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***POSTER***

***PRESENTATIONS***

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**POSTER**

**BİLDİRİLER**

## Turkish Adaptation of E-Therapy Attitudes Measure: Validity and Reliability Study

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Internet-based interventions in the field of psychological help means presenting scientifically proven psychotherapeutic interventions to prevent and treat psychological disorders or to increase the well-being and coping skills of users, through an online web page, mobile application or computer software generally with a guide who is a mental health professional or in a form that users can use on their own. In this study, the Turkish adaptation of the e-Therapy Attitudes Measure, which is used to evaluate attitudes towards internet-based interventions, was carried out. The participant group of the research consists of 414 (313 Female and 101 Male) university students. The obtained confirmatory factor analysis results generally confirm the structure of the original scale:  $\chi^2/df$  (416.09/103) = 4.04,  $p < .001$ , CFI = .94, NNFI = .92; IFI = .94; GFI = .89; SRMR = .063; RMSEA=.086 (confidence interval for RMSEA = .077-.094). The Attitude Scale Towards Internet-Based Interventions consists of two sub-dimensions called "Perceived usefulness and helpfulness" and "Relative Advantage and Comparability". In the analyzes performed to determine the reliability of the scale in the existing data, it was found that the internal consistency coefficient for the whole scale was .86, and the results of the measurement tool did not change over time according to the test-retest application ( $r = .92$ ). The measurement tool, which consists of 16 items, is a valid and reliable assessment tool that can be used to evaluate individuals' attitudes towards internet-based interventions.

## Misophonia and Schema Therapy: Case Report

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**Presenting Problem:** Mizophobia is an abnormal reaction (anxiety and anger, and sometimes experience tantrums) to a sound that has certain characteristics and/or is meaningful to the individual. Misophonia can be treated with different treatment modalities such as medication and psychotherapies (e.g. BDT, mindfulness), but the related studies are limited.

**Case:** Conceptualisation and Intervention: In this case report, we summarized the follow-up of a 22 years old female patient who presented to our clinic with sensitivity to sound (especially nasal irritation and throat clearing due to food sounds) with 12 sessions of schema therapy. Her complaints had increased significantly in the last 1 year and that she applied to us because she had difficulty eating with her family, getting angry and not being able to sit with her father. It was learned that the patient had previously applied for treatment for this complaint and was on sertraline 100 mg for 6 months and received weekly cognitive behavioral therapy and they still continued and she was very disturbed especially by her father's sounds. Since the patient had applied for a different therapy method, and schema therapy was recommended to the patient. Before starting the therapy, the misophonia scale (scored as 62) was completed. The patient was interviewed weekly for 50-60 minutes. In this process, it was learnt that the patient was especially disturbed by the sounds made by her father. During the interviews, it was learnt that her mother died when the patient was 7 years old and her father married her aunt in a short time and she was very disturbed by her father's marriage with her. She stated that after this marriage, she had no trust in anyone and felt abandoned and unloved and that her father had distanced himself from her. When the patient focused on the moments when she was disturbed by the sounds, it was seen that she was angry and upset when she heard the sounds made by her father, and underlying these feelings were thoughts of abandonment and lack of love. In the sessions with the patient, cognitive and experiential techniques were used to work on re-parenting, modes and coping.

**Outcome:** After 12 sessions of schema therapy, the severity of the disorder was measured by giving scales to the patient again. Misophonia scale score decreased to 24. According to the patient's own statement, it was learnt that she no longer got up from the table, could watch TV with her father in the same environment in the evenings, and did not get angry at noises as much as before.

**Review and Evaluation:** In this study, a patient with misophonia who applied to a psychiatry outpatient clinic was followed up with a change in the misophonia scale score as a result of receiving psychotherapy with a 12-session schema therapy protocol. Although schema therapy is not a widely used method in patients with misophonia, it has been observed that it provides significant improvement in disease symptoms and functionality when selected in appropriate patients with negative core beliefs.

## The Satisfaction with Life Scale in Namibia

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Life satisfaction is often measured with the five-item Satisfaction with Life Scale (SWLS). Although many previous studies have examined the validity of the SWLS in diverse populations, rigorous assessment of measurement invariance has been lacking, especially in an African context, and none have been conducted in Namibia. The present study examined measurement invariance of the SWLS in English and in translation to two African languages, Khoekhoe and Oshiwambo, in a convenience sample in Namibia (N = 1,912). Confirmatory factor analysis in each language supported a unifactorial structure of the SWLS, suggesting the most parsimonious solution with the four-item version. Consequently, this unifactorial model was tested for measurement invariance, which established scalar invariance by language as well as by age, gender, and education within each language. The achievement of scalar invariance allowed the investigation of group differences and associations of the SWLS, with higher scores in those speaking English, with better health, higher income, education, and employment. Associations between SWLS scores with age and gender were nonsignificant. Associations between SWLS and personality variables were small to nonsignificant. The problematic item properties of the fifth item, noninvariance of the five-item SWLS, and the relationship of the four-item SWLS to other variables are discussed in terms of Namibia's social, economic, and cultural aspects. This study recommends the four-item version in all three languages as a valid instrument for use in Namibia, while demonstrating the challenge of adapting survey methodology to more representative samples in the majority world.

## Relationships of Adverse Childhood Experiences, Psychological Symptoms, Cognitive Fusion, Experiential Avoidance and Perceived Social Support

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The systematic review and meta-analysis results show that adverse childhood experiences, especially sexual and physical abuse, harsh and hostile parenting, are associated with depression, anxiety, other internalizing disorders, and increased suicidality (Sahle et al., 2021). The relationship between adverse childhood experiences and psychological symptoms has examined with various mediating variables, but with cognitive fusion, experiential avoidance and perceived social support. According to the Relational framework theory, which is based on Acceptance and Commitment Therapy, which is one of the Cognitive and Behavioral Psychotherapies, cognitive fusion and experiential avoidance are two basic processes are ubiquitous and harmful for mental health (Hayes, 2004). Previous findings support that these processes are in relationships with the symptoms of post traumatic stress disorder, anxiety, distress and depression (Bardeen ve Fergus, 2016). Moreover, it was thought that including perceived social support into the variables of the study will contribute to widen the understanding of the proposed relationships. No other study has been found in which these basic concepts and perceived social support come together with childhood traumas and psychological symptoms. The main purpose of this study is to determine the relationship between childhood traumatic experiences, psychological symptoms, cognitive fusion, experiential avoidance and perceived social support. In addition, another aim of the study is to examine whether these variables differ according to demographic variables such as age, gender and perceived socioeconomic level. The sample of the study consisted of adults between the ages of 18-65. Childhood Trauma Scale, Cognitive Fusion, Acceptance and Action Form II, Multidimensional Scale of Perceived Social Support and Brief Symptom Inventory were used as data collection tools. As a result of the analysis, it was found that adverse childhood experiences, cognitive fusion, experiential avoidance and low social support predicted psychological symptoms. Cognitive fusion alone explained a significant portion of the total variance. This study will contribute to understanding the nature of psychological symptoms and improve the cognitive and behavioral interventions of psychotherapies.

**Keywords:** Adverse childhood experiences, cognitive fusion, experiential avoidance, psychological symptoms

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## How Do Adolescents Experience Cognitive Psychotherapy by Videoconferencing?

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**Introduction:** The aim of this qualitative study was to explore how adolescent clients experienced their cognitive psychotherapy that was mainly conducted via teleconferencing.

**Methods:** I conducted a semistructured interview with four 16-18-year-old clients to whom I had provided cognitive psychotherapy as a trainee in cognitive psychotherapy at the University of Helsinki. The sessions were 45 minutes once weekly and their number was 20-24 in the case of three clients and 68 in the case of one client. Three of the therapies had started as in person sessions, whereas one included in person sessions only in the end of the therapy. The reason for videoconferencing in all cases were the restrictions during the COVID-19 pandemic.

**Results:** All clients viewed it important to start psychotherapy with in person sessions in order to build trust. They felt it was crucial that they experience the psychotherapist's entire presence, especially eye contact and gestures. Videoconferencing sessions at home made it difficult for two clients to express themselves freely about emotions and sensitive topics especially if other family members were at home. One client experienced the psychotherapist as distant and unable to comfort the client in videoconferencing sessions. All clients viewed that videoconferencing was convenient because they did not need to commute.

**Discussion:** Psychotherapists need to be mindful of how to convey non-verbal communication and build trust in videoconferencing sessions, and actively ask for feedback about the client's experience. Videoconferencing sessions should be scheduled so that clients can find a space where they feel free to express themselves.

## Prevalence and Differential Profile of Patients with Substance Use Disorder Who Have Suffered Physical and/or Sexual Abuse

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**Introduction:** Patients with substance use disorder (SUD) who undergo treatment present a high prevalence of lifetime physical and/or sexual abuse. Studies about this phenomenon and the specific needs of patients with a history of abuse must be carried out to tailor treatment programs.

**Objectives:** The first goal of this article was to determine the prevalence of physical and/or sexual abuse among patients with SUD, and the second goal was to analyse the specific characteristics of these patients.

**Methods:** A sample of 418 subjects was assessed to achieve the first goal and 104 subjects (52 with and 52 without a history of physical and/or sexual abuse) were examined to reach the second goal. All patients sought treatment for SUD in two Spanish clinical centres. Severity of addiction, psychopathological symptoms and general maladjustment were assessed.

**Results:** The 15.5% of the sample had a history of physical and/or sexual abuse (42.3% of women and 9.9% of men). Patients with a history of abuse presented a higher need for SUD treatment in family and psychiatric areas and more psychopathological symptoms than patients without a history of abuse.

**Discussion:** This study confirms the high relevance of these traumatic events and the greater severity in patients in SUD treatment who have suffered them. According to this more serious profile, a patient-centered intervention considering the history of abuse is recommended. This will allow the specific needs of these patients to be met, thus improving SUD treatment success.

## Impact of a Trauma Intervention on Reducing Dropout From Substance Use Disorder Treatment

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**Introduction:** Compared to patients without a history of abuse, patients who have experienced these traumatic events present a worse psychopathological profile and higher rates of treatment dropout. These specific characteristics could be associated with specific treatment needs.

**Objective:** To evaluate the effectiveness (in terms of retention) of an intervention aimed at treating the consequences of lifetime physical and/or sexual abuse among patients who are also seeking substance use disorder treatment (SUD-T) in a clinical centre.

**Method:** A parallel, randomized, controlled clinical trial using an experimental design (with 1 treatment group and 1 control group) with repeated measures (pretreatment, posttreatment and six-month follow-up) was carried out. The sample consisted of 57 patients in SUD-T who had experienced lifetime physical and/or sexual abuse. All patients received a cognitive-behavioural SUD-T. In addition, the treatment group (n = 29) received physical and/or sexual abuse treatment (PSA-T).

**Results:** The treatment group presented a lower SUD-T dropout rate (37.9%; n = 11) than the control group (50.0%; n = 14), but this difference was not statistically significant ( $\chi^2 = .8$ ;  $p = .359$ ;  $u = .122$ ). The main variable related to SUD-T success (therapeutic discharge after completing the 40 outpatient sessions or 12 inpatient months and maintained abstinence) was the completion of PSA-T.

**Discussion:** The completion of this trauma-centred treatment improved the retention rate of SUD-T in patients with histories of physical and/or sexual abuse. This is a promising result because of the high SUD-T dropout rate shown by patients with victimization. The present study suggests that a centred-trauma intervention improves substance use disorder treatment retention in patients who have suffered lifetime physical and or sexual abuse. Additionally, interference of trauma in daily life and psychopathological symptomatology decreases in patients who receive interventions for both trauma and substance use disorder simultaneously. This evidence supports the need of centred-trauma interventions in substance use disorder treatment programmes to improve therapeutic results in these patients.

## Adverse Childhood Experiences (ACEs) and Substance Use Disorder (SUD): A Scoping Review

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**Background:** The long-term negative effects of adverse childhood experiences (ACEs) and their impact on physical and mental health has been widely studied. However, research about the relationship between ACEs and substance use disorder (SUD) diagnosis in adolescence and adulthood is still scarce. Therefore, this scoping review was conducted to collect the existing research findings to explore the relationship between the experience of ACEs and the diagnosis of SUD later in life.

**Methods:** The PsycINFO, Medline, Scopus, Web of Science, and Cochrane Library databases were searched. After identifying the records based on eligibility and exclusion criteria, 12 studies were finally selected for inclusion.

**Results:** Most of the studies were conducted in the USA with adult male and female participants. All studies were cross-sectional in nature and assessed ACEs retrospectively. The main conclusions of the studies were that there is a higher prevalence of ACEs in the population with SUD than in the general population, and a positive association between ACEs and the development and severity of SUD in adolescence and adulthood.

**Conclusions:** It is difficult to make comparisons between studies and to draw solid conclusions because of the lack of standardized criteria for evaluating ACEs and due to the heterogeneity in the substance types examined. More research is needed to fully elucidate the underlying mechanism of the relationship between ACEs and SUD.

## A Qualitative Study on The Effect of Cognitive Behavioral Therapy on Children's Depression Levels, Negative Self and Beliefs

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**Introduction:** Although important life things like disease, death of parents, serious illness and sexual and physical abuse is related (Kendler, Khun and Prescott,2004; O'Sullivan,2004) with childhood depression, less traumatic things like family, peer and changes in romantic relationship, passing from primary school to secondary school is increasing depressive signs.(Philips, Hammen, Brennan, Najma and Bor,2005). It is known that the person who has childhood depression diagnosis is highly risky to have depression in his/her adulthood life. To treat the person's childhood depression leaves a preventive impression on adulthood depression. Beck stated that reason of depression is disorder on cognitive process and cognitive fault can be treated to learn healthy and realistic thinking on his developed model (Beck,1976).

**Method:** General purpose of this study is to investigate the effects of cognitive behavioral therapy on children's depression levels, negative self and beliefs of children. Fifteen children who scored above the cut-off score in the Child Depression Inventory and displayed umbrage/exclusion symptoms were selected. With assigned children to experiment, placebo and control groups are done a study with pretesting, proof positive and monitoring evaluation. Individual therapy based on cognitive behavioral therapy was applied to five children in experiment group once a week for a total of ten weeks, each session lasting an average of fifty minutes. Unstructured interviews were conducted with five students in placebo group. Any of the study weren't conducted with five students in control group. In this study, Child Depression Inventory, Piers-Harris children's self-concept scale and negative thoughts in childhood evaluation scale were used as data for quantitative research method. After four months monitoring process, the data is taken before application, after application and from the end of the application. The content of the interviews conducted with the children and the answers of parents given to the semi structured interview questions prepared by the researcher after the application were used as data for qualitative research method.

**Result:** As a result of this study, it is seen that individual therapy on the basis of cognitive therapy, created meaningful effects on decreasing depression level of children when placebo and control groups compared. It was obtained that this application increases children's sense of self and decreases children's evaluation level of negative thoughts. Qualitative findings of this study, depression signs on children, lower sense of self, negative cognitive and emotional processes were seen in children at early sessions and it was observed that children lived similar process. Later phase's of application, these titles were evolved to positive cognitive, emotional and behavioral dimensions, so it was concluded that this application had positive effects on children.

**Discussion:** When literature was investigated it was seen that Cognitive Behavioral Therapy affected on children is shown by some studies which support current study.

**Conclusion:** At this point it can be said that current study's findings match up with studies in literature. It was subjected that data analyses and content of interview are supporting each other; cognitive behavioral therapy is effective on children's depression level.

## The Effect of Cbt Enhanced Psychoyoga Group Intervention on Uncertainty Tolerance, Distress Tolerance and Psychological Flexibility

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Modern life stressors may prevent people from contacting with their bodily needs and they may start living in their minds under the control of their unquestioned, biased, and learned cognitions, which may result in unfunctionality in their life (Panjwani, Dudani and Wadhwa, 2021). Cognitive behavioral therapy is proved effective to take control of life under the stressful life conditions and researchers have been trying to enhance CBT protocols with strength-based, mindfulness based and body-based practices (Capon, O'Shea, Evans and Mclver, 2021). Psychoyoga is a group intervention that combines mind and body. In this study, the effect of an 8-week CBT-enhanced psychoyoga group intervention on people's distress tolerance, uncertainty tolerance and psychological flexibility was examined through a pre-test, post-test and follow-up study. The participants consisted of 17 people. The results showed CBT enhanced psychoyoga group intervention is an effective to increase people's distress tolerance, tolerance to uncertainty and psychological flexibility. Follow-up results showed that the effect of the group intervention was still high after three months.

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## "I Don't Think Anything Can Prepare You for it": Motivations, Expectations, and Challenges Associated with Becoming A CBT Therapist

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**Introduction:** The decision to train in CBT often involves leaving behind previous ways of conceptualizing mental health problems and of working with clients. The small body of existing research on role transition during CBT training indicates a range of challenges that are experienced by different professionals (e.g. Roscoe et al., 2022; Wilcockson, 2020). For example, CBT's alignment with positivism can generate value conflicts for counsellors whilst Psychological Wellbeing Practitioners can struggle with moving away from advice giving when trying to develop a more Socratic style. Resistance to certain aspects of CBT theory and practice can result from these tensions therefore it is important to better understand the reasons why different mental health professionals choose to train in CBT.

**Method:** A convenience sample of (n=39) qualified CBT Therapists completed an online survey consisting of eight open-ended questions, designed to explore motivations to train in CBT, expectations of what it would entail and the challenges involved in learning CBT. Reflexive thematic analysis (Braun & Clarke, 2006) was applied to participants responses.

**Results:** Four major themes were identified: "Intrinsic and extrinsic rewards"; "Access to the profession" "Alignment with values" and "Complexity of CBT". Whilst the availability of CBT training places was a factor in decisions to train, a natural alignment with evidence based treatment and the structured nature of CBT was an attraction across all professions. Widening skills, deepening knowledge and clinical outcomes were rewarding to participants however the perceived complexity of some models and their application to some client groups presented a number of challenges. There was a need for more shadowing opportunities and tutor / supervisor modelling of key skills during training.

**Discussion:** In contrast to previous findings, participants in this research demonstrated largely positive attitudes towards CBT. Although employment prospects was a significant factor in the decision to train in CBT, values conflicts were not found. Skepticism about models rather than resistance was identified. Training courses and employers need to facilitate more access to shadowing opportunities to enable trainees to see how models and treatment plans are delivered in routine clinical practice.

## Increasing Access to Psychological Therapy on Acute Mental Health Wards: Talk, Understand and Listen for Inpatient Settings (TULIPS)

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**Background:** People with severe mental health problems often rely on inpatient mental health care at times of crisis, but care in these settings is costly and is typically poor quality. The main treatments offered are medication and containment for risky behaviours, with patients having limited access to evidenced-based psychological therapies, such as Cognitive Behavioural Therapy. There is good evidence that inpatients want talking therapies and these may be helpful in terms of reducing length of stay, reducing re-admission rates and improving perceptions of quality of care. However, the inpatient environment presents a unique set of challenges to delivering therapy which require empirical investigation. This talk will describe a programme of UK-based research funded focused on the delivery of and outcomes of CBT-based interventions on acute mental health wards.

**Method:** The first stage of this research programme involved a meta-synthesis of existing studies implementing new interventions in acute mental health settings and interviews with fifty-six people (patients, ward staff and carers) about their experiences and views of therapy for inpatients. Using expert consensus methods, these findings were used to develop an intervention to improve patient access to psychological-informed care and evidenced-based treatments such as CBT in inpatient settings. The intervention is currently being trialled in a large cluster randomised control trial where 34 wards (with 384 patients and 510 staff) are randomised to receive the intervention or treatment as usual. We are assessing the impact of the intervention on serious incidents (acts of violence, aggression and self-harm), patient well-being, staff burnout and ward atmosphere. We are also carrying out ethnographic observations and interviews with staff and patients to understand barriers and facilitators to implementation in practice.

**Results:** We identified barriers to implementing psychological therapies inpatient settings that related to patient attitudes, staff attitudes, organisational barriers and factors associated with the ward culture. The intervention we devised to help overcome these barriers involved psychological therapies being well integrated into the ward environment and providing interventions to improve staff as well as patient well-being. It also involved three levels of intervention: 1) formulation for all patients; 2) nurse-led CBT-informed interventions; 3) CBT-informed interventions with psychological therapies focused on understanding the reasons for admission and relapse prevention. The trial is ongoing but data relating to uptake and retention in the study will be presented along with preliminary results from the qualitative research taking place alongside the trial.

**Discussion:** This research has direct implications for everyday practice as it presents empirical data on a comprehensive range of barriers to the delivery of therapy that are specific to both the inpatient environment and CBT. Moreover, we also present solutions to overcoming these barriers that are derived from existing data and currently being evaluated in real world settings.

## Parent-Led CBT for Japanese Children with Anxiety Disorder: Two Case Studies with School Refusal

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**Presenting problem:** Case 1: A 12-year-old girl diagnosed with social anxiety disorder (SoAD), specific phobia (SP), and generalised anxiety disorder (GAD). Her main concern was that she gets anxious in front of people and cannot talk to others except for her family and close friends. She started refusing to go to school one year ago and is joining an adaptation class twice a week. Her mother attended the therapy session. The mother is 39 years old and has a part-time job three times a week.

**Case 2:** A 9-year-old boy diagnosed with SoAD and SP. His main concern was that he was anxious to talk to other people in school. He started to refuse to go to school after he missed several school days due to a leg fracture. His mother attended the therapy session. The mother is 44 years old and has a self-employed job.

**Case conceptualisation and intervention:** In both cases, children feared other people making fun of them and being rejected from social groups. Therefore, they avoided going to school and meeting other people, especially children around the same age. We conducted parent-led cognitive behavioural therapy (CBT) in both cases. Parent-led CBT is a low-intensity treatment developed in the UK in which parents learn CBT skills from therapists and deliver them to their children with anxiety disorders. The Japanese-translated program comprises five 60-hour face-to-face sessions and three 20-minute telephone sessions (Okawa et al., 2023). The main focus of the treatment was that the parent encouraged the child to expose to feared situation step by step to test out the child's anxious thoughts. The parents of both children provided written consent for the publication of the case report.

**Outcome:** The score of ADIS clinical severity decreased from pre-treatment to one-month follow-up from 6 to 1 for Case 1 and 6 to 3 for Case 2. Self-reported child anxiety decreased from pre to one month from 53 to 40 for Case 1 and 42 to 32 for Case 2. Both children recovered from the primary diagnosis and were able to go to school again at the one-month follow-up. However, parent-reported child anxiety symptoms did not improve (Case 1: pre = 23, follow-up = 28, Case 2: pre = 40, follow-up = 38).

**Review and evaluation:** Both cases worked on several step plans and tested their fears, which led to decreased clinical severity and self-reported anxiety symptoms. However, the parent-rated child anxiety symptoms score did not change even though they commented that they felt their children's anxiety symptoms had improved. This inconsistency may reflect issues with parent-report measures and/or the characteristics of Japanese parents. Further investigation is needed to enhance the adaptability of parent-led CBT for Japanese children.

### Reference

Okawa, S. et al. (2023). Guided parent-delivered cognitive behavioural therapy for Japanese children and parents: A single-arm uncontrolled study. *Behavioural and Cognitive Psychotherapy*, 1-6.

## Autism Spectrum Disorders and Polymorphisms of the TCAP And GAA Genes

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**Presenting Problem:** Autism spectrum disorders (ASD) are neurodevelopmental disorders characterized by inadequate development of social interaction, impaired development of communication ability, and repetitive and stereotypical movements. ASD is a neurodevelopmental condition with a high rate of heritability, suggesting a strong genetic background. However, an increasing amount of genetic studies indicate that it is a complex and genetically heterogeneous disease and may present different inheritance patterns and underlying genetic variants. Several polymorphisms have so far been associated with ASD, and the heritability of ASD explained by common single nucleotide polymorphisms (SNPs) was estimated from 17% to 52%. In this case, we will report an ASD associated with TCAP and GAA genes.

**Case Conceptualisation and Intervention:** A 16-year-old male patient who is the only child of a 45-year-old father and a 44-year-old mother, was followed up in our outpatient clinic with the diagnosis of ASD since he was 3 years old. His parents applied to the outpatient clinic with the complaint of speech delay. Since the diagnosis, he had been attending a special school and taking part in various rehabilitation programs. However, despite the training programs, little improvement was achieved in the patient's symptoms and he met the diagnosis of mild-to-moderate ASD. In his last examination at the outpatient clinic, the family stated that he had muscle pains for the last few weeks. His enzyme levels were found to be high in the blood test. Cardiomyopathy was diagnosed while investigating the etiology of blood enzyme levels.

**Outcome:** After cardiomyopathy was identified in our patient, etiological studies were expanded to cover more ground. Genetic analyzes revealed TCAP c313 G>C, and GAA c1417 G>A changes. TCAP titin-cap is a protein associated with skeletal muscles. Some gene polymorphisms associated with this protein have been associated with cardiomyopathy. Alpha-glucosidase is an enzyme that aids in the elimination of glycogen in the lysosome. It is encoded in the GAA gene and its damage is associated with glycogen storage diseases. Detected gene polymorphisms were associated with metabolic diseases. Although not directly related to the core symptoms of ASD, the burden of chronic disease on the child is significant. It is obvious that the treatment and rehabilitation processes of the patient will be adversely affected. In addition, deterioration in metabolic parameters will adversely affect cognitive functions and adversely affect the patient's clinic.

**Review and Evaluation:** Our patient suffered from pathology that was connected to some genes that were not directly linked to ASD. Previous studies have shown that polymorphisms in many genes are associated with ASD. It is obvious that increasing genetic methods in recent years will strengthen our hand to understand these etiologies. Only a small proportion of ASD cases can be explained genetically. It is important to consider genetic counseling in the clinical approach to these disorders. It will help us understand the etiologies of these disorders and the factors that affect prognosis. This approach is important in terms of detecting direct or indirect possible genetic ground, as in our case.



## Efficacy of ADHDCoach: A Randomized Controlled Trial Conducted with Parents of Children Diagnosed with ADHD

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**Introduction:** Attention/deficit-hyperactivity disorder (ADHD) is one of the most common mental health problems in children. Evidence-based treatment exists for this condition with both psychological and pharmacological treatment options available; however, a limited number of children with ADHD receive treatment given the existing. Internet-delivered interventions could improve treatment access; however, research is scarce regarding their efficacy for ADHD. The aim of the present study was to investigate the efficacy of ADHDCoach, an Internet-delivered intervention for parents of children with ADHD.

**Method:** Eligible participants were parents of children aged between 6 and 11 years old, diagnosed with ADHD. Participants (n = 83) were randomly assigned to one of the two conditions: ADHDCoach and treatment as usual.

**Results:** Significant changes from baseline to posttreatment assessment were found for parental knowledge about ADHD as well as for parental stress.

**Discussion:** Given the high potential of Internet-delivered interventions in the treatment of child mental health problems, it is important to investigate their efficacy conducting rigorous research. Limitations of the present research, future research directions to investigate the efficacy and effectiveness of digital mental health interventions for ADHD are discussed.

## Virtual Environment for Cognitive Training in OCD

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Obsessive-compulsive disorder is a chronic psychiatric disorder with heterogeneous symptoms. It is characterized by obsessions; unwanted intrusive thoughts that cause anxiety, and compulsions; ritualized behavior that is seen as a short-time relieving response to the anxiety caused by obsessive thoughts. Patients with OCD can also have impairments in cognitive flexibility, which may result in a decreased ability to shift between mental processes and adapt their behavioral response to environmental changes. Therefore, they tend to repeat the same behavior even when it is irrelevant. Neuropsychological assessments are showing that cognitive flexibility is impaired in patients with OCD, including measures of reversal, attentional set-shifting, task-switching paradigm, and inhibition (Gruner and Pittenger 2017). At the National Institute of Mental Health in the Czech Republic, we enrich the CBT program for inpatients with OCD with a method targeting cognitive flexibility on the premise of enhancing cognitive functions and adherence to treatment and symptom severity relief. The aim of this study is to preliminarily evaluate this method as a valuable addition to cognitive behavioral therapy.

The inpatients undergo 5 sessions of cognitive training using immersive virtual reality (VR). Before the 1st and last VR session, we assess participants' cognitive functions using multiple neuropsychological testing methods and symptom severity using Y-BOCS. Each training session lasts about 30 minutes. The environment for cognitive training is located in a virtual city environment, consisting of several cognitive tasks. In each session, the participants undergo the same sequence of tasks, however, the difficulty of the tasks increases between the sessions and within each session. The first task "Flies" aims at the attentional set-shifting paradigm and strategy adaptation. The second task "Shooting range" aims at inhibitory control and reversal learning. Third is memory training in a "Castle" game. Selected virtual environments will be presented in case studies of patients with OCD (F42 by ICD-10).

We present three case studies of patients with OCD aged 25 to 35 years and their scores in cognitive testing before and after the mental flexibility training in VR.

Cognitive flexibility training could enhance the effects of the CBT program. From patients' anonymous feedback, we conclude good acceptance of the technology and a subjective enhancement of cognitive abilities, such as developing new strategies and faster evaluations of situations. The presented case studies will demonstrate the valuable use of virtual reality-based cognitive training for patients with OCD.

**Acknowledgments:** The presented study is supported by project No. NU23-04-00402 "Exposure therapy in virtual reality for obsessive-compulsive disorder: randomized clinical study" and partially by the European Regional Development Fund-Project "PharmaBrain" No. CZ.02.1.01/0.0/0.0/0.0/16\_025/0007444

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## Features of Dysfunctional Beliefs of Women in Abusive Relationships (in Azerbaijan)

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**Introduction:** WHO reports that 30% of women worldwide have been subjected to physical or sexual violence during their lifetime. According to the study men who use physical violence simultaneously employs psychological violence. Overall, psychological violence has a significant impact on women's mental and physical well-being, which is considered a public health problem worldwide. Abusive relationships are a form of psychological violence which includes aggressive behavior in the form of ridicule traits, ignore, jealous control, criticize behavior. These relationships are characterized by a violation of the partner's personal boundaries. In such relationships, women undergo negative outcomes such as an increase in dysfunctional beliefs and anxiety, and a decrease in self-esteem. The purpose of our study is, hence, to identify differences in dysfunctional beliefs between people in healthy and abusive relationships.

**Method:** For the study implementation 162 respondents were involved. All participants answered questionnaires after signing a confidentiality agreement. The criterion for inclusion was the presence of a relationship at the moment or within the last year. No exclusion criteria appeared, including restrictions based on other demographic variables. Primarily, the respondents answered socio-demographic questions and filled out the questionnaire "Profile of psychological violence", "The Posttraumatic cognitions inventory". According to the results of the questionnaire, the respondents were divided into 2 separate groups respectively : persons in healthy (N=108) and abusive (N=54) relationships. The age of the respondents ranged from 18 to 58, with an average age of 31.99 years.

**Results:** In accordance with the graphic, there are statistically significant differences in dysfunctional beliefs associated with negative cognitions about self ( $p=.003$ ) and self-blame ( $p=.000$ ). People who have abusive relationships have lower self-esteem, and also tend to look for reasons for the deterioration of relationships in themselves, to blame themselves for what happened. We performed a bivariate correlation analysis to test whether the severity of dysfunctional beliefs in relationships is associated with higher levels of abusive behavior. The criticize behavior was positively correlated with negative cognitions about self ( $r=.794$ ,  $p<.001$ ), negative cognitions about world ( $r=.571$ ,  $p<.001$ ), self-blame ( $r=.415$ ,  $p<.001$ ). The Ridicule Traits was positively correlated with Negative cognitions about world ( $r=.711$ ,  $p<.001$ ), however this correlation was not seen with negative cognitions about self and self-blame.

**Discussion:** The results of our study point to a possible difference between healthy and abusive relationships, as well as a possible link between some dysfunctional beliefs and the occurrence of abusive behavior in a relationship. Specifically, that increased negative cognitions about self and self-blame is related to abusive relationship. Guilt and self-blame negatively affect women's mental health and can lead to self-harming behaviors, depression and anxiety. The lack of equality in relationship, ignoring the emotional needs, restrictions and control by parents, and later by a partner, as well as cultural patterns have a negative impact on the mental well-being of women and are a reason for further study of the consequences of abusive relationships. In a sequence, educating the public about abusive relationships can lead to a reduction in dysfunctional beliefs, improved personal boundary setting skills, prevention of abuse.

## Validation of the Short Form of the Korean version of the Social Interaction Anxiety Scale (SIAS) and Social Phobia Scale (SPS) for Adolescents (SIAPS-A)

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**Introduction:** In South Korea, social anxiety is highly prevalent among individuals aged 14-19 (Ministry of Health and Welfare, 2016). Early detection and intervention are crucial, necessitating tools for accurate impairment identification. Currently, two instruments measure social anxiety in Korean adolescents: the Korean Social Anxiety Scale for Children and Adolescents (Oh & Moon, 2002) and the Korean version of the Social Anxiety Scale for Adolescents (Yang et al., 2008). However, participant recruitment and scale construction limitations need to be revised to maintain their validity and generalizability. In response to this, a validated youth social anxiety scale was developed by adapting the 12-item short form of the Korean Social Interaction Anxiety Scale (K-SIAS) and the Social Phobia Scale (K-SPS), representative measures of social anxiety (K-SIAPS, Kim et al., 2013; Peters et al., 2012).

