted to confirm and evaluate these findings and assess their clinical implications.

Nils Hedman, Peter Johansson, Josefin Särnholm, Gerhard Andersson, Ghassan Mourad

Day 1, 16:05: **Magnus Karlsson-Good**, School of Medical Sciences, Örebro University

What Are We Estimating? How Causal Reasoning Can Improve Predictor and Moderator Research in Internet Interventions

Introduction: A common issue in internet interventions for mental health conditions is that many patients do not respond to treatment. This has led to a line of research that focuses on finding predictive and moderating factors of treatment outcomes with the goal to improve our understanding of these heterogeneous treatment effects. However, this literature often finds inconsistent results between studies making the findings difficult to implement in clinical practice. Drawing on methods from the causal inference literature could improve consistency and impact.

Methods and results: Using causal directed acyclic graphs (DAGs), we show that results from common statistical analyses used in this line of research are sensitive to the underlying causal structure of the data, under some realistic conditions. We use collider bias as an illustrative example. Results from simulation will be presented that show how inconsistent results can appear depending on how covariates are chosen.

Conclusions: Research on predictors and moderators of outcomes in internet interventions would benefit from applying methods from causal inference. Recommendations for future research are to clarify the intended aim of the analyses, precisely define what is to be estimated (the estimand), and justify the chosen statistical analyses using causal reasoning.

Magnus Karlsson-Good & Vilgot Huhn

Day 1, 16:35: **Michael Endale Mengesha**, Uppsala Health Economics, Uppsala University

Resource use and costs associated with response to internet-delivered cognitive behavioral therapy (ICBT) for common mental disorders

Background: Internet-delivered cognitive behavioral therapy (ICBT) has been shown to be effective for common mental disorders, yet evidence on health economic outcomes in routine primary care remains limited. In Region Uppsala, ICBT has been implemented since 2018 for patients with depression, insomnia, generalized anxiety disorder, panic disorder, social anxiety, and stress-related disorders/exhaustion syndrome, with data available until 2022. This study aims to assess the incremental resource use and costs between responders and non-responders to ICBT.

Method: Data from the Swedish Internet Treatment Register (SibeR) were linked to registers for specialized inpatient and outpatient care, primary care, dispensed medication, and sociodemographic variables. Treatment response was measured with diagnosis specific rating scales and followed the criteria from SibeR. Cumulative resource use and costs for responders and non-responders were calculated for one year starting from treatment date. Healthcare resource use and cost were categorized as psychiatric or non-psychiatric. Propensity score matching with replacement was performed within treatment groups. Mixed-effects generalized linear models, hurdle models, and two-part models estimated the incremental resource use and cost. All costs were inflated to 2024 Swedish Krona and converted to Euro (€).

Results: From an initial cohort of 2,343 patients, exclusions and matching procedures resulted in a final analytic sample of 933 responders and 542 non-responders. At baseline, sufficient balance was achieved, and responders and non-responders were comparable in terms of age, sex, education, income, and prior healthcare use.

Responders had lower resource use across primary care (-1.89), specialized outpatient (-1.25), and dispensed medication (-1.76), compared to non-responders. There were no significant differences in inpatient care use. In total, responders used 4.21 fewer resource units, driven by reductions in psychiatric resource use (-2.70).

Responders had statistically significant lower primary care costs (-€ 397) but not specialized outpatient, inpatient and medication costs. In total, responders incurred -€ 2,368 lower total healthcare costs, resulting from reductions in both psychiatric costs (-€ 780), and non-psychiatric costs (-€ 1,147).

Conclusion: Our results indicate that treatment response to ICBT can lead to broad health care savings; across both psychiatric and non-psychiatric domains.

Michael Mengesha, Inna Feldman, Amanda Simonsson, Monica Buhrman, Lance McCracken, Viktor Kaldo, Filipa Sampaio

Day 1, 16:50: **Jenny Görling**, Karolinska Institute Department of Clinical Neuroscience

Feasibility of an Abbreviated Internet-Delivered Parent–Child Interaction Therapy (iPCIT) for Parents of Young Children with Disruptive Behaviors

Introduction: Severe early behavioral problems significantly increase the risk of functional impairments during childhood and later life. Parent-Child Interaction Therapy (PCIT) is an evidence-based intervention proven effective for young children (aged 2–7) with disruptive behaviors. However, PCIT is not currently implemented in Sweden. Barriers include time constraints for parents, logistical challenges for therapists, and high dropout rates in traditional formats. The aim of the study was to evaluate the feasibility of an abbreviated, internet-delivered version iPCIT, that may help overcome these implementation barriers.

