



**10<sup>Th</sup> CONFERENCE**  
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## SCIENTIFIC ORAL PRESENTATION

### CONSENSUS SURVEY OF INTERNATIONAL EXPERTS REGARDING MENTAL HEALTH PHYSIOTHERAPY

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#### ABSTRACT

**Background:** While physiotherapy in mental health has been a defined area of practice in some countries for several decades, it currently lacks an internationally developed and universally accepted definition, as well as educational guidelines. **Purpose:** (i) To develop a consensus definition of mental health physiotherapy. (ii) To understand current educational practices and develop consistent recommendations for training physiotherapists in mental health. **Methods:** A mixed-methods survey study was conducted with international experts from member countries of the International Organization of Physical Therapy in Mental Health (IOPTMH). Each IOPTMH country was invited to conduct a roundtable discussion to complete the survey. **Instruments:** The survey was developed through a workshop involving IOPTMH committee members. **Analysis:** The survey responses were analyzed using descriptive statistics, content analysis, and qualitative thematic analysis. The Consensual Qualitative Research method was used to ensure the findings accurately reflected the data. **Results:** Surveys were completed by 22 of the 25 IOPTMH Member Countries, with 137 physiotherapists specializing in mental health participating. Qualitative analysis revealed that

physiotherapy in mental health is practiced in a variety of settings, from primary care to specialist mental health services. There was a consensus that a biopsychosocial approach underpins mental health physiotherapy practice, and that all physiotherapists require foundational training in mental health. Specialist training should involve managing complex cases and cover mental health informed physiotherapy approaches. **Conclusions and Implications:** The consensus definition of mental health physiotherapy and education recommendations provide the foundation for global guidelines for training physiotherapists in mental health.



## PHYSIOTHERAPY FOR WELLBEING: KEY STRATEGIES TO PROMOTE MENTAL HEALTH IN THE SCHOOL EDUCATIONAL COMMUNITY

**Andrea Carolina Amaya Córdoba**, Master in neurorehabilitation, Professor at Iberoamericana University. **Deissy Johana Correa Estupinan**

### ABSTRACT

The COVID-19 pandemic has profoundly impacted society, particularly in the realm of mental health, especially among school-aged children. This review explores strategies to promote mental health and prevent mental disorders within the school educational community, with a focus on the role of physiotherapy. Through a qualitative descriptive review, literature from 2019 to 2024 was examined, highlighting the importance of physical exercise as a recurring and effective intervention for improving mental health in children and adolescents. Additionally, the perspective of trauma in mental health services delivery for youth is emphasized, urging the consideration of childhood traumatic experiences in educational interventions. The review underscores the positive impact of school-based physical activity interventions on mental health, indicating the pivotal role educational institutions play in fostering healthy lifestyles. While promoting physical exercise emerges as a crucial strategy, addressing trauma and tailoring interventions to individual student needs are also essential. The manuscript concludes with recommendations for future research, emphasizing the need for interdisciplinary collaboration, culturally sensitive interventions, and ongoing evaluation to meet the evolving needs of students and educational communities. This

document contributes to understanding the vital role of physiotherapy in promoting mental health and well-being in school settings during the COVID-19 pandemic and beyond.



## THE EFFECT OF BASIC BODY AWARENESS THERAPY MEASURED BY HEART RATE VARIABILITY AND INTEROCEPTION IN PATIENTS WITH PSYCHIATRIC DISORDERS (BODYMIND) - A FEASIBILITY STUDY

**Mark Højbo Fajardo-Hansen**, Former Junior researcher at the WHO Collaboration Center Copenhagen-Malmoe for Health Promotion,,Strategic Healthcare Developer, Norrtälje, Region of Stockholm, Master student at the University of Gothenburg

### ABSTRACT

**Background:** An objective assessment tool based on physiological data is warranted to measure treatment outcome of physiotherapy in mental health. Heart rate variability (HRV) has within the past decades gained traction as a non-invasive measure of autonomic nervous system functioning.

**Purpose:** This presentation will report on an ongoing study aiming at testing a protocol to evaluate HRV as a potential measure of effect of Basic Body Awareness Therapy (BBAT) in group setting. The hypothesis is that an increase in interoception and subsequently body awareness will improve HRV.

**Methods:** The study aims at including 61 patients recruited from the Psychiatric Center Copenhagen and the Center of Veterans in Denmark. The study utilizes a with-in subjects before-after design in which the patients act as their own controls. The data collected will be interbeat intervals (IBI) of the heart rate, the questionnaire Multidimensional Assessment of Interoceptive Awareness (MAIA) and Short Form 36 (SF-36).