**Method:** For scale validation, we recruited 310 adolescents aged 12-18 online, and data from 37 adolescent participants were used for cutoff point analysis. First, confirmatory factor analysis was conducted to examine whether the data fit the two-factor, 12-item structure of the existing SIAPS (Peters et al., 2012). Subsequently, to analyze the reliability, Cronbach's alpha coefficient was calculated. Validity analysis was performed using the performance anxiety, the social avoidance and distress scale (K-SAS), as well as the total items of K-SIAS and K-SPS. Correlations with Korean depression screening assessment (DEP, Yoon, 2018) and generalized anxiety disorder scale (K-GAD-7, Spitzer et al., 2006) were also examined. Finally, to estimate the cutoff point, ROC curve analysis was performed using data from 37 individuals diagnosed with or without social anxiety disorder based on structured clinical interview for DSM-5 disorder clinical version (SCID-5-CV, First et al., 2016).

**Results:** According to the CFA results, the K-SIAPS-A had a 12-item two-factor structure and showed a suitable model fit,  $\chi^2$  (53, N = 310) = 91.6,  $p < .001$ , CFI = 0.978, TLI = 0.972, RMSEA = .048 (90% CI: .031-.065). The reliability and validity of the K-SIAPS-A were good, M = 2.45, SD = 1.37, Cronbach's  $\alpha = .91$ . To be specific about the validity analysis results, K-SIAPS-12 showed a positive correlation between performance anxiety (PA),  $r = .76$ ,  $p < .001$ , K-SIAS-20,  $r = .84$ ,  $p < .001$ , K-SPS-20,  $r = .91$ ,  $p < .001$ , K-DEP,  $r = .61$ ,  $p < .001$ , and K-GAD-7,  $r = .62$ ,  $p < .001$ . In the partial correlation analysis, even after controlling for the influence of depression and general anxiety symptoms, K-SIAPS-A significantly explained social anxiety. Regarding the ROC curve analysis, K-SIAPS-A showed a cutoff point of 22, with a Youden's index of 0.450 and an AUC of 0.708, indicating a fair level of accuracy.

**Conclusions:** The Korean Social Interaction Anxiety Scale for Adolescents (K-SIAPS-A) exhibited excellent reliability and validity, making it suitable for practical application among adolescents. The results of the validity analysis revealed that the scale accurately captures the core features of social anxiety disorder. The introduction of this scale holds great potential for enhancing the practical assessment of social anxiety disorder in adolescents in the future.

## **Improve-MH: Promoting the Mental Health of Refugee Parents and Their Children**

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Since 2014, Germany has received more than 2.2 million refugees, many of whom are families with young children. Among refugees, mental health problems (MHP) are highly prevalent. Recognizing these challenges, the German Federal Ministry of Education and Research (BMBF) has launched the funding measure "Research networks on the mental health of refugees" to alleviate the mental health challenges faced by this segment of the population and to develop evidence-based solutions. The Research and Treatment Center for Mental Health (FBZ) at Ruhr University Bochum is part of this research network. Given that early interventions yield the highest return on investment, our primary goal is to minimize MHP in refugees and prevent their development in their children early on by addressing parental psychopathology and improving parenting skills.

As part of a randomized controlled treatment trial, half of the study participants receive a low threshold, primary care-based intervention, called Improve. In this intervention, general practitioners provide refugees with information on managing their mental health problems. Additionally, parents participate in the internationally recognized online parenting program, Triple P (Positive Parenting Program). The program promotes positive parenting skills in an interactive way and has been translated into Arabic specifically for the target group of refugees. Moreover, regular phone calls with mental health professionals are offered to ensure the integration of the intervention and parenting training into participants' daily lives.

The remaining half of the study participants have the option to seek the standard treatment options in Germany. The objective is to compare the effectiveness of both forms of treatment. The primary aim of this study is to improve the mental health status of these high-risk families by addressing both parental psychopathology and parenting skills. It is hypothesized that the Improve intervention will show better outcomes in comparison to the treatment as usual (TAU) for parental MHP and parenting skills at the post, 3- and 6-month follow-ups. Given that changes in parental MHP and parenting skills are necessary preconditions to positive changes in child MHP, we expect that the beneficial effects of Improve on the children will be observable at the follow-ups.

## **Self-Criticism, Experiential Avoidance, Social Anxiety and Depression in an Experience Sampling Design**

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The study investigates the relationship between self-criticism, experiential avoidance, and symptoms of depression and social anxiety using a design with longitudinal intensive data (experience sampling; ES). By exploring these constructs in an ecological setting, the study aimed to differentiate the sequence of activation of self-critical and avoidance modes in relation to depressive and social anxiety symptoms/states. Thus, we aimed to provide an empirical test of the schema therapy model.

Data were collected by using the Expiwell mobile app (N = 162). The intensive longitudinal measures included a questionnaire referring to stressful activating events (ex. a social interaction), five items from the Schema Mode Inventory, the subscales for punitive critic and detached protector modes, five items for measuring social anxiety and three items for depressed mood. Participants were reminded that they would be randomly prompted to fill in questionnaires four times throughout the day, between 10:00 a.m. and 10:00 p.m. Notifications were scheduled within four equal 3-hour windows (i.e., 10:00 a.m. to 1:00 p.m., 1:00 p.m. to 4:00 p.m., 4:00 p.m. to 7:00 p.m. and 7:00 p.m. to 10:00 p.m., respectively). Questionnaires remained available for 20 minutes and participants received an extra reminder 10 minutes after the notification, if no answer had been provided in the meantime.

The results, analyzed through hierarchical linear modeling, showed interesting relationships between self-criticism and experiential avoidance on the one hand, and social anxiety/depression symptoms, on the other hand. More specifically, it seems that self-criticism and experiential avoidance predict social anxiety and depression symptoms when looking per day and per entire data set, but not when looking from one time point to the next. Also, depressive states appear to prospectively predict all other constructs suggesting that, when in a depressed mood, individuals are more prone to be self-critical, avoid unpleasant experiences and become socially anxious.

## Measurement Invariance of the Child- Parental Acceptance-Rejection Questionnaire- Short Form Across Parental Version, Age, Gender, Clinical Status, and Time

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**Introduction:** The quality of parent-child relationships impact a child's physical, cognitive, and socio-emotional development, thus parenting research is critical for understanding how to support healthy child development and enhance parent-child relationship. The field of parenting research advances alongside the development and adaptation of instruments with good psychometric properties. Considering these, the aim of this study was to investigate the factorial structure and measurement invariance of the Romanian version of the Child- Parental Acceptance-Rejection Questionnaire (Short Form) across parents, age, gender, clinical status and time.

**Method:** Participants were 1240 youths (community sample: N=1034; clinical sample: N= 206) aged 10-19 years old. The analysis was conducted using R. The factorial structure of the scale was assessed using confirmatory factor analysis and measurement invariance was examined via multi-group confirmatory factor analysis.

**Results:** Results confirmed the original four-factor model, for both the PARQ-Mother and the PARQ-Father versions. For the PARQ-Mother Version, we found measurement invariance across gender and time and partial measurement invariance across age and clinical status. Regarding the PARQ-Father Version, we confirmed measurement invariance across gender, age, and time and partial measurement invariance across clinical status. Finally, measurement invariance was demonstrated across the PARQ-Mother and the PARQ- Father versions.

**Discussion:** Overall, the present findings suggest that the Child-PARQ-SF is a valuable tool with proper psychometric properties for assessing the perceived parental acceptance-rejection in preadolescents and adolescents.

## Oxybutynin Induced Psychotic Symptoms

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**Presenting Problem:** Anticholinergic agents, acting as muscarinic receptor antagonists, have the ability to diminish the activity of the acetylcholine system in the brain. Furthermore, certain anticholinergic agents have been shown to increase the concentration of dopamine in the synaptic cleft, which can potentially lead to the manifestation of psychotic symptoms. Specifically, oxybutynin, which is an antimuscarinic drug, has been associated with deleterious effects on the central nervous system in patients, including but not limited to memory impairment, confusion, delirium, and hallucinations. Here, we report of a young patient who developed psychotic symptoms after Oxybutynin abuse.

**Case Conceptualisation and Intervention:** A 14-year-old female patient was applied to the emergency department with complaints of intense fear and speaking incoherently. From the anamnesis taken from her family, it was learned that she had seen snakes and scorpions around her, complained about animals walking on her skin, and talked to herself. The symptoms started suddenly previous night, and no prodromal period was described. When her medical history was questioned, it was learned that she previously had a psychiatric consultation for enuresis but had not used any psychiatric medication. She had been followed up for overactive bladder by nephrology and had been using 5 mg/day of oxybutynin for one year. The family also stated that she had taken 75 mg of oxybutynin for suicide attempt two days ago.

In the mental status examination, the patient was conscious but not cooperative or oriented. Spontaneous speech was not sustainable, there were blocks in speech, and she did not give logical answers to questions. She had visual and tactile hallucinations, and her mood was euphoric, and her affect was congruent with her mood.

**Outcome:** As there were not any family history of psychosis and prodromal period. The patient was evaluated as drug-induced psychosis as a preliminary diagnosis. She was kept under observation in the emergency department with her vital functions monitored. No medication was used. The patient's psychotic symptoms regressed within twenty-four hours and the patient was discharged with full recovery.

**Review and Evaluation:** The development of psychotic symptoms with the use of oxybutynin is scarce in the literature. In one case report, a 7-year-old male patient developed psychotic symptoms after accidentally taking 10 mg of oxybutynin, and supportive care for the patient's vital signs was sufficient without the need for additional medication. In another case report, a 17-year-old male patient developed psychotic symptoms with the use of high-dose oxybutynin for substance abuse purposes, and the psychotic symptoms were relieved over several weeks with the use of 2 mg/day risperidone.

While there have been case reports linking the use of antimuscarinic agents to psychiatric adverse effects, the connection between oxybutynin use and neuropsychiatric adverse effects has not been established in everyday medical practice, especially in young patients. From this point of view, our case report serve as additional evidence that oxybutynin may potentially cause psychotic manifestations, particularly in younger individuals.

## A New Smartphone Application for Binge Eating Based on DBT Skills: Content and Study Protocol for a Pilot RCT

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**Introduction:** Binge eating, whether formally diagnosed or occurring at subthreshold levels, is associated with negative health consequences and decreased quality of life. Access to accessible, cost-effective interventions that effectively address binge eating episodes is critical for individuals with this condition, and smartphone applications have demonstrated promise in treating binge eating and related disorders. Dialectical Behavior Therapy (DBT) has shown effectiveness in treating binge eating but has not yet been integrated into an app designed for eating disorders. This study aims to describe the background, design and protocol of a randomized controlled trial (RCT) evaluating the efficacy and acceptability of eMOTE and the content of this novel app that integrates DBT skills to treat binge eating.

**Method:** A pilot RCT will be conducted. At least 75 adult women who report binge eating episodes will be randomly assigned to an 8-week app intervention group or an 8-week waiting list group. The intervention provided by eMOTE combines psychoeducation, mindfulness skills, emotion regulation skills, and distress tolerance skills, along with self-monitoring of meals, behaviours and feelings. The primary outcomes are the number of objective and subjective binge eating episodes, eating disorder psychopathology and severity of binge eating. Secondary outcomes are difficulties in emotion regulation, BMI, dispositional mindfulness, intuitive eating, depression, anxiety and stress. Assessments will occur at baseline, two months, and four months after randomization. We will use an intention-to-treat approach and repeated measures ANOVA to analyze the data.

**Discussion:** This pilot trial will represent the first attempt to outline the content and explore the efficacy of a smartphone application incorporating DBT skills to address binge eating and promote emotion regulation. Findings will enhance our understanding of the efficacy of these interfaces when applied to eating disorders symptoms.

## The Role of Negative Problem Orientation, Metacognition, and Problem-Solving Styles in Anxiety: A Moderated Mediation Model

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**Introduction:** Negative problem orientation refers to how the individual sees the problematic situations encountered in several life domains. Individuals with a negative problem orientation tend to perceive problems as serious obstacles that are difficult to handle. They also perceive themselves as lacking the skills to solve problems in an efficient way. This leads to the adoption of maladaptive problem-solving styles such as impulsive or avoidant styles in addition to decreased use of adaptive styles such as rational ones. Both negative problem orientation and problem-solving styles play an essential role in the etiology of psychological distress. The current study aims to examine the association of negative problem orientation with anxiety with a focus on the mediator roles of problem-solving styles. A second aim is to examine the moderator role of metacognitive beliefs, which refers to beliefs people have about their own mental processes, in the relationship of negative problem orientation with problem-solving styles. In other words, we expect dysfunctional metacognitive beliefs to enhance the impact of negative problem orientation and lead to more frequent use of maladaptive problem-solving styles.

**Method:** Four hundred and thirteen individuals between ages 18 and 59 ( $M=21.3$ ,  $SD=3.49$ ) answered scales assessing metacognitive beliefs, social problem-solving, and anxiety.

**Results:** The results indicated that both rational and impulsive problem-solving significantly mediated the relationship between both metacognitive beliefs and negative problem-solving with anxiety. Furthermore, negative problem orientation moderated the relationship between metacognitive beliefs and impulsive problem-solving.

**Discussion:** Rational and impulsive problem-solving styles but not avoidant problem-solving play an important role in the relationship between distal risk factors (negative problem orientation and metacognitive beliefs) and anxiety. Also, negative problem orientation enhanced the negative impact of metacognitive beliefs on anxiety. The findings are discussed in the light of recent literature.

## Asynchronous Online Psychological Intervention for Anxiety, Stress and Depression

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**Introduction:** According to data from the Survey on the Use of Technologies of Information and Communication in Brazil, it is estimated that there are approximately 126 million internet users. In addition, the survey points out that 90% of young people between 16 and 24 years old have access to the internet and that this has become a fundamental aspect for interaction and an essential tool for those entering the job market. Regarding the treatment of mental disorders via the internet, there are already studies on depression, panic disorder and anxiety disorders. There are numerous advantages of using the internet to offer interventions, including: ease of access and implementation of services, low cost, availability of access 24 hours a day, greater adherence due to low patient exposure.

**Objectives:** To build a brief psychological intervention via the internet to prevent the worsening of symptoms such as anxiety, depression and stress. **Method:** This is an experience report on the development of an online intervention protocol to prevent symptoms of anxiety, depression and stress. The intervention is made up of 6 modules associated with synchronous contacts. Each module is composed of self-explanatory materials based on Cognitive-Behavioral Therapy. The intervention lasts 6 weeks and each week the participants receive, individually, a module and a contact is scheduled via chat with a member of the Program team. The modules have materials with the following themes: psychoeducation on the cognitive model; psychoeducation about emotions; RPD; relaxing techniques; Mindfulness; self-compassion and self-care. Each module was structured with different types of media, such as: videos, cards, audios, etc. All team members who make contact via chat received training on CBT and on asynchronous online interventions.

**Results:** The Program still has initial results from the application of the protocol. The sample is composed of 50 university students. The results obtained in terms of adherence and feedback on the program were very positive.

**Conclusions:** The analysis of the data obtained will allow us to understand the potential applicability of asynchronous interventions for the Brazilian culture. From the preliminary data, it is already possible to verify the positive receptivity in relation to the program and the opportunity to expand the possibilities of interventions for this population.

## The Influence of Cultural Differences in Self-Construal on Social Anxiety: The Mediating Role of Modesty

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**Introduction:** Western countries like the United States are individualistic nations, and they are more likely to have independent self-construal. In contrast, Eastern Asian countries, such as Korea, exhibit a collectivistic culture and are inclined to embrace interdependent self-construal. Individuals with interdependent self-construal may experience an enhanced sensitivity to others' evaluations and rejection, an increased fear of negative evaluations, and a heightened experience of social anxiety. Modesty is defined as lowering one's abilities and achievements to prevent negative evaluations from others. People with interdependent self-construal tend to be modest to a greater extent to maintain social harmony and avoid negative feedback from others. As a result, individuals with interdependent self-construal may exhibit higher levels of social anxiety due to their inclination towards modesty, which plays a role in preventing potential conflicts and maintaining positive social relationships. Thus, this study aimed to examine the relationship between self-construal, social anxiety, and modesty as a mediator focusing on Asian American, European American, and South Korean participants.

**Method:** A total of 880 participants, consisting of 402 South Koreans, 166 Asian Americans, and 312 European Americans, completed an online survey to assess self-construal, social anxiety, and modesty. Pearson's correlation analysis was conducted to examine the relationship between self-construal and social anxiety. Furthermore, mediation analysis using jamovi advanced mediation models (Gallucci, 2020) was performed to investigate the potential mediating effect of modesty within each cultural group.

**Results:** The correlation analysis revealed that in the South Korean sample, there was no significant correlation between interdependent self-construal and social anxiety ( $r = .02, p = .622$ ). However, a significant negative correlation was found between independent self-construal and social anxiety ( $r = -.46, p < .001$ ). For European Americans, no significant correlation was observed between independent self-construal and social anxiety ( $r = -.04, p = .475$ ). In contrast, a significant correlation emerged between interdependent self-construal and social anxiety ( $r = .35, p < .001$ ). Among Asian Americans, both interdependent self-construal and independent self-construal showed significant correlations with social anxiety ( $r = .24, p = .002$ ;  $r = -.59, p < .001$ ). The mediation analysis revealed significant paths in different cultural contexts. Specifically, among South Koreans, there was a significant path from independent self-construal to social anxiety through modesty ( $\beta = -0.24, p < .001$ ). Among European Americans, a significant path was found from interdependent self-construal to social anxiety through modesty ( $\beta = 0.25, p < .001$ ). Among Asian Americans, both paths were significant, with interdependent self-construal to social anxiety through modesty ( $\beta = 0.25, p < .001$ ) and independent self-construal to social anxiety through modesty ( $\beta = -0.24, p < .001$ ).

**Discussion:** This study highlights cultural differences in the mediation effects observed between self-construal, social anxiety, and modesty. Among South Koreans, independent self-construal predicted social anxiety through modesty, while among European Americans, interdependent self-construal predicted the relationship. Among Asian Americans, both paths were significant. These findings emphasize the need for culturally sensitive interventions for social anxiety, considering the role of self-construal and modesty.

## Evaluation of Emotion Regulation Training for Adolescents

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**Presenting Problem:** Emotion regulation is an important aspect of mental health. Adolescence represents a sensitive period for strengthening the use of maladaptive emotion regulation strategies like suppression, rumination and avoidance of emotional experience. Taking into account the importance of learning the adaptive strategies of emotion regulation among adolescents, in Psychiatric Hospital for Children and Youth in Zagreb, Croatia, we organized a group programme „Emotion Regulation Training“ for adolescents.

**Intervention:** Emotion Regulation Training“ was based on principles of cognitive-behavioral therapies and was developed similar to previously developed trainings for youth (EUREKA; Braet, Wante and Boelens, EABCT, 2022) and for adults (ART - Affect Regulation training, Berking and Whitley, 2014) with modifications in number of sessions and the quantity of content.

The Training was organized during 10 weeks, included 10 group sessions, one session weekly in duration of 90 minutes. Sessions were held in smaller group, were organized in form of interactive workshops and included psychoeducation and experiential exercises for practising skills. The participants were adolescents (13 to 16 years) who attended Day Hospital and were diagnosed with anxiety and depression, expressed self-harm behaviours, had history of suicidal tendencies and/or problems in controlling anger. The participants were selected after previous psychiatric evaluation and agreement with their psychiatrist and were those who expressed motivation to attend the training.

**The session topics were as follows:** 1. Psychoeducation on stress and setting goals, 2. Relaxation, 3. Emotional awareness, 4. Emotional awareness and Mindfulness, 5. Acceptance and tolerance of emotions, 6. Self-compassion, 7. Analysis and understanding of emotions (Psychoeducation on the cognitive model), and three sessions on Active emotional regulation - 8. Distraction, 9. Cognitive reappraisal, and 10. Problem-solving.

**Outcome:** The training started in a group of 9 participants. After drop-out due to unexpected circumstances or participant's absence on more than two sessions, the final group number was 5. The group of 5 adolescents (M age= 14,80, sd= 1,1) attended regular Emotion Regulation Training during mid October to mid December 2022.

**Review and Evaluation:** The training evaluation was conducted using measures on emotion regulation before and after the training. The measures were as follows: frequency of adaptive and maladaptive emotional regulation strategies (The Coping Strategy Inventory for Children and Adolescents, SUO, Vulić-Prtorić, 2000), difficulties in emotion regulation (Difficulties in Emotion Regulation Scale, DERS, Gratz & Roemer, 2004) and mental health questionnaire (DASS-21, Lovibond & Lovibond, 1995).

In addition, participants were given the evaluation forms to evaluate their satisfaction from the training. The average satisfaction ratings for the entire Training and the Training facilitator were 4.17 and 4.83, respectively, on a scale of 1 to 5 (1=not satisfied at all, 5=completely satisfied).

There were no statistically significant differences ( $p > .10$ ) found on measures assessed before and after the training, which is expected due to the small sample used. Regarding the data before training, adolescents sought social support from family significantly less than they used avoidance. Regarding the data after training, adolescents sought social support from family significantly less than they used problem solving and avoidance.

## Delivering CBT, Supervision and Training Remotely in Georgia - Advantages and Challenges

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**Introduction:** The global COVID-19 pandemic has significantly impacted people's well-being and generated widespread fear. The fear of losing loved ones, extended periods of quarantine, and the risk of contracting the virus have exacerbated anxiety, depression, and sleep disturbances. [1]To address the increased demand for psychological support, remote therapy emerged as an initial solution to sustain mental health services[2]. However, the transition to remote psychotherapeutic services and training has introduced various challenges, particularly concerning ethical considerations such as confidentiality, privacy, information security, competency, communication issues, and crisis intervention.[3]

**Method:** In 2022, the Georgian Association of Cognitive Behavioral Therapy (CBT) conducted a study to explore the opinions, perspectives, and attitudes of CBT therapists and trainees regarding the shift to remote psychotherapeutic services and training during the COVID-19 pandemic. It administered an online questionnaire to gather insights from the 69 participants over a two-month period (August-September).

The study was initiated by the Serbian Association of Behavioral and Cognitive Therapists (SRABCT).

**Results:** The study findings revealed that therapists in Georgia had conducted at least one online therapy session during the pandemic, and the frequency of these sessions significantly increased over time. Participants expressed difficulties in interpreting client emotions and highlighted challenges related to the absence of written agreements for remote therapy, as well as the struggle to find suitable spaces for online sessions. Additional concerns included establishing a therapeutic connection, maintaining professional boundaries, and ensuring privacy protection. The study identified depression and panic disorders as the most common and challenging issues encountered during remote therapy. Despite these challenges, the majority of participants believed that the quality of therapy delivered through virtual platforms was comparable to in-person sessions. However, the study emphasized the lack of supervision, indicating a need for support and guidance in remote therapy practices.

**Conclusion:** This study contributes to a better understanding of the requirements for working and studying online in the field of CBT for both trainees and therapists. A practical implication of the findings could be the incorporation of remote-control training to equip therapists with the necessary skills for effective remote therapy in the future. Overall, the research sheds light on the opportunities and challenges associated with the transition to remote psychotherapeutic services and training, offering valuable insights to enhance practices in the field of CBT during and beyond the pandemic.

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## Means-Ends Problem Solving (MEPS) Task: Psychometric Evaluation of Turkish Version

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**Introduction:** Means-Ends Problem Solving (MEPS) task was designed to assess the individual's capacity for solving problems that are encountered in both interpersonal relationships and academic settings by presenting them with an explanation of a problematic situation followed by its successful resolution from the participant's own personal perspective. MEPS requires participants to write down how they would solve the problem described in four vignettes in a successful way. The task yields two different scores for effectiveness (quality of problem solving process) and means (steps taken by the individual to solve the problem). Previous research on MEPS indicated that the clinical populations had lower performance and deficits in effective problem solving abilities compared to control as measured by MEPS. Furthermore, the quality of problem solving as measured by MEPS is highly influenced by the intensity of ruminative thoughts. The aim of the current study is to assess the psychometric properties of the Turkish version of MEPS in Turkish young adults.

**Method:** Two hundred and twenty-two individuals between ages 17 and 59 ( $M=21.92$ ,  $SD=4.42$ ) completed MEPS in addition to scales assessing problem orientation, problem solving styles, repetitive negative thinking, depression, and anxiety.

**Results:** The results indicated that the Turkish form of MEPS has adequate interrater reliability. Also, both the means and effectiveness scores had significant negative correlations with measures of repetitive negative thinking and impulsive problem solving, in addition to significant negative correlations with rational problem solving.

**Discussion:** In other words, the participants who were able to come up with effective methods for solving both academic and interpersonal problems were less likely to entertain repetitive negative thoughts and were also less likely to engage in impulsive problem solving strategies. However, neither means nor effectiveness scores were correlated with problem orientation, anxiety, or depression. The findings are discussed in the light of current literature.

## Mindfulness Traits are Related to Lower Mental Fatigue and Higher Subjective Value of Effort

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Mindfulness has been shown to be a trait that enhances focus, motivation and ability to control one's behavior. As a skill it is trained in almost every third-wave approach in CBT (eg. ACT, DBT or MCBT). In the presented study we aimed to investigate the impact of mindfulness on cognitive fatigue and subjective value of cognitive effort.

241 participants (130 females), aged 18-80 took part in the study. They filled Five Facets Mindfulness Questionnaire and performed an effortful procedure which comprised 40 tasks requiring mental rotation. After each 5 trials participants answered questions regarding their motivation to perform further tasks, the value of performing the procedure and they also assessed their mood including cognitive fatigue sensation.

The total effect of mindfulness on motivation was significant and positive ( $b = 0.04$ , 95% CI [0.02, 0.06],  $p = .001$ ). Mindfulness was also positively related to the perceived value of a task ( $b = 0.04$ , 95% CI [0.01, 0.06],  $p = .001$ ) and negatively to fatigue ( $b = -0.05$ , 95% CI [-0.07, -0.03],  $p < .001$ ). Value was negatively related to fatigue ( $b = -0.22$ , 95% CI [-0.34, -0.09],  $p = .001$ ). Value was positively ( $b = 0.88$ , 95% CI [0.82, 0.93],  $p < .001$ ), while fatigue was negatively related to motivation ( $b = -0.08$ , 95% CI [-0.14, -0.03],  $p = .004$ ).

When both mediators were included in the model, the effect of mindfulness on motivation became nonsignificant ( $b = 0.0003$ , 95% CI [-0.01, 0.01],  $p = .949$ ). The indirect effect of mindfulness (estimated with 10,000 bootstraps) through perceived value and fatigue was significant and positive ( $b = 0.001$ , 95% CI [0.0001, 0.0015]). Indirect effects through value only ( $b = 0.03$ , 95% CI [0.01, 0.05]) and fatigue only ( $b = 0.004$ , 95% CI [0.001, 0.008]) were also significant and positive.

In this study we showed a consistent negative relation between perceived value and mental fatigue and the negative impact of mental fatigue on motivation to invest further effort. We have also shown that mindfulness positively impacts perceived value of the tasks and therefore leads to lesser fatigue and higher motivation. The results indicate that mindfulness-based approaches can be successfully applied and investigated in the treatments of chronic fatigue, procrastination and burnout.



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## Early Maladaptive Schemas and Borderline Personality Disorder: A Meta-Analysis

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**Introduction:** Early maladaptive schemas (EMSs) have been hypothesized to be significantly associated with multiple mental health problems, especially with personality disorders. Furthermore, EMSs have been considered as a central factor in the onset and development of borderline personality disorder (BPD). However, the associations between EMSs and BPD remains unclear, as studies have provided inconsistent results regarding the effect magnitude. The current meta-analysis aimed to examine the associations between early maladaptive schema domains and borderline personality disorder severity.

**Method:** Systematic searches were conducted in SCOPUS, Web of Science, PubMed and PsycInfo. A total of 25 studies were included in the analyses and provided sufficient data for estimating the pooled effect sizes for each of the five schema domains and borderline personality disorder severity. Moderation and meta-regression analyses were also conducted.

**Results:** The results indicate that EMSs from each of the five domains present a large and positive effect on BPD severity, with pooled effect sizes ranging from  $r = 0.42$  for the Overvigilance and inhibition domains, to  $r = 0.55$  for the Disconnection and rejection domain.

**Discussion:** These results support the hypothesis that EMSs are strongly related to BPD severity. Future research should approach this relationship using longitudinal designs and take into consideration potential sources of variability discussed in this meta-analysis.

**Key words:** borderline personality disorder, early maladaptive schemas, schema domains.

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## Loneliness and Emotion Regulation: A Meta-Analysis

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Often understood as an aversive emotional state, loneliness began to be investigated through an emotional regulation framework. The current meta-analysis examines the associations between loneliness and emotion regulation, conceptualized both as distinct strategies (rumination, cognitive reappraisal, expressive suppression, and distraction) and as overall competence (emotion regulation abilities and difficulties). Fifty-two studies (total  $N = 32852$ ) met the inclusion criteria and reported a total of eighty-eight ( $k = 88$ ) effect sizes. Analyses indicated that loneliness correlated positively (showing large effect sizes) with rumination ( $k = 27$ ,  $r = 0.37$ ), suppression ( $k = 14$ ,  $r = 0.31$ ), and difficulties in emotion regulation ( $k = 18$ ,  $r = 0.51$ ), and negatively (showing medium effect sizes) with reappraisal ( $k = 18$ ,  $r = -0.22$ ), distraction ( $k = 6$ ,  $r = -0.21$ ), and emotion regulation abilities ( $k = 6$ ,  $r = -0.24$ ). In order to account for between-study variability, subgroup and meta-regression analyses were conducted, with study design, clinical status of the samples and age category investigated as categorical moderators and mean age of the participants, the percentage of women in the samples, and Hofstede's individualism index investigated as continuous moderators. In sum, the results of the current meta-analysis draw attention to the implications of emotion regulation in the understanding of loneliness and set the stage for possible intervention techniques aimed at alleviating feelings of social isolation.

**Keywords:** loneliness, perceived social isolation, emotion regulation, meta-analysis.

## The Effectiveness of Psychological Treatments for Obsessive-Compulsive Disorders: A Meta-Analysis of Randomized Controlled Trials Published Over Last 30 Years

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**Background:** Obsessive-compulsive disorder is a common mental disorder that affects millions of people worldwide. Although numerous randomized controlled trials have been conducted to examine the effect of psychological treatments for obsessive-compulsive disorder, there is still a lack of consensus on their overall effectiveness. We conducted a comprehensive meta-analysis to determine the overall effectiveness of psychological treatment for obsessive-compulsive disorders.

**Method:** We conducted a comprehensive search not only in English (PubMed, Embase, PsycINFO, International clinical trials registry platform of WHO) but also in Chinese databases (CNKI, WangFang, WeiPu, China Clinical Trial Registry) using an extensive strategy. Our inclusion criteria were controlled trials investigating psychological treatments for subjects diagnosed with obsessive-compulsive disorder, compared to control groups. The primary outcome of interest was the severity of OCD symptoms, with Hedges'  $g$  calculated at post-treatment and at 6-12 months follow-up. Random effects models were used for all analyses, with subgroup analyses and sensitivity analyses performed. Additionally, the risk of bias was assessed.

**Results:** 55 controlled trials comparing psychological treatments to control groups were identified, with a total of 86 comparisons and 2713 patients. At post-treatment, psychological treatments demonstrated a significant and large effect on reducing OCD symptoms ( $g = -1.15$ ; 95%CI [-1.32, -0.97]) compared to control groups, with high heterogeneity ( $I^2 = 72.11\%$ ; 95%CI [63.4, 78.7]). This finding remained consistent in sensitivity analysis for the Yale-Brown Obsessive-compulsive scale ( $g = -1.2$ ; 95%CI [-1.43, -0.96]) and after excluding outliers ( $g = -1.09$ ; 95%CI [-1.2, -0.98]), but lost significance in sensitivity analysis for low risk of bias. Subgroup analyses indicated that the type of control group and intervention format may be associated with the treatment effect. Waiting lists were associated with the largest effects ( $g = -1.3$ ; 95%CI [-1.58, -1.03]), while psychological placebos had the smallest effects ( $g = -0.82$ ; 95%CI [-1.04, -0.59]). The intervention format that involved the family members of the patient had the largest effects ( $g = -1.39$ ; 95%CI [-1.98, -0.8]). The effect was insignificant at 6 - 12 months follow-up. Most trials (87%) were rated at high risk of bias.

**Conclusions:** Psychological treatment appears to be a promising approach for managing OCD symptoms. Furthermore, our subgroup analyses suggest that the type of control group and treatment delivery format may play a role in the treatment effect. However, caution should be exercised when interpreting these results due to the high heterogeneity and risk of bias across trials. Further studies are required to investigate the long-term effectiveness of psychological treatment for OCD and to confirm the conclusions drawn from our meta-analysis.