Methods: This study involved 21 parents of children aged 2–7 exhibiting disruptive behaviors. The iPCIT intervention combines internet-based cognitive behavioral therapy elements - delivering content via text, videos, and case examples- with live videoconference coaching, a core component of traditional PCIT. Feasibility was assessed through measures of treatment adherence, treatment satisfaction, treatment credibility, therapeutic alliance, subjective relief, and adverse events. Pre- to 2-month post-treatment changes in child disruptive behaviors were also evaluated.

Results: Feasibility measures indicated good treatment adherence (mean completed treatment modules 8.5/10 and 4.8/5 video sessions), satisfactory working alliance with the therapist, high treatment satisfaction and credibility, absence of severe adverse events, and adequate subjective relief. A significant reduction in disruptive behaviors was observed between baseline and the 2-month follow-up ($p < .001$). The effect size was large (Cohen's $d = 1.28$).

Conclusion:

This shortened online intervention may offer a feasible alternative that reduces attrition while providing an accessible yet impactful option for parents managing disruptive behaviors in young children. The results need to be confirmed in a randomized controlled trial.

*Jenny Görling, Maria Helander, Åse Bjørseth, Josefin Ahlqvist, Ulrika Ehrén,
MaiBritt Giacobini, Tobias Lundgren, Eva Serlachius, Sarah Vigerland,
Lotta Reuterskiöld & Marianne Bonnert*

Day 1, 17:05: **Magdalena Pietrzak**, Institute of Psychology, SWPS University, Warsaw

What Do Games Mean? Exploring Young People's Narratives to Inform Serious Game Design

Introduction: Video games have become a mainstream medium for delivering mental health education and interventions among young people. To improve the design and implementation of gamified tools, it is essential to understand the meanings that young people assign to games within their everyday lives and personal narratives. The present study focuses primarily on these meanings, while also examining how they vary across different age groups, how contextual factors shape them, and how they can inform strategies to enhance engagement with serious games.

Methods: Focus groups were conducted with adolescents and young adults, parents, teachers, and mental health professionals working with young people. The study was carried out across seven European countries (Germany, Italy, Slovenia, Cyprus, Spain, Poland, and UK) as part of the SMILE project funded by the Horizon program. Participants discussed mental health challenges and resources, as well as gaming

habits and preferences. Subsequently, thematic analysis was used to identify and analyze narratives related to the role of gaming in participants' lives.

Results: The analysis identified five main themes. The first concerns the role of games in the creation and dynamics of social relationships. The second captures the emotional and psychological value of games. The third relates to the contribution of games to the development of interests and competencies. The fourth presents games as part of everyday life - either as a central element or a background activity. The final theme highlights games as sources of experiences and forms of stimulation.

Conclusions: The findings highlight that video games play a multifaceted role in young people's lives across social, emotional, developmental, and everyday contexts. These dimensions should be explicitly considered both in the design of serious games and in how they are communicated to key stakeholders, to enhance their relevance, acceptance, and effective implementation.

Magdalena Pietrzak, Magdalena Leśniewska, Jan Maciejewski, & Ewelina Smoktunowicz

Day 1, 17:20: **Gerhard Andersson**, Linköping University

Leftovers in internet interventions research. Should we publish our old trials?

Some research studies never get published. Sometimes this is a consequence of lack of statistically significant findings. But there are also examples of studies that are left behind because of lack of time, resources to publish the findings, shortage of staff, and the fact approximately 20% of rejected papers never get published. That can be reasonable if quality is poor, but it can also be bad for open science as we need to learn from studies that are not perfect. In particular as replication is urgent in some fields of intervention research. The topic of this talk is the file-drawer problem in ICBT research. Examples will be given and a call for researchers to go public with their old, unpublished trials. It is also important to publish failed trials and studies with non-significant findings. Examples of ways to open up the file-drawer will be given and discuss preregistration and ways to detect and facilitate publication of old trials and data. Arguments from the opposing camp of researchers who claim that there is a need to prevent some studies from getting published will be mentioned. In conclusion, researchers in the field of ICBT can join forces and promote the goal of reducing the file-drawer.