**Analysis:** The IBI data will be analysed to determine seven aspects of vagally mediated HRV.

**Results:** The results may display effect of BBAT on the described measures on group level, and differences or similarities among diagnoses at the sub-group level, and correlations between measures.

**Conclusions and implication:** The study will indicate whether or not the approach laid out in this study will be relevant to investigate at larger scale. Future work may consist

of multi-center studies of the effect of BBAT on HRV, imaging of temporal and structural changes of brain functioning, and evaluation of combined versus single treatment modality.



## DANISH TRANSLATION AND CULTURAL ADAPTATION OF THE BODY AWARENESS SCALE MOVEMENT QUALITY AND EXPERIENCE (BAS MQ-E)

**Jonna Jensen**, Associate Professor Copenhagen University College

### ABSTRACT

The Swedish assessment Body Awareness Scale Movement Quality and Experience (BAS MQ-E) has been translated into Danish. Before backtranslation and approval by the creator of BAS MQ-E., it is important that the Danish version is applied and understood the same way.

This project has two parts. One that aims to investigate physiotherapist' (PT) understanding of BAS MQ-E manual for items and how it is used in clinical practice. Two to investigate how patients understand the experience part.

A phenomenological research design using cognitive interview. The PT's were interviewed in focus groups and the patients were interviewed individual. Both using cognitive interviewing.

Three main themes emerged from the data by the PT: Educated in BBAT, A score with a distinct reference point, applicability in practice. The patients expressed difficulties when explaining their symptoms without combining the physical and mental aspects, while at the same time expressing thoughts about wanting to separate these aspects. Furthermore, the informants expressed mixed thoughts about specific words in the response options, which led to difficulties in choosing one answer.

Conclusion: The patients were able to use their own vocabulary when expressing their views on the questions in BAS-E. However, there were numerous response options as well as questions where the informants needed a specified explanation of how to

answer. The Danish physiotherapist had generally an equivalent understanding of the BAS MQ-E. In collaboration with the creator of BAS MQ-E Amanda Lundvik Gyllensten few words in both part of the test was changed.



## PSYCHOMETRIC ANALYSIS OF THE MULTIDIMENSIONAL ASSESSMENT OF INTEROCEPTIVE AWARENESS (MAIA) AND MULTIDIMENSIONAL ASSESSMENT OF INTEROCEPTIVE AWARENESS VERSION 2 (MAIA-2): A SYSTEMATIC REVIEW

**Manuel Trinidad-Fernández**, Assistant Professor in University of Lleida (Spain), Researcher at Clinimetria Group from The Biomedical Research Institute of Malaga (IBIMA), and PhD by the University of Malaga (Spain) and the University of Brussels (Belgium)

### ABSTRACT

Due to the clinical significance of the Multidimensional Assessment of Interoceptive Awareness (MAIA) scale and its Version 2 (MAIA-2), along with the numerous versions, translations, and applications it has garnered, a comprehensive review of its psychometric properties becomes necessary. A systematic search was conducted across electronic databases such as Pubmed, Embase, and PsycINFO to identify studies using Patient-Reported Outcome Measures (PROMs) such as MAIA or MAIA-2 to assess body awareness in adults. The search included translations in various languages. Two reviewers independently assessed eligibility based on titles and abstracts in a blinded manner, focusing on outcomes related to the MAIA scale. The COSMIN methodology was followed for systematic reviews of PROMs, involving a Risk of Bias analysis and application of quality criteria for measurement properties. Psychometric results collected according to COSMIN guidelines were analyzed. Data on questionnaire administration, items, dimensions, as well as study details such as participant numbers and types, were extracted. A total of 21 studies were included, analyzing 12 versions of MAIA and 7 of MAIA-2. These studies examined structural validity (SV), internal consistency (IC), reliability (REL), construct validity (CV), and responsiveness. MAIA-2 showed more reliable results in Risk of Bias assessment

compared to the original MAIA. Psychometrically, MAIA-2 demonstrated better IC and CV than MAIA, with similar results in SV and REL. MAIA-2 displayed superior psychometric properties compared to its predecessor. Future translations or versions should prioritize improving SV and REL.