## The Current Status and Future Perspectives of Cognitive Behavioral Therapy for Social Anxiety Disorder in South Korea: A Systematic Review

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**Introduction:** Cognitive Behavioral Therapy (CBT) has shown efficacy as a disorder-specific treatment for Social Anxiety Disorder (SAD) across different cultures. In recent years, CBT for SAD has evolved beyond traditional cognitive restructuring, incorporating various cognitive and behavioral techniques based on the cognitive model of SAD. However, South Korea still predominantly relies on traditional CBT approaches, focusing on cognitive restructuring, in both clinical and research settings. This study aimed to examine the progress of CBT for SAD in South Korea since the 2000s through a literature review, providing insights into its future prospects.

**Methods:** For the period between 2000 and mid-2017, relevant data pertaining to CBT were selected from the review study conducted by Kim and Yang (2017). Subsequently, for the period from 2017 to 2023, research papers focusing on the treatment of SAD in South Korea were searched using search engines like AccessON, Riss, Kci, and Kiss. The search utilized keywords such as "social anxiety," "cognitive behavioral therapy," and "treatment." Studies that lacked specified sample characteristics, a control group, or quantitative evaluations were excluded from the analysis.

**Results:** This study reviewed a total of 30 research papers on CBT for SAD. The findings revealed that in the early 2000s, following the introduction of Heimberg's cognitive behavioral group therapy in South Korea, CBT for SAD emphasized cognitive factors over behavioral factors (6 studies; Hedges'  $g = 1.13$ ). In the mid-2000s, mindfulness-based approaches and Acceptance and Commitment Therapy (ACT) were introduced in South Korea, leading to a significant increase in research exploring their application in treating SAD from 2010 to mid-2017 (11 studies; Hedges'  $g = 1.27-1.29$ ). During this period, there were also limited research efforts aiming to enhance the effectiveness of disorder-specific CBT for SAD (2 studies; Cohen's  $d = 1.30 - 2.05$ ). From late 2017 to early 2023, 11 studies met the inclusion and exclusion criteria, focusing on validating the efficacy of specific treatment modules. These modules included imagery rescripting (4 studies; Cohen's  $d = 0.99$ ), virtual reality exposure therapy (4 studies; Cohen's  $d = 1.91$ ), and self-compassion-based interventions (2 studies; Cohen's  $d = 0.97$ ). However, there was a relative scarcity of studies examining the overall effectiveness of treatment packages. Only one study specifically applied dialectical behavior therapy to SAD (Cohen's  $d = 1.01$ ).

**Discussion:** In conclusion, the findings of this study demonstrate several important trends in CBT for SAD in South Korea. Firstly, there is a notable shift towards a transdiagnostic approach in the overall treatment package of CBT for SAD. Secondly, the research has seen a surge in studies focusing on developing and evaluating treatment modules to enhance the therapeutic outcomes of CBT for SAD. These modules, such as imagery rescripting, virtual reality exposure therapy offer promising avenues for optimizing treatment effectiveness. Lastly, given the rapid advancements in the field and the incorporation of the latest treatment outcomes, the dissemination of up-to-date CBT for SAD practices becomes highly crucial.

## Understanding the Lived Experience of a Life with Multiple Sclerosis: Blending Citizen Science with Natural Language Processing and Machine Learning

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**Background:** The emergence of new digital technologies has enabled a new way of doing research, including active collaboration with the public ('citizen science'). Harnessing the knowledge of "citizens" on a particular topic is a powerful way to generate new insights or address scientific/societal challenges. Innovations in machine learning (ML) and natural language processing (NLP) have made it possible to automatically analyze large amounts of textual data in order to study individual perspectives in a convenient and efficient way. Here, we present the citizen science project 'My life with multiple sclerosis' of the Swiss MS Registry, which was developed in close collaboration and on the initiative of people with MS. For this project, we combine citizen science with innovations in NLP and ML to examine (1) which categories of life events people with multiple sclerosis (MS) perceive as central to their MS and (2) the emotions associated with them. We then relate our findings to standardized individual-level measures.

**Methods/Design:** The sample of the 'My Life with MS' study (n = 1039) consists of persons with MS registry participants, an ongoing longitudinal patient-centered survey in Switzerland. Study participants were invited to tell their story of a life with MS through self-selected key events. For each event, participants provided keywords and were asked to describe the event itself, its consequences, the support they received, and what was helpful. They also offered advice for others in a similar situation. Individuals then completed survey measures on quality of life, MS type and symptoms, medication, disease course, and treatment. For the text analysis, we first translated all text entries into English using pretrained language models ('transformer models'). We then implemented topic modelling ('latent dirichlet allocation') to identify overarching topics underlying the text descriptions. For fine-grained average sentiment analyses (i.e., sadness, fear, anger, joy, surprise) we again implemented ML-driven language models. We finally linked the overarching event topics to participants' individual-level measures, including quality of life and symptoms.

**Results:** Individuals reported a total of 4309 unique MS-related events. Topic modeling analysis revealed eight distinct event themes: (1) 'diagnosis', (2) 'medication / treatment', (3) 'relapse / child', (4) 'work', (5) 'birth, health', (6) 'partnership & MS', (7) 'rehab / wheelchair', and (8) 'injection, symptoms'. Sentiment of the text entries was predominantly negative, with sadness and anxiety being the most frequent emotions. However, individuals also documented a significant number of positive events, particularly in the categories 'birth, health' and 'partnership & MS'. In terms of the individual-level characteristics, we did not find a clear pattern across topic categories.

**Discussion:** The innovative aspects of this project pertain to its combination of digital citizen-science with ML-driven NLP methods. All project stages were guided by scientific expertise and individual experiences of persons with MS. A group of more than 1,000 citizen scientists shared their lived experience of MS, contributing to a deeper understanding of the disease. Our study informs future research combining citizen science and large-scale language assessments by identifying challenges of automated text analysis and proposing potential avenues for future research.

## Design of Virtual Environments for Aviophobia

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Aviophobia (the fear of flying - FoF) is a specific phobia characterized by persistent anxiety during or in anticipation of, flying on an airplane. The intensity of fear is disproportionate to the actual danger, often resulting from fear of the plane crashing or the inability to have control over the flight experience. People with FoF are often engaging in avoidance behavior, escaping these situations or enduring them (e.g. using alcohol to reduce the distress). FoF negatively affects professional and social life, preventing individuals from traveling for work or visiting family and friends [1].

Treatment of FoF usually consists of medication and/or cognitive behavioral therapy, including systematic desensitization or exposure therapy. Exposure therapy can include spending time in a stationary plane or a flight simulation. However, performing in vivo exposures for FoF can be problematic due to the limited availability or the high costs of airplane practice situations. Virtual reality exposure therapy (VRET), already proven to be an efficient tool in phobia treatment, represents a useful and more accessible alternative that can address these limitations [2]. Some virtual environments (VE) for VRET in FoF have already been created. Nevertheless, most of them are in the form of self-help mobile app-based treatments or 360° videos, allowing only viewing, but no interaction in the environment, with limited possibility of graduating the exposure based on the patient's individual needs.

In this project, VE for exposure therapy of FoF was designed based on situations suggested in the Flight Anxiety Questionnaire [3]. The virtual scenario includes taking the subway to the airport, going through security, waiting at the gate, boarding the plane, and taking off (with authentic visual and sound effects). The main advantage of our scenario is the possibility of gradual, individualized exposure in a VE controlled by a professional therapist.

The main aim of this pilot study is to examine the feasibility of the created virtual scenario in inducing stress in patients with FoF, comparing differences in subjective rating during virtual exposure between the experimental and control group (with and without FoF). A description of the virtual environment and pilot data will be presented at the conference in a poster format.

This virtual environment was created in cooperation with CIIRC CTU as part of a larger project VRETcity supported by the Technology Agency of the Czech Republic program Éta (project No. TL0300022), serving as a complex tool for exposure therapy of phobias.

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## Multimodal Functional and Structural Brain Connectivity Analysis Focusing on Response to Cognitive Behavioral Therapy for Obsessive-Compulsive Disorder: A Combined Resting-State fMRI and DTI Study

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**Introduction:** Cognitive behavioral therapy (CBT) is already known as the most effective therapy for obsessive-compulsive disorder (OCD); however, different patients respond differently to CBT, and it is uncertain how CBT affects brains. Recently, there have been two useful neuroimaging modalities; resting-state functional magnetic resonance imaging (rsfMRI), which provides insights into whole-brain networks, and Diffusion Tensor Imaging (DTI), which offers a means to assess the connectivity of white matter. Whereas combining these modalities will make much progress in estimating changes in the brain and making a prediction about CBT, no study of this in OCD has been reported. Herein, our study proposes exploring CBT's neurological mechanism for OCD.

**Methods:** Thirty patients included in this study who were with a Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) score of 16 or higher and got CBT for OCD consisting of 10 or more sessions. Patients with Y-BOCS scores of 12 or less after treatment were defined as the remission group, and others were defined as the non-remission group. We measured pre-treatment resting-state brain functional connectivity and diffusion-weighted structural connectivity and explored the difference between the remission and non-remission groups. Regarding rsfMRI, multiple voxel pattern analysis (MVPA) was performed using the CONN toolbox, and post-hoc analysis was performed by seed-to-voxel analysis based on the clusters obtained by MVPA to search for changes in functional connectivity. About DTI, we performed a probabilistic tractography using the TRACULA (TRActs Constrained by UnderLying Anatomy) toolbox in FreeSurfer.

**Results:** In rsfMRI, a total of four clusters were extracted in part of the bilateral occipital cortex and left temporal cortex between the remission and the non-remission group from MVPA. Post-hoc analysis revealed a total of six significant connectivity changes, mainly in the bilateral occipital cortex, which were associated with the four clusters. DTI data is currently under analysis.

**Discussion:** The difference in functional connectivity, mainly in the bilateral occipital cortex, was indicated. In general, the occipital cortex is known to be associated with visual perception processing, thus this result suggests visual perception may affect treatment response in CBT for OCD. The results of DTI will be added and discussed on the day of the presentation.

(Ethical Considerations: This study was approved by the Ethics Committees of the Chiba University Graduate School of Medicine.)

## Effect of Group Cognitive Behavioral Therapy on Anxiety and Sense of Coherence for Community Dwelling Older Adults with Anxiety

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**Introduction:** In relation to the changes that occur in old age and the social changes of the present, there are more older adults with anxiety disorders. Cognitive behavioral therapy (CBT) is one of the methods that can be effective in reducing anxiety. The advantage of group therapy is the possibility of reducing social isolation. The aim of our study was to determine the effect of group CBT for community dwelling older adults with anxiety on their anxiety, and sense of coherence.

**Methods:** Within our study, 4 groups of 7 participants were organized. Three participants did not complete the study due to deterioration of their health. Older adults were approached through the Centre for Prevention and Promotion of Healthy Ageing of the University of Ostrava in the Czech Republic. Group sessions took place once a week and lasted 120 minutes over the course of 12 weeks. The manual "Aging Wisely" by Wuthrich et al. (2016) was used. Individual sessions include education on the ageing process, coping with loneliness, improving sleep, coping with anxiety, and avoiding, coping with loss and death. Participants learn to monitor their mood, identify their thoughts, challenge unhelpful thoughts, and practise techniques to replace the unhelpful thoughts. For data collection, the following scales were used: The Geriatric Anxiety Inventory - GAI and the Sense of Coherence Scale - SOC-13. The short form of the SOC scale consists of 13 items that comprise three components: comprehensibility (SOC\_C), manageability (SOC\_MA), and meaningfulness (SOC\_ME). Participants completed the scales before and after the group sessions. Differences were tested using the paired-sample t-test.

**Results:** The research sample included 25 older adults with an average age of 72.72 years ( $s=5.9$ ; min-max: 61-83 years). Only two participants were men (8%). A total of 11 older adults lived with their partners, 13 lived alone, and one with their child. Only two participants were still employed. After completion of group CBT, older adults reported lower anxiety rates (pre:  $\bar{x}=13.6$ ;  $s=2.6$ ; post:  $\bar{x}=9.4$ ;  $s=3.5$ ;  $p<0.001$ ; mean diff.: 4.16; 95%CI: 3.17-5.15). Also, an improvement in all domains of sense of coherence was detected: SOC (pre:  $\bar{x}=54.2$ ;  $s=10.1$ ; post:  $\bar{x}=59.6$ ;  $s=8.7$ ;  $p<0.001$ ; mean diff.: -5.32; 95%CI: -8.01 - -2.64), SOC\_C (pre:  $\bar{x}=19.7$ ;  $s=4.7$ ; post:  $\bar{x}=21.0$ ;  $s=4.2$ ;  $p=0.044$ ; mean diff.: -1.32; 95%CI: -2.61 - -0.04), SOC\_MA (pre:  $\bar{x}=15.8$ ;  $s=3.9$ ; post:  $\bar{x}=17.8$ ;  $s=3.1$ ;  $p=0.005$ ; mean diff.: -2.04; 95%CI: -3.41 - -0.67), and SOC\_ME (pre:  $\bar{x}=19.2$ ;  $s=3.6$ ; post:  $\bar{x}=20.7$ ;  $s=3.9$ ;  $p=0.012$ ; mean diff.: -1.48; 95%CI: -2.60 - -0.36).

**Conclusion:** Group CBT is a suitable psychological intervention for older adults with anxiety to reduce their anxiety and improve their sense of coherence.

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## Effect of Group Cognitive Behavioral Therapy for Community Dwelling Older Adults with Depression to Their Depression Symptoms, Self-Esteem and Quality of Life

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**Introduction:** Geriatric depression is considered the most common mental health problem in older adults, negatively affecting quality of life. Group cognitive behavioral psychotherapy is an appropriate and effective intervention to reduce depressive symptoms also in older adults. The aim of the study was to determine the effect of group cognitive behavioral therapy for older people with depression in the community on their depression symptoms, self-esteem, and quality of life.

**Methods:** Within our study, 3 groups of 7 participants were organized. The criterion for inclusion in the research group was age 60 or older, cognitively intact (no diagnosed dementia, ability to sign an informed consent form). Older adults were approached through the Centre for Prevention and Promotion of Healthy Ageing of the University of Ostrava in the Czech Republic. The group sessions took place once a week for 120 minutes over the course of 12 weeks. The manual "Ageing Wisely" by Wuthrich et al. (2016) was used. All patients were educated about depression, activity planning, cognitive restructuring of automatic negative thoughts, exposure, and relaxation training. The Geriatric Depression Scale (GDS-15), Rosenberg's Self-Esteem Scale - RSES, and the Older People's Quality of Life Questionnaire (OPQOL-Lite) were completed before and after the intervention. Data normality was verified by the Shapiro-Wilk test. Differences were tested using the paired-sample t-test.

**Results:** The research sample included 21 older people with an average age of 72.62 (min-max.: 61-86 years). All participants were women, 10 women lived with their partners, and 11 lived alone. Only one participant was still in the work. Total 14 women were found to be mildly depressed (GDS score 6-10) and 7 women were found to be severely depressed (GDS score 11-15). After the intervention, there was a significant reduction in depression (pre:  $\bar{x} = 9.1$ ;  $s = 3.0$ ; post:  $\bar{x} = 4.6$ ;  $s = 2.2$ ;  $p < 0.001$ ; mean diff.: 4.45; 95%CI: 2.83-6.07), and also a significant improvement in quality of life (pre:  $\bar{x} = 49.1$ ;  $s = 3.8$ ; post:  $\bar{x} = 52.5$ ;  $s = 2.9$ ;  $p < 0.001$ ; mean diff.: -3.35; 95%CI: -5.03 - -1.67). There was no statistically significant difference in self-esteem (pre:  $\bar{x} = 17.1$ ;  $s = 4.1$ ; post:  $\bar{x} = 17.6$ ;  $s = 3.3$ ;  $p = 0.362$ ; mean diff.: -0.50; 95%CI: -1.62-0.62).

**Conclusion:** Group cognitive behavioral therapy for older people can be particularly effective in managing depression in old age. It further improves the quality of life, therefore, it can be classified as an appropriate psychological intervention for older adults in community care.

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## Guided Internet-Based Cognitive Behavioral Therapy for Insomnia in Patients with Borderline Personality Disorder: Study Protocol for a Randomized Controlled Trial

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**Background:** Borderline personality disorder (BPD) is a highly disabling psychiatric disorder with emotion dysregulation at its core, resulting in affective instability, impulsivity and sometimes self-harming or suicidal behavior. Sleep is increasingly recognized to play a crucial role in emotion regulation. BPD patients often suffer from (severe) insomnia, potentially aggravating symptoms and preventing recovery from BPD. Yet, the effects of insomnia treatments have not been investigated in context of BPD. Guided internet-based cognitive behavioral therapy for insomnia (iCBT-I; i-Sleep) has been proven effective in improving both insomnia and psychiatric symptoms such as depression, anxiety, PTSD, and substance use. This study aims to assess the effectiveness of iCBT-I in patients with BPD, on BPD symptom severity, BPD treatment effectiveness, and other secondary outcomes. These effects are thought to arise from a direct effect of improved sleep on emotion regulation and a synergistic effect on the consolidation and internalization of the BPD treatment effect. To our knowledge, this is the first trial assessing effectiveness of CBT-I in patients with BPD (traits). The accessibility of the studied intervention greatly facilitates clinical implication in case of positive results.

**Methods:** In this randomized controlled trial among 96 patients with a DSM-5 diagnosis of BPD (or other personality disorder with  $\geq 4$  BPD traits) and insomnia symptoms, we will test the effectiveness of iCBT-I before regular BPD treatment starts, during the waitlist period, on BPD symptoms. Patients in the control group monitor their sleep through a sleep diary during the waitlist period and also receive standard BPD treatment after that. Using linear mixed models we will test the hypothesis that the iCBT-I group improves more than the control group on BPD symptoms (primary outcome), insomnia severity, additional subjective and objective sleep variables, emotion regulation, comorbid anxiety and depression complaints, and quality of life.

**Results:** the study is still ongoing and no results can be reported yet.

**Conclusion:** iCBT-I as add-on treatment for patients suffering from both BPD and sleep problems may be a promising way to alleviate BPD symptom severity directly and through improved internalization of subsequent standard BPD treatment. Our ultimate goal is to test the efficacy of iCBT-I as add-on therapy for BPD with comorbid sleep complaints and include the intervention in clinical guidelines of BPD in case of positive results. Findings may similarly spark new investigations into effectiveness of iCBT-I for other psychiatric disorders deriving from emotion dysregulation and/or maladaptive memory processing along with sleep problems.

## Positive Emotions as a Mediator between Childhood Adversity and Psychopathology: A Meta-Analysis

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Childhood adversity is a lifelong and transdiagnostic risk factor for psychopathology, and more recent studies have focused on understanding the underlying psychological mechanisms, such as emotion regulation. Positive emotions may be one of the other eligible candidates, given its association with both childhood adversity and psychopathology. Based on the available evidence, the present meta-analysis aimed to investigate the mechanistic involvement of positive emotions in the relation between childhood adversity and psychopathology. Systematic searches were conducted in PubMed, Scopus, Web of Science and PsychInfo. Finally, ninety-three studies were included. A partial mediation model was fitted to the available data across studies, using meta-analytic structural equation modeling. First, results showed that correlations between childhood adversity, positive emotions and psychopathology were significant, in the expected direction, and of small and moderate effect sizes. Second, positive emotions indeed served as a mediating mechanism underlying the link between childhood adversity and psychopathology. Further subgroup analyses will be conducted to investigate sources of heterogeneity by examining how the mediation model varies across specific subgroups. Our preliminary results suggest that dampened positive emotions is a consistent marker of childhood adversity and contribute to risk of psychopathology.

**Keywords:** meta-analysis, childhood adversity, positive emotions, psychopathology, mediation.

## Self-Care Among Helping Profession's Specialists in High and Low Stress Conditions

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**Introduction:** Taking Care of Yourself (Self-care) is important for mental health professionals whose work is associated with the stress increasing risk (El-Ghoroury et al. 2012) and burnout (Wityk 2003), which, in turn, might lead to the therapy decreasing effectiveness (Smith & Moss, 2009). According to large number psychologists' ethics codes, a specialist's psychological well-being is an obligatory requirement when working with clients. That is why the purpose of this study was to identify differences in practicing psychologists with low and high stress levels on the following components of self-care:

Self-care in the personal sphere

Self-care in the professional sphere

Self-care in the psychological sphere

Behavioral self-help

We hypothesized that specialists with low stress levels would differ from others with high stress levels on all or single component of self-care. Identifying these components will help to understand the main goals in developing self-care skills.

**Methods:** There are 119 specialists (psychologists, psychiatrists, and psychotherapists), including 18 men and 101 women, aged 24 to 65 years, participated in the study (M=38.2; SD=8.4). List of questionnaires:

1. Self-care questionnaire was developed to study self-care (Gizhitskii V., Glumova N., Demchenko A., Kharina E, Zenina A.).
2. C. Neff's self-help questionnaire was used to identify psychological self-help.
3. K. Carver, M. Scheyer, and J. Waitraub's short version of the COPE-30 coping strategies questionnaire was used to determine behavioral self-care.
4. PSS-10 questionnaire was used to determine stress level.

**Results:** Three groups of specialists with different levels of stress scores were formed to identify characteristics of self-care, self-compassion, and coping strategies among psychologists in the helping professions, (we used quantile distribution measure - quartiles): with high (N=25), average (N=68) and low (N=26) score on the perceived stress scale. Students' t-criterion was used to compare the groups of specialists with low and high level of stress.

According to the obtained results the group of specialists with a low stress level, shows kinder attitude to themselves and uses more productive coping strategies than the group with a high stress level which, on the contrary has higher rates of self-criticism and uses non-productive coping strategies such as mentally switch from the problem and using sedatives.

We believe such results might be interpret in two ways. On the one hand, when specialists are more stressed, it becomes more difficult for them taking care of themselves: eat right, sleep, do physical activities, regulate work and rest regimes. It increases stress and self-criticism, decreases self-care ability and ultimately leads to unproductive coping strategies. On the other hand, insufficiently developed self-care and support skills can lead to increased stress, which in turn decreases ability to use productive coping strategies in stressful situations.

**Conclusion:** Results of the two groups' comparison, as well as the correlation analysis, nether allow us to draw some clear conclusion about the primacy of stress in reducing self-care, nor talk about the opposite effect. However, we believe that there is a circle where the stress increasement might lead to a self-care reduction, but self-assistance reduction might lead to stress growth.

## Stress Coping Skills and Strategies as Antidote to Mental Health for Adult Male Migrants – Open Space for CBT Interventions

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Migrants often face numerous stressors that can significantly impact their mental health. Understanding the coping strategies employed by migrants and assessing their mental health status is crucial for developing effective support systems. Cognitive Behavioral Therapy (CBT) coping stress skills are effective techniques and strategies that individuals can use to manage and reduce stress. These skills are based on the principles of CBT, which focuses on the relationship between thoughts, emotions, and behaviors. By identifying and challenging negative or unhelpful thoughts, individuals can develop healthier coping mechanisms and improve their overall well-being.

The main aim of this study was to examine the most common coping skills and strategies of young adult migrants in order to come up with an idea for creating a good CBT support program. The study explored the frequency of different coping strategies employed by migrants in correlation with their levels of depression, anxiety, and stress.

This study utilized a quantitative approach and recruited a sample of 184 male migrants from 14 different countries facing stressful situations.

Following instruments were applied: participants completed self-report measures, including a coping strategies inventory The Brief – COPE, DASS-21-The Depression, Anxiety and Stress scale and BHS – Beck Hope(lessness) Scale.

The findings revealed that religion was the most commonly used coping strategy, followed by planning about the next steps and active coping with the situation. Substance use was identified as the least utilized coping strategy. Mental health of male migrants scores reflected moderate levels of depression, anxiety, and mild manifestation of stress symptoms.

These results underscore the importance of understanding and addressing the coping mechanisms and mental health needs of migrants in order to provide appropriate support and interventions.

**Keywords:** migrants, coping strategies, mental health, stress, religion, depression, anxiety, stress management

## Self-Love Discourse in AOD Recovery Social Media Posts: What Predicts Other-Focused Self-Love?

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**Introduction:** Despite its rising popularity in mental health, and semblance to self-acceptance and self-care, self-love has yielded only minor attention within scientific research. By exploring lay beliefs about self-love on Twitter and Instagram posts among people in alcohol and other drug (AOD) recovery, Ziemer (2022) found that self-love is a much broader concept than the historically researched concepts of self-esteem and narcissism. One important theme that emerged was self-love described as “taking action for the self”, specifically self-(centered) care (related theme: self-care) or other-focused care (related themes: prosociality; asking for help). These self-centered strategies may resemble “neoliberal self-care”, with emphasis on a cognitive mind shift (e.g., reframing), mindfulness, or exercising. All demonstrate the adverse focus on personal responsibility as a typical motive within our achievement-driven society, neglecting the beneficial role of cooperating with others or seeking social support. However, connectedness in the form of peer support or embeddedness in a community has been identified as a crucial mechanism behind recovery. Individuals in AOD recovery have even named it as the key factor in their recovery journey. As such, AOD recovery interventions like 12-step programs (e.g. Alcoholics Anonymous) foster prosocial behavior, for example through a buddy system. Additionally, found to increase the likelihood of prosocial behavior and recovery capital, gratitude has been identified as an important factor. Further research is needed to understand what generates prosocial self-love practice and how society can learn from individuals in AOD recovery.

**Method:** This study extends a larger project, which explored lay beliefs of self-love in 188,114 #selflove Instagram and Twitter posts from 2019. Using a mixed-methods design and applying inductive and deductive exclusion/inclusion criteria, AOD recovery-related hashtags (e.g., #sober) identified a subsample of 902 #selflove and AOD recovery posts. A content analysis was conducted, and a codebook was created resulting in the most frequent themes of #selflove and recovery. All themes were binary coded (0=not mentioned/1=mentioned in the post). Based on these previously identified themes, using Chi-square analysis, we will assess for the association between self-centered and other-focused self-love in the #selflove AOD recovery posts. Then, to predict other-focused self-love, we will run a multiple logistic regression model with expressing gratitude, reframing, and taking responsibility.

**Results:** Analysis in progress

**Discussion:** Drawing on AOD recovery communities, this study aims to explore what predicts other-focused self-love practices (asking for help; prosociality) as opposed to self-centered self-love strategies (e.g., self-care). The goal is to deepen our understanding of the role of other-directed self-love in the recovery journey and how fostering prosocial self-love can possibly lead to sustained recovery and prevent relapse. Further, we examine how strategies previously associated with neoliberal self-care (e.g., self-optimization with cognitive reframing) affect the likelihood of an other-focused self-love practice. This study has a larger goal of reclaiming self-care as solidarity and cooperation and potentially clarifying for those in recovery, practitioners, and researchers how self-love can be implemented in behavioral treatment and recovery interventions and promote AOD prevention.

## The Effects of Emotion Inductions on a Self-Report and Psychophysiological Level in Adolescents: A Pilot Study

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**Introduction:** Depression and anxiety develop and are highly prevalent in the adolescent period. Although cognitive behavioral therapy (CBT) has been shown to be effective in treating youth depression and anxiety, it is concerning that symptoms seem to persist when looking at the high relapse and recurrence rates. This suggests that some CBT treatments may not address the root mechanisms leading to this symptom persistence. Studies indicate that 75% of emotional problems are linked to emotion regulation difficulties, measured with self-report questionnaires. Our aim is to study emotion regulation in understanding symptom persistence. Recent theoretical models propose that physiological processes may serve as biomarkers to better understand emotion regulation processes. Up until now, physiological parameters underlying emotion regulations are far less studied to examine symptom persistence in youth. We will examine physiological parameters as indicators for understanding emotion regulation processes contributing to symptom persistence.

**Method:** We will recruit youth with depression and anxiety during the intake phase in a therapy center and a healthy comparison group in schools (12-18 years). We will implement a longitudinal multi-method design using subjective (i.e., multi-informant questionnaires and clinical interviews) and psychophysiological measures (i.e., heart rate variability and electrodermal activity) prior to the start of (CBT-) treatment (T1) and six months later (T2). During a laboratory paradigm, participants will watch film clips that induce neutral moods as well as negative and positive emotions and participate in recovery phases while physiological parameters are recorded using a Porti 16-channel amplifier. Throughout the paradigm, participants will rate their emotions (stress, sadness, anger, anxiety, frustration and boredom) and rate their emotion regulation skills. Psychophysiological data will be analyzed using ANSLAB.

**Hypotheses:** We hypothesize that youth with depression and anxiety will show more (1) dysfunctional emotion regulation and (2) dysfunctional physiological processes during baseline measures, towards reactivity tasks that elicit negative and positive emotions, and during recovery compared to healthy youth. Moreover, we expect that youth with depression and anxiety will show improvements in physiological processes that will underly more adaptive emotion regulation after treatment, which will be associated with recovery of symptoms of depression and anxiety.

**Future preliminary Results:** The project has been approved by the Medical Ethical Commission of the University Hospital Ghent (reference number: ONZ-2022-0317). Recruitment has started and data-collection is planned for June 2023. We aim to present preliminary results regarding the first measurement point (T1) in a small subsample.

**Discussion:** Clinical implications of the current project will be that more emotion regulation oriented treatments in youth's emotional problems with more body-related focus (by e.g., adding biofeedback training) will be beneficial in preventing the problem of symptom persistence.

## Help-Seeking Behaviour in Anxiety Disorders

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**Introduction:** Anxiety Disorders (AD) have the highest prevalence of all the mental disorders and imply a high level of social and individual disease burden (Jacobi et al. 2014).

Although CBT and pharmacological treatments are successful in treating AD (Carpenter and al. 2018) there are numerous studies that show that the majority of individual do not seek help (Wittchen et. Al. 2008). The aim of the study is to conduct a systematic review of the studies that have investigated help seeking behaviours in AD.

**Method:** We conducted an online search using the following search query ("anxiety disorder" OR "panic attack" AND "treatment seek" OR "treatment-seek" OR "continuity of care" OR "health behav" OR "treatment barrier" OR OR "help seek" OR "help-seek" OR "helpseek" OR "mental health service" OR "treatment util" OR "treatment use" OR "service use" OR "perceived need" OR "service util" OR "primary care" AND "beliefs" OR "concerns" OR "intention" OR "preference" OR "need for treat"). We found 1296 abstracts relevant to the searched criteria.

Next we selected abstracts that met the following criteria: i) included adults or elderly as the population for the study, ii) participants were not in treatment at the moment of the study, iii) anxiety disorders were mentioned in the abstract, iv) the abstract also mentioned the idea of treatment preferences, and v) the study mentioned that data was collected. After this process, we selected 225 eligible articles.

Next, we analysed the 225 full-text articles and we selected only the papers that i) included at least one group of participants diagnosed with ADs, and ii) reported results related to seeking treatment specific to participants diagnosed with ADs.

**Results:** As the analyses are ongoing, we can only state our intentions regarding the evidence that we will summarize in the present review. We will focus on the main predictors of the decision to seek treatment. These predictors include demographic variables (e.g., gender, age, or socio-economic status), patient beliefs regarding their ADs (e.g., patient beliefs regarding the transitory nature of their ADs), and patient beliefs regarding their treatment options (e.g., perceived treatment effectiveness, perceived treatment availability, social stigma associated with seeking treatment).

**Discussions:** In the present contribution, we aim to provide a comprehensive review of existing evidence regarding the variables associated with seeking treatment in the case of people diagnosed with ADs. By focusing on patient beliefs, we aim at providing a framework for enhancing the proportion of patients with ADs that are actively seeking specialised treatment.



## Effects of a Mental Imagery Intervention on Depressive Symptoms and Psychological Well-Being

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**Introduction:** Recently, several studies have shown that mental imagery can improve motivation and engagement in activities. By allowing subjects to pre-experience future activities through mental imagery, they would have an easier time anticipating their potential to be pleasurable or rewarding (Holmes, Blackwell, Burnett Heyes, Renner & Raes, 2016), which would amplify the motivational aspects related to these activities, thus promoting engagement in them (Renner, Murphy, Ji, Manly & Holmes, 2019). These results suggest mental imagery to be a promising tool for the treatment of depressive disorder, for which engagement in the intervention remains a significant barrier to therapeutic success. Mental imagery could thus constitute a motivational and emotional lever, particularly in behavioral activation interventions. Our study focuses on the effect of two mental imagery interventions administered for two weeks to a non-clinical population on behavioral activation, positive and negative affect, motivation, optimism, depression, anhedonia and well-being.

**Method:** 55 participants aged 18-65 were randomly assigned to three different conditions: (1) planned activity mental imagery (N=17) (2) mental imagery of the best possible self (N=20) and (3) control condition of activity planning (N=18). The inclusion criterion was a minimum score of 8 on the HADS depression subscale. In a first lab session, each participant first completed standardized questionnaires (BADS-LF, BDI-II, LOT-R, PANAS, SBI, WEMWBS, PSIQ) and planned four activities of their choice to do during the next two weeks. Participants in experimental conditions also had a mental imagery practice of 5 minutes in the lab and they were told to pursue this practice at home daily for the next two weeks, while participants in the control condition only planned four activities. After two weeks the participants came back for a second lab session where they completed the standardized questionnaires once again.