Gerhard Andersson

Day 2, 08:30: **Sonja Togmat Malki**, Linköping University

Development of an Internet-Based Support Program for informal caregivers in Sweden: A Delphi Study

Background: Informal caregivers in Sweden provide essential support to individuals with chronic illnesses, disabilities, or age-related conditions, often without formal training or compensation. Despite the high burden and associated risks of depression among caregivers, access to structured support remains limited. Digital interventions, particularly internet-based programs, offer a promising solution to enhance accessibility and flexibility.

Aim: This study aimed to identify and refine the content and design of an internet-based support program for informal caregivers in Sweden using a Delphi approach.

Methods: A two-round Delphi process was conducted with 56 participants, including informal caregivers and carer advocates. Participants evaluated the relevance and clarity of a prototype program consisting of

structured modules based on cognitive behavioral principles. Quantitative ratings were analyzed using medians and quartiles, while qualitative data underwent deductive content analysis.

Results: Consensus was achieved on all rated items across both rounds. Participants emphasized the importance of flexibility, allowing optional modules to accommodate diverse caregiving contexts. Key recommendations included integrating practical tips, emotional support content (e.g., grief management), and multimedia elements such as videos. Language accessibility emerged as a critical factor, with requests for motivational and non-academic wording. The role of a contact person for feedback and guidance was also highlighted.

Conclusions: Findings underscore the need for an inclusive, adaptable digital support program that addresses both emotional and practical aspects of caregiving. Incorporating user perspectives ensures relevance and usability, supporting the development of an approximately eight-week program with elective modules and clear guidance. Future research should explore implementation strategies and evaluate program effectiveness in diverse caregiver populations.

Togmat Malki Sonja, Johansson Peter, Andersson Gerhard, Andréasson Frida, Mourad Ghassan

Day 2, 08:45: **Per Carlbring**, Stockholm University

What you get vs. what you think you get: Comparison of Human and AI (CHAI) feedback in ICBT for social anxiety

Internet-based cognitive behavioral therapy (ICBT) is an effective treatment for social anxiety, and therapist support increases both adherence and outcomes. But this support comes at a cost. In the current study, human feedback required roughly 15 minutes of therapist time per patient per week. With AI-generated feedback, that drops to about one minute for oversight. The question is whether AI feedback is equally effective, how participants experience it, and whether their beliefs about who is writing back actually matters for the outcome.

The CHAI study (Comparison of Human and AI feedback) is an RCT addressing these questions. Participants with social anxiety are randomized to receive either AI or human feedback during a 9-week manualized ICBT program based on the Clark and Wells model, delivered on a secure treatment platform. What makes the design unusual is a partial deception element: some participants are told they receive AI when they actually get human feedback, and vice versa. This allows us to separate the actual effect of feedback source from the effect of what participants believe they are getting, a distinction that matters given what we know about expectancy effects in psychotherapy.

The AI feedback is generated by an LLM, with all output monitored by a licensed psychologist. Additional conditions include self-guided treatment and a waitlist control. Social anxiety symptoms (SPIN) and therapeutic alliance are measured weekly throughout treatment, making it possible to track not only symptom trajectories but also how the therapeutic relationship develops over time, including potential alliance ruptures and whether AI and human therapists differ in their capacity to repair them. We also collect adherence data and qualitative content analysis of participants' experiences and attitudes. The qualitative component captures what standardized measures miss: what people actually value in therapeutic feedback, what feels lacking when a machine provides it, and whether knowing the source changes the experience. Preliminary results from early participants will be available at the conference.