## TARGETED PSYCHOMOTOR PHYSIOTHERAPY IN TREATMENT OF ACUTE MANIA - A PILOT STUDY

**Ellen Raugstand**, psychomotor physiotherapist, **Oda Bentzrød**, psychomotor physiotherapist MS, **Kristine Myksvoll**, specialist in psychomotor physiotherapy, **Hans Martin Nussle**, special adviser MS, **Nikolaj Kunøe**, psychologist PhD, **Anne-Marte Rustad Indregard**, nurse PhD

### ABSTRACT

**Background:** In treatment of acute mania, measures are sought to regulate overactive and uncritical behavior. Manic behavior is often met with restrictions and coercive measures that increase the patient's frustration and agitation. Based on previous studies that physiotherapy can reduce stress activation during early admission, we wanted to evaluate the feasibility and patients' experience of targeted psychomotor physiotherapy in patients admitted with acute mania. **Material and method:** Quantitative pilot-study with tests pre- and post targeted psychomotor physiotherapy for patients with acute mania admitted to Lovisenberg Diaconal Hospital (15/06/2021 to 15/06/2022). The patients' experiences of the physiotherapy treatment on their stress activation was scored on a visual analogue scale (VAS) immediately before and after each physiotherapy session. **Results:** During the study, 84 patients were admitted with manic symptoms. 73% received at least one physiotherapy session. 22 patients consented to research participation and completed 94 physiotherapy sessions with recording of VAS scores. Results support a decreased feeling of tension, restlessness and irritability/aggression in the patients after targeted psychomotor physiotherapy. Nine percent of sessions resulted in the patient sleeping. **Conclusion and implications:** Targeted psychomotor physiotherapy in acute mania is feasible and reduce stress activation during admission. The approach should be explored further with a control group and objective measures for its potential to reduce the risk of coercion during acute mania.



## Strengthening psychological well-being through strategies based on body awareness and corporeality in adolescents undergoing rehabilitation for psychoactive substance use

**Mayra Valeria Escobar**, Physiotherapy Mariana University - Specialist in Neurorehabilitation from the Autonomous University of Manizales - Candidate for Master's Degree in Promotion and Prevention in Mental Health' from the University of Nariño

### ABSTRACT

The use of psychoactive substances in adolescents is highly prevalent in Colombia, and in Nariño it is the main cause of morbidity. This scenario has generated multiple efforts in rehabilitation processes, mostly from intramural care from the biomedical approach. Thus, drug use involves not only biological changes, but also psychological and social changes, which imply the loss of being and being well. Hence, it is not only necessary to understand the altered psychological dimensions, but also how these are related to the body, understanding that the human being is an embodied being and all the mentioned experiences have repercussions on the movement. This indicates an incorrect understanding of the body-movement-mind-environment relationship and how its alteration affects well-being, suggesting the development of alternative interventions in rehabilitation processes to maintain and improve the psychological well-being of the adolescent. **OBJECTIVE:** To determine the elements that should integrate a strategy for the strengthening of psychological well-being oriented to the development of body awareness and corporeality in adolescents undergoing rehabilitation for psychoactive substance use. **METHODOLOGY:** Cross-sectional descriptive study with quantitative approach in which a diagnosis of the level of body awareness and corporeality in adolescents will be made to subsequently propose the guidelines of a strategy and its subsequent validation. **RESULTS:** This study aims to make a diagnosis and formulate a strategy to strengthen the mental health of adolescents in rehabilitation process with a view from the psychological well-being and human body movement from body awareness and corporeality.





## ANXIETY IS RELATED TO CELL PHONE DEPENDENCE: CROSS-SECTIONAL OBSERVATIONAL STUDY

**Claudia Fernanda Giraldo Jiménez;** Physiotherapist, Master of Science, PhD Student **Alejandro Botero Carvajal;** Psychologist, Master of Science, PhD Student