**Results:** Preliminary results show significant improvements in behavioral activation, depressive symptoms and negative affect in all three conditions. Participants in the best possible self condition also showed significant improvement in professional dysfunction and psychological well-being. Finally, the planned activity mental imagery condition showed the most significant changes with improvements in all the above-mentioned factors but also in ruminations, positive affect, mental imagery skills, present moment pleasure, anticipating pleasure and general savoring pleasure. These results are based on a test-retest comparison.

**Discussion:** The preliminary results of our study suggest that mental imagery, specifically mental imagery of planned activities, can be an important lever for engaging individuals prone to behavioral inactivation. Activity planning is widely used in the context of behavioral activation, and this study shows the added value of a mental imagery practice to improve the effectiveness of this intervention. This study is currently in progress.

## A French Validation of a Tool to Measure Avoidance: The Cognitive Behavioral Avoidance Scale

Ecaterina Lazari, Sylvie Blairy

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**Introduction:** Ottenbreit and Dobson's (2004) Cognitive Behavioral Avoidance Scale (CBAS) is a tool that assesses the avoidance process through four dimensions: social cognitive, non-social cognitive, social behavioral, and non-social behavioral. This scale is particularly interesting because of its ability to quantify the degree of avoidance in different settings and therefore target more precisely the contexts in which avoidance strategies occur. There is currently no validated translation of this tool in French. We propose a French validation of the CBAS scale and will present the first results of its psychometric qualities analysis.

**Method:** The first phase of the study (N=150) consisted of presenting the original and the French translation of the questionnaire to bilingual participants at one-week intervals in order to test the concurrent and content validity, the test-retest reliability, and the internal consistency of the French translation of the scale. A second phase of the study was in the form of an online survey (N=404) aimed to establish correlations between the French version of the CBAS and other scales (BADS-SF, BDI-II, RRS, STAI-trait, AAQ, LSAS-E), as demonstrated in the original validation article.

**Results:** The first phase of the study revealed a test-retest reliability of .87 and an internal consistency of .90, like the original version. The second phase of the study showed significant positive correlations between the CBAS and the BDI-II, the BADS, the STAI-trait, the LSAS-E, the RRS, and the avoidance sub-dimension of the BADS-SF ( $r = .70$ ,  $r = .66$ ,  $r = .73$ ,  $r = .68$ ,  $r = .67$ ,  $r = .50$ , respectively), and significant negative correlations between the CBAS and the AAQ and with the activation sub-dimension of the BADS-SF, like the original version ( $r = -.66$ ,  $r = -.53$ ).

**Discussion:** Preliminary results are encouraging to attest of the validity of the French translation of the Cognitive Behavioral Avoidance Scale. This new tool will allow us, as clinicians, to identify avoidance processes in our patients in order to better understand their coping strategies and to offer better suited therapeutic interventions. This study is currently in progress.

## Some of the Challenges of Affective Disorders Treatment Addressed in The Day Unit Care: Case study

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**Presenting Problem:** There is a growing number of affective disorder cases in the world population. E.g. globally, an estimated 5% of adults suffer from depression (1). At the same time the complexity of the affective disorders requires appropriate course of treatment. The multidimensional programme offered in the day unit can be a good example of a dealing with this challenging issue. This poster is an attempt to illustrate with two case study examples the flexible approach available in the day unit.

**Case: Conceptualisation and Intervention:** Presented case studies describe two young adults who suffer from bipolar disorder (BD). Their example show common barriers during the BD treatment. First one is the diagnostic issue (2). It is often a challenge to make the right diagnosis having mostly subjective information from the past. Another difficulty is to differentiate between BD and other mental disorders – e.g. borderline personality disorder (BPD), since the symptoms overlap in some extent. Case study 1 is an attempt to show how to address this diagnostic difficulties and give adequate treatment in a day unit. The diagnostic process was even harder in this case. The access to reliable observation was impaired by patient's avoidance strategy.

Case study 2 show another common problematic area in the treatment which is the acceptance of the illness (3). Without this process completed the risk of incompliance with the treatment orders is very high and the relapse almost unavoidable. The 30 years old male patient, suffering from BD for about 5 years was unable to accept himself as a person with a bipolar disorder. This difficulty might be linked to the standards set in his family of origin, where high achievements from the family members were expected. The therapeutic team was aiming to support patient in the process of illness acceptance by variety of interventions e.g. psychoeducation, therapeutic group support and experience sharing, cognitive-behavioural elements of treatment.

**Outcome:** In both cases the main therapeutic goals were achieved. In Case study 1 the diagnostic process had been completed and the adequate treatment was recommended. In case study 2 due to therapeutic effort in the area of patient's self acceptance the physicians orders compliance improved significantly. Both examples illustrate the fundamental significance of close cooperation between physicians and psychologists and a need of variety of interventions. That is possible only in few settings. Day care unit is one of them.

**Review and Evaluation:** Literature and clinical experience indicate some problematic areas in BD treatment. The poster illustrates common ones – making the right diagnosis, enhancing the acceptance of the illness and compliance with physicians orders. Two case studies of young adults with BD diagnosis treated in the day unit describe the possible way of treatment addressing issues mentioned above.

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## Sleep in Tourette Syndrome: Surveillance of the National Survey of Children's Health

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**Introduction:** Despite research demonstrating sleep disturbance in children with Tourette's syndrome (TS), few studies have examined bedtime regularity, an important sleep health dimension. Therefore, this study examined bedtime regularity in children with TS relative to matched healthy controls, and its associated demographic, clinical, and behavioral factors.

**Method:** Participants were 384 parents or caregivers of children aged 3 to 17 years, including 192 with current TS and 192 matched healthy controls drawn from the 2020-2021 cycle of the National Survey of Children's Health. Parents completed questions assessing demographics (i.e., age, race, sex), clinical (i.e., ADHD, ASD, anxiety, depression, tic severity, behavioral or conduct problems, ADHD medication, health-condition related impairment), and behavioral (i.e., screen time) characteristics. SPSS case control matching was performed to select a matched healthy control group. A Mann-Whitney U Test was used to compare groups on bedtime regularity. Ordinal regression was performed to evaluate predictors of bedtime regularity in children with TS.

**Results:** Children with current TS had significantly poorer bedtime regularity relative to matched healthy controls. Four or more hours (Wald  $\chi^2(1) = 17.20$ ,  $p < .001$ ) and 3 hours (Wald  $\chi^2(1) = 6.60$ ,  $p < .010$ ) of daily screen time use were each associated with increased likelihood of poor bedtime regularity relative to 1 hour or less. Co-occurring anxiety was associated with higher likelihood of poor bedtime regularity in children with TS relative to no endorsement of anxiety.

**Discussion:** Findings put forth screen time and anxiety as intervention targets to optimize sleep health in children with TS.

## Thematic Content Analysis in Connection with Cognitive Behavioral Therapy

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**Introduction:** It is difficult sometimes to form a picture of the substance of a person's thoughts merely by asking them things or using problem specific questionnaires. This is obvious especially with clients having difficulty to express their feelings and thoughts like those with eating disorders and depression. Thematic analysis is a method used in psychotherapy to understand person's thought patterns and association structures (Braun & Clarke, 2022). Thematic Apperception Test developed by Murray and Morgan in the 1930-1940s has been applied in the psychodynamic framework to understand personality features and thought structures (Miller, 2015). Murray and Morgan developed a pictorial testing equipment, which became the original TAT-test version used in 1947 to evaluate the first ever diagnosed anorexia nervosa patient (Morgan, W, 2002). The main question here is, could thematic analysis have a role in the CBT framework, and how can the test be developed?

**Method:** The study questions were: How can image viewing be used as a foundation for cognitive and behavioural semiotic analysis? How can relational frames be used as the framework for thematic analysis? The basis for the clinical trials in the Pohjanmaa welfare area in Finland were stories created by depressive young adult clients and personnel from pictorial test material, which have been analyzed in the perspective of semiotics and thematic analysis.

**Results:** Results from the trials show that thematic analysis can be used in connection with cognitive behavioural therapy. First, we need to figure out what it is that we seek from this method. Secondly, we need a way to identify relevant codes and themes for pictures used. Thirdly, we need to observe how different themes and their under-headings are related to each other. The results show that using a set of pictures and analyzing their contents with thematic and semiotics analysis can be a valuable tool to gain information on the patient's thought patterns. The picture sets can be varied. These contents can further be analyzed by inspecting clients' relational frames. The method can be expanded by using different artworks, so we are not bound to the original TAT-pictures.

**Discussion:** Thematic analysis is a meaningful approach in finding out thought associations to form a picture of a person's thoughts and matters influencing them. We can see from the perspective of learning psychology that these themes can be understood through sc. automatic thoughts (Beck et al., 1979) and/or relational frames (Hayes, Barnes-Holmes & Roche, 2001).

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## A Longitudinal Study of Childhood Maltreatment and Loneliness: The Mediating Role of Early Maladaptive Schemas

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**Objective:** Several cross-sectional studies have consistently shown that childhood maltreatment is associated with loneliness. However, little is known about the cognitive mechanisms involved in this relationship. Using a longitudinal, four-wave design, this study sought to assess the longitudinal associations between childhood maltreatment and loneliness in adulthood, while exploring the potential mediator role of early maladaptive schemes (EMS) such as emotional deprivation, social isolation, and abandonment.

**Method:** A sample of 254 Romanian adults (89.4 % women, mean age = 28.4, SD = 8.9) enrolled in the study and completed baseline measurements for childhood maltreatment, EMS, and loneliness. Participants were followed up after 3, 6, and 9 months and loneliness levels were assessed over the nine months.

**Results:** Preliminary results indicated that childhood maltreatment was significantly associated with loneliness, both cross-sectionally ( $r = 0.37$ ,  $p < .001$ ) and longitudinally ( $r = 0.27 - 0.41$ ,  $p < .01$ ). Moreover, childhood maltreatment predicted loneliness (T3), even after controlling for baseline levels of loneliness ( $\beta = .17$ ,  $p < .01$ ). Childhood maltreatment had a significant indirect effect on loneliness at T2 through emotional deprivation ( $b = .13$ , 95% Bca CI [.07, .20]), social isolation ( $b = .15$ , 95% Bca CI [.08, .23]) and abandonment schemas ( $b = .07$ , 95% Bca CI [.03, .13]).

**Conclusion:** These findings provide evidence for the longitudinal effect of childhood maltreatment on loneliness, while also showing the mediator role of three early maladaptive schemas.

## Attitudes towards digital health interventions in Germany: Findings from a population-based representative survey

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**Introduction:** Digital (mental) health interventions, encompassing mobile applications and online platforms, have the potential to address logistical barriers, stigma, and treatment shortages in mental healthcare globally. However, the attitude towards and acceptance of these interventions among potential users are a crucial factor in their successful implementation. Therefore, this study aims to assess attitudes towards digital health interventions in a representative sample of the German population.

**Method:** Trained interviewers conducted face-to-face interviews with N = 2519 participants (age range: 16-96 years), who were representative of the German population. Participants subsequently answered self-report questions based on the Attitudes towards Psychological Interventions Questionnaire (APOI). Supplementary open-ended questions explored participants' utilization of digital health interventions for specific disorders, the disorders they perceived as suitable for digital interventions, and the perceived barriers to their adoption.

**Results:** While a majority of participants indicated partial agreement with the potential usefulness and advantages of digital health interventions, such as anonymity, a substantial proportion (45.8%) expressed an entire refusal to use digital health interventions for future psychological problems. Notably, especially older individuals and those with lower educational attainment expressed critical and hesitant views towards digital health interventions. Overall, depression and anxiety were the most frequently mentioned disorders considered as suitable for digital interventions. Key barriers identified by participants comprised the absence of personal contact, technical issues, and concerns related to data privacy and security.

**Discussion:** The results of this study provide important and representative insights into the attitudes and acceptance towards digital health interventions in Germany. While participants acknowledge the potential benefits of digital interventions, the observed limited acceptance rates and identified barriers are to be solved in order to fully harness their potential in psychological and psychotherapeutic treatment. Addressing these concerns will be crucial for enhancing the successful implementation, adoption and efficacy of digital health interventions on a global level.

## Predicting Alcohol and Other Drugs Recovery Content within #selflove Social Media Posts

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**Introduction:** Self-love has become trendy, pervasive, yet confusing. Conceptualized as either self-esteem or narcissism by researchers, a recent study found that laypeople discuss self-love in broader terms (e.g. having a relationship with oneself, wellness, self-care). Similar concepts, like self-acceptance, are utilized in alcohol and other drugs (AOD) recovery suggesting self-love could help sustain recovery. However, researchers call for new methodologies to recruit diverse recovery experiences (e.g. abstinence, harm reduction) and clarify recovery's definition. Usage of social media offers accessibility, self-disclosure, and elimination of some treatment barriers. This study sought to identify language specific to AOD recovery and self-love with a larger goal of training an algorithm to identify social media users who are discussing recovery. By identifying those within recovery communities, more can be learned about recovery and self-love.

**Method:** This study uses supervised machine learning to examine 1,804 Twitter and Instagram captions from a larger sample of 188,114 #selflove posts collected during 2019. The sample was divided into: 902 AOD recovery (AODR) posts using recovery-related terms like #sober, #AlcoholicsAnonymous; and a randomly-selected 902 non-AODR posts. The dataset was preprocessed (e.g., removing lengthened words, OMTGG; stopwords, the). To transform and organize the social media text into a mathematical value (i.e., feature extraction), four word embeddings were used (e.g., bag of words (BOW) and TF-IDF (term frequency/inverse document frequency). Features were incorporated into four classifiers (e.g., logistic regression) that are commonly used with social media data prediction. 80% (1443) of the data were trained on the classifiers, and 20% (361; 180 AOD and 180 non-AOD) of the data were retained for a test set. To optimize model parameters, conservative modeling techniques were employed (e.g., 10-folds cross-validation, GridSearchCV), and where applicable, regularization was considered to limit overfitting by penalizing model coefficients that prevent overfitting.

**Results:** Descriptive statistics demonstrated key distinctions between the co-occurring hashtags in the #selflove AODR and non-AODR posts. In the AODR posts, #recovery (590) and #soberlife (502) were the most used hashtags compared to #selfcare (215) and #love (115) in the non-AODR posts. #motivation was in the top 5 hashtags (338 and 60) in both posts, respectively. Based on the test sets for 16 models (4 vectors\*4 classifiers), logistic regression with TF-IDF and BOW performed equally well (F1 of .99, accuracy of .99) indicating excellent prediction. Words such as alcohol, heroin, sober, addiction, and rehab helped to classify AODR versus non-AODR posts. Semblances of self-empowerment (admit, commitment) and expressing emotions (gratitude, inspiring) also distinguished AODR from non-AODR posts.

**Discussion:** By developing an algorithm to differentiate between self-love within AOD recovery and non-AOD recovery, themes indicative of recovery discourse (abstinence, substance, self-empowerment) emerged. Implications of these findings are that a future, unlabeled sample of social media posts could ideally identify AOD recovery-related content with the intention of expanding beyond self-love discourse. Ultimately, recruitment of online users across a diverse sample may further exploration of self-love and recovery lay beliefs, as well as decipher how views of those in AOD recovery could be beneficial to self-love messaging in non-AOD communities.

## Positive and Negative Loneliness: Effects of Sociotrophy

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Loneliness is often seen as one of the key social and psychological problems of the 21st century. Loneliness lies at the intersection of emotional, social and existential problems, which creates certain difficulties in its study and understanding. Traditionally, loneliness had negative connotations, but over the past 10-15 years, positive loneliness has attracted increasing interest from researchers. Such loneliness can be a dynamic, temporary, but necessary state for a person: a state of reflection, rethinking, planning and growth. Although technically no one wants to be alone, our survey of 500 Russian and Bulgarian young people showed that only one of them would like to live in a world in which he could never ever be alone. These results led us to think that if loneliness could be both negative and positive, than it could have different effects on well-being, particularly, it could have some positive association. So, hypothetically, a person oriented towards society could react more sharply to the state of loneliness, probably, such a person would strive less for positive loneliness and painfully experience negative loneliness. In contrast, a self-sufficient person could feel the need for it.

**Study design.** The study sample consisted of 204 adults aged 30-60 years ( $M=45.43$ ,  $SD=7.98$ ), 55.9% women. The data was collected in 2021-2023 in St. Petersburg and the Leningrad region, participation in the study was voluntary. For the purposes of analysis, the sample was divided into 4 sex-age groups: (1) men aged 30-44 ( $N=40$ ;  $M=38.52$ ,  $SD=3.78$ ); (2) men aged 45-60 ( $N=50$ ;  $M=52.56$ ,  $SD=4.60$ ); (3) women aged 30-44 ( $N=51$ ;  $M=37.72$ ,  $SD=4.04$ ); women aged 45-60 ( $N=63$ ;  $M=50.82$ ,  $SD=4.31$ ). Methods used were the "Differential Questionnaire for the Experience of Loneliness" - the scales "Positive Loneliness", "Dependence on Communication" (Osin, Leontiev, 2013) and the Questionnaire "Sociotropy - Self-Sufficiency" (Strizhitskaya, Petrash, Murtazina, Vartanyan, 2021). Analysis of variance and regression analysis was used. The purpose of this study was to analyze effects of different types of loneliness on psychological well-being, depending on age and sex.

Younger men (30 - 44) showed more pronounced feeling of loneliness, while women did not experience the painful experience of loneliness and found in solitude a resource for recovery and reflection. In men aged 45-60 years, on the one hand, there was a decrease in the experience of isolation, on the other hand, the need to avoid loneliness slightly increased. Women of this age category were prone to a more intense experience of loneliness, but they were less dependent on communication, and in solitude they saw an opportunity for self-development. Regression analysis showed that sociotrophy, or social orientation, was closely related to the experience of loneliness, both positive and negative. Results showed that positive loneliness could be a reflection of a person's self-sufficiency, autonomy, or could act as a resource. We can assume that for socially oriented adults, who were in a situation where society cannot provide them with the support and communication they needed, positive loneliness could be seen as a kind of positive coping. Study was supported by RSCF project 23-28-00841

## Assesment of Trauma in Immigrants with Substance Use Disorder

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**Introduction:** Individuals that have been forced to migrant experience both difficulties and traumatic experiences, before and after the migration process including, the time to adapt to a different country. Studies have shown that these experiences can lead to both mental health problems and substance use disorder (SUD). In the literature, studies on the relationship between SUD and trauma in immigrants are limited (1). Within the scope of this context, the purpose of the study is to investigate the frequency of traumatic experiences and the risk rate of post-traumatic stress disorder (PTSD) in immigrants who seeking SUD treatment in Green Crescent Counseling Center (YEDAM).

**Method:** A sample of the study consists of 146 immigrants who applied to YEDAM for SUD treatment between 2021-2023. The data was obtained from the Addiction Profile Index and Kocaeli Short Screening Scale for Psychological Trauma.

**Results:** The total number of participants was 146 and mean age was 31.98. The majority of the immigrants are men (82.2%) and 52.7% of the participants are Syrian. The drug with the highest usage rate among individuals is amphetamine with 37.7% usage rate. (Table 1).

71.9% of the participants stated that the most traumatic situation they had experienced during their life was "witnessing someone injured or killed." 27.4% of individuals stated that the most affected event in their lifetime was "sudden and unexpected death of a loved one". (Table 2).

33.6% of the participants stated that the most common PTSD symptoms were anxiety and avoidance and the PTSD risk rate was determined in 31.5% of the individuals (Table 3).

**Discussion:** Traumatic experiences which are before and after migration, psychological problems and cultural adaptation issues are stated as risk factors for SUD (2). In the study, the frequency of traumatic experiences and SUD comorbidity was investigated. 82.2% of the participants are male and it was found that 52.7% of the participants are Syrian. The PTSD risk rate of 31.5% is compatible with other studies in the field (1,3). In a study conducted with Syrian refugees in Lebanon, the lifetime prevalence of PTSD was found to be 35.4% (1). Similar rates, 33.5%, were detected in the study conducted with Syrian refugees living in a tent city in Turkey (3). Displacement, which is accepted as a risk factor for PTSD, causes prolongation of the traumatic experience (1) and is a risk factor for SUD (2). Increasing the number of studies examining PTSD and SUD comorbidity in immigrants will guide the determination of risks and needs.

## The Pain of Death: A Meta-Analysis of Death Anxiety and Psychological Distress

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Death anxiety has long been posited to be the main cause of human distress and recent literature suggests death anxiety is a transdiagnostic construct. While empirical studies approached the relationship between the fear of death and distress in its various forms, we still lack a global view on the relationship between death anxiety and psychological distress. Therefore, the main purpose of this systematic review is to quantify the relationship between death anxiety and psychological distress. The relationship was evaluated based on a systematic review which included 179 studies (57.089 participants) using a random-effect model. Distress was categorized based on the CBT theory (emotional, cognitive and behavioral distress), adding a personality and a psychopathological distress category. We examined overall effects and potential moderators: sample type (i.e., nonclinical, subclinical, clinical, medical), study quality, age, gender and individualism score. Death anxiety was significantly positively associated with each distress type. Sample type, study quality and age were significant moderators. Death anxiety and psychological distress are consistently and moderately associated, with psychopathological distress showing the greatest association ( $r = .420$ ), which suggests death anxiety is intricately linked with human distress. Further research is needed to establish whether death anxiety is a transdiagnostic construct.

## Neuroanatomical and Functional Features of Cerebellar and Subcortical Cortex in Major Depressive Disorder, Obsessive-Compulsive Disorder, and Social Anxiety Disorder.

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**Introduction:** Major depressive disorder (MDD), obsessive-compulsive disorder (OCD), and social anxiety disorder (SAD) are well-known psychiatric disorders for which cognitive behavioral therapy (CBT) is effective. In addition, selective serotonin reuptake inhibitors (SSRIs) are used for these disorders in pharmacotherapy. SSRIs are drugs that target serotonin to regulate brain function; however, these anatomical and functional difference is unclear. The aim of this present study is to reveal the distinctive and common neuroanatomical and functional features of these disorders. And then we hope that this understanding will contribute to treatment CBT strategies.

**Methods:** We applied resting-state functional magnetic resonance imaging (rsfMRI) analysis and voxel-based morphometry (VBM). We used one-way analysis of variance (ANOVA) to compare resting-state functional connectivity (rsFC) and gray matter volume (GMV) in MRI obtained for 21 patients with MDD, 28 patients with OCD, 21 patients with SAD, and 77 healthy controls (HCs). rsFCs were extracted from whole-brain analysis, and VBM used the mask as common regions from the result of rsFC.

**Results:** In the overall results of rsFC, the rsFCs between the cerebellum and subcortical regions were extracted from group comparisons. In addition, the cerebellum regions included bilateral cerebellum VIII, IX, and vermis IX. The OCD, SAD, and HCs group had higher rsFC between the left putamen and left cerebellum IX compared with the MDD group. The MDD, OCD, and SAD groups had lower rsFC between the right putamen and right cerebellum IX compared with the HCs group. No significant rsFC between the OCD and the SAD groups. In GMV, the right cerebellum IX was a significant difference in the four groups. From the post hoc analysis, the MDD and the HCs groups had lower GMV in the right cerebellum IX compared with the OCD group.

**Discussion:** We have found evidence for neuroanatomical and functional features in MDD, OCD, and SAD. The treatment background of those disorders may be influenced by structural and functional alterations in the subcortical regions and cerebellum.

## An Invitation to Dialogue About Anthesis: a Randomized Controlled Trial of an Internet-Based Intervention for Sexual Distress

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**Introduction:** The experience of distress with sexual function (i.e., sexual dysfunction) is strongly associated with lower levels of physical health, mental health, and relational conflicts. So, developing evidence-based clinical interventions to diminish sexual distress effectively is paramount. In addition, studies demonstrated that there is a high comorbidity between clinical disorders (e.g., anxiety) and sexual dysfunctions (e.g., orgasmic difficulties), as well as the presence of negative psychological processes (e.g., emotional dysregulation) in the etiology and maintenance of sexual dysfunctions. Furthermore, the same negative psychological processes seem to lead to and maintain emotional disorders. This result confirms that transdiagnostic factors may influence sexual experience. We aim to gather researchers, clinicians, and stakeholders to assess the future acceptance, uptake, and use of Anthesis, a transdiagnostic-based internet-delivered intervention to reduce levels of sexual distress in people 1) diagnosed with sexual dysfunction and 2) who have been in a relationship for at least 6 months.

**Method:** Following a participatory design, we will adopt a World Café meeting methodology to structure the intervention and explore primary and secondary users' unmet needs and preferences concerning sexual health digital intervention. We aim to answer the following research questions: 1) "How should digital sexual health interventions be designed and used to suit their users' unmet needs better?" and 2) "What would be the best approach to implement an online intervention to minimize or eliminate sexual distress?". The inclusion criteria for the panel are: 1) to be a mental health professional or a sexologist (N = 4); 2) to be a sex research or mental health researcher (N = 3); and 3) to be a potential user (individual or couple) (N = 3). To enhance the dynamics of dialogue and foster active participation, we propose the formation of small groups. When the groups agree to share the outcomes of their discussions, the conversations will be recorded in audio format. Data will be analyzed through an interactive process of conventional content analysis.

**Results:** The direction of Anthesis development will be shaped by the input of the specialists and interest groups mentioned above, so we cannot provide a definitive structure for the intervention at this stage. Even so, the development process will adopt the best clinical and development practices, following the most up-to-date state-of-the-art approaches. As a result, we expect Anthesis to align with other evidence-based internet interventions and result in a self-guided intervention, combining 5 to 8 modules, to be completed in up to 8 weeks.

**Discussion:** At the end of the World Café debate, we aim to reach a final version of Anthesis when each group shares the main results for each research question. A strong focus will be placed on Anthesis acceptability, feasibility, ethics, and relevance. Based on the gathered insights, the research team will further develop the Anthesis structure, intervention modules and outcome measures, building its prototype in collaboration with participants during participatory design workshops.

## The Risk of Psychological Problems of Immigrants with Substance Use Disorder

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**Introduction:** Substance use disorder (SUD) is the one of common health problems among immigrants as it is pointed out by World Health Organization (WHO, 2021) reports. Besides SUD; anxiety, depression, post traumatic stress disorders are comorbid problems that immigrants are faced to overcome (Martin & Sashidharan, 2023). In this study, the variables related with SUD and the risk of psychological problems of people who applied to Green Crescent Counselling Centers (YEDAM) for SUD are retrospectively investigated.

**Method:** A sample of 164 immigrants who applied YEDAM for SUD were included in this study. Sociodemographic forms and BAPI-K scale which is developed for assessing six psychological problems such as depression, anxiety, anger control problems, communication problems, impulsivity and sensation seeking with addiction severity are used (Ogel et al., 2012). The data is retrieved from YEDAM database and analysed with descriptive statistics using SPSS software.

**Results:** The total number of participants was 164 and mean age was 32. The majority of immigrants is from Syria (50%) and followed by Afghanistan (20%), Iran (8%) and Pakistan (2,4). Nearly half of participants reported that they have primary school graduate or below. In the case of treatment history, 64% have no outpatient treatment as well as 86% have no inpatient treatment. According to BAPI-K results, male and female both have higher scores on scale items which assessing risk of depression, anxiety, anger control problem and communication problems.

**Discussion:** Socioeconomic status of participants are found low which can be seen as risk factors receiving treatment and seeking help. Individuals who have SUD also at higher risk to develop psychological problems. As a result, developing social policies and psychosocial intervention programmes both for individuals who have SUD and psychological problems is crucial for public health.

## Attitudes of CBT Therapists Towards Children of Parents with SMI Compared to Other Therapeutic Approaches

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**Objective:** Children of parents with mental illness (COPMI) must cope with the symptoms of parental disease and often with parental hospitalization. Despite some prevention programmes that have been initiated in the Czech Republic, little attention is still paid to these children. This study aimed to investigate the attitudes of mental health practitioners towards informing and engaging COPMI in parental treatment.

**Method:** A self-report online survey of 196 mental health practitioners working with adult SMI patients in the Czech Republic.

**Results:** Almost all professionals working with SMI patients ascertain whether their patients have children. More than half of SMI patients are talking to professionals about how to handle their treatment and family care. A large number of professionals talk to the patient's partner or adult children as part of treatment; only a minimum of professionals involve minor children. There was not much difference in attitude to engaging children in treatment between CBT therapists and other therapeutic approaches.

**Conclusion:** Most professionals working with SMI patients know about their family situation and offspring. A large proportion of patients bring the topic of the family into their treatment. However, minor children are usually not engaged in treatment and receive little information about possible support.

## Exploring Worries and Ruminations Among CBT Therapists in Europe: Preliminary Results of a Qualitative Study

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**Introduction:** Repetitive Negative thinking (RNT) is a well-established transdiagnostic mechanism that affects intrapersonal functioning. According to the literature, worry and rumination are two types of RNT. Both are negative, conscious, frequent, and consistent thoughts with different temporal orientations (i.e., worry focuses on the future, and rumination focuses on the past). Worry and rumination have been widely studied from the patient's perspective and are associated with several disorders (e.g., anxiety disorders). However, existing knowledge needs to pay more attention to therapists' experience in their clinical practice. In this sense, the present study aims to understand the perspectives of Cognitive Behavioral Therapists (CBT) about their processes of worry and rumination regarding their clinical practice.

**Method:** The Special Interest Group on RNT from EABCT developed this study. An online questionnaire was advertised in the EABCT newsletter and asked members for dissemination within their CBT national organizations. We collected answers from 154 European CBT therapists (e.g., Germany, Turkey, Portugal, Italy, France, Belgium and others). For the current analysis, we chose the two first open-ended questions. The first explored worries related to CBT therapists' clinical practice, while the second focused on ruminations tied explicitly to their clinical practice. We used a reflexive thematic analysis approach to analyze qualitative data.

**Results:** Four main themes were identified: (1) Can therapists live up to it?; (2) House management; (3) Will it crumble?; and (4) Prep time. The first theme focused on content regarding their self-assessment of clinical competence, the impact of clinical sessions on therapists' physical and mental well-being, and the expectations imposed on them by individuals and society. The second theme emphasizes the negative thoughts about bureaucracy, finances (of the patient, therapist, and clinic), calendar organization, excessive workload and excessive patient waiting lists. The third theme focused on concerns about the patient's behavior during clinical sessions (e.g., hostility toward the therapist) and assessing the patient's suicide risk. Finally, the four themes emphasize the thoughts of therapists regarding the most effective approaches to assist patients. This included reflections on the optimal methods or strategies to support patients in their therapeutic journey.

**Discussion:** Our results showed a potential overlap between worries and ruminations, as therapists tend to engage in both processes concerning the same content. Also, these constructs seem to have a reciprocal influence (i.e., rumination potentially leading to worry, and vice versa). Although worry and rumination have a maladaptive component, some people perceive them as having adaptive functions, such as those found in theme four (i.e., problem-solving and self-reflection). These findings can offer preliminary implications for understanding the experience of CBT therapists in clinical settings.



## Bivalent Fear of Evaluation and Social Anxiety: A Cross-Cultural Study of South Koreans, Asian Americans, and European Americans

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**Introduction:** The perception of social anxiety as maladaptive varies significantly across cultural contexts. Cross-cultural research on social anxiety reveals that average levels of social anxiety tend to be higher in collectivistic societies. In contrast, clinical rates of social anxiety disorders are more prevalent in individualistic societies (Hofmann, Asnaani, & Hinton et al., 2010). In collectivistic cultures, where the fear of social evaluation is prominent, it serves as an adaptive factor within a cultural framework that emphasizes group harmony. In contrast, in individualistic cultures, where negative evaluations and social backlash can accompany personal achievements, there is an amplified fear of evaluation that contributes to symptoms of social anxiety. Previous studies have consistently found that collectivistic groups exhibit higher social anxiety symptoms and fear of negative evaluation. In contrast, individualistic groups tend to have a greater fear of positive evaluation than their collectivistic counterparts (Okawa et al., 2021). Hence, this study aims to compare the variations in fear of evaluation among South Korean, Asian American, and European American cultures and shed light on the implications of cultural factors for enhancing therapeutic interventions targeting social anxiety disorder.

**Method:** This study utilized an online survey to collect self-report data from a sample of 880 participants, including 402 Koreans, 166 Asian Americans, and 312 European Americans. The survey included measures assessing social anxiety symptoms, fear of positive and negative evaluation, and disqualification of positive social outcomes. Path analysis using jamovi advanced mediation models (Gallucci, 2020) were conducted to explore potential cultural differences in the relationship between fear of negative/positive evaluation, disqualification of positive social outcome, and social anxiety symptoms.