Per Carlbring, Jón Ingi Hlynsson, George Vlaescu, & Gerhard Andersson

Day 2, 09:00: **Kristina Nilsson**, Linköping University

Evaluating an Internet Based Education and Support Program for Kidney Transplant Candidates: A Pilot Randomized Controlled Feasibility Study

Background: Individuals awaiting deceased donor kidney transplantation often experience physical strain, emotional stress, and limited social participation. Uncertain waiting times and dialysis demands can reduce well being, self-management, and readiness for life post transplantation. Structured education and psychosocial support are inconsistent, and standard information may not meet patients' needs. To address this, a 9 week web based program combining educational content with guided cognitive behavioral and acceptance and commitment therapy was developed to support resilience, self-efficacy and preparedness during the waiting period.

Objective: To assess the feasibility of a 9 week online support and education program for adults awaiting deceased donor kidney transplantation, including recruitment, retention, fidelity, adherence, and preliminary effects on well being, self efficacy, illness acceptance, and transplant knowledge.

Methods: A randomized feasibility design was used. Adults listed for deceased donor kidney transplantation in Sweden were randomized to immediate access to the web based program or a wait list control. Feasibility was evaluated through recruitment, retention, adherence, engagement, fidelity, resource use, and missing data against predefined stop–amend–go criteria. Patient reported outcomes were collected digitally at baseline and after nine weeks.

Results: Thirty of 359 invited patients enrolled, and 24 completed follow up. Most feasibility indicators met Go criteria, while recruitment required improvement. Preliminary analyses showed moderate to large improvements in self efficacy, illness acceptance, and self rated health, with additional moderate effects on stress and self care monitoring; other domains showed small changes. Within group trends aligned with these findings.

Conclusion: The program met most feasibility criteria, with recruitment as the main limitation. Findings support a full scale trial with refined recruitment strategies and evaluation of clinical and implementation outcomes.

Kristina Nilsson, Gerhard Andersson, Peter Johansson, & Johan Lundgren.

Day 2, 09:15: **Helene Skaarnes**, Center for Digital Psychiatry, Denmark

Current landscape of digital mental health interventions for children, adolescent and young adults' anxiety and depression: a scoping review

Background: Anxiety and depression are common among children, adolescents, and young adults, and often persist if left untreated. Although evidence-based treatments exist, few receive appropriate care. Over the past two decades, digital mental health interventions (DMHIs) have emerged as an alternative means of delivering psychological interventions through computer- and mobile-based platforms.

Objectives: This scoping review aimed to map the current landscape of DMHIs targeting anxiety and/or depression in children, adolescents, and young adults, describing technological modalities, key implementation features, reported effects, and gaps in the evidence.

Methods: Following PRISMA-ScR guidelines, seven databases (CINAHL, Cochrane Library, ERIC, PubMed, PsycINFO, Scopus and Web of Science) were searched for studies published in the past two decades. Eligible studies were screened and charted using a structured framework.

Results: Eighty-seven studies met inclusion criteria. DMHIs showed substantial variability in digital modalities, duration, therapist involvement, and parental participation. DMHIs showed promising effects in reducing anxiety and depression symptoms. Evidence remains limited for several technologies and for certain demographic groups, including younger children, young adults, and non-Western populations.

Conclusion: DMHIs, particularly internet-based interventions, show strong potential as scalable treatment options for anxiety and depression. Other modalities appear promising but require further research to establish their effect and applicability across diverse populations.

*Helene Skaarnes, Nikita Marie Sørensen, Johanne Jeppesen Lomholt,
Per Andréén, Lauren McLellan, Marie Paldam Folker,
Julie Buhl-Wiggers, Merete Konnerup & Kim Mathiasen*

Day 2, 09:30: **Louise Lind**, Stockholm university

Identifying early indicators of symptom improvement in routine digital primary care: A machine learning analysis

Introduction: Large-scale digital mental health services generate extensive clinical data, yet these data are not collected under controlled research conditions. The present study examines how routinely collected data can be structured and analysed to identify early indicators of reliable symptom improvement, with particular attention to the methodological trade-offs inherent in working with heterogeneous clinical presentations.

Methods: Using routinely recorded treatment data, patients were grouped pragmatically based on primary symptom presentation (depression, anxiety, comorbid), reflecting how care is organised in practice rather than research diagnoses. Logistic regression models were estimated separately within each group. Predictor sets were defined a priori and harmonised across groups, while allowing outcome-specific early symptom measures. L1-regularised logistic regression was used to balance interpretability and stability. Performance was evaluated on held-out data using ROC AUC, balanced accuracy, F1-score, and PR AUC.