### ABSTRACT

**Background:** Dependence on cell phones, the internet, and smart devices produces adverse consequences for the musculoskeletal system and mental health. The study aims to describe the relationship between cell phone dependence, anxiety, and depression in health students. **Methods:** An observational, cross-sectional, analytical, cross-sectional study was conducted on university students of the Faculty of Health from the careers of physiotherapy, nursing, dentistry, surgical instrumentation, speech therapy, psychology, respiratory therapy, and medicine, with a universe (N) of 4,194 students. The sample size calculation indicated 352 students (95% CI, error 5%). **Instruments:** The State-Trait Anxiety Inventory Test (STAI), the Beck Scale for depression scores, and The mobile dependency test (MDT) were used. Data were double-entered and randomly checked for possible transcription errors. **Analysis:** The jamovi software was used for statistical analysis. Normality assumptions were checked to evaluate the correlation between anxiety, depression, and cell phone dependence. **Results:** The three instruments presented excellent Cronbach's  $\alpha$  validity coefficients for anxiety (0.917), depression (0.897), and cell phone dependence (0.868). A statistically significant correlation was found between anxiety and cell phone dependence ( $p = 0.023$ ) Spearman (0.125). **Conclusions:** We contribute to the scientific knowledge that anxiety and not depression are a response among health students who have cell phone dependence. Through physical therapy, we can contribute to the management of anxiety.



## PHYSIOTHERAPY AND MENTAL HEALTH IN THE WORK ENVIRONMENT

**Karen Jineth Cardenas Aguayo**, Physiotherapy student

### ABSTRACT

**Introduction:** It is to consider that mental disorders, produce one of the main causes of work absenteeism worldwide; it is estimated that absenteeism due to illness or accidents represents three quarters of total absenteeism, due to diseases derived from work, workload, routine tasks, work under pressure and work stress, it is evident that these aspects are considered important within the psychosocial risk factors, emphasizing that exposure to this type of factors in the workplace increases the risk of symptoms of Musculoskeletal Disorders (Venegas, 2017). **Objective:** The present research aims to: implementation of mental health in the workplace, reported by scientific evidence through an integrative review. **Methodology:** This study was conducted through a qualitative approach, of integrative review where, the available scientific evidence is available, without restriction in the types of study and of the last 5 years where the physiotherapeutic techniques implemented in the working population with psychosocial risk factor of the national and international territory are evidenced. In **conclusion:** The physiotherapeutic techniques identified in the present research allowed to obtain types of interventions applied in the working population, which allow to reduce the affectations in mental health such as: depression, anxiety, emotional stability.



## EFFECTIVENESS OF BODY AWARENESS INTERVENTIONS IN PHYSIOTHERAPY FOR CHRONIC HEALTH CONDITIONS. A SCOPING REVIEW

**Cristina Bravo, Victor Joglar Bernabé, Lady Valentina Boyacá, Daniela Roldan Moreno, Manuel Trinidad-Fernández;** Lecturer Professors Department of Nursing and Physiotherapy, University of Lleida, Spain

### ABSTRACT

In the current post-pandemic landscape marked by escalating mental health issues and chronic conditions, physiotherapists wield powerful tools in clinical practice to address these challenges. Particularly in patients with chronic conditions, physiotherapists can assist in emotional management, body awareness, alleviating medication effects, promoting mental and physical well-being, among other aspects. The aim of physiotherapy in mental health is to optimize the physical and mental aspects through the promotion of functional movement, which includes therapies like movement awareness and body awareness. These types of interventions are under-researched, despite their effectiveness being evidenced by their recent widespread implementation. This study aimed to evaluate the impact of physiotherapists' body awareness tools, including movement intervention, relaxation, breathing exercises, and basic body awareness therapy, on patients with chronic health conditions. A comprehensive search of relevant databases identified 11 randomized controlled trials (RCTs) out of 2053 records, all focusing on chronic pain as the prevailing health condition. Various tools such as Basic Body Awareness Therapy, relaxation training, awareness interventions, and others were utilized in physiotherapy programs. Results from the selected studies demonstrated improvements in pain reduction, central nervous system-related symptoms, motor function, postural control, psychological distress, and self-perceived health status. These findings underscore the potential of physiotherapy interventions based on body awareness tools to positively impact various chronic conditions beyond pain management. Further research is warranted to delve into the broader implications of physiotherapy in addressing a spectrum of chronic health conditions, thus expanding the role of physiotherapists in multidisciplinary healthcare settings.