**Results:** We conducted a path analysis to investigate how fear of positive evaluation and fear of negative evaluation contribute to the prediction of social anxiety symptoms by mediating the disqualification of positive social outcomes. The results revealed that among Koreans and European Americans, there was a significant pathway linking fear of positive evaluation to social anxiety. However, for Asian Americans, this pathway did not reach statistical significance ( $\beta = .12, p = .081$ ). Notably, the strongest association between fear of positive evaluation, disqualification of positive social outcomes, and social anxiety symptoms was found among European Americans ( $\beta = .22, p < .001$ ).

**Discussion:** Contrary to previous research, our findings revealed that collectivistic cultures, such as Koreans, exhibited a significant relationship between fear of positive evaluation and social anxiety. However, for Asian Americans, who possess a bicultural identity, this association was not statistically significant. Notably, the strongest correlation between fear of positive evaluation, disqualification of positive social outcomes, and social anxiety symptoms emerged among European Americans. These results underscore the importance of cultural considerations in comprehending and addressing social anxiety. Tailoring interventions to the specific cultural context is crucial for effectively addressing individuals' fear of evaluation and the accompanying anxiety symptoms.

## Cognitive Beliefs about Childhood Cancer in Psychosocial Assessment: Toward CBT-Based Interventions for Parents

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**Introduction:** Parents of children with cancer face high uncontrollability and uncertainty of the situation with few possibilities to regulate events, but they have the ability to regulate the cognitive appraisal of the situation. This study aimed to explore the cognitive beliefs in response to their children being diagnosed with cancer.

**Methods:** As the first phase of a longitudinal study data were collected from 85 parents (mostly mothers,  $n=72$ ) having children newly diagnosed with cancer. Pre-adapted Latvian version of Psychosocial Assessment Tool (PAT 3.0) (Kazak et al., 2018) was used to collect information about parental beliefs and stress reactions after diagnosis.

**Results:** Spearman's rank correlation was computed to assess the relationship between parental beliefs and stress reactions. There was a negative correlation between the belief in doctors' competencies and depressiveness, as well as positive correlations with the belief in overcoming the illness and the time since starting treatment. Belief in doctor's competencies correlated negatively with belief about child's pain. Positive correlations were found between the belief in reason ("Everything happens for a reason") and the belief in strengthening the family ("Our family will be closer because of this"), but also with higher level of depressiveness, and anxiety.

**Discussion:** Results suggest that parental beliefs in response to child's cancer diagnose are comparable to emotion-focused coping strategies (secondary control strategies - predictive, vicarious, interpretative). Some beliefs may simultaneously correlate with anticipation of positive outcomes from disease, but also with negative stress reactions (anxiety/depression) as the context of coping process. The identification of parents' thinking patterns that create distorted views and understanding their habitual responses to stress after diagnosis are crucial for tailoring personalized CBT-based interventions for cognitive restructuring and improving the compliance to treatment.

## Evaluation of Internet Searches for Cognitive Behavioral Therapy via Google Trends

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**Introduction:** In recent years, infodemiological research on internet searches has become very popular. Google Trends, which is used to determine people's interests, to reveal the words used during searches and to determine the most searched localizations, is one of the most frequently used databases in the infodemiological field. In this study, it is aimed to reveal some features of the searches on "cognitive behavioral therapy".

**Method:** Searches made on Google Trends on 06.06.2023 using the words "cognitive therapy, behavioral therapy, cognitive behavioral therapy, psychotherapy, psychotherapist" were compared. The countries where these words are searched the most, the words most related to these terms and the search densities in the last 5 years have been reached.

**Results:** Among the search terms, the most searched words in the last 5 years were psychotherapy, cognitive therapy and psychotherapist, respectively. behavioral therapy and cognitive behavioral therapy words were found to be searched relatively less frequently. The localizations with the highest searches for the most searched term, psychotherapy, were Indonesia, Hong Kong, Japan, Saudi Arabia and the United States.

**Discussion:** As a result of the Google Trends research, it has been determined that the word "psychotherapy" is more popular than other terms. This may be due to the fact that this word is seen and known more than other terms. When the world map obtained is examined, it is an expected finding that the search intensity is generally higher in densely populated countries. The fact that the second most searched word is "cognitive therapy" may be related to the fact that cognitive therapy is a common, effective and well-known form of treatment among psychotherapy types. It is a finding found in previous clinical studies that there is sufficient level of knowledge about cognitive behavioral therapy in studies investigating the attitude and knowledge level of psychotherapy types among the public (1,2). Although behavioral therapies are often combined with cognitive therapies, the reason why the word behavioral therapy is less searched may be due to its lesser knowledge. This situation makes us think that it would be beneficial to work on informing the society about types of psychotherapy and especially behavioral therapy.

**Keywords:** therapy, cognitive therapy, behavioural therapy, google trends

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## What about having a traumatic history and especially having suffered bullying in adolescents with an ED?

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**Introduction:** Eating disorders (ED) are rarely only related to irregular eating habits. Knowing the root cause of the ED is critical to developing an effective treatment. In many cases, this root cause involves untreated traumatic experiences from the past. Recent studies validate the importance of assessing traumatic events (TE) and post-traumatic stress disorder (PTSD) in treating ED. A relationship between ED and trauma has been discovered among participants in various studies (Brewerton, 2007). While child sexual abuse has long been recognized as a risk factor for ED, recent studies indicate other types of trauma can also be related and that the majority of patients with ED reported a history of interpersonal trauma. Overall, the most significant finding was that rates of ED were generally higher in people who experienced trauma and PTSD (Mitchell et al, 2012; Mitchell et al., 2021). There are many types of trauma that can be associated with ED including physical abuse and assault, sexual assault and harassment, emotional abuse, emotional and physical neglect, teasing and bullying (Brewerton, 2007). Our aim is to explore associations between ED and presence of traumatic history as well as different types of TE.

**Methods:** A total of 118 adolescents (mean age= 14.92 years, SD =1.53, 98.3 % female) with diagnosis of ED according to DSM-5 criteria (74.6% Anorexia Nervosa Restricting (AN-R); 12.7% Anorexia Nervosa Purgative (AN-P); 6.8% Eating Disorders not Otherwise Specified (EDNOS)), were recruited from the ED Day Hospital (EDDH) at the Hospital Clinic of Barcelona (Spain). The ethical committee approved this study. Eating disorder symptoms were assessed with Eating Attitude Test (EAT-40). The presence, types, and number of traumatic experiences in the past were assessed with Early Trauma Inventory Self-Report Short Form (ETISR- SF).

**Results:** 77 patients (65.3%) of our total sample reported having suffered 4 or more TE in the past. The most frequent types of TE in the total sample were bullying (n=27, 22.8%), psychological abuse or negligence (n=17, 14.3%) and sexual abuse (n=16; 13.5%). Also relevant were sickness in the family (n=14, 11.8%), physical abuse (n=12; 10.1%) and family violence witness (n=10, 8.4%).

**Conclusions:** Our preliminary data suggests that having suffered TE in the past may be related to the subsequent development of an ED due to the high rate of patients with traumatic history in our sample. Also relevant is the high percentage of patients who are victims of bullying among the different types of TE evaluated. Therefore, being a victim of bullying may be a risk factor for developing and maintaining an ED, as has been previously determined (Øverland Lie et al., 2019) especially in adolescent population, where both problems are most frequently encountered. This findings support the need to assess the presence of ET in patients with ED in order to develop comprehensive treatments that also include trauma.

## Behavioral Experiment and Intensive Exposure-Based Behavioral Therapy for a Child with Cuprolaminophobia – Resolution in Single Therapy Session

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Cuprolaminophobia is described as pathological fear of coins. We described a 10 year girl with 3 years of history with this phobia. She was unable to interact with coins without feeling disgusted. The mechanism of learning was classical conditioning, with operant and cognitive mechanisms of maintenance. The current case study describes the implementation of behavior experiments with intensive exposure and response prevention (ERP) in vivo in a single session with complete resolution of symptoms. Frequency data pertaining to the symptoms were assessed prior to, during, and after intervention. Post-treatment, the reduction of symptoms was 80%. She no longer met the diagnostic criteria for phobic disorder because her interaction with coins was limited without disgust but not avoided. Limitations of single therapy sessions with resolution of symptoms include the absence of tailoring family supports to break negative reinforcements and irrational cognitive inputs are discussed.

## The Effect of Career Decision Self-Efficacy on Career Decision Making Among Young Adults

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**Introduction:** Making a career decision is a complex task that may result in indecision—a condition frequently associated with psychological distress and anxiety (Lipshits-Braziler et al., 2016). Helping young adults deal with indecision is an important challenge for career counselors. One of the important resources for dealing with indecision is career decision self-efficacy which refers to people's beliefs about their ability to successfully accomplish certain tasks involved in career choice (Betz et al., 1996). Drawing from Social Cognitive Career Theory (Lent et al., 2002), it has been hypothesized that career decision self-efficacy beliefs relate to (a) the likelihood that persons choose to engage in versus avoid career decision-making tasks, (b) the effort they will put into the decision process, (c) how long they will persist in their decision-making efforts when faced with difficulties, and (d) ultimately their success in arriving at career decisions. Based on these hypotheses, the present study examines the relationships of career decision self-efficacy with the strategies for coping with career indecision, career decision status, and perceived decisional difficulty and distress.

**Method:** Participants were 451 Israeli young adults (Mage = 22.6, SD = 3.11; 64% women) deliberating about their career choice. They filled out the career decision status, perceived decisional difficulty and distress, the CDSE scale, and the Strategies for Coping with Career Indecision questionnaire (SCCI; Lipshits-Braziler et al., 2016). Structural equation modeling (SEM) was used to identify the relationships between these factors.

**Results:** The results showed that career decision self-efficacy is positively associated with the use of productive coping strategies, such as instrumental information-seeking ( $r = .34$ ), problem solving ( $r = .32$ ), cognitive restructuring ( $r = .53$ ), and self-regulation ( $r = .48$ ). In addition, career decision self-efficacy was negatively associated with nonproductive coping strategies, such as avoidance ( $r = -.35$ ), helplessness ( $r = -.46$ ), isolation ( $r = -.12$ ), ruminative thinking ( $r = -.30$ ), and blaming others ( $r = -.14$ ). Contrary to expectations, career decision self-efficacy was not significantly correlated with instrumental help-seeking ( $r = .07$ , ns), while it was correlated negatively with emotional help-seeking ( $r = -.18$ ) and delegation (i.e., projection of responsibility for decisions onto others) ( $r = -.26$ ). In addition, career decision self-efficacy was positively associated with a more advanced career decision status ( $r = .19$ ), and negatively associated with decisional difficulty and distress ( $r = -.27$ ).

**Discussion:** The results highlight the importance of career decision self-efficacy in career decision making and are compatible with previous research that demonstrated that career decision self-efficacy is positively correlated with favorable career attitudes and behaviors, as well as with career adjustment, and negatively correlated with career indecision (see Prideaux & Creed, 2001, for a review). This study has practical implications, as the results can facilitate the development of career CBT interventions for reinforcing young adults' career decision self-efficacy beliefs, which may provide them with a basis for overcoming career indecision more effectively. Future research should implement the CBT approach in career decision-making and enhance its integration in career counseling practices.

## Can Post-Traumatic Stress Disorder Worsen the Clinical Presentation of Eating Disorders in Adolescents?

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**Introduction:** Having experienced traumatic events increases vulnerability to eating disorders (ED), and the presence and severity of post-traumatic stress disorder (PTSD) appears to be related to the severity and increased comorbidity of ED (Gilbert et al., 2009; Molendjik et al., 2017; Rijkers et al., 2019)

**Aim 1:** To know the prevalence of PTSD at the Day Hospital for adolescents with Eating Disorders (DHED).

**Aim 2:** To test whether there are mean differences between ED patients (group 1) and ED + PTSD patients (group 2) in several clinical variables of interest: number of psychiatric comorbidities, depressive symptomatology, eating symptomatology, number of inpatient and DHED admissions, presence of self-harm, number of self-harm attempts and total length of stay in inpatient and DHED.

**Methods:** We evaluated 118 ED patients undergoing treatment in our DHED, (98.3% female), with mean age 14.92 (SD=1.53) range 11-17 years, ANr n=88(74.6%), ANp n=15(12.7%), BN n=7(5.9%), OSFED n=8(6.8%).

The following battery of tests was administered:

- Children Depression Inventory (CDI). Assess depressive symptoms.
- Eating Attitude Test (EAT-40). Assess symptoms of eating disorders.
- Early Trauma Inventory Self report -Short form (ETISR-SF). Assess past traumatic events.
- Posttraumatic Stress Disorder Symptom Severity Scale-Revised (EGS-R). Assess PTSD symptoms.

We checked whether the quantitative variables followed a normal distribution using Kolmogorov-Smirnov, only the CDI variables met normality. Differences in means between groups were verified by Mann-Whitney or parametric t-test as appropriate.

**Results:** Of our sample, 77(65.3%) reported having suffered 4 or more traumatic events. Of these 77 patients, 57 (74.02%) met PTSD criteria (48.30% of the total sample). Additionally, 86(72.8%) patients carried comorbid diagnosis for other mental disorders: 66 patients with 2 diagnosis (55.9%), and 20(16.9%) patients with 3 diagnoses.

The differences between groups in terms of sociodemographic and clinical variables of interest were as follow:

No significant differences were found between groups in: mean age (G1 M=14.80 (SD=1.57), G2=15.04 (1.48)), number of admissions to DHED (G1 M=1.61 (0.14), G2 M=1.91 (0.10), p=0.24); days of admission to DHED (G1 M=176.08 (153.35), G2 M=166.13 (78.14), p=0.32); number of admissions to the inpatient ward (G1 M=1.33(1.32), G2 M=1.42 (1.17), p=0.39); days of admission to the hospital ward (G1 M= 51.82 (44.48), G2 M=51.68 (71.82), p=0.75) and number of comorbidities (G1 M=0.69 (0.76), G2 M=0.77 (0.70), p=0.44).

Significant differences were found between both groups in the scores of the EAT-40 (G1 M=58.70 (23.28), G2 M= 73.64(19.07), p=0,001) and CDI questionnaires (G1 M=24.15 (23.28), G2 M=31.25(8.38), p=0,001),

where more presence of ED and depressive symptoms in the group with comorbid PTSD. Also, were found greater presence of self-harm attempts (G1 M=9 (14.75%), G2 M=21 (36.84%), p=0.004) and presence of self-injury (G1=31 (50.81%), G2=39 (68.42%), p=0.031)

**Discussion:** In addition to the enormous severity of suffering from ED, patients with ED + PTSD show greater depressive symptomatology, greater number of self-harm attempts, greater prevalence of self-injury and greater eating symptomatology.

The detection of PTSD is essential to offer a comprehensive treatment to both pathologies, when they are comorbid, and to improve the evolution and prognosis of patients with ED.

## Neuropsychological Studies on Cognitive Impairment in Psychiatric Disorders

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Although impaired executive function has been shown to reduce the therapeutic efficacy of cognitive behavioral therapy in various psychiatric disorders, few studies have investigated the role of impaired executive dysfunction. The results of the studies are contradictory as the cognitive structure from which the impairments originate is controversial. Furthermore, no studies have examined the relationship between mental rotation and inhibitory control, which is a core component of executive function. Therefore, the aim of this study is to investigate the cognitive impairments in executive function and mental rotation in patients with psychiatric disorders and to reveal how these two cognitive processes relate to each other. The Stop Signal Task (SST) is administered to measure inhibitory control, whereas the Vandenberg & Kuse Mental Rotation Test (Vandenberg & Kuse, 1978) and The Comprehensive Ability Battery-Spatial (CAB-S; Hakstian & Cattell, 1975) are administered to measure the mental rotation ability in patients with psychiatric disorders and healthy subjects. Both tests measure mental rotation, however because one test contains 2-dimensional and the other 3-dimensional stimuli, they are thought to measure different areas of mental rotation. 196 patients with psychiatric disorders (28 patients per disorder; depression, anxiety, obsessive-compulsive disorder, anorexia nervosa, bulimia nervosa, autism spectrum disorder, attention deficit/hyperactivity disorder), and 28 people in the subthreshold anxiety group are planned to be administered in the study. In addition, the number of healthy subjects is to be 56. In total, 280 people are aimed to participate in the study. By evaluating cognitive functions such as inhibitory control and mental rotation from multiple perspectives, comparing them with healthy subjects and clarifying the relationship between each cognitive function, it is expected to contribute to understanding the pathology of mental disorders and improving treatment effects.

**Keywords:** psychiatric disorders, inhibitory control, mental rotation, cognitive behavioral therapy

## The Effectiveness and Acceptability of The Bergen 4-Day Treatment for Adolescents Suffering from OCD. A Replication and Extension

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**Introduction:** Two previous open trials demonstrated promising results for the Bergen 4-day treatment (B4DT) for adolescents with obsessive-compulsive disorder (OCD). B4DT is a concentrated treatment format with prolonged sessions of exposure and ritual prevention (ERP) delivered over four consecutive days. The aim of the current study was to replicate initial results with a new sample of adolescents with OCD, at different sites across Norway, with different therapists.

**Method:** 43 youths entered treatment from 7 different specialized OCD-treatment sites. At pretreatment, post-treatment, and at three-month follow up, OCD symptoms were assessed using the CY-BOCS interview while the GAD7 and PHQ9 self report questionnaires were administered to rate general anxiety symptoms and depressive symptoms. To assess treatment acceptability, patients also rated the satisfaction with the B4DT with the CSQ-8 self report questionnaire.

**Results:** All symptoms were significantly reduced at post-treatment and follow-up. At post-treatment 36 patients (85.71%) were defined as responders, while 29 patients (69.05%) achieved remission. At the three-month follow up, 36 patients (92.3%) were defined as responders, while 33 patients (84.62%) were in remission. CSQ-8 scores indicated that patients were highly satisfied with the treatment, and no patients dropped out of the treatment

**Conclusion:** The B4DT treatment was successfully replicated in a new sample at different sites across Norway, which indicates that this treatment is generalizable, effective and acceptable to adolescents with OCD.

## Digital Mental Health Interventions for ADHD: Where Do We Stand?

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Attention-deficit/hyperactivity disorder (ADHD) is the most prevalent mental disorder among children, involving the necessity for effective interventions to subdue symptoms and improve functioning. Digital mental health interventions (e.g., serious games, Internet-delivered interventions, chatbots) offer a promising solution by leveraging technology to deliver ADHD treatments. These interventions provide greater accessibility, reduced costs, and increased availability of information. By utilizing online platforms, caregivers and children with ADHD can access evidence-based resources, interactive tools, and remote support from a mental health specialist. The purpose of this study is to conduct a systematic review of the existing literature regarding digital mental health interventions used in the treatment of ADHD. The aim is to provide an overview of the characteristics of these interventions, their efficacy/ effectiveness and highlight relevant limitations. Systematic searches in scientific databases (PubMed, Web of Science, and Scopus) using keywords pertaining to ADHD and digital mental health interventions were conducted in May 2023. The results of this systematic review shed light on the effectiveness of digital interventions in managing ADHD symptoms and reducing associated impairments. Moreover, the review highlights significant limitations, including issues related to adherence and implementation challenges, which may influence the successful application of these interventions. The findings emphasize the importance of considering both the benefits and constraints of digital mental health interventions in shaping effective treatment strategies for individuals with ADHD. This paper provides valuable insights into the potential of digital mental health interventions used either as standalone treatment or as an add-on to complement traditional approaches in the treatment of ADHD. Furthermore, through this study we present future directions that aim to help clinicians, researchers, and policymakers in making informed decisions regarding the integration and implementation of digital interventions in ADHD management.

## Positive Mental Imagery and Mental Health Amongst University Students in Pakistan

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Mental health problems amongst university students pose a major public health challenge, and this is particularly the case in Pakistan. Alongside broader societal and cultural pressures, cognitive factors likely also play a role in the development of and resilience to mental health problems and may provide a feasible target for interventions. The current study built on previous research in primarily European samples investigating the relationship between one cognitive factor, positive future-oriented mental imagery, and mental health, extending this to a sample of university students in Pakistan (N = 1838). In a cross-sectional design, higher vividness of positive future-oriented mental imagery was associated with lower levels of depressive symptoms and higher levels of positive mental health amongst participants completing questionnaire measures on paper (N = 1430) or online (N = 408). In the sample completing the measures on paper, these relationships remained statistically significant even when controlling for socio-demographic and mental health-related variables. The results provide a foundation for further investigating positive mental imagery as a potential mechanism of mental health and intervention target amongst university students in Pakistan.

## Culturally Adapted Cognitive Behavioral Therapy to Reduce Psychological Distress of Individuals Affected by Kahramanmaraş Earthquakes: A Pilot Randomized Controlled Trial

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**Introduction:** Earthquakes frequently occur in Türkiye, and they have detrimental effects on mental health, such as posttraumatic stress disorder, depression, and anxiety disorders. If these are not intervened, they can persist for a long time. An effective method to alleviate these problems is cognitive behavioral therapy (CBT), and literature shows that when culturally adapted, the effectiveness of CBT can increase even more. A culturally adapted version of CBT, Culturally Adapted CBT (CA-CBT), will be tested in terms of potential effectiveness in decreasing distress in earthquake survivors who were relocated to İstanbul following the earthquake, and its feasibility will be evaluated in this study.

**Method:** For these purposes, first, a cultural adaptation will be conducted with 20 free-listing interviews, eight key-informant interviews, two focus groups with 20 participants, and five cognitive interviews. Then, a pilot randomized controlled trial will be carried out with 60 participants with a random allocation of 30 participants to CA-CBT and 30 participants to enhanced care as usual control group, and baseline, post-, and one-month follow-up assessments will be conducted. Following this step, a process evaluation will be performed. Finally, 20 mental health professionals will be trained to be CA-CBT facilitators.

**Expected Results:** At the end of the study, it is expected that;

- (1) The participants who receive the CA-CBT will have a significantly higher decrease in the severity of psychological distress, depressive symptoms, anxiety, posttraumatic stress, prolonged grief symptoms and disability compared to those in the ETAU group one month after the post-assessment.
- (2) The participants who receive the CA-CBT will have a significantly higher increase in the level of well-being and quality of life compared to those in the ETAU group one month after the post-assessment.
- (3) Changes in psychological flexibility, hope, emotion regulation, and social support will mediate the changes in psychological distress and well-being one month after the post-assessment.
- (4) Changes in survivor guilt will mediate the changes in depressive and prolonged grief symptoms one month after the post-assessment.

**Discussion:** With this project, a treatment manual for earthquake survivors will be shaped, its potential effectiveness and feasibility will be tested with an investigation of potential mechanisms of change, and the capacity of mental health professionals will be strengthened. By all these means, the proposed project will provide an opportunity to conduct more extensive effectiveness trials and implementations of an evidence-based treatment method for earthquake survivors.

## Flexible Emotional Responsiveness in Depression and Social Anxiety

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Emotional flexibility, or the ability to change how emotions are felt and expressed in response to changing stimuli and contexts, is important for well-being (Coifman & Almahoud, 2016). There is evidence that decreases in emotional flexibility are associated with certain mental health conditions, such as depression and anxiety (Chen & Bonanno, 2021). However, emotional flexibility encompasses a wide range of functions, and it is unclear which aspects are most relevant to mental well-being, and thus might be more relevant to intervention efforts. The present study investigated one specific aspect of emotional flexibility: the extent to which initial emotional responses to stimuli are impacted by previously viewed stimuli. Previous literature suggests this element of emotional flexibility is associated with trait resilience (Vaughn, Thompson & Gotlib, 2011) and recovery from physical pain (Meesters, VanCleeef & Peters, 2019) in healthy adult populations. Therefore, it was hypothesised that meeting criteria for social anxiety or major depression, as well as reporting higher levels of depression or social anxiety symptoms, would be associated with less flexibility in initial emotional responses to changing stimuli. Participants included 150 students residing in the UK with various mental health histories, including those with no major mental health concerns, current social anxiety, and current or remitted major depression. Participants rated their emotional responses to positive and negative target images on trials where the target was preceded by images of either the same or the opposite valence. This produced a congruence effect, in which the valence of a target image was rated as more extreme on trials where the target's valence was the same as the preceding images than on trials where the valence of the target and preceding images were different. A larger congruence effect would imply more 'carryover' of the emotional response to previous stimuli on the emotional response to the target image; therefore, we hypothesised that larger congruence effects would be associated with higher levels of psychopathology. Contrary to expected findings, initial results indicate that although depressive symptoms were associated with less positive ratings of images across all conditions, there was no relationship between the flexibility of responses and reported experience of depression or social anxiety. Further, the negative bias in ratings appeared to be more related to current depressive symptoms rather than lifetime depression experience. The relationships between this measure of emotional flexibility and rumination, mindfulness, and a more general measure of cognitive flexibility are also discussed to provide a better understanding of drivers of individual differences within each group. These preliminary findings suggest that the emotional flexibility deficits and emotional inertia reported in depression may not involve differences in the flexibility of initial emotional responses. Instead, the way in which emotions are regulated and responded to, or even differences in social or environmental cues, may be more relevant to mental health.

## Six-Session Religiously Integrated Cognitive Behavioral Therapy for the Management of Acute Stress Symptoms: A Case Report

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One of the frequent reactions, particularly following stressful life experiences, is stress-related responses. Approximately 5 to 20 percent of people who experience traumatic events develop acute stress disorder (ASD). ASD symptoms are described under various headings, including intrusion, negative mood, dissociation, avoidance, and arousal, and differentiated from post-traumatic stress disorder fundamentally by its duration, which is 2 days to 4 weeks, in The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR). On the other hand, published research on the treatment of ASD symptoms is scarce, and its efficacy is controversial. However, the Cognitive Behavior Therapy (CBT) therapy approach for trauma offers a structured guide for treating the symptoms. Additionally, research indicates that culturally sensitive methods benefit clients in managing their psychological difficulties. Accordingly, one of the fundamental predictions concerning those who were affected by the earthquake that occurred in 10 cities of Turkey on February 6, 2023 was that they could develop ASD symptoms. As a result, in addition to responding to their basic needs, the delivery of culturally sensitive psychological assistance to earthquake survivors became a priority. This study provides an example of religiously integrated brief CBT-based treatment for ASD symptoms. The client was a 28-year-old woman living alone in one of the cities most severely affected by the earthquake. She presented symptoms of intrusion, negative mood, avoidance, and arousal in various levels of severity which were measured by PTSD Symptom Scale-Self-Report (PSS-SR) and written feedback was obtained. The PSS-SR scale was administered after the first session, the last session and the follow-up sessions. The client attended 6 sessions conducted weekly and 2 follow-up sessions, one at a week and one at a month. The described symptoms improved at the end of the therapy period, PSS-SR scores were reduced from 35 to 19, and this was sustained at the 1-month follow-up. This study underscores the relevance of early intervention after an earthquake, as well as involving the client's religiosity into the therapy process; it further discusses the impact of the client's personality patterns on a time-limited and symptom-focused therapy approach.

## Treatment Expectancy and Credibility as Predictors of Outcome in Difficult to Treat Patients with OCD Using Concentrated Exposure Treatment

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**Background:** Obsessive-compulsive disorder (OCD) is a severe mental illness and exposure-based cognitive behavioural therapy (CBT) is considered treatment of choice. Treatment readiness predictors like treatment credibility and treatment expectancy are assumed to predict outcome in CBT treatment, and investigating treatment readiness in patients with OCD who did not respond to treatment, drop out or later relapse, so called difficult-to-treat patients, is especially important because of the chronic and severe health impairing course of the illness. Concentrated exposure therapy (cET) is a form of short termed, intensive, exposure-based CBT which has shown promising results. Because of the short time frame, it is ideal to investigate predictors (e.g., reduced influence of external variables as in ordinary outpatient treatment). This study will investigate whether treatment credibility and treatment expectancy can predict treatment outcome when treated using cET in a group of difficult-to-treat OCD-patients.

**Methods:** A total of 163 non-responding or relapsed OCD patients underwent a 4-day cET. Treatment credibility and expectancy was measured using Borkovec credibility/expectancy questionnaire (CEQ) prior to treatment start. OCD symptom severity was measured using the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) pre treatment, post treatment, three month follow-up and one-year follow-up, while work and social function was measured using Work and social adjustment (WSAS) pre treatment and one-year follow-up.

**Results:** CEQ was negatively correlated with Y-BOCS scores post-treatment, 3 months-follow up and 1-year follow-up accounting for 14% of the variance at 3 months and 5% after 1 year. Only the treatment expectancy dimension of CEQ contributed significantly to this effect at 3 months and 1-year follow-up. Treatment dedication of the treatment expectancy dimension was correlated with increased work and social functioning using WSAS at 1-year follow-up.

**Discussion:** CEQ demonstrates promise as a suitable tool for predicting treatment outcomes in concentrated exposure therapy for difficult-to-treat OCD patients. Patients who expressed more dedication to follow the treatment principals, and expressed more treatment optimism prior to treatment start, achieved better treatment outcome and regained more work and social function. These results are in line with previous findings and highlight the potential value of assessing and addressing patients' treatment expectations and perceptions early on in the therapeutic process.



## The Bergen 4-Day Treatment for Panic Disorder: Implementation in a Rural Clinical Setting

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**Introduction:** The Bergen 4-Day Treatment (B4DT) is a concentrated treatment with individually tailored exposure exercises. The format has shown promising results in the treatment of panic disorder.

**Aim:** The aim of the current study was to investigate the effectiveness of the B4DT in a large sample in a rural clinical setting.

**Method:** Fifty-eight patients with panic disorder were consecutively included using an open trial design. The primary outcome measure was the Panic Disorder Severity Scale. The Generalized Anxiety Disorder-7 and the Patient Health Questionnaire-9 were used as secondary outcome measures. Assessments were conducted at pretreatment, posttreatment, and 3-month follow-up. Treatment satisfaction was measured at posttreatment using the Client Satisfaction Questionnaire-8.

**Results:** There was a significant reduction in symptoms of panic disorder from pre- to posttreatment ( $d = 3.36$ ) and from pretreatment to follow-up ( $d = 3.63$ ). At posttreatment and follow-up, 72.4% and 81.0% of patients, respectively, were classified as in remission. Patients reported high treatment satisfaction, and there were significant reductions in symptoms of generalized anxiety and depression.

**Conclusion:** The results from the current study replicated the findings from previous studies using a larger sample size. The findings indicate that the B4DT is a promising treatment format for panic disorder. The study also demonstrated that the treatment format can be successfully implemented in new rural clinics.

## Patient Adherence as a Predictor of Acute and Long Term Outcomes with Concentrated Exposure Treatment for Difficult-to-Treat Obsessive- Compulsive Disorder (OCD)

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**Background:** Exposure and response prevention (ERP) is considered to be the first line psychological treatment for obsessive compulsive disorder (OCD). Substantial research supports the effectiveness of ERP, yet a notable portion of patients do not fully respond while others experience relapse. Understanding poor outcomes such as these necessitates further research. This study investigated the role of patient adherence to ERP tasks in concentrated exposure treatment (cET) who had previously not responded to treatment or relapsed.

**Method:** The present study included 163 adults with OCD. All patients received cET delivered during four consecutive days. Patients' treatment adherence was assessed using the Patient EX/RP Adherence Scale (PEAS) after the second and third day of treatment. OCD severity was evaluated at post, 3-month follow-up and 1-year follow-up by independent evaluators.

**Results:** PEAS scores during concentrated treatment were associated with OCD-severity at post-treatment, 3-month follow-up, and 1-year follow-up. Adherence also correlated with work and social adjustment and quality of life at 1-year follow-up.

**Conclusions:** The results indicate that ERP adherence during the brief period of cET robustly relates to improvement in OCD symptoms and functioning in both the short and long term. Assessing adherence might identify patients at risk of poor outcomes, while improving adherence may enhance ERP for treatment resistant patients.

## Cognitive Behavioural Group Therapy for Insomnia: A Treatment Feasibility Pilot Study

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**Introduction:** Insomnia is commonly reported by patients with depression and can have a detrimental impact on mood (Goldschmied, & Gehrman, 2022). Repetitive Negative Thinking (RNT) is a longitudinal precursor of depression and anxiety, which are often co-present alongside insomnia. Cognitive Behavioural Therapy for Insomnia (CBT-I) is an effective treatment for insomnia and seems to have an impact on depressive mood and general measures of RNT. The aim of the present pilot study is to investigate the acceptability and feasibility of a CBT-I with a group format and to test the effects on sleep quality, anxiety-depressive mood and negative repetitive thoughts.

**Method:** Six participants were adults aged between 45 and 67 (four women and two men) have been included in the group. The CBT-I consisted of 2-hour group session every two weeks. The group underwent five treatment sessions with traditional CBT techniques, including stimulus control, sleep restriction, and sleep hygiene. We added a RNT intervention. Sleep quality depressive and anxious mood were assessed using self-reported measures, before and after the treatment period. We computed a change score assessing the proportion of individuals showing reliable change (RC) at post-treatment, relative to pre-treatment to rule out the possibility that a difference between two scores was due to a measurement error rather than to the intervention.