Results: Discrimination was moderate across groups (ROC AUC \approx 0.69–0.76). Early symptom change and second-measurement symptom levels consistently emerged as the strongest predictors, while baseline demographics and treatment characteristics contributed more modestly. Results were largely stable across modelling strategies.

Conclusions: The findings illustrate both the predictive value of early symptom trajectories and the methodological trade-offs involved when translating routine clinical data into structured analytic models.

Louise Lind

Day 2, 09:45: **Kristofer Vernmark**, Linköping University

Use of Generative AI and Digital Competencies Among Swedish Psychologists: Descriptive Findings from a National Survey

Introduction: The rapid development of generative artificial intelligence (GenAI) is transforming the landscape of digital mental health. Psychologists are increasingly expected to engage with digital tools in their professional work. However, there is limited knowledge about how psychologists currently use GenAI, their attitudes toward its integration in practice, and their perceived competence in this area.

Understanding these factors is important for informing training, implementation strategies, and the future development of the psychology profession.

This presentation reports descriptive findings from a national survey of Swedish psychologists, focusing on current and future use of GenAI, and perceived digital competencies.

Methods: A cross-sectional online survey was distributed to psychology students, internship psychologists (PTP), and licensed psychologists in Sweden (January-February 2026). Recruitment was conducted through the Swedish psychological association's mailing list and social media channels. The survey included items on demographic characteristics, current use of GenAI in professional and private contexts, perceived digital competencies, and attitudes towards the integration of GenAI in the psychology profession. Descriptive statistics were calculated to summarize patterns of use, attitudes, and competencies across the sample.

Results and conclusions: A total of 1077 respondents were included in the analysis. Results from the descriptive analysis will be presented. The descriptive findings provide the first large-scale overview of how psychologists in Sweden use and perceive GenAI. The study contributes to the ongoing discussions about the role of AI in the psychology profession and the development of digital competencies in education and practice.

Kristofer Vernmark

Day 2, 10:45: **Nike Lindhe**, Linköping University

ClimateCope 2.0: An updated intervention for climate change-related distress

Introduction: In a previous RCT, we evaluated the effects of tailored ICBT on climate change-related distress. Results indicated that the ClimateCope program was superior to wait-list on several outcome measures. However, dropout rates were relatively high, and participant feedback from questionnaires and telephone interviews suggested that the ICBT program might benefit from some adjustments.

Methods: Changes were made to the module content, and the format was converted from tailored to standardized. A second RCT was conducted to evaluate the updated intervention. Forty-nine participants were recruited and randomized to receive eight weeks of ClimateCope 2.0 or a wait-list condition. Linear mixed-effects models were used to analyse effects on climate change-related distress. Adherence and acceptability were compared between the two RCTs.

Results: The second RCT produced similar findings regarding psychological symptoms, as participants in the intervention group showed significantly greater reductions in depressive symptoms, stress, climate change-related distress and insomnia than participants on wait-list. Compared with the first trial, participants in the second trial were more satisfied with the help they received, engaged more with the module content, and had lower dropout rates.

Conclusions: Participant feedback was valuable in the process of making alterations to the original intervention. Outcome measures and feedback questionnaires indicate that ClimateCope 2.0 effectively reduces climate change-related distress, while being shorter, easier for therapists to administer, and more accepted by participants.

Nike Lindhe, Matilda Berg, & Gerhard Andersson

Day 2, 11:00: **Jón Ingi Hlynsson**, Stockholm University

ZeroOCD: Enhancing Exposure Therapy with Augmented Reality

Introduction: Clinical guidelines for the treatment for obsessive-compulsive disorder (OCD) have remained unchanged since 2005, wherein gold-standard treatment centers around voluntary exposure to feared stimuli and disengagement of safety-seeking behaviors. Alarming, OCD sufferers far too often present to treatment a decade after initial symptom onset. As such, investigating novel ways of providing accessible gold-standard treatment is imperative to help ameliorate the burden of OCD. This presentation will provide attendees with preliminary insights from a randomized controlled trial within the ZeroOCD project, which investigates a smartphone-based treatment for OCD leveraging augmented reality.