## CO-DESIGNING PRIORITIES FOR PHYSICAL ACTIVITY PROMOTION AMONG REFUGEES AND ASYLUM SEEKERS

Grace McKeon, Postdoctoral research fellow; Simon Rosenbaum Scientia Associate Professor

### ABSTRACT

**BACKGROUND** People from refugee and asylum seeker backgrounds resettling in Australia often experience intersecting risks for poor mental and physical health. Physical activity can improve mental health outcomes, however there are limited programs tailored for this population. Therefore, understanding how exercise professionals can support refugees and asylum seekers to engage in mental health informed physical activity is crucial. **PURPOSE** This study aims to describe how the experience-based co-design (EBCD) process was used to identify priorities for a physical activity promotion for refugees and asylum seekers. **METHODS** Using the EBCD framework we conducted a series of qualitative interviews and focus groups with service users (refugees and asylum seekers living in the community) and service providers (e.g., mental health and social service professionals), at a community Centre in Sydney, Australia. The study consisted of five stages, 1) set up, 2) gathering service provider experiences, 3) gathering service user experiences, 4) co-design workshops, 5) review of priorities. **INSTRUMENTS** The EBCD framework was used which draws on participatory action research, user-centered design, learning theory, and narrative-based approaches to explore service user and service provider experiences with physical activity and identify priority areas for exercise promotion. **ANALYSIS** Braun and Clarkes steps of reflexive thematic analysis were used to analyse the individual interviews from stages 2 and 3. Subsequently, a trigger film was produced which showed the key themes generated and experience shaping moments through excerpts of the recorded interviews in a sequenced narrative. In the workshops the film with subtitles was played for participants before priorities and action points were determined by the group. **RESULTS** Sixteen participants, including eight service users and eight service providers engaged in the EBCD process over 12-months. The interviews revealed common themes or ‘touchpoints’ including barriers and enablers

to physical activity participation such as access, safety and competing stressors. Subsequent co-design focus groups resulted in the establishment of five fundamental priorities and actionable strategies; ensuring cultural and psychological safety, promoting accessibility, facilitating support to access basic needs including food security and housing, enhancing physical activity literacy and fostering social connection. **CONCLUSIONS AND IMPLICATION** Using EBCD methodology, this study used the insights and lived experiences of both service users and providers to co-design a physical activity service for refugees and asylum seekers. The five priorities should be adopted by exercise professionals to ensure programs are safe, supportive, social and accessible. The results of the implementation and evaluation of the program are ongoing.



## PHYSICAL EXERCISE FOR PEOPLE WITH PSYCHOTIC DISORDERS – STUDY PROTOCOL FOR THE TREPP STUDY

**Trygve Bruun Endal**, PhD candidate, physiotherapist; **Jørn Heggelund**, Associate professor, exercise physiologist; **Vivian Woodfin**, PhD, psychologist; **Lina Thorsnes Egeland**, psychology specialist; **Mariann Ozols**, medical doctor; **Trine Halhjem**, user representative; **Eva Andersson**, associate professor, medical doctor, **Kristine Sirevåg** head of research, psychologist

### ABSTRACT

**Background.** People with psychotic disorders have reduced life expectancy, increased risk of developing cardiovascular disease and can benefit from physical exercise. The nature of psychotic symptoms, adverse pharmacological effects and social stigma, complicate the management of psychotic conditions and introduce barriers to engaging in physical exercise. Thus, the feasibility of implementing high-intensity training for those with psychotic disorders might differ from people with general mental health disorders and might necessitate a tailored approach. **Purpose.** Primarily through attendance, adherence and dropout rates to investigate the feasibility of a high-intensity combined strength and endurance training program among two groups; outpatients with psychotic disorders and outpatients with general mental disorders,

excluding psychotic disorders. Secondary, to investigate experiences and perceptions of participation. **Methods.** Participants (n=20 in each group) will be recruited through convenient sampling for participation in a 16 weeks high-intensity combined endurance and strength training program. Participants will be tested on physical and psychological measures prior to and after the program. 8 participants from each group will undergo semi-structured interviews after participation. **Instruments.** Psychotic symptoms, depression, QoL and anxiety are measured with the PANSS interview, CDSS, RAND-12 and GAD-7, respectively. The Ekblom-Bak test and the Myworkout GO application will indirectly assess maximal oxygen uptake. Maximal strength will be measured as 1 repetition maximum in squat and bench-press. **Results.** Results will be presented upon completed trial. **Conclusions and implication.** The study seeks to uncover new insight into specific needs for facilitating physical exercise and may contribute to improve treatment for people with mental disorders.