**Results:** Prior to the intervention, the participants' assessment revealed the presence of significant sleep difficulties and insomnia, some mild ( $n=2$ ), others moderate ( $n=3$ ) and finally severe ( $n=1$ ). Three participants also reported an anxious mood, and one participant a depressive mood. Ruminations and worry scores were within the normal range for all participants. Three of the six participants completed the entire intervention. The participants feedback support the acceptability and feasibility of a group protocol of CBT-I with a group format for patients with depressive mood. Pre-post RC analyses suggested significant improvement in insomnia in two participants and deterioration in one. No significant change scores were found for measures of anxious-depressive mood and repetitive negative thoughts.

**Discussion:** The CBT-I group format is feasible for clinicians, acceptable to participants and effective in improving insomnia in two out of three participants. The significant deterioration reported by one participant may be explained by the complete cessation of the participant's medication during the intervention. Nevertheless, this pilot study did not demonstrate the effect of this intervention on anxious-depressive mood and repetitive negative thoughts. It would be appropriate to reiterate this study with a larger number of clinical subjects, to multiply the number of assessments over time and to monitor medication intake.

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Goldschmied, J., Gehrman, P. CBT-I for Patients with Depression; Adapting Cognitive Behavioral Therapy for Insomnia; Elsevier: Amsterdam, The Netherlands, 2022; pp. 149–163.

## The Validity and Reliability of Turkish Version of the Psychological Flexibility in Epilepsy Questionnaire (PFEQ): Preliminary Results

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**Introduction:** This study aims to conduct a Turkish validation and reliability study of the Psychological Flexibility in Epilepsy Questionnaire (PFEQ) to measure psychological flexibility in epilepsy patients (Burket et al., 2021).

**Method:** Firstly, the following steps were followed to conduct Turkish validation and reliability study of the PFEQ: The original Swedish version of the scale was translated into Turkish independently by two bilingual mental health experts, the translations were compared, then the Turkish version of the scale was back-translated from Turkish to Swedish to ensure accuracy and alignment with the original form. Based on the items obtained from the translations, language and field experts selected the most appropriate items, and the Turkish form was created. Secondly, the validity and reliability study of the scale was conducted. The data was collected, and the following measures were utilized for the scale's validity and reliability assessment: Psychological Flexibility in Epilepsy Questionnaire (PFEQ), Socio-demographic Form, Epilepsy specific characteristics form, Depression-Anxiety-Stress Scale (DASS-21), Quality of Life in Epilepsy Scale (QLIE-31), Acceptance and Action Questionnaire-II, and Rosenberg Self-Esteem Scale. The correlations between these measures and the Psychological Flexibility in Epilepsy Questionnaire (PFEQ) were examined.

**Results:** It involved 123 participants who were diagnosed with epilepsy. The average age of participants was 33.7 years, ranging between 18 and 65 years ( $SD \pm 9.7$ ). 60.2% of the participants were women ( $n=74$ ), 43.9% were married ( $n=54$ ), and 46.3% ( $n=57$ ) were working. In the reliability study, the Cronbach alpha coefficient was found to be .924, and the Split-half of the Spearman-Brown method was 0.89. Exploratory factor analysis of the PFEQ was conducted. The Kaiser-Meyer-Olkin test value was 0.896, which is meritorious, and the Bartlett test was statistically significant ( $p < 0.001$ ), indicating the suitability of the data for factor analysis. Initially, It is performed maximum-likelihood, and the solution was rotated using the Promax method. Results demonstrated three factors with eigenvalues greater than 1, overall explaining 62.19% of the variance. Because of the several cross-loadings and low factor loadings ( $<0.40$ ), it was decided that EFA was repeated, and a one-factor solution was extracted. One-factor solution with an eigenvalue of 7.92, explaining 46.60% of the total variance, was accepted. In this one-factor solution, the following item was excluded from PFEQ because of low factor loading ( $<0.40$ ): "It is important that I learn to control my epilepsy". Pearson correlations between PFEQ and other scales were performed to measure construct validity. PFEQ was positively correlated with AAQ-II, DASS-21, and medication effect and negatively correlated with seizure worry, overall quality of life, emotional well-being, and social function. No significant relationship was found between Rosenberg Self-Esteem Scale and PFEQ.

**Discussion:** Current findings demonstrate that the total score of the PFEQ is a valid and reliable scale for assessing psychological flexibility in the Turkish population of epilepsy patients.

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## Design and Implementation of a Behavioral Protocol for Gamblers – Experience from Serbian CBT Center Nis

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Serbian Association for Behavioural and Cognitive Therapies (SRABCT) was initially founded in Nis, an University city located at southeastern Serbia, during 1996s. Up to now the center trained more than 25 certified therapists working with different non-psychotic non-addicted patients with more or less success. Since the addiction, especially gambling, started to emerge as a significant socio-economic issue we aimed to design and implement the behavioral protocol for treating such clients. Based on the clinical practice the medication treatment for reactive depression or insomnia in such clients is not recommended during the initial period of treatment since it provide. Also, the treatment of such clients should be non-expensive since gambling itself represents a significant burden to the client. Designed behavioral protocol included clients with pathological gambling [estimated using Yale Brown Obsessive Compulsive Scale adapted for Pathological Gambling (PG-YBOCS)], but excluded those with suicidality risk, poor social support, significant financial debt, other psychopathological states which have gambling as a reaction. During the initial phase, individual therapy, clients were motivated (motivation phase) to accept the treatment, to form a strong social network and willingly give up financial rights. The term without hesitation ('sve na Sunce') was created depicting that the patient needs to "open all his cards" and confess all his debts. In this phase the network of people supporting the client helps him find the way to cover all of his financial debts (during a prolonged period of time). The second phase is the stabilization phase which estimated the remaining psychic-related symptoms which are recognized through a behavioral diary. The diary entries serve as a checkup for crisis events and level of crisis that the client is experiencing. The last phase is called conquering freedom which is basically gradual recovery of financial responsibilities by the client without entering the gambling process again. After phase one, clients are introduced to a group (open mid-sized group) which requires great motivation and at least one month of abstinence. The group techniques employed to the clients include one-part education and one-part impulse control learning, role-play, etc. Up to now using this behavioral protocol from 2016 around 200 clients entered and successfully finished the treatment protocol without any relapses.

## Virtual House Environment for Exposure Therapy for OCD

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Obsessive-compulsive disorder (OCD) is a chronic psychiatric disorder characterized by the presence of obsessions and/or compulsions, which are time-consuming and severely disrupt the life of the affected person. Obsessions are repetitive, intrusive thoughts, images, or urges that typically increase anxiety. Compulsions are ritualistic physical or mental acts that the person performs to neutralize the anxiety caused by obsessions (APA, 2013). OCD is a heterogeneous disorder with several symptom subtypes, the most frequent being contamination obsessions accompanied by cleaning or washing compulsions and fear of harm with checking compulsions. Cognitive-behavior therapy (CBT), and specifically Exposure and Ritual Prevention (ERP), is the main psychotherapeutic approach used in OCD treatment. ERP focuses on breaking the bond between anxiety feelings and ritual behavior and decreasing anxiety with repeated exposure to the feared stimuli or situations. Traditionally, two types of exposure were used to slowly graduate the intensity: imaginary and in-vivo (Foa, 2010). Exposure in virtual reality is a third option that augments the standard procedures with a simulation of a real-life situation in a safe, controlled environment.

Here we present three case studies of patients with OCD and their SUDS (Subjective Units of Distress Scale) scores in several VR exposure scenarios they underwent during five VR exposure therapy sessions in the virtual "OCD house" environment (Fajnerová, Francová, 2022) as a part of a standard 6-week CBT-based treatment. The "OCD house" provides provocation stimuli relevant to all OCD subtypes (for more details, see Francová et al., 2019).

Exposure scenarios in VR were shown to be substantially anxiety-provoking, and anxiety decreased with repeated VR exposures. From patients' anonymous feedback, we conclude good acceptance of the technology and a subjective enhancement of treatment outcomes.

**Acknowledgments:** The presented study is supported by project No. NU23-04-00402 "Exposure therapy in virtual reality for obsessive-compulsive disorder: randomized clinical study" and partially by the European Regional Development Fund-Project "PharmaBrain" No. CZ .02.1.01/0.0/0.0/16\_025/0007444 and by the Technological agency of the Czech Republic within the program GAMA project BrainTech (TP01010062).

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## Integration of Virtual Reality Methods in the Group Cognitive Behavioral Therapy Programme

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Anxiety disorders are highly prevalent, tend to have a chronic course and are associated with considerable impairment. Cognitive behavioral therapy (CBT) and exposure specifically is widely accepted as an effective method of treatment of anxiety disorders, with both individual and group format being proven effective.

Virtual reality (VR) technologies provide a novel tool for providing an immersive and interactive experience in different and various environments. During exposures, it allows for an adjustable control over anxiety and fear triggering variables.

In the National Institute of Mental Health in Klecany, Czech Republic, runs an established in-patient program for treatment of anxiety disorders using group CBT. Since 2018, the group of virtual reality researchers in collaboration with CBT therapists and psychiatrists started to test, develop and implement various VR technologies in the structured CBT program.

We aim to summarise our experience of providing several VR applications in the 6,5-week program for 10 patients. Currently, we have six distinct VR programs and studies for a range of anxiety disorders, which include:

Exposure House or cognitive training for patients with obsessive-compulsive disorder

Exposure City for patients with agoraphobia, social phobia, acrophobia or claustrophobia

Darkroom providing space for worry time for patients with generalised anxiety disorder and anxiety depressive disorder

Virtual magnetic resonance (MR) for patients with fear of undergoing MR examination

Relaxation with deep rhythmic breathing training available for all interested patients.

In the first week, VR programs are introduced to all patients by a VR group researcher. Individual patients are matched with specific VR programs based on their symptomatology and diagnosis made by their attending psychiatrist. In the second week, the initial ratings using multiple and appropriate scales is conducted and the patient undergoes the first session. Next sessions are held once a week, usually with increasing or adjusting difficulty, and with in-session scale ratings. After the last session, the final measurements are taken.

We identified several advantages and also some drawbacks of including VR technology in the group CBT program, which we will share in the presentation.

**Acknowledgments:** The VR programs were supported by Czech Health Research Council project NU23-04-00402, by the European Regional Development Fund-Project "PharmaBrain" No. CZ.02.1.01/0.0/0.0/16\_025/0007444 and by the Technological agency of the Czech Republic within the program GAMA project BrainTech (TP01010062), program Éta (TL0300022), program Zéta (TJ01000010) and Internal Funding Competition grant of NIMH (318A\_2020), and also by programme Cooperatio, Neuroscience, Charles University.

## The Role of Mistake Rumination Difficulties in Mistake Rumination and Emotion Regulation Difficulties in Social Anxiety

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**Background:** Social anxiety disorder is a highly prevalent and debilitating condition, which is characterized by irrational and exaggerated concerns about being scrutinized and negatively evaluated by others in social and performance situations; and behavioral strategies to evade such situations. Previous research indicates various transdiagnostic risk factors, such as perfectionism, neuroticism, and repetitive negative thinking to play a role on the onset and maintenance of social anxiety symptoms. One specific type of repetitive negative thinking, which was neglected by the researchers until recently is mistake rumination. Mistake rumination can be defined as the tendency to entertain negative and self-critical thoughts following mistakes and it has been demonstrated to have a strong association with depression. However, the specific associations between mistake rumination and social anxiety, as well as the role of additional risk factors in this relationship is not known. Thus, the current study aimed to examine how mistake rumination and individuals' experiences of difficulty in regulation of negative emotion are contributing to social anxiety symptoms. In particular, the current study aimed to examine the mediator role of emotion regulation difficulties in the relationship of mistake rumination with both affective and behavioral domains of social anxiety.

**Method:** Three-hundred and twenty-two subjects (229 females) between ages 18 and 60 ( $M = 35.30$ ,  $SD = 12.68$ ) from a community sample completed measures of mistake rumination, emotion regulation difficulties and social anxiety disorder through an online survey platform.

**Results:** Mistake rumination demonstrated positive associations with emotion regulation difficulties, as well as social anxiety symptoms. Emotion regulation difficulties, while partially mediating the relationship between mistake rumination and the affective dimension of social anxiety; completely mediated the relationship between mistake rumination and the behavioral dimension of social anxiety.

**Discussion:** The current findings are the first to suggest that the tendency to entertain repetitive negative thoughts following real or imagined mistakes is associated with the tendency to utilize problematic emotion regulation strategies and lead to increases in both affective and behavioral dimensions of social anxiety. The current results also indicate that different mechanisms may be involved in the development and maintenance of different dimensions of social anxiety.

## Breaking the Chain: The Role of Irrational Thinking in Our Fear of War and Death

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This paper sought to investigate the validity of a mediation model, where we hypothesized that the four irrational evaluations postulated by the Rational-Emotive Behavior Therapy (REBT) theory (demandingness, awfulizing, low frustration tolerance and global evaluation) would mediate the relationship between perceived risk of war and death anxiety. A sample of 159 romanian participants completed online self-report measures, namely the Death Anxiety Scale, The Attitudes and Beliefs Scale and the Risk Perception Scale. Mediation analyses were employed to assess the validity of the model. The REBT mediation model was confirmed, suggesting that the relationship between perceived risk and death anxiety is mediated by awfulizing and low frustration tolerance beliefs. The present research lends support to the REBT theory and puts forward a cognitive background to war-related distress.

## Resting-State Functional MRI Predicts Response to Cognitive Behavioral Therapy in Pediatric Obsessive-Compulsive Disorder.

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**Introduction:** Cognitive behavioral therapy (CBT) is a first-line treatment for pediatric obsessive-compulsive disorder (OCD). However, response varies considerably among individuals. By identifying reliable biologically-based predictors of treatment outcomes, there is a possibility for individually-tailored interventions. For this reason, we utilized multiple voxel pattern analysis (MVPA) to explore pretreatment resting-state functional connectivity (rsFC) patterns that might presage the treatment response.

**Methods:** Participants were twenty patients with a primary diagnosis of OCD. The patients underwent manualized exposure and response prevention-based CBT. During the intake assessment, we investigated age, sex, illness duration, dominant hand, medication, Autism-Spectrum Quotient (AQ), and Wechsler Intelligence Scale for Children (WISC-IV) or Wechsler Adult Intelligence Scale (WAIS-III). Yale-Brown Obsessive Compulsive Scale (CY-BOCS), Depression Self-Rating Scale for Children (DSRS-C), and Spence Children's Anxiety Scale (SCAS) were administered to all participants before and after treatment. The severity of OCD symptoms was quantified by the CY-BOCS. Patients with CY-BOCS scores of 12 or less after treatment were defined as the remission group, and others were defined as the non-remission group. Whole brain sagittal 3D T1-weighted structural images and resting-state functional images were acquired. Regarding rsfMRI, MVPA was performed using the CONN toolbox, and seed-to-voxel analysis was conducted based on the clusters obtained by MVPA to search for changes in functional connectivity.

We performed a simple linear regression model to assess whether rsFC was linearly associated with treatment response. Treatment response was operationalized as the percentage of symptom reduction between baseline and post-treatment severity assessments.

**Results:** In patients, CY-BOCS scores drastically decreased after CBT sessions ( $p < 0.001$ ). In rsfMRI, three clusters showing the difference between the remission and non-remission groups were extracted in part of the precuneus cortex, lateral occipital cortex and parietal operculum cortex left from MVPA. Post-hoc analysis revealed two significant connectivity changes (lateral occipital cortex, superior division right - occipital pole right, lateral occipital cortex, superior division right - lateral occipital cortex, superior division left). Simple linear regression analysis showed that the treatment response inversely correlated with rsFC ( $R^2=0.494$ ,  $p<0.001$ ).

**Discussion:** The difference between the remission and non-remission groups in rsFC was extracted within the occipital cortex and our results indicated that the occipital cortex is associated with treatment outcomes in pediatric OCD. The occipital cortex has been reported as a predictive site of treatment efficacy not only in obsessive-compulsive disorder but also in depression and social anxiety disorder. The results suggest that rsfMRI predicts response to cognitive behavioral therapy in pediatric obsessive-compulsive disorder.

## Am I Religiously Responsible About My Sexual Intrusive Thoughts? The use of the 4T Model to Distinguish Cognition Hierarchy in the Context of Religious Responsibility After Sexual Abuse: A Case Report

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Individuals with a history of sexual abuse often live with persistent intrusive thoughts relevant with a history of abuse (Rosenthal & Folette, 2007). Since sexually intrusive thoughts are related to the person's morals, values or beliefs, they have more personal importance. So people feel responsible for these thoughts and cause them unhelpful guilt (Rachman, 1993; Rachman, 1997). Unhelpful guilt can significantly reduce the life satisfaction of individuals by increasing their depressive symptoms (Kim, Thibodeau, & Jorgensen, 2011; Van Damme-Ostapowicz et al., 2021). Drawing attention to the importance of unhelpful guilt about intrusive thoughts, Toprak & Emül (2016) developed the 4T model specific to obsessive compulsive disorder. The model hierarchically classifies thoughts (images, detailed imagination, reasoning-thought and confirmation) in terms of their volition inspired by the conceptualizations of Islamic scholars. According to the model, while individuals are religiously responsible for the voluntary thinking process (reasoning-thought and confirmation) they are not religiously responsible for the involuntary thinking process (images, detailed imagination).

From this point of view, the aim of this study is to discuss the results of integrating the 4T model into cognitive behavioral therapy practice in preventing unhelpful guilt caused by sexually intrusive thoughts related to sexual abuse through a case study.

In this study, a 20-year-old female case with post-traumatic stress disorder due to sexual abuse was investigated. The Turkish version of the PTSD Check List for DSM-5 (PCL-5) scale (Boysan et al., 2017) was used to monitor progress in the therapy process. Sessions including cognitive behavioral therapy and acceptance and commitment therapy techniques were conducted once a week for 50-60 minutes. While the therapy sessions were being conducted, in the eighth session, the client said that sexual thoughts about the sexual abuse she experienced came to her mind and asked the therapist whether she was religiously responsible for these. This question was answered by explaining the 4T model (Toprak & Emül, 2016). The client stated learning that she is not religiously responsible for her involuntary sexual thoughts was very beneficial for her and reduced her distress.

As a result, according to the analysis of the scale results, it was seen that there was a significant decrease in the scale scores of the case. Although the unhelpful guilt were not measured quantitatively, the traumatic experience-related distress score decreased from 4 to 1 in the PCL-5. This finding and the client's verbal feedback can show us that the 4T intervention was effective in reducing the unhelpful guilt of the case caused by sexually intrusive thoughts related to sexual abuse. It is thought that this result indicates the importance of cultural sensitivity studies in the psychological treatment of religious clients.

## ANKA Group Therapy: Dealing with Depression in Turkish Women with Migration Experience

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**Introduction:** An increasing number of studies show a higher incidence of affective disorders, including depression, in Turkish people who migrated to Germany [1-2]. At the same time, conventional German treatments show relatively poor treatment outcomes in patients of Turkish origin than in German patients [1-2]. This study aims to investigate the effect of a mother-tongue psychoeducation group therapy on depression scores in migrant women in Germany.

**Method:** In this study, Turkish-origin immigrant women participated in an eight-week therapy program, with sessions taking place once a week for 90 minutes. A group pretest-posttest design was used to evaluate the efficacy of the program. Depression severity was measured before and after the therapy program using the Beck Depression Inventory (BDI-II) and compared over time [3].

**Results:** The therapy offer is very well received. The women participate actively in the psychoeducation group therapy and take it up reliably. Preliminary results showed a reduction in the severity of depression. A significant decrease in depression scores is observed in three out of five patients in the first group with 38-20, 31-32, 33-34, 21-12, and 45-31 pre- and post-treatment BDI-II depression scores.

**Discussion:** The study's preliminary results show the potential of mother-tongue psychoeducation in a group of Turkish women with migration experience. An improvement in depressive symptoms can be achieved. The importance of culturally adapted forms of therapy for the effectiveness of the treatment of depression in people with migration experience becomes clear.

**Keywords:** Depression, group therapy, migration, women, interculturality

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## Reciprocal Relationships between Positive Expectancies and Positive Emotions During the COVID-19 Pandemic: A Cross-Lagged Panel Study

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**Introduction:** In this study, we investigated the relationships between optimism, three forms of positive expectancies (response expectancy, response hope, and the discrepancy between response hope and response expectancy), and positive emotions during the COVID-19 pandemic. First, we explored the best predictor for short-term (T2–2 weeks) and long-term (T3–4 months) positive emotions. Second, we examined reciprocal relationships between variables.

**Methods:** The sample comprised 271 participants (Mage=29.2 years, 84.7%females). Four cross-lagged models were tested.

**Results:** In Model 1, response expectancy at T1 predicted positive emotions, optimism, and response hope at T2, while positive emotions at T1 predicted each type of positive expectancy at T2. In Model 2, response expectancy at T1 predicted optimism at T3, while optimism at T1 predicted positive emotions at T3. Additionally, the response hope at T1 negatively predicted optimism at T3. In Model 3, the discrepancy score at T1 negatively predicted optimism and positive emotions at T2. In Model 4, the discrepancy score at T1 negatively predicted optimism at T3, while optimism at T1 predicted positive emotions at T3.

**Discussion:** Positive expectancies and positive emotions are closely linked. Positive expectancies affect emotional and cognitive outcomes. Psychological interventions aimed at increasing positive expectancies may improve individuals' functioning in stressful situations.

**Keywords:** positive emotions, response expectancy, response hope, optimism, COVID-19 pandemic, longitudinal study

## Effectiveness of a 5-session Value-Focused CBT Intervention in the Treatment of Acute Stress Disorder: A Case Study

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Acute Stress Disorder is a disorder defined in The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) as a traumatic experience followed by constant mental images of the traumatic experience, reliving the traumatic event over and over again, feeling constantly tense, anxious and aroused, and avoidance, and unlike Post Traumatic Stress Disorder, it covers the period between 2 days and 4 weeks after the traumatic event. In our country, after the earthquake centered in Kahramanmaraş on February 6, 2023, which affected 10 provinces and thousands of our citizens, there was a period when interventions related to acute stress were very much needed, but it was observed that there was an important deficiency such as the fact that the diagnosis of PTSD could not be made before 3 months and there were almost no studies on acute stress disorder in our country. This study presents an example of a short-term and value-oriented intervention that was initiated within the first 1 month after the earthquake. This case study is important both in terms of showing the effect of a short 5-session CBT intervention on acute stress disorder and in terms of integrating value intervention into CBT practice and demonstrating its effectiveness in the post-earthquake process.

The client is 35 years old, female, working, doing her master's degree. She directly experienced the earthquake, has no past or current medication use, and has no past psychiatric diagnosis. Interviews were started 1 month after the earthquake. She had acute stress symptoms such as feeling constantly tense, alert, anxious, accelerated heartbeat, difficulty falling asleep, waking up because of an earthquake while sleeping and waking up her son.

During the process, 5 CBT-based interviews were conducted. The interviews included taking anamnesis, problem and goal setting, normalization, identifying and supporting the value-oriented behaviors that she did before the earthquake and that were good for her, cognitive restructuring, identification of avoidance and exposure interventions. At the end of the session, the client's symptoms were greatly reduced, eating and sleeping activities returned to normal and daily functionality increased. She sent a paper to the congress about her thesis. At the end of 5 sessions, the client gave verbal feedback as "Therapy prevented me from getting lost in negative emotions" and "I realized that whatever we are going through is not permanent and that there is a new hope every new day". The PSS-SR scale was administered after the first session, the total score obtained from the scale in the first session was 42, while this score decreased to 3 in the last session. In the 1-month follow-up study, the client stated that this improvement was maintained, she presented her thesis at the congress and her life continued in normal routine. "I turned the crisis situation at that time into an opportunity thanks to this support. I returned to life before the earthquake and those times remained as a bad memory," she said.

## Investigating the Mediating Effect of Early Maladaptive Schemas in the Relationship Between Retrospective Family Unpredictability, Distress Intolerance and Difficulties in Emotion Regulation

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Early interpersonal experiences with a caregiver that meet not only the physical but also psychological needs of children. And, meeting those core needs of children leads to a secure attachment between the child and their caregiver and turns the child into a person with a higher sense of autonomy and life satisfaction in the later stages of life. When caregivers neglect their children and do not meet their needs for love, safety, and stability, children may develop different Early Maladaptive Schemas, which distort their self- and world perception in a specific way. These dysfunctional and hard-to-change schemas are negative cognitive patterns that lead to self-defeating behavior and increase the likelihood of various psychopathologies. The objective of this study is to understand the association between family unpredictability, different schema domains, and two important psychological constructs: distress tolerance and difficulties in emotion regulation. A total of 285 participants, between 20 to 41 years old, were recruited via snowball sampling technique. After obtaining informed consent, participants completed the Young Schema Questionnaire-Short Form, the Retrospective Family Unpredictability Scale, Difficulties in Emotion Regulation Scale-Brief Form, and The Distress Tolerance Scale. To examine if different types of family unpredictabilities and levels of different schema domains predict the distress tolerance (1st model) and difficulties in emotion regulation levels (2nd model) of individuals, we conducted two separate multiple regression analyses. The first model was found to be a good fit and explained the %15.9 of the variances in distress tolerance, while only the impaired autonomy was found to be a significant predictor and negatively associated with the distress intolerance levels of individuals. Also, the second model indicated a good fit for the data and explained 55% of the variance in the difficulties in emotion regulation. Results revealed that the impaired autonomy domain, as well as the unpredictability in the family discipline have a positive estimate, while meal unpredictability in the family context has a negative coefficient estimate. These findings suggest that individuals with higher levels of Impaired Autonomy tend to have lower distress tolerance scores, while experiencing much more difficulties in emotion regulation. Moreover, mediation analyses showed that only the impaired autonomy schema domain mediated the association between the retrospective family unpredictability and difficulties in emotion regulation. The present study contributes to the literature by providing empirical evidence on the relationship between family unpredictability, schema domains, and psychological outcomes. The findings emphasize the significance of impaired autonomy as a potential vulnerability factor for both distress tolerance and difficulties in emotion regulation. These results have implications for clinical practice showing that interventions and prevention programs that promote independence, development of a healthy sense of autonomy, and assertiveness may help individuals enhance their distress tolerance and improve their emotion regulation skills after experiencing early childhood adversities.

## T-RAC: Exergame-Augmented Dynamic Imagery Intervention as an Add-on to Behavioral Activation Treatment of Depression: The Case of Maria

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In the present case study, we describe the application of a behavioral activation (BA) protocol based on Martell et al., (2010) and Richards et al., (2017) approaches, plus remote kinematic motor imagery training and audio motor imagery selected from an current RCT (Tiba & Voss., 2022). The intervention consists of eight sessions. The first session is focused on psychoeducation about depression and BA treatment, introducing clients to the procedures and forms that will be used during the treatment. During the second and following sessions, "antidepressant" activities are generated and scheduled in the activity scheduling form, participants learning to generate activities using functional analysis, problem-solving, and functional equivalence. The eighth session is a summary of all the techniques that subjects learned, and strategies to prevent relapse. As an add-on, participants used a Kinect-based motor imagery training, an actfulness and action memory rescripting, and dynamic imagery for mental rehearsal of antidepressant activities.

Here we present how we applied this intervention in the case of Maria, a young female diagnosed with depression. We describe the application of the exergame enhanced BA intervention in the case and the results of the intervention in reducing her depression, anxiety but also on cognitive functioning such as vividness of imagery, working memory, and action fluency. We discuss the implications of our results. According to Ferster theory of depression, avoidance of internal and external stressors is one of the main mechanisms of depression. We emphasized in Maria's case that she started to avoid important things in her life and solve her problems in response to global negative self-evaluation, having strong feelings of guilt and hopelessness. We also stressed that avoidance resulted in not getting the important things and needs met in her life. She found it helpful to imagine antidepressant activities using dynamic imagery and she used it several times a day the actfulness exercise. Efficient mental simulations of actions are thought to help us build a sense of efficacy about what we can do and what will follow in everyday situations. The activity planner form helped her achieve realistic goals and gave her a feeling of accomplishment. She exercised replacing guilt and negative self-evaluation with self-encouragement. She found achievable ways to set healthy boundaries in social interactions. After treatment, Maria did not meet the criteria for a major depressive episode and showed reduced depression and anhedonia. We also observed a reduction in avoidance, increased activation, and rewards. We also observed effects on cognitive function, such as increasing working memory span and action fluency. We did not observe any effect on other executive functions, such as verbal fluency. Maria reported that the program helped her very much in reducing her depressive symptoms and that she would highly recommend the program to others. She also stated that she will apply the method further on and that the program also helped her with problem solving.



Adult Mental Health, Basic Processes and  
Experimental Psychopathology

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## The Role of Response Expectancy on the Effectiveness of the “Counting Blessings” Technique for Increasing Positive Emotions

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**Introduction:** This study aimed to examine the impact of response expectancy (positive, negative, and control expectancies) on the effectiveness of the “counting blessings” technique for increasing positive emotions. Additionally, the interaction between dispositional optimism (high, medium, and low) and specific expectancies (positive, negative, and control) in determining positive emotions was explored.

**Methods:** A total of 529 participants were randomly assigned to the positive expectancies group, the negative expectancies group, or the control condition. Of these, 142 completed the counting blessings intervention over seven consecutive days, and 111 participants also completed a follow-up assessment (one month).

**Results:** The findings revealed that at a low level of optimism, positive emotions decreased in the Positive Expectancies Condition from post-intervention to follow-up, while positive emotions decreased in the Negative Expectancies Condition from pre-intervention to post-intervention. At a medium level of optimism, positive emotions increased in the Positive Expectancies Condition from pre-intervention to follow-up, as well as from post-intervention to follow-up. Positive emotions also increased in the Negative Expectancies Condition from pre-intervention to follow-up and from post-intervention to follow-up. At a high level of optimism, positive emotions increased in the Positive Expectancies Condition from pre-intervention to follow-up, as well as from post-intervention to follow-up.

**Conclusion:** These results highlight the influence of different response expectancies on the effectiveness of the “counting blessings” technique in promoting positive emotions. The implications of these findings are discussed in relation to theory and clinical applications.

Public Health (Including COVID-19),  
Behavioural Medicine

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## Wearing Protective Masks During the Pandemic, Assertiveness and Cognitive Distortions: Does Communication Matter?

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**Introduction:** The pandemic SARS-COV-2 (COVID-19) has taken many lives and compromised long-term health in many people around the world. Wearing protective masks has been recommended as one of the preventive measures (protecting both self and the others). However, challenges in adherence to this measure were noticed, even when this measure was legally demanded. How much can we influence each other when it comes to respecting protective measures by assertive communication? The aim of this study was to explore the preference, the use and the effectiveness of different ways of communication regarding wearing masks (assertive, aggressive, passive/defensive), and the relationship between these attitudes and behaviors, ability to discriminate what assertiveness is, and cognitive distortions.

**Method:** The snowball sampling resulted in 564 participants from general population in Serbia (24.3% males, 75.7% females; mean age 36.39 years (SD 10.15), predominantly living with partner (58.2%) and having graduate or postgraduate education level (60%)). The participants filled out the anonymous online questionnaire, comprising the socio-demographic items, items on wearing protective masks (behaviors and attitudes, including the communication with others regarding wearing masks), items on the ability to discriminate between different communication behaviors (from the Test of Discriminating Assertive from Aggressive and Defensive Verbal Behavior; Zdravkovic & Krnetic, 2002; modified), as well as items on cognitive distortions (Cognitive Distortions Questionnaire – CD-Quest, de Oliveira, 2015; modified scoring).

**Results:** Participants reported on wearing masks in a gradually decreasing frequency (from 2020 to 2023). When asked how they would approach another person not wearing the mask in their presence, 56.6% would assertively ask this person to put the mask on, 25.4% would not ask at all, 16.2% would ask with the explanation that they have a risk factor (chronically ill person at home), whereas 1.8% would ask in aggressive way. These attitudes were associated with several cognitive distortions (mind reading, labeling, “what if”), as well as with the ability to discriminate between assertive and other types of communication. When asked what kind of communication would be the most effective if they were approached by another person asking them to put the mask on, 63.8% chose assertive communication, 30.3% chose defensive communication (asking with the explanation that they have a risk factor - chronically ill person at home), 1.4% chose aggressive communication, while 3% would not put the mask on

and 0.9% would put the mask on, independently of how they were asked. These attitudes were associated with the ability to discriminate between assertive and other types of communication, whereas no associations were found with cognitive distortions. In the later stages of the pandemic (2022), those who prefer assertive behavior were more likely to wear the mask comparing to those who prefer other communication types.

**Conclusion:** Assertive communication attitudes and behavior among citizens could be considered as a potential instrument of boosting protective behaviors in the population such as wearing a mask during the pandemic. Implications and future directions are discussed.