Methods: The ZeroOCD project is an ongoing international collaboration between institutions in Sweden, Switzerland, the Netherlands, and Belgium. The ZeroOCD app combines augmented reality (AR) exposure therapy and CBT principles to ameliorate OCD symptoms, with a focus on contamination-related symptoms (e.g., fear of dirt, germs, bodily fluids). It offers a module-based treatment program featuring evidence-based tools, including psychoeducation, immersive AR stimuli (both realistic and ambiguous to address disgust and uncertainty intolerance), in vitro and in vivo exposure and response prevention.

Results: The ZeroOCD project has a relatively low threshold for intake (e.g., inclusion criteria include a Y-BOCS score of 7 or higher). Nevertheless, the average symptom severity at baseline is substantially higher than anticipated. Other preliminary insights will be shared orally at SWEsrii.

Conclusions: Although the trial is currently ongoing, a few key insights about implementation of a smartphone-based treatment application have already emerged. This presentation provides attendees with an opportunity to better understand the future of AR-CBT interventions generally, the future of accessible OCD interventions, and derive preliminary learnings from the ZeroOCD project.

Jón Ingi Hlynsson, Jan Bergström, Per Carlbring, Marketa Ciharova, Andrej Skoko, Thomas Berger, Ilja Cornelisz, Chris van Klaveren, Tobias Krieger, Tom Van Daele, & Tara Donker

Day 2, 11:15: **Jan Maciejewski**, StressLab: Stress Research Centre, SWPS University, Warsaw

Why targeting adherence self-efficacy failed to improve adherence in internet interventions: insights from two randomized studies

Introduction: Low adherence is a persistent challenge in self-guided internet interventions. To investigate a potentially universal way to improve it, we developed a brief module designed to increase adherence-specific self-efficacy in internet interventions. The module targeted confidence in integrating and sustaining the use of internet interventions and included a testimonial video and two text-based exercises grounded in self-efficacy theory.

Methods: We conducted a two-phase investigation. In Phase 1, university students (N = 217) were randomized to the module or a waitlist control to test its immediate effect on adherence self-efficacy. In Phase 2, final-year medical students and medical interns (N = 214) were randomized to receive either the module before a two-week self-guided intervention (Med-Stress Student) or the intervention alone. Outcomes were adherence self-efficacy, actual adherence, and intervention outcomes (job stress and work engagement).

Results: In Phase 1, no differences in adherence self-efficacy were found between groups. In Phase 2, groups did not differ in adherence self-efficacy immediately after the module or at posttest. There were also no group differences in actual adherence, work engagement, or job stress. However, job stress

decreased from baseline to posttest across both groups, suggesting that Med-Stress Student itself may have had beneficial effects.

Conclusions: A one-time pre-intervention module was not sufficient to improve adherence-specific self-efficacy or actual adherence in self-guided internet interventions. These findings suggest that improving adherence may require process-oriented support delivered throughout the intervention rather than a single preparatory component.

Jan Maciejewski, Magdalena Lesnierowska, Per Carlbring, Ewelina Smoktunowicz

Day 2, 11:30: **Karin Romberg**, Karolinska Institutet

Lifefulness - feasibility and acceptability of a self-guided digital intervention promoting mental health among older adults in Sweden

Introduction: The number and proportion of older adults (≥ 65 years) is increasing worldwide, already exceeding 20% in Sweden. The growing number of older adults with concurrent physical and mental health issues, pose a major challenge for healthcare, rendering a critical need for low-cost, easily accessible behavioural interventions.

Methods: This single-group feasibility trial evaluated a transdiagnostic digital self-help intervention, "Lifefulness", specifically adapted for older adults and designed to promote behaviour change and mental health. Content was based on cognitive behavioural therapy (CBT) and healthy ageing principles. Older adults were recruited from the community (age range 65–85) and were assigned to the six week intervention, which included three brief phone interviews focusing on program adherence. Outcomes included program use and acceptability as well as preliminary effects on quality of life and mental health outcomes.

Results: A total of 73 individuals were included. Program utility was high on average, with 72% of participants engaging with the intervention daily or several times a week. The average time spent on the three interviews was 33 minutes per participant. The program was associated with favourable changes in various mental health symptoms and higher ratings of quality of life and the participants reported high satisfaction and credibility.