**Keywords:** COVID-19, protective masks, assertiveness, cognitive distortions

*Long-term Mental Health, Basic Processes and Experimental Psychopathology*

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## **New Theory Study, Systemic Self Theory and Therapy**

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Systemic Self Theory is based on structuring psychotherapy in the light of new knowledge, considering the outputs of recent neuroscience and psychology research. Neurogenesis and Neuroplasticity (the brain's ability to regulate neuronal connections or to form new connections) will affect the cortical association areas known as storage areas in our brain. From this point of view, we can only structure learning in storage areas due to neuronal development with a developmental psychotherapy model. Therefore, it is designed as a development-orientated form of therapy. It focuses not specifically on the disease but on the person's development in all areas that make up the whole person. The systemic form of self-therapy is based on the assumptions of cognitive theory. It is structured by utilizing the outputs of social learning theories and self-theories in the application part. The theory is based on the concepts of consciousness, memory, self, and social role and aims to restore the self systematically within social roles. Our therapy is thought to be structured by enabling the patient to systematically redesign his/her automatic thoughts and beliefs, emotions, and behaviors about himself/herself through the patient's life story. Systemic Self Therapy emphasizes individuals' roles and the self-understanding they develop within these roles. Awareness allows the individual to restructure the self-design on his/her initiative. The roles in the individual's life are explored in the first stage of the theory application. The roles of the patient are defined by creating a self-schema while taking anamnesis. The study can be expanded through the roles and how the roles are shaped, and the roles' expectations, responsibilities, and competencies will be covered in chronological order.

As can be understood, our psychotherapy practice will be planned individually. While studying roles, relationship balances, whether there is an asymmetric or symmetric relationship, the form and direction of the exchange in the relationship, and the values developed in the relationship will be examined. Exploring developmental analyses within the roles of the self provides a valuable framework for understanding and transforming one's consciousness. The developmental infrastructure of the theory, the creation of definitions and concepts in the clinical field, and the practice of application constitute the main topics of the research. The mobile application of Systemic Self Therapy (designed according to the patient) aims to increase the effectiveness of the therapy. Structured questionnaires were prepared for all social roles. Each form is structured with questions appropriate to the developmental level of the studied role. Another tool of the therapy is the list of beliefs and values. The values acquired in each role were categorized. It is aimed to be a universal list. Another one of our therapy tools is the mirror. Based on the concept of mirror self-developed by Cooley, mirror studies were used in therapy or as homework. It will enable the patient's current consciousness to mirror himself/herself. Therapy will proceed interactively. Establishing a humane and empathic relationship between the therapist and the patient is essential. Homework, in-therapy psychoeducation, and relaxation exercises will be used in the therapy.

## Introduction to Quantitative Electroencephalography (QEEG)

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Recent advances in computer and mathematic sciences and hence its application in neuroscience result in a wide approach to develop software for processing brain activities. Using these neuroscientific approaches one can distinguish the brain activities that are deviant from normal and the magnitude of deviation. In turn, could aid in the evaluation of a wide range of clinical disorders and research domains. One of the brain activities study techniques is the Quantitative Electroencephalography (QEEG). Brain waves that result from electrophysiological activities contains several complex features that are missed in visual verification. Hence, it could be possible to investigate complex features of EEG by quantification and comparison of the individual's record with normal population.

The outline of half-day workshop is following:

EEG hardware and software & terminology

EEG Recording: practical session

EEG data editing and generating QEEG report: practical session

QEEG analysis: interpretation of generated reports, QEEG findings in various disorders, Pharmaco-EEG

QEEG has several applications in psychology, psychiatry, neurology and neuroscience including the diagnosis and treatment of various disorders. It can provide valuable information on brain function, which can help clinicians create treatment plans based on individual's needs. Additionally, QEEG can be used to monitor the progress of treatment and make adjustments as needed. Indeed, QEEG is a useful tool for researchers who are interested in understanding the neural mechanisms underlying behavior and cognitive processes.

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## Effectiveness of Repetitive Transcranial Magnetic Stimulation on Symptoms of Treatment Resistant Depression

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**Introduction:** Repetitive transcranial magnetic stimulation (rTMS) is increasingly used for treatment-resistant depression (TRD). In our study, we investigated the effectiveness of high frequency rTMS treatment in TRD patients.

**Method:** The study was a randomized controlled single-blind study, which was conducted between June-2019 and August-2020 with 52 participants, 26 of which were placebo. rTMS sessions were held once a day, for a total of 15 sessions over a 3-week period. The rTMS protocol was high frequency (10 Hz) applied to the left dorsolateral prefrontal cortex (DLPFC), 120% of the motor threshold (MT), 3000 pulses/session. Hamilton Depression Rating Scale (HAM-D 17) and Montgomery Asberg Depression Rating Scale (MADRS) scales were used to assess response to treatment. A decrease of more than 50% in scale scores was considered as treatment response. As a result of the treatment, the decreases in scale scores were found to be significant in both groups ( $p=0,001$   $p=0,001$ ).

**Results:** The decrease in the scale scores of the treatment group was significantly higher than the placebo group ( $p=0,008$   $p=0,003$ ). Response rate to treatment was 65% in the treatment group and 19% in the placebo group. The remission rate was 30.8% in the treatment group and 19% in the placebo group. The participants tolerated the treatment well and there were no serious side effects.

**Discussion:** Our study has shown that high frequency rTMS application is an effective and safe treatment option for TRD patients. More clinical studies are needed for treatment optimization.

**Keywords:** Dorsolateral Prefrontal Cortex, Treatment-Resistant Depression, Single-Blind Study

## Emotion Regulation Strategies in Youngsters (8-17 years) with a Congenital Heart Disease (CHD) in Comparison to Healthy Controls

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**Introduction:** Because of their medical vulnerability, youngsters with a congenital heart disease (CHD) may experience more overwhelming emotions while growing up than their healthy peers. To date it remains unclear whether these youngsters differ from their healthy peers with regard to the strategies they use to regulate their emotions. It is therefore the aim of the present study to examine whether youngsters with CHD use more maladaptive and less adaptive emotion regulation strategies (ERS) compared with healthy controls.

**Method:** A sample of 8 to 17-year-old youngsters who were born with a CHD (percutaneous and/or invasive surgically corrected) was recruited (N = 203; 54.2% boys and 45.8% girls) and matched with healthy controls (N = 229; 52.4% boys and 47.6% girls) with regard to their age, gender and level of education. All participants completed online self-report questionnaires about the use of emotion regulation strategies (FEEL-KJ). If the youngsters did not complete their self-report FEEL-KJ, the parents' answers (mother or father) on the parent report FEEL-KJ were consulted. Analyses were performed in SPSS 28.0.

**Results:** In line with the hypothesis, a multivariate difference between both groups was found on the use of Maladaptive ERS ( $p \leq .05$ ). More specifically, youngsters with CHD ( $M = 16.53$ ,  $SD = 5.08$ ) reported more use of 'Self-Devaluation' compared with the control sample ( $M = 15.43$ ,  $SD = 5.16$ ;  $p = .03$ ). In contrast with the hypothesis, no multivariate difference was found between both groups on the use of Adaptive ( $p = .30$ ) or External ERS ( $p = .53$ ). The other four Maladaptive ERS (Giving Up, Withdrawal, Rumination and Aggressive Actions) showed no difference between these two groups. Results also show that both groups did not differ in the use of any of the Adaptive ERS (Problem Solving, Distraction, Forgetting, Acceptance, Humor Enhancement, Cognitive Problem Solving and Revaluation). The remaining three strategies (Social Support, Expression and Emotional Control) were also not significantly different in both groups.

**Discussion:** Youth with CHD differ from their healthy peers with regard to their increased use of self-devaluation as ERS. Future research should further unravel emotional processes in youth with CHD. Self-devaluation often involves engaging in negative self-talk, where individuals belittle themselves and their abilities. Pediatric patients may also benefit from emotion regulation training in order to strengthen this sample's wellbeing and to cognitive restructure these self-devaluative thoughts.

## Adaptation of the Interpersonal Emotion Regulation Questionnaire (IERQ) to European Portuguese

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**Introduction:** Intrapersonal aspects of emotion regulation have been at the forefront of research, while interpersonal aspects have received less attention. The Interpersonal Emotion Regulation Questionnaire (IERQ) was developed to address this issue. However, this scale was neither adapted nor validated for European-Portuguese. The present study aims to adapt the IERQ to European-Portuguese and explore the preliminary psychometric properties of the IERQ in a community sample (N = 266, Mage = 35.02; SD = 12.8) through confirmatory factor analysis (CFA). Construct validity was further supported through the inspection of convergent validity with ERQ subscales.

**Methods:** Using a cross-sectional design, individuals were recruited online. Self-report questionnaires were used, namely the IERQ and the Emotion Regulation Questionnaire (ERQ).

**Results:** The 4-factor structure was confirmed through CFA ( $\chi^2 = 283,756$ ,  $df = 145$ ,  $TLI = .91$ ,  $CFI = .94$ ,  $RMSEA = .060$ ). IERQ subscales correlated positively with the dimensions of the ERQ of cognitive reappraisal and correlated negatively with experiential suppression.

**Conclusion:** This preliminary study showed that the IERQ has adequate psychometric properties in a Portuguese sample and supports that this instrument can be used to assess interpersonal emotion regulation strategies in non-clinical samples.

## CBT Efficacy in Body Dysmorphic Disorder - a Review Study

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The aim of this review was to map current knowledge regarding efficacy of cognitive behavioral therapy for body dysmorphic disorder. It summarizes and analyzes the total of 28 studies systematically found through the EBSCO and SCOPUS databases, which were published in the time period 2012-2022. The main question of the work is how effective is this therapeutic approach for this diagnosis. It also deals with the limits of the analyzed studies and the possible direction of further research. The results point to a relatively high effectiveness of cognitive behavioral therapy for this disorder. Effectiveness could depend on the number of sessions per week and the length of the intervention. However, a higher level of depression could be an obstacle in treatment. Online/telephone therapy and alternative therapy approaches also appear to be effective.

## Using Religiously Extended Psycho-Educational 4T Model for Psychotherapy of Scrupulosity: A Case Report

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**Introduction:** Scrupulosity is a common but under-researched subtype of obsessive-compulsive disorder (OCD) characterized by an excessive pursuit of certainty in religious practices (Wetterneck et al., 2021: 1). Individuals with scrupulosity face challenges in differentiating between normal and acceptable religious thoughts and behaviors from religious obsessions and compulsions, making it difficult to respond to exposure therapy. Therefore, incorporating religious knowledge into therapy is considered crucial in the treatment of scrupulosity (Purdon and Clark, 2013). This study aims to investigate the impact of the 4T religious psycho-educational intervention developed by Toprak (2016) on a female patient with religious OCD who had previously participated in Cognitive Behavioral Therapy-based group therapy with persistent OCD symptoms.

**Method:** This study presents the case of a 33-year-old female with scrupulosity. The treatment consisted of a 5-session 4T religious psycho-educational intervention. Yale-Brown Obsessive Compulsive Scale (Y-BOCS), Penn Inventory of Scrupulosity (PIOS), Brown Assessment of Beliefs Scale (BABS), Beck Depression Inventory (BDI) and Beck Anxiety Inventory (BAI) were administered at five different times: prior to the intervention (pre-test), at the end of the intervention (post-test), and at 1 week, 1 month, and 3 months after the completion of the intervention (follow-up tests). Additionally, at the end of the treatment, the client completed a "Therapy Evaluation Form" and 3 months later participated in a follow-up interview, providing her views on the results of intervention.

**Results:** When the scale scores were examined, it was found that the Y-BOCS score decreased to a "mild" level and other obsessive and compulsive symptoms were similarly significantly reduced as a result of the 4T intervention. In addition, an increase in the insight score was also observed. These improvements were maintained at the 3-month follow-up assessment. Moreover, feedback from the client highlighted the significant effectiveness of the intervention: "It was essential to have this information so that individuals with faith in God could find satisfaction. Scientific information alone was insufficient. Even if something was scientifically proven, doubts would still linger about whether God would accept it. The presence of doubt would persist. However, now I remind myself that these thoughts are from the devil, they are illusions. I recall the advice given to me that 'If I perceive these illusions as significant, they will grow, but if I see them as insignificant, they will diminish. If I allow fear to consume me, they will become overwhelming, but if I refuse to be afraid, they will eventually fade away.' I remember Nursi's words, and I choose not to magnify these thoughts. That is the only way I can regain control over myself."

**Discussion-Conclusion:** As hypothesized, the 4T religious psycho-educational intervention proved to be effective in reducing obsessive and compulsive symptoms and increasing levels of insight in the case study. This study enhances the existing literature by contributing treatment approaches for scrupulosity.

\*This article is extracted from my master thesis entitled "The Effectiveness Of Religiously Extended Psycho-Education On Obsessions And Compulsions With Religious Content: Case Study", (supervised by Taha Burak Toprak, Sabahattin Zaim University, İstanbul, 2023).

## Relationship of Alexithymia with Emotion Regulation Strategies and Mental Health

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The main aim of the study is to analyze the emotional aspects of mental health. We examined the relationship between levels of alexithymia, different strategies for emotion regulation, levels of stress and subjective well-being. Different studies show that in general people with high levels of alexithymia tend to exhibit a less adaptive profile of emotion regulation. High levels of alexithymia are also linked with high levels of depression, anxiety, and stress. Targeting of the emotion regulation patterns and coping strategies in therapy may be useful for the treatment of a emotional disorder symptoms such as alexithymia, depression and anxiety. We proposed that people with high levels of alexithymia and poorer coping strategies will be less willing to seek help from professionals. The scales that were used are Toronto Alexithymia Scale (TAS-20); Depression, Anxiety and Stress scale (DAS), Emotion regulation questionnaire (ERQ) and a scale for subjective well-being. Questions about attitudes toward health specialists were constructed. 120 people completed the survey. People with higher levels of alexithymia had tendency to use strategies as expressive suppression, which was linked with higher levels of stress. High levels of alexithymia were linked with poorer quality of life and lower life satisfaction. The results will be used for improving therapeutic psychological approaches when working with clients, recommendations for psychological work will be given.

## A Pilot Randomized Controlled Trial of an Internet-Based Intervention for Sexual Distress in LGB+ Individuals: Study Protocol

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**Introduction:** Sexual dysfunctions (SD) compromise psychological and physical health. The central construct of all SD is distress in the sexual domain, i.e., sexual distress. Although recent studies have emphasized the urgency of academia to apply the sexual distress criterion in research, this construct has been neglected. Furthermore, the most up-to-date empirical evidence support that transdiagnostic factors (TF) are associated with SD (e.g., repetitive negative thinking). These studies are consistent with a transdiagnostic approach to emotional distress, demonstrating that TF may be related to sexual distress. Although research on SD in LGB+ individuals (i.e., lesbian, gay, bisexual, and other minority sexual orientations) has received little attention, studies have shown that LGB+ individuals experience sexual distress and dysfunction. Hence, we intend to adapt an online intervention for sexual distress based on the transdiagnostic approach (Anthesis) for the LGB+ population (Anthesis LGB+). The study aims to address the research question: "Can an online intervention using the transdiagnostic approach decrease or eliminate levels of sexual distress related to sexual function in LGB+ individuals?".

**Methods:** A two-arm, parallel, open-label pilot RCT with a waiting list (N = 30) will be conducted via the Internet. Inclusion criteria are: i) being over 18 years of age; ii) self-identifying as LGB+; iii) being in an exclusive, monogamous dyadic relationship for more than 6 months; and iv) meeting criteria compatible with a diagnosis of DS (to be confirmed in a telephone interview). Exclusion criteria are: i) taking medication that interferes with the sexual response (e.g., hormone therapy, antipsychotics) and ii) undergoing any form of psychological intervention. Eligible participants will be allocated through a computational randomization procedure. This ensures that allocation occurs randomly and equally to either Group 1 (Experimental Condition: Anthesis LGB+) or Group 2 (Control Condition: Waiting List). Participants in Group 1 will receive the intervention immediately after randomization. To ensure ethical principles, participants in Group 2 will be able to receive the intervention after the assessments as Control Condition.

**Results:** Anthesis LGB+ is expected to show efficacy in significantly changing variables of interest (e.g., decreased levels of sexual distress). We hypothesize that by alleviating levels of sexual distress, we can minimize sexual problems. Also, we expect participants to find Anthesis LGB+ user-friendly while finding the promoted skills useful.

**Discussion:** The current study is expected to significantly impact clinical practice with LGB+ individuals experiencing sexual distress, promoting their empowerment. This study has the potential to expand both theoretical and practical knowledge about specificities of sexual distress in LGB+ individuals, offering potentially relevant therapeutic possibilities for reducing healthcare disparities.

## Contribution of Cerebral Cortex Measures in Classifying Anorexia Nervosa for Effective CBT, a Machine Learning-Based Approach

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**Introduction:** Anorexia Nervosa (AN) is an adolescent-onset psychiatric condition that causes serious disturbances to everyday diets, such as eating extremely small amounts of food or severely overeating. AN is reported to have the highest mortality rate among any other psychiatric disorders [1]. While cognitive behavioral therapy (CBT) has been proven effective in treating anorexia, biomarkers that aid the differential diagnosis of AN are still unclear. This study aims to identify MRI-based biomarkers by classifying healthy subjects from AN subtypes such as restricting type (AN-R) and binge purging type (AN-BP). This study also aims to classify the subtypes itself as AN-BP continues to be a masked illness with the highest suicide rate. This study uses multisite datasets using machine learning techniques for identifying the contribution of cortical thickness, cortical surface area, etc., as biomarkers of AN for improved treatment with CBT.

**Materials & Methods:** The data consists of FreeSurfer-based parcellated data sets acquired in five different sites from 124 healthy females and 58 AN-R and 45 AN-BP female patients. The brain region includes regional measures of cortical thickness, surface area, two lateral ventricles, etc. Both non-harmonized and harmonized data sets are used for generating separate classification models for analysis. The classification was performed using two machine learning classifiers, random forest with Boruta feature selection and gradient boosting technique. Leave one site out validation was performed for all data sets. The model performance was evaluated using the area under the curve (AUC) with a 95% confidence interval and accuracy (ACC). We also compared the performance of the model with cortical thickness and surface area separately.

**Results and Discussion:** Non-Harmonized and harmonized data sets used for site-wise classification of HC vs. AN-R, HC vs. AN-BP, and AN-R vs. AN-BP showed significant accuracy in classification results using LOOCV and k-fold in the case of AN-BP vs. AN-R, with an area under the curve (AUC) ranging up to 0.91 with 95% confidence interval ranging from 0.57 to 0.99 and ACC up to 89%. As for the identification of biomarkers, feature analyses indicated that the significant features for AN-R and AN-BP include cortical thickness in precuneus regions, insula, etc., which had a greater contribution to the classification analyses. More than 90% of selected features in our analyses fall under cortical thickness. Also, separate analyses with only cortical thickness and only surface area for its effect on classification indicated that cortical thickness has a significant contribution compared to cortical surface area.

**Conclusions:** Machine learning-based analysis showed promising results for using structural MR imaging as a candidate to classify AN subtypes and healthy controls and also indicated cortical thickness as the main feature in identifying possible biomarkers in patients with AN and their subtypes which ultimately is beneficial for effective CBT.

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## Examining Suicide, Hopelessness, Negative Automatic Thoughts and Schemas in Major Depression

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**Introduction:** Understanding the underlying potential causes and associated factors in the emergence of depression and suicidal behaviour, which are significant public health issues, is considered important for the development of specific and effective interventions (1). The aim of this study was to compare suicidal behaviors in terms of their levels of depression, hopelessness, automatic thoughts, and early maladaptive schemas among individuals with major depressive disorder. The relationships between these factors were examined based on Beck's Cognitive Theory.

**Method:** The participants consisted of 50 individuals who had exhibited suicidal behavior in the past or at the present time, and were included in the major depressive disorder with suicide (MDDS) group. Another group of 70 individuals without a history of suicidal behavior, included in the major depressive disorder (MDD) group, were also diagnosed with Major Depressive Disorder according to the DSM-V diagnostic criteria. Data was collected using several assessment tools including a Sociodemographic Information Questionnaire, Beck Depression Inventory, Beck Hopelessness Scale, Automatic Thoughts Questionnaire, and Young Schema Questionnaire-Short Form 3.

**Results:** When comparing the two groups, statistically significant differences were found in terms of the levels of depression and hopelessness, frequency of automatic thoughts, and the levels of early maladaptive schemas. Furthermore, significant differences were observed in certain subscales of the cognitive factors and schema dimensions. Past episodes of depression and suicidal behaviors, as well as having a history of suicide plans, were identified as clinical risk factors for suicidal behavior in individuals with major depression. Additionally, negative emotions and self-related negative thoughts, negative expectations about the future, and higher scores on the failure schema and impaired autonomy schema domains were identified as cognitive risk factors for suicidal behavior in major depression.

**Discussion:** These findings have important implications for the cognitive therapy of individuals with major depression and may contribute to the reduction and prevention of suicidal behaviour.

### Reference

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## When the Mirror is Wrong: A Multi-Method Study on Body Dysmorphia

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Body Dysmorphic Disorder (BDD) is a severe condition, associated with psychological distress and impaired quality of life, characterized by an obsession with a perceived defect that is rarely observable to others or appears as a minimal flaw. Despite its prevalence and critical impact, BDD is often misdiagnosed/underdiagnosed.

Cognitive Behavioural Therapy (CBT) and Serotonin reuptake inhibitors have been considered the standard treatment for BDD, but recent studies have also highlighted some limitations, including high relapse rates. On the other hand, some studies have paved the way and highlighted the need to explore 3rd generation therapies for BDD (e.g., Acceptance and Commitment Therapy and Compassion-based Interventions).

This project aims to contribute to the overall care and research in BDD, by developing, implementing, and testing the preliminary efficacy of the MIND-over-MIRROR: a group programme combining ACT and compassion strategies for individuals presenting high BDD symptomatology. A feasibility study will be conducted, comparing the participants of the MIND-over-MIRROR programme (experimental condition), with participants of an empirically validated CBT-based group (active control condition), and participants on the waiting list (passive control group). A multi-method assessment procedure will be implemented - including self-report, computer-based, and neuroimaging measures -, across a longitudinal parallel-arm design.

This study is expected to add to the overall improvement of the pathways of care in BDD while contributing to the progress of 3rd generation interventions.

## Cognitive Behavioral Therapy of an Obsessive Compulsive Disorder Patient Exacerbated Due to Pandemics

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**Presenting problems:** The patient was 26-year-old female, single, doing a master's degree in engineering. She was living with her family. She had been diagnosed with obsessive compulsive disorder for about 3 years. The patient had doubt and contamination obsessions. Her compulsions were think about the past frequently along with the fear of going to jail for making a mistake in the past, check underwear frequently due to the fear of contamination, visit the hospital frequently, not to touch things, and wash hands frequently. The patient has received CBT before the pandemic and during this therapy process, religious obsessions were discussed. Therapy could not be continued during the pandemic process.

The COVID-19 pandemic has proven to be a tremendous stressor for both the general population and individuals with OCD, with many experiencing exacerbations in obsessive-compulsive symptoms (1). In the process of the COVID-19 pandemic, patient's contamination obsessions exacerbated, and she started to be unable to go to school because she could not enter the classroom.. Cognitive behavioral psychotherapy was applied to the patient between April 2022 and November 2022.

**Case Conceptualisation and Intervention:** Contagion and doubt obsessions were mainly discussed during the therapy process. After cognitive interventions, behavioral experiments and exposure response prevention (ERP), which are known to be effective interventions (2), were applied. She was asked to send her emotional changes in the behavioral experiments between sessions via e-mail.

The perception of responsibility for doubt obsessions, intolerance to uncertainty, and the perception of control over their thoughts were studied. The patient performed his own exposure response prevention exercises by setting new goals by understanding the rationality for exposure response prevention throughout the sessions. Towards the end of the therapy, sub-threshold depressive complaints started due to the job-seeking process, and coping mechanisms were discussed in the last sessions.

**Outcome:** The obsessions and compulsions of the patient, whose motivation and desire to apply therapy methods are high during the therapy process, are almost cured. She completed her master's degree programme in the process. As we approached the final sessions, she got a job. In the control session held 3 months after the last session, the patient was still in remission and continued her work.

**Review and Evaluation:** There are studies that say that there is an increase in OCD symptoms due to Covid-19, as well as studies that show that the symptoms do not change (3). The mental health consequences of the COVID-19 pandemic may be particularly acute for individuals with obsessive-compulsive disorder (OCD). In this case, it was observed that OCD symptoms increased after the Covid-19 pandemic. 22 sessions of therapy were applied to the patient who had obsessions and compulsions in many areas for the last 3 years and received therapy in the past, but with limited benefit. Significant improvement was observed at the end of the therapy process in the patient who was applied CBT methods, which proved to be effective, such as behavioral experiments and exposure response prevention (ERP).



## Empower Your Mind to Embrace Your Life: Study Protocol to Test the Efficacy of an ACT-Based Intervention for People with Young-Onset Parkinson's Disease

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Parkinson's disease has a detrimental impact on patient's quality of life, functioning and mental health, particularly in people with early diagnosis. The burden of the disease is also shared by caregivers. Emerging evidence suggests Acceptance and Commitment Therapy (ACT) as one psychotherapeutic model that fits particularly well for managing the non-motor symptoms of the disease (e.g., depressive, and anxious symptomatology).

A two-arm randomized controlled trial will be conducted to test the efficacy of a videoconference-delivered group intervention based on ACT for people with young-onset Parkinson's disease. The content and structure of the "Empower your mind to embrace your life" intervention will be developed based on previous empirical studies and focus group results. Participants (patients and their caregivers) will be recruited at the Neurology Service of Coimbra Hospital and University Center. A total of 52 patients will be selected and assigned to one of two conditions (experimental condition or control condition). Although not considered the main target of the intervention, this study also seeks to explore the indirect benefit of the intervention for participants' caregivers. Thus, caregivers will be divided by the two experimental conditions (according to the condition already assigned to the participant they are caring for) and will not receive the intervention. All participants in both conditions complete baseline, post-intervention, and at four-month follow-up assessments.

This innovative psychological intervention aims to improve quality of life, functioning, and mental health of people with young-onset Parkinson's Disease. Furthermore, it is expected an indirect effect on caregivers, with improvements in quality of life and mental health, and a decrease of caregiver burden.

This study is expected to offer important insights for research and clinical practice, expanding the current knowledge of ACT-based interventions applied to this clinical population. The design of the intervention potentially affords a cost-effective psychological intervention to healthcare systems given its group format and remote access, decreasing cost and burden, and allowing for a decrease in asymmetries regarding access to Parkinson's disease treatment. Furthermore, this study also supports the relevance of including specialized psychotherapeutic interventions in the usual healthcare of this disabling neurological condition.

**Keywords:** acceptance and commitment therapy, caregivers, randomized controlled trial, study protocol, young-onset Parkinson's disease.

## A Systematic Review of the Association between Childhood Interpersonal Trauma and Non-Suicidal Self-Injury: Exploring the Mediating Role of Complex Posttraumatic Stress Disorder (CPTSD) Experiences

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**Background:** Childhood traumatic experiences were identified as a risk factor for developing Non-Suicidal Self-Injury (NSSI). However, those that are interpersonal (i.e., childhood abuse) were found to increase the risk of NSSI significantly compared to other types of childhood trauma. Previous research suggested that the link between Childhood Interpersonal Trauma (CIT) and NSSI is not direct, and several factors are involved in this relationship. Many of these factors were experiences associated with Complex Posttraumatic Stress Disorder (CPTSD). The review aimed to synthesize and evaluate the current evidence on the mediating role of various CPTSD experiences in the relationship between CIT and NSSI.

**Method:** This review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The electronic databases (i.e., PsychINFO, MEDLINE, Web of Science) were searched to identify relevant studies published until 2023. The review protocol, which includes the search strategy and analysis plan, was pre-registered with PROSPERO. The study results were integrated and synthesized narratively.

**Results:** A total of 27 studies (with clinical and non-clinical participants) were identified. A wide range of CPTSD-related mediators (i.e., PTSD, emotion dysregulation, negative self-concept, and related constructs) were assessed in included studies. Despite the methodological limitations identified across included studies, the overall findings support the role of CPTSD experiences as potential mechanisms underlying the CIT-NSSI pathway. There was some evidence to support the role of PTSD as a significant mediator in the link between CIT and NSSI although there were inconsistencies concerning which symptom clusters were significant mediators. Similarly, the current evidence supports the mediating role of emotion dysregulation; however, the limited access to emotion dysregulation strategies appeared to be the strongest mediator compared to other emotion dysregulation aspects. With regard to Negative self-concept and relation constructs (i.e., negative self-evaluation, self-blame, perceived self-criticism, shame, and self-esteem), the overall findings support their role as mediators in the CIT-NSSI link. Finally, none of the identified studies measured the disturbances in the relationships, which makes it an important gap in the current literature.

**Discussion:** The findings support the mediating role of CPTSD difficulties in the relationship between CIT and NSSI. The findings are consistent with several theoretical models of NSSI that highlight the role of CIT and CPTSD-related experiences such as negative self-scheme, emotion reactivity, and poor emotion dysregulation in the onset and maintenance of self-injury. The findings are also congruent with previous research highlighting emotion regulation as a common function of NSSI. Despite the identified limitations in reviewed studies, predominantly in relation to the use of cross-sectional design, the use of relatively small sample sizes for mediation analyses or the use of inappropriate mediation analyses. The overall findings indicate that CPTSD-related difficulties may in part explain the risk of NSSI among those with a history of CIT highlighting the need to adopt trauma-informed care and interventions aimed at addressing CPTSD-related stressors when working with individuals who self-injure.

## Motivational Intervention in Cognitive Behavioral Therapy for Skin Picking Disorder: A Case Report

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**Introduction:** The therapeutic relationship, personality traits and therapy techniques are essential equipment that the therapist can utilize in her/his relationship with the client (Ackermana ve Hilsenrothb, 2003). Especially in the case of adolescents, even though techniques would be perfect, motivation could be low. Studies show that a strong therapeutic alliance has positive effects on different therapy approaches (Cognitive-behaviour therapy, person-centered therapy, primary care, psychodynamic therapy) (Clark, Fairburn ve Wessely, 2007). Accordingly, motivational interventions are essential to CBT. Motivational interventions aim that refrain from taking the role of change advocate, but instead help the client become their own advocate for change. These strategies for managing client's ambivalence reduce resistance and increase intrinsic motivation.

**Method:** In this study, we report a 12 years old girl with anxiety and Skin Picking Disorder (SPD). Self-report was obtained for post-intervention evaluation. In addition, reviews were gotten from the client's family and the client's psychiatrist. The treatment included cognitive behavioral therapy (CBT) methods consisting of 50-60 minute 20 sessions once a week for 7 months. CBT techniques were used in 15 sessions. Behavioral homeworks have been given with reward charts. Increasing and decreasing changes were observed in the frequency of weekly picking behavior. Self report includes that "Picking my hand not a problem for me it's on my hand many friends of mine don't even realize". In addition, 16-17 sessions included motivational interventions about gaining insight. Be talked about the present and future effect of picking behavior on the client. For instance "How do you dream about your future self?" 18-20 sessions talked "If you want we can take a break sessions and one month later we can observe you and see how it is going", "If you have any problem at that time other problems about your relationships or life we can talk about them."

**Result:** When applied CBT techniques for SPD, the client's level of awareness about thought and behavior cycles was increased. However, no change was observed in the impulsivity and picking behavior of the client. Interventions the client inhibit her picking desire because of continue sessions which are based on relationship with her therapist. After motivational interventions, the client's insight about the picking behavior as the problem increased and she said "I think I shouldn't pick my hand." Sessions were continued with this motivation and picking behavior wasn't observed during 4 weeks.

**Discussion- Conclusion:** In conclusion, the intervention was significantly effective in reducing the client's symptoms and stopping the picking behavior which causing wound her hands. Self-reports from the client suggest that the CBT technique without motivational intervention was not sufficient in this case to gain insight into the SPD and motivation to stop the picking behavior. When motivational techniques were not integrated, the patient did not get enough benefit from CBT. When this integration was achieved, it was observed that the motivation of the client's picking behavior and compliance with the therapy tasks increased.

## Navigating One's Body Image: Development and Validation of a New Body Image-Related Psychological Flexibility Measure

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Body image-related psychological flexibility concerns the willingness to navigate undesirable body-related experiences, including body dissatisfaction while remaining committed to valued goals and actions. This construct has been highlighted in literature due to its role in several mental health difficulties and disorders, including body concerns and eating psychopathology. However, some researchers have suggested that the measures used to assess body image-related psychological flexibility have some limitations, including the incomplete assessment of all the six dimensions of the ACT model: cognitive defusion, acceptance, attention to the present moment, clarity of values, committed action, and the self as context.

Recently a novel psychological flexibility measure has been developed and successfully validated with different samples and languages, the Psy-Flex. This short self-report measure has six items, each assessing a specific dimension of the ACT model. The present study aimed to develop and validate a new body image-related psychological flexibility measure based on the Psy-Flex scale, the Psy-Flex-BI (for body image).

The study comprised 1031 participants from the general population. Data was collected online through self-report questionnaires. Data analysis followed similar steps to the original Psy-Flex scale.

Psy-Flex-BI's one-dimensional factorial structure and reliability were confirmed, with great indicators. Regarding convergent validity, the scale correlated significantly and moderately with other ACT-related constructs, and significantly but weakly with psychopathology measures. Finally, the scale's discriminant validity for body dysmorphic concern and eating psychopathology was also explored and confirmed by assessing its ability to discriminate between individuals scoring low, medium, and high on the Dysmorphic Concern Questionnaire and the Eating Disorder Examination, respectively.

Indeed, the Psy-Flex-BI is a brief and sound measure that allows for the assessment of body image psychological flexibility, through the six ACT dimensions. This is a new measure, which can be considered reliable and thorough, and contributes to the field of body image, eating psychopathology, and related constructs.

## Academics' Cognitive Appraisal of Their Performance and Related Emotions

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The topic of emotions and how academics evaluate their own academic performance is not well researched. It is known that most cognitive activities are thought to influence and be influenced by emotions. How academics evaluate their performance, how these evaluations are shaped by the context in which they are situated, and how they interact with one another can all have an impact on evaluation systems and related experiences.

The primary goal of this study is to determine how faculty members who are traditionally accepted to have higher levels of cognitive skills, evaluate a personally relevant and distressing issue in terms of specific components proposed by Cognitive Theory of Appraisal and Emotion.

Atılım University academics were selected due to competitive performance expectations and convenience of the data collection. As the specific distressing issue(s), academics' performance in educational and research activities were determined.

58 full-time academics (28 women) aged between 20 and 60 (75.5% of them within 30-50 years range) with the average duration of work at Atılım University 7.67 years (SD = 6.33) constituted the sample of the current study.

Perceived Stress Scale, The State-Trait Anxiety Inventory and Beck Depression Inventory were used to assess the psychological wellbeing of the participants.

Academics' Performance Appraisal Form, was used to assess 10 cognitive appraisal dimensions (Pleasantness, Relevance, Goal attainment, Problems, Control/Agency-Self Control/Agency-Others Control/Agency-Circumstances, Certainty, Predictability and Effort).

In order to assess the 17 specific emotions (Surprise, happiness, pride, hope, interest, anger, sadness, hate, contempt, boredom, disgust, frustration, shame, regret, guilt, jealousy, and fear) associated with appraisal dimensions, an emotion checklist was used.

As a result of both education and research related performance appraisals, happiness was the most salient emotion reported by the academics. It was followed by pride and hope. Shame and regret on the other hand were two least frequently experienced emotions.

Pearson correlations among the cognitive appraisal dimensions and emotions indicated an expected association with certain appraisals and specific emotions. For example, happiness was positively associated with pleasantness ( $r = .71$ ), relevance ( $r = .63$ ), goal attainment ( $r = .61$ ), self-agency ( $r = .39$ ), certainty ( $r = .39$ ) and predictability ( $r = .53$ ) dimensions of cognitive appraisal of research related performance.

A paired sample t-test indicated a significant difference in two cognitive appraisal dimensions between education related performance and research related performance. Participants reported higher levels of pleasantness and goal attainment in their education related performance appraisals.

The positive emotions associated with academics' evaluations based on their research and educational activities were found to be interest, hope, pride, and happiness in this study. Anger, sadness, boredom, contempt, frustration, regret, and hate feelings, on the other hand, emerged from negative emotions.

Cognitive evaluations that lead to diverse emotions work as a bridge in people's emotional reactions; however, they also act as a mediator in terms of a person's goals, values, and beliefs. Knowing the emotional and cognitive evaluations of 'normal' behavior can serve as a guide in the explanation and intervention of psychopathological behavior.

## 1989 Bulgarian Turks' Perceptions of Discrimination and Attitudes Towards Syrian Immigrants: A Qualitative Research Example

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**Introduction:** Discrimination is observed in various areas of society, and there are certain situations where it becomes more apparent. Migration experience is one of them. In discrimination studies focused on migration, the evaluation of discrimination experienced by minorities in the face of the majority is often addressed. However, minority groups that come with migration also interact with existing minority groups and are evaluated by these groups. The aim of this study is to examine whether the attitudes of Bulgarian Turks who migrated to Turkey after 1989 towards Syrian immigrants, who are also a minority like themselves, can be evaluated within the scope of discrimination, and to examine their perceptions of discrimination during the migration process to Turkey.

**Method:** In line with this aim, semi-structured interviews were conducted with 6 participants living in Istanbul and Bursa, and the interview transcripts were analyzed using thematic analysis.

**Results:** The findings were categorized under two headings. Firstly, most of the participants do not perceive discrimination. The participants who perceived discrimination shared experiences of being subjected to discriminatory discourse. At this point, the participants consider being referred to as "Bulgarian migrant" as discrimination. In the findings under the heading of Bulgarian Turks' attitudes towards Syrian immigrants, it was observed that some participants empathize with Syrian immigrants based on their own migration experiences, while others make a distinction between "us" and "them."

**Discussion:** According to the Social Identity Theory, humans tend to categorize events, objects, and people, leading to the formation of "us" and "them" groups (Korkmaz ve Öztürk, 2017). In the interviews, participants compared their own migration experiences with their perceptions of Syrians and created a distinction between "us" and "them."

A comparison of transience and permanence reveals implicit discrimination against Syrian migrants. Turkish people initially showed positive attitudes towards Syrians, emphasizing the value of hospitality, but as the number of refugees increased, negative perceptions and xenophobia emerged among different groups (İçduygu, 2015; Kirişçi & Ferris, 2015; Oytun & Gündoğar, 2015). Similar changes in attitudes were observed among Bulgarian migrants in line with the mentioned literature.

**Conclusion:** This study aimed to evaluate the migration experiences of Bulgarian Turks and the Syrian migration. It has shown that the themes related to discrimination can repeat themselves under changing conditions (such as ethnicity and the reason for migration). The findings regarding the empathetic approach of one minority group towards another minority group due to similar experiences, but their implicit discrimination based on reasons such as resource/space sharing and material difficulties, contribute to the literature in terms of understanding the dynamics of discrimination between minority groups. It is believed that in future studies, asking the same questions to larger samples of Bulgarian Turks will contribute to a better understanding.

**Keywords:** Bulgarian Turks, Syrian migrant, discrimination, ethnicity.

## Evaluation of Perceptions on Acceptance and Avoidance with Metaphor Analysis

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**Introduction:** In this study, it was tried to understand how the concept of acceptance, which is one of the basic elements of Acceptance and Commitment Therapy, and experiential avoidance, which can be defined as the efforts of individuals to avoid and get rid of difficult feelings and thoughts in relation to this concept, manifests itself metaphorically.

**Method:** In this study, phenomenology model, one of the qualitative research methods, was used. Phenomenology can enable the uncovering of phenomena that are recognized but thought to lack in-depth understanding (Patton, 2022). Data were collected from 230 people in total and 174 responses were deemed appropriate for the study and were evaluated. In order to determine the participants' metaphorical perceptions of difficult emotions and thoughts, a semi-structured form with the statement "Painful past experiences, disturbing emotions and thoughts are like ....., what should be done in these difficult moments is ....." was used. The first blank here provides information about the concept of "acceptance" and the second blank provides information about the concept of "experiential avoidance". The data were analyzed using coding method through content analysis. In this context, the coded metaphors were divided into themes and reported.

**Results:** According to the findings obtained in our research, the answers given by the participants about painful experiences, negative emotions and thoughts were grouped under 6 different categories, and the metaphors about what to do in the face of negative emotions and thoughts were also grouped under 6 different categories. The findings are shown in Table 1 and Table 2 the categories of physical pain/painful stimulus (36%), emotional pain/painful stimulus (21%) and resembling physical formations (16%) are prominent. It is seen that the categories of experiential avoidance (46.47%) and tolerance (14.11%) are prominent.

**Discussion:** In this context, it may be important to determine the factors affecting the differentiation of definitions of pain and to test whether this affects therapeutic interventions in the clinical field. In the results related to behavior, the categories of experiential avoidance (46.47%) and tolerance (14.11%) are prominent. In conclusion, in the participants' perceptions of painful experiences and emotions and thoughts, it was observed that metaphorical discourses towards acceptance were less common and metaphorical discourses towards experiential avoidance were predominant. Therefore, it will be especially important for ACT therapists to assess their clients' perceptions of acceptance in their sessions.

## Love in the Fast Lane: Attachment Styles and Partner Preferences in Short-Term Relationships

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The way in which people choose their partners has evolved over time, and the factors involved in this process continue to be the subject of intense debate, with partner preferences being the focus of numerous studies. Research by Simpson and Rholes (2017), among others, shows a strong relationship between attachment and romantic relationships in adulthood. The aim of the present study was to understand the relationship between attachment styles and partner choice in short-term relationships. The Buss Partner Preferences, Adult Attachment Scale (AAS) and Experiences in Close Relationships - Relational Structures (ERP-ER) questionnaires were used. The final sample included a total of 524 heterosexually oriented participants, 129 men and 355 women. Three dimensions of partner preferences (Emotionality, Resources, and Attractiveness/Health) were assessed using exploratory factor analysis with adequate psychometric properties. There were significant gender differences in partner preferences for short-term relationships on the dimensions of Emotionality and Resources, with women showing a greater preference for these traits compared to men. Although there were no significant differences in partner preferences according to attachment style, secure participants showed less avoidance and anxiety in relationships. The findings and literature review of the present study support the idea that attachment styles play a crucial role throughout an individual's life and that behaviours derived from attachment style determine partner choice as well as the formation and maintenance of loving relationships.

## Food Thought Suppression and Vulnerability Factors for Eating Disorders: The Mediating Role of Emotional Eating

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Eating disorders (EDs) are associated with a decrease in physical and psychological well-being. We aimed to explore the relationship between food thought suppression and ED vulnerability factors using emotional eating as a mediator and explored gender differences among variables. The sample consisted of 287 participants aged 18 to 68. Data was collected online. We used the Emotional Eating Scale (EES) and the Food Thought Suppression Inventory (FTSI). Information about BMI, restrictive diets and body dissatisfaction was also collected. The results revealed that women had higher levels of food thought suppression and emotional eating (due to depression) and tried more restrictive diets than men. Correlations were found between food thought suppression, emotional eating and ED vulnerability factors. The results showed also that emotional eating (due to depression) mediated food thought suppression in individuals with body dissatisfaction, which did not happen among individuals following restrictive diets; and emotional eating (due to anger) mediated food thought suppression in individuals with discrepancies between their current and ideal BMI. The collected data can contribute to clinical understanding of vulnerability factors for ED.

## Efficacy of Cognitive Behaviour Therapy with Adjunctive Reiki Among Patients with Chronic Obsessive-Compulsive Disorder in India: A Pre-Post Intervention Study

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**Background:** Obsessive-compulsive disorder (OCD) is characterized by intrusive, troubling thoughts and repetitive, ritualistic behaviours which are time-consuming, cause significant impairment in functioning and cause distress to an individual. Obsessions generate feelings of anxiety, fear, or disgust in an individual, and the discomfort caused by these feelings causes one to repeat certain behaviours or mental routines to achieve relief. The treatment and management of OCD include the use of pharmacotherapy along with psychotherapy to reduce and control the resulting symptoms. In recent years, Reiki has become widely used and accepted in the medical field for its usefulness in treating anxiety and depression. Classified as a biofield energy therapy, Reiki is non-invasive and cost-effective with no contraindications or adverse side effects. Reiki healing is one of the several therapies covered under complementary and alternative medicine (CAM). The present research aims to study the efficacy of adjunctive Reiki with cognitive behaviour therapy among patients with chronic OCD.

**Objective:** This pre - post intervention study aimed to investigate the efficacy of Reiki as an adjunct to CBT among patients with chronic obsessive-compulsive disorder in India.

**Methods:** A hospital-based pre - post-intervention study was conducted at Central Institute of Psychiatry, with 40 patients who were selected using purposive sampling and diagnosed with obsessive-compulsive disorder (F42) (ICD - 10 DCR). A total of 40 patients aged 18 to 50 were included in the study. Baseline assessments were carried out using the Beck's Anxiety Inventory (BAI), Beck's Depression Inventory (BDI) and Yale-Brown Obsessive Compulsive Scale (Y-BOCS) to assess the symptoms of OCD along with anxiety and depressive features. Patients were randomly assigned to two groups, with group 1 consisting of 20 patients with OCD who received CBT and a 30-minute Reiki treatment, while group 2 consisted of 20 patients with OCD who only received CBT. The assessment measures were then administered post the delivery of sessions, while a follow-up assessment session was conducted one month after the completion of the intervention module. Descriptive statistics assessed the sociodemographic and clinical variables, while inferential statistics were used to compare the two groups on depression, anxiety and symptoms of OCD.

**Results:** Our study showed that the two groups showed comparable differences in their pre-post and follow-up assessments. The patients in Group 1 showed significant improvement in compulsive behaviours along with improvement in anxiety and depressive features, suggesting the efficacy of Reiki in patients with OCD.

**Discussions:** The findings of our study demonstrate evidence regarding the efficacy of Reiki as an adjunct to psychotherapy and pharmacotherapy. We saw significant improvement in the psychiatric symptomatology of patients with OCD, along with a reduction in their symptoms of OCD, anxiety, and depression. The study further adds to the literature regarding the efficacy of Reiki, especially in the management of significant anxiety-invoking disorders such as OCD.

**Keywords:** Obsessive - Compulsive Disorder, Anxiety, Cognitive - Behavior Therapy, Reiki, Intervention, Management

## Culture Sensitive Cognitive Behavioral Therapy for Panic Disorder with Agoraphobia: A Case Follow-Up in Turkish Psychiatric Outpatient Clinic Conditions

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While cognitive behavioral therapy is the first line of treatment for panic disorder and agoraphobia, it may not be possible to benefit from this treatment for most of the patients who suffer from these common disorders due to limited time per patient in public health care and the diverse socio-cultural backgrounds of the patients. We want to present a patient suffering from panic disorder with agoraphobia whose symptoms remitted with culturally-sensitive cognitive behavioral techniques in the current conditions of a government hospital psychiatry outpatient clinic. A female patient, aged 54, presented to our outpatient clinic with symptoms of palpitations, tachycardia, sweating, tremors, and shortness of breath in the form of attacks. Furthermore, the patient had been unable to go out unaccompanied for three decades due to the fear that if a panic attack were to occur in public, no one would help which would lead to an awkward and embarrassing situation. After the case conceptualization, the number of sessions, the duration of each session, and the topics of the sessions were planned. But after the plan immediately mandatory modifications started. Due to the patient's illiteracy, we decided to conduct a follow-up procedure via audio recordings and brief videos that the patient would record during and after completing the assigned tasks. The plan was to have weekly 30-minute sessions, but due to the patient's domestic responsibilities and the psychiatrist's excessive number of followed patients, the sessions were scheduled 20 minutes sessions every 15 days after the first two. During the treatment, instead of discussing her agoraphobic tendencies, the patient wanted to discuss the issues she was having with her husband's family. These conversations revealed that in the patient's culture, it was considered dishonorable for women to leave the house alone. Exploring and reconstructing these cognitive distortions greatly improved her compliance with exposure exercises. After 25 sessions, which could sometimes be done at irregular intervals, the patient met the criteria for remission for panic disorder and traveled alone between cities. The content of these sessions included cognitive restructurings taking their essence from idioms and folk tales, the patient's religious mindfulness methods, and the inspection of short videos and audio recordings clumsily taken during and after exposures. Although culture-specific elements are undoubtedly included in current CBT practices, there has yet to be a study on culture-specific CBT for panic disorder and agoraphobia in our country. It is also important to tailor CBT to the local healthcare system. Although it is necessary to eliminate problems such as the limited time per patient in the current health care system, the way large patient groups can benefit from CBT is to develop adaptations suitable for these current conditions. Or maybe, psychotherapy researchers should investigate the evidence-based therapy techniques that can be adapted to different conditions, rather than forms of therapy consisting of sessions with a certain number, duration, and content applied to patient groups narrowed by exclusion criteria.

## Humor as a Therapeutic Tool for Couples

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**Introduction:** Humor is a powerful tool that can bring people together and empower them. It allows us to move forward despite serious situations. Humor can improve romantic relationships, unlock creativity, and boost resilience. Deploying it doesn't make light of serious things, it means you're able to move forward, in spite of those serious things. By training our brains to see the world through a different lens, we can reframe narratives and transform dramatic or tragic stories into comical or lighthearted ones, making a significant impact on people's lives.

**Purpose:** This case report focuses on the implications of humor in romantic relationships. S, a 44-year-old pharmacist, and U, a 45-year-old pharmacist, lived in Istanbul and had lost their sense of humor after the unfortunate loss of their newborn baby.

**Method:** The couple was asked to share stories about moments of "Shared Laughter" and "Shared Positivity" (moments they shared that made them feel good about their relationship with each other) that had occurred in the last three months. They described what happened during these moments, what led to them, and what followed afterward. I used four scales to measure the couple's life satisfaction, emotions, trust, and stress levels. These scales were the Satisfaction with Life Scale (SWLS), the Positive and Negative Affect Schedule (PANAS), the Trust Scale, and the Perceived Stress Scale (PSS).

**Results:** After therapy, the couple reported increased relationship satisfaction. They felt happier, more trusting, and less stressed. They also reported that humor helped them cope with their grief and heal their wounds. When the couple were laughing, they were paying attention each other. Sharing laughter not only brought them closer in the moment but also strengthened their bond over time. Humor also enhanced their mental agility boosted creativity in sessions. Playful interactions allowed them to thrive even during challenging times.

**Conclusion:** Humor plays a crucial role in unlocking creativity, reducing stress in tense situations, and helping us navigate life's ups and downs. It is not an innate ability but a skill that can be learned and strengthened through training and use. Humor widens our perspective, making us feel psychologically safe. Furthermore, laughter accelerates the development of trust and self-disclosure, ultimately strengthening relationships. As Victor Frankl wisely said, "Humor was another of the soul's weapons in the fight for self-preservation. It affords an aloofness and an ability to rise above any situation, even if only for a few seconds. The attempt to develop a sense of humor and to see things in a humorous light is some kind of a trick learned while mastering the art of living." In conclusion, humor is a secret weapon that can greatly impact relationships. Its ability to bring joy, foster closeness, and alleviate stress makes it an essential aspect of human connection. Through cultivating and utilizing humor, we can enhance our relationships and thrive in all aspects of life.

## Life-Paralyzing Obsessive-Compulsive Disorder: A Case with Developing Flexion Contracture

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**Presenting problem:** Obsessive-compulsive disorder (OCD) is a disease that can disrupt an individual's functionality in various ways. While severe cases of OCD can lead to physical complications, major complications from compulsive behaviors are rare. Secondary complications such as eczema, back pain, gum inflammation, ear infections, scurvy, anemia, malnutrition(1), vision loss(2), self-castration, rectal prolapse, hemorrhoidal bleeding, and tibia stress fractures(3) can arise as a result of OCD.

In this case, we present a patient who became bedridden due to pressure sores caused by prolonged sitting on the toilet and contractures in the knees without any additional medical diagnoses. To the best of our knowledge, this is the first reported case of OCD in this context.

**Case conceptualisation and intervention:** A 53-year-old married woman with a history of 32 years of contamination, uncertainty, religious and sexual obsessions and compulsions has had irregular psychiatric admissions and drug use over past 28 years. She has not taken psychotropic medication within the last 2 years and did not receive psychotherapy before. For the last 7 years, she has not allowed anyone into her home. Despite refusing to be taken to the hospital by her family previously, she sought medical advice after falling from a bed, and later hospitalised to our psychiatry clinic following her appointment in our outpatient clinic.

When uncertain thoughts arise, a thought emerges to clarify them. When she does not do so, she experiences restlessness. To get rid of these thoughts and find relief, she compulsively ruminates or seeks confirmation from her husband. When such thoughts arise in the bathroom, it takes 5-6 hours of her time. If they arise in any other place, they take less time. To avoid this distress, she restricts food and wants to ensure that her restroom activities are completed and clean to minimize bathroom visits. Due to wounds caused by prolonged bathroom sitting and contractures on her knees, she has been bedridden for the last 6 years.

A psychoeducation was given to the patient about OCD. Exposure/response prevention interventions targeting her obsessions were conducted during 43 days of hospitalisation. She was prescribed end discharged with fluoxetine and paliperidone.

We consulted with the orthopedics and related departments. Grade 1 pressure ulcers were observed in the sacral region, and a dried wound (1x2 cm) was observed in the posterior aspect of the right thigh. The patient had bilateral flexion contractures, and arthrosis was observed in both knees. Exercise and bilateral joint prosthesis were recommended.

**Outcome:** She was able to eat by herself in 20 minutes and gained 10 kg. Her bathing time, which had been avoided for 2 years, decreased to 20 minutes. The y-bocs score dropped from 40 to 12.

**Review and evaluation:** We aimed to draw attention to the extent of functional impairment that OCD can cause, and the unusual need for hospitalization that can arise. Additionally, in a severe case of OCD, it is evident that along with medication treatment, a therapeutic relationship and behavioral interventions significantly reduced the severity of OCD.

## The Flash Technique in Trauma Therapy: An Evaluation in the Context of Post-Disaster Intervention

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The Flash Technique represents a novel intervention in trauma therapy, distinguished by its less emotionally charged methodology relative to more conventional trauma processing methods (Manfield et al., 2017). This approach prompts clients to anchor their focus on a positive image during periods of slow eye movements or dual-focus tasks. On the therapist's instruction, clients are guided to blink, consciously refraining from revisiting the traumatic memory by maintaining focus on the positive imagery. Empirical studies have indicated the technique's efficacy in precipitously attenuating memory-related distress with a reduced emotional toll (Brouwers et al., 2021; Wong, 2019). In post-catastrophe settings, where immediate trauma amelioration is imperative and protracted therapy sessions may be impracticable, the Flash Technique emerges as a potential asset. However, despite its immediate applicability, methodological assessments of its performance in post-disaster scenarios remain sparse.

The present investigation sought to elucidate and quantify the efficacy of Flash Technique training for trauma-specialized therapists, particularly in the context of the earthquake on February 6, 2023, in Turkey. Therapists, previously educated in Eye Movement Desensitization and Reprocessing (EMDR), partook in an intensive half-day Flash training. This was supplemented by a subsequent group consultation, envisioned to bolster the training's potency. The cohort comprised therapists enlisted in the training initiative and those subsequently trained by the primary team. All participants had prior EMDR certification and were registered in the Trauma Institute & Child Trauma Institute (TICTI) and the Turkish training team's Flash instruction programs.

Post-training, therapists were presented volunteer service, employing the Flash technique on earthquake survivors, concurrently participating in the research. The commitments included meticulous training involvement, consistent Flash usage documentation, and a post-training critique. Preliminary demographic metrics were collated pre-training. Subsequent to their sessions, therapists cataloged nuanced details of Flash application – delineating client categories (regular, survivor, first responder), age demographics, and initiating and culminating SUDS (Subjective Units of Distress Scale) evaluations – within a fortified online portal throughout the eight-week study duration. An evaluative survey was administered two months post-training, probing their instructional experiences and consequential outcomes.

Currently, this investigation is constituted of two waves of data collection. Preliminary findings, though not exhaustive, from 32 sessions in the inaugural wave and 18 from the subsequent wave, will be showcased. This pioneering research endeavors to augment the assimilation of the Flash Technique into the trauma therapy lexicon, adapting its instructional methodologies for therapists across diverse operational environments, thereby optimizing its reach and efficacy.

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## How to Enhance Functioning with ACT in Patients with Bipolar Disorder?

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**Presenting Problem:** Bipolar disorder results in impairment of social and occupational functioning during episodes of mania and depression. Furthermore, contemporary research links periods of euthymia to notable declines in functioning and a diminished quality of life (1). It's evident that pharmacotherapy alone falls short in adequately treating bipolar disorder. Beyond managing mood episodes, there exists a necessity to improve individuals' functionality and quality of life, encompassing even the euthymic phases (2). This poster presents the process and results of a 6-session Acceptance and Commitment Therapy (ACT) group therapy of three patients with BD for enhancing functioning.

**Case Conceptualisation and Intervention:** We included 6 patients with Bipolar disorder in euthymic period who were seeking treatment in Center for Mood Disorders of a mental health hospital in May 2022. Participants attended a 6-session ACT group therapy program consisting of weekly 90-minute sessions. Therapy sessions are arranged as following: Session1: explaining the rationale of group therapy, mindfulness exercise, presenting mindfulness; Session 2: Mindfulness exercise, presentation of values and identification of value areas, homework; Session 3: Mindfulness exercise, defusion practice through thought labeling, homework; Session 4: Mindfulness exercise, acceptance practice by using physicalization techniques; Session 5: Mindfulness exercise, working with self-labels, homework; Session 6: Checking therapy goals, overview of the therapy objectives, feedback. Participants were evaluated before and after the 6 session group therapy program by using Bipolar Disorder Functioning Questionnaire (BDFQ) and satisfaction questionnaire prepared by researchers in the study.

**Outcome:** The protocol was applied to 6 patients with a diagnosis of bipolar disorder in the euthymic period who applied to Bakırköy Mental and Neurological Diseases Hospital. Two of three patients didn't continue the study after two sessions, due to transportation problems and city change. One patient didn't give feedback about his quitting from study. 3 patients completed the protocol. 1st patient's BDFQ score was 91 at the beginning and 109 after the intervention. For the 2nd patient, it was 90 at the beginning and 92 after the intervention. Patient 3's score was 112 before the intervention and 112 after the intervention. Beside these results, we've seen that participants reached their therapy goals to a large extent. The protocol was found feasible and acceptable by the patients who completed the group process.

**Review and Evaluation:** Our results suggest that ACT has the potential to be a feasible treatment for BD patients. Additional research is required to assess the effectiveness of ACT group therapy for bipolar disorder.

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## Body Dissatisfaction, Cognitive Distraction and Sexual Satisfaction in LGB+ People: A Mediation Analysis

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**Introduction:** Body dissatisfaction, i.e., negative perceptions, behaviors, and feelings towards one's body, is a well-established transdiagnostic risk factor for high levels of emotional problems and low levels of well-being indicators, including sexual health. Cognitive models of sexual response suggest that body dissatisfaction can lead to cognitive distractions related to body appearance during sexual activity, potentially hindering sexual satisfaction. However, this relationship has been limited to heterosexual samples. The present study aims to investigate the relationship between body dissatisfaction, cognitive distraction related to body appearance during sexual activity, and sexual satisfaction in LGB+ people.

**Methods:** This cross-sectional study comprised 165 cisgender LGB+ participants (n = 67 women, 40.6%; n = 98 men, 59.4%). Participants were recruited online. Self-report questionnaires were used: the Global Body Dissatisfaction Scale, the Body Appearance Cognitive Distraction Scale and a Single-item Measure of Sexual Satisfaction.

**Results:** In the female sample, the relationship between body dissatisfaction was significant and positively correlated with cognitive distraction based on body appearance during sexual activity ( $r = .56$ ;  $p < .001$ ). The correlations between body dissatisfaction and sexual satisfaction ( $r = .09$ ;  $p = .487$ ) and between cognitive distraction based on body appearance during sexual activity and sexual satisfaction ( $r = .11$ ;  $p = .376$ ) were positive but nonsignificant. In the male sample, body dissatisfaction was significant and positively correlated with cognitive distraction based on body appearance during sexual activity ( $r = .57$ ;  $p < .001$ ). Body dissatisfaction was significant and negatively correlated with sexual satisfaction ( $r = -.43$ ;  $p < .001$ ), and cognitive distraction based on body appearance during sexual activity was significant and negatively correlated with sexual satisfaction ( $r = -.43$ ;  $p < .001$ ). Furthermore, cognitive distraction based on body appearance during sexual activity mediated the relationship between body dissatisfaction and sexual satisfaction in the male sample.

**Discussion:** Although there are similarities between genders regarding body dissatisfaction and cognitive distraction, there is a noticeable difference in their impact on sexual satisfaction. LGB+ women appear less affected by body dissatisfaction, possibly due to not feeling the need to correspond to societal expectations, which can align with positive sexual outcomes shown in the literature. On the other hand, LGB+ men who feel high body dissatisfaction levels are more likely to experience lower sexual satisfaction levels. This could be attributed to the emphasis on physical appearance within the gay male subculture. It is also possible that striving for a perfect body could be a response to the discrimination and perceived inferiority that gay men face daily. It is crucial for healthcare professionals to consider cultural ideals and their impact when addressing issues related to body image and sexual health in LGB+ individuals. These results support the validity of the cognitive models, reinforcing their socio-cognitive nature.



## Role-Playing Game Incorporating Elements of CBT

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**Introduction:** A role-playing game is a type of game where players assume roles of different fictional characters and engage in collaborative improv storytelling. Role-playing games have shown potential as a complementary tool in psychotherapies and mainly cognitive behavioral therapy (CBT) (Arenas et al., 2022). It may be possible to leverage the immersive nature of role-playing games, especially for children and adolescents, in order to enhance and promote cognitive restructuring, improve social skills, and facilitate self-regulation. This study aims to determine any potential clinic efficacy of using role-playing games incorporating elements of CBT in the treatment of attention deficit hyperactivity disorder.

**Method:** Sample: Participants are selected from diverse backgrounds, including individuals in primary school and middle school, of ages between 9 and 14. All participants have been diagnosed with ADHD and previously underwent some form of treatment. All participants are volunteers, and each are introduced to the overall concept of role-playing for mental health shortly beforehand.

**Intervention:** Role-playing game sessions will run involving carefully crafted scenarios that mimic real-life challenges. All sessions will be run by a game moderator on video call. Each session will include two 10-minute periods: one in the beginning to share expectations and recap the events of the previous session, and another at the end to share one favorite and one least-favorite moment along with any learnings for the fictional character or the patient themselves. The moderator will be available for communication between game sessions for further discussion and planning. Sessions will be run weekly, with a total number of eight sessions targeted.

The particular game model to be used in the sessions was developed under the mentorship of accredited cognitive behavioral therapist, using the stop and think steps adapted from Kendall's Cognitive-Behavioral Therapy for Impulsive Children (Kendall, P. C., & Braswell, L., 1993). The core game mechanic focuses on replaying scenarios to find the optimal solution. Participants are encouraged with in-game rewards to find better solutions even after solving the problem given.

**Measures:** The Strengths and Difficulties Questionnaire (Goodman, 1997) will be used. A copy of the questionnaire will be filled by the participant and their parent. The form will be filled before the first session, after the fourth session, and after the eighth session. Additionally, the questionnaire by A. Turgay will be filled before the first session and after the eighth session (Turgay, 1995).

**Expected Results:** At the end of the study, it is expected that the participants will see an increase in adaptive thinking, organizing, and planning skills, and therefore experience fewer challenges in school. Participants are also expected to see increased orientation toward self-control.

**Conclusion:** While role-playing games may offer unique benefits, their implementation should be guided by professionals to ensure proper and effective usage. Further research should be done looking into the long-term effects of role-playing-assisted therapy. Optimal frequency and duration of the role-playing sessions, customization of role-playing scenarios to individual likings and therapeutic needs, and potential challenges with integrating this approach into standard CBT practices are also areas requiring further research.

## Suicide Attempt with Hanging After the Earthquake: Case Report

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**Introduction:** Earthquakes are natural disasters that can have a profound impact on people's physical and mental health. In addition to the physical damage that they cause, earthquakes can lead to post-traumatic stress disorder (PTSD), anxiety, and depression. These psychological effects can be more severe in people who have experienced previous trauma or who have lost loved ones in the earthquake.

**Case Presentation:** A 56-year-old woman with no known comorbidities experienced an earthquake in Malatya. Thirty days after the earthquake, she and her family moved to a new city and rented a new house. On the 50th day after the earthquake, her children attempted suicide by hanging themselves in their new home. The patient was taken to the intensive care unit and later consulted to a psychiatrist.

The patient had not previously sought mental health treatment. She did not fall under the rubble of the earthquake, but her house was severely damaged. None of her first-degree relatives died in the earthquake. However, her children had been complaining of introversion, unhappiness, anhedonia, and constant crying in the days following the earthquake.

The patient's mental state examination was unremarkable. She did not have any mood, affect, manic, or psychotic symptoms. She stated that she did not remember the event.

The patient was diagnosed with major depressive disorder and started on sertraline 50 mg/day and mirtazapine 15 mg/day. She is currently being followed up in the psychiatry outpatient clinic.

**Discussion:** Research suggests that 8-11% of earthquake victims have suicidal thoughts after the earthquake due to increased physical or emotional stress, death of relatives, financial losses, and destruction of property. The factors most relevant to increased suicidal behavior after natural disasters are current major depression, PTSD, and previous psychological health problems. Female gender, separation from family, psychological abuse, and neglect have also been associated with the risk of suicide.

Psychological first aid is a type of intervention that can be provided to people who have been affected by a disaster. It helps to identify and address the immediate psychological needs of survivors, such as providing emotional support, information, and practical assistance. Psychological first aid can help to reduce the risk of developing post-traumatic stress disorder and other psychological problems.

**Conclusion:** This case report highlights the importance of psychological first aid after earthquakes. It is important to identify and provide support to people who are at risk of suicide, such as those who have experienced previous trauma or who have lost loved ones in the disaster.