Conclusions: These findings support the feasibility and resource-efficiency of a digital self-help intervention for older adults. The intervention warrants further testing in a randomized trial with long-term follow-up assessments of both outcomes and healthcare consumption.

Karin Romberg, Martin Kraepelien & Christopher Sundström

Day 2, 11:45: **Cecilia Maria Malberti**, Università Cattolica del Sacro Cuore

Social Media Exposure and the Plasticity of Bodily Identity: An Experimental Study of Enfacement

Social media are increasingly shaping how individuals experience and represent their own bodies, often promoting standardized and appearance-focused content. Growing evidence suggests that prolonged exposure to such environments may influence the integration of internal and external bodily signals, potentially altering the stability of self–other boundaries.

Human bodily self-consciousness relies on multisensory representations that allow individuals to distinguish their own body from others. These representations are highly plastic and can be manipulated through body illusions such as the enfacement illusion, in which synchronous visuotactile stimulation

induces identification with another face. Recent findings indicate that prolonged Instagram use is associated with heightened susceptibility to face embodiment illusions, suggesting a potential digital modulation of bodily identity. However, the underlying mechanisms remain unclear.

The present study investigates whether exposure to body-focused social media content modulates susceptibility to the enfacement illusion in virtual reality (VR). In a within-subject design, participants undergo three enfacement assessments: at baseline, following exposure to body-related content, and following exposure to non-body-related content. Illusion strength serves as an index of the flexibility of self–other boundaries.

To further clarify the mechanisms involved, body image and body schema are assessed through self-reported questionnaires and behavioral paradigms to examine if pre-existing characteristics of body representation influence the effects of social media exposure on embodiment susceptibility.

We hypothesize that exposure to body-focused content will increase susceptibility to synchronous enfacement, reflecting a transient loosening of facial self-boundaries. This study provides a controlled experimental framework to examine how digital environments may reshape multisensory mechanisms underlying bodily identity.

Cecilia Maria Malberti, Davide Peiti, Maria Sansoni, & Giuseppe Riva

Day 2, 12:00: **Davide Peiti**, Università Cattolica del Sacro Cuore

Investigating Flow During Social Media Scrolling: A Multimodal Approach

Social media use has been associated with states of intense focus, which some authors have conceptualized as “Facebook flow”. However, it remains unclear whether passive social media engagement fully corresponds to flow or reflects a related form of attentional absorption.

Importantly, both flow and similar immersive states involve a narrowing of attentional resources and reduced processing of peripheral information. Given that bodily self-consciousness depends on the dynamic integration of internal and external sensory signals, such attentional narrowing may transiently modulate the processing of bodily signals. Despite this theoretical relevance, flow in social media contexts has been predominantly examined through cross-sectional and correlational designs relying almost exclusively on self-report measures, which do not capture changes in sensory processing. Experimental paradigms assessing flow in real time and integrating objective behavioral indices remain indeed scarce, leaving its moment-to-moment impact on bodily awareness largely unexplored.

The present study therefore investigates whether self-reported flow during Instagram use is associated with transient alterations in bodily self-consciousness. Healthy adult social media users without medical or psychiatric conditions complete an Instagram scrolling task during which randomized visual, auditory, and thermal stimuli are presented. Participants’ signal detection is assessed in real time; reduced performance during scrolling relative to baseline serves as a behavioral index of sensory attenuation. This behavioral index is examined alongside validated state measures of flow, dissociation, and cognitive absorption to distinguish flow-like engagement from detachment-related phenomena. Interoceptive accuracy is additionally measured via the Schandry heartbeat counting task to examine whether immersive scrolling is associated with altered access to internal bodily signals.

This study introduces an experimental, multimodal paradigm to investigate moment-to-moment fluctuations in bodily awareness during digital engagement. This methodology provides an ecologically grounded framework for examining how immersive technological environments may transiently reshape the integration of bodily signals.

Davide Pieti, Cecilia Maria Malberti, Maria Sansoni & Giuseppe Riva



www.swesrii.se



Printed in Linköping 2026 by Linköping University Electronic Press