## CORRELATION BETWEEN PERCEIVED STRESS AND SOMATIC SYMPTOMS IN HEALTH PERSONNEL

**Natacha Ximena Osses Alvarado** Kinesiologist Professor University of the Andes; **María Dayana Pérez Ledesma**, Physiotherapist; **Norma Elisa Gálvez** Physiotherapist, Mexican Association of Physiotherapy in Mental Health

### ABSTRACT

This study, which aims to determine the relationship between perceived stress and somatic symptoms in health personnel at a psychiatric hospital in Santiago, Chile, was conducted with the health personnel's voluntary participation and informed consent. The study was approved by the Management of the El Peral Psychiatric Hospital (HPEP) of the commune of Puente Alto in Santiago de Chile. It was part of the academic requirements of the International Diploma of Physiotherapy in Mental Health of the Autonomous University of Mexico (UNAM) and the Mexican Association of Physiotherapy in Mental Health (AMEFISAM). The measurement of both study variables

was carried out through the Perceived Stress Scale-14 (PSS-14) and the Patient Health Questionnaire-15 (PHQ-15) in a sample of 67 participants who work in the direct care of patients in the HPEP.



## INFLUENCE OF THE PANDEMIC ON THE MENTAL HEALTH OF UNIVERSITY STUDENTS IN THE HEALTH AREA

**Jhosman Alfonso Buitrago Buitrago**, Physiotherapist, Master in Neurorehabilitation, Master in Epidemiology and Public Health, Doctor in Education

### ABSTRACT

The pandemic caused an unprecedented crisis in all fields; at the educational level, the massive closure of all institutions generated sudden changes in the habits of students (CEPAL, 2020). UNICEF reports that young people currently have a higher percentage of anxiety and depression (UNICEF, 2020). Given the above, it was proposed to analyze the influence of the pandemic on the mental health of students in the health area. Methodology: Explanatory sequential mixed study (DEXPLIS); Two instruments (quantitative and qualitative) were applied to 311 students. Results: In the quantitative phase, 70% were female (n=218), the average age is 23.84±3.07 years, the majority belonged to the Physiotherapy program (48%). In turn, it was found that 60% of the students (n=185) had symptoms of depression and anxiety, and 46% reported stress (144 cases). Regarding the qualitative phase, it was carried out with a sample of 10 students from the different programs, identifying as the main emerging categories the modification of habits and lifestyles "my healthy styles changed... I became sedentary"; academic performance "there was low performance... we had to adapt again"; and the state of mental health "...with the pandemic I lost a close family member and I couldn't say goodbye." Conclusions: The pandemic has left a deep mark on mental health due to drastic changes in daily habits and routines, which resulted in a notable increase in levels of stress, anxiety and depression.



## CLINICAL ORAL PRESENTATION

### BEHAVIOURAL PROBLEMS IN CHILDREN WITH AUTISM SPECTRUM DISORDER

**Ana Ferlinc**, Assistant professor University of Ljubljana

#### ABSTRACT

Children with autism spectrum disorders (ASD) often exhibit behavioral issues such as aggression, self-injury, elopement and tantrums. Addressing these challenges requires a comprehensive approach that includes various therapies such as behavioral, communication, education, family therapy and sometimes medication. Medication may not target the core symptoms of ASD, but it can help manage associated problems such as irritability, hyperactivity, anxiety and depression. Treatment for behavioral problems in children with ASD is multi-faceted and tailored to individual needs, using a range of therapeutic options to provide comprehensive support.

In addition, the text presents a research study conducted in Slovenia looking at behavioral problems in individuals with autism. The study involved 35 special education teachers and 35 students who are trained to work with children with special needs. Participants completed a survey examining the prevalence of significant behavior problems in individuals with autism and the strategies used to address these issues. The aim of the study was to gain insights into how special education professionals and trainees deal with behavioral problems in individuals with autism in practice.





## PAIN MANAGEMENT. MIND-BODY INTERVENTIONS

**Felipe Figueroa Mellado**, Chilean Scientific Society of Kinesiology in Mental Health - Adolfo Ibañez University

### ABSTRACT

**Introduction:** Chronic pain is a common health condition, which causes a high burden of disease worldwide, affecting people with a decrease in their quality of life, functionality, activities of daily living and their participation in the environment. Affecting between 20% and 40% of the world's population. An important reason to investigate new alternatives for its management, where positive psychology and mindfulness showed to be a promising alternative, since its methods increase well-being and reduce symptoms of depression and pain. **Objective:** To know what the scientific literature says about the relationship between positive psychology and mindfulness for pain management. **Material and methods:** CAT methodology. The search was carried out in the scientific databases Scopus, APA PsycNet (PsycINFO) and Web Of Science (WOS). With the following inclusion criteria: publications from the year 2000 onwards for meta-analyses and systematic reviews and from the year 2016 for the defined constructs. Focusing on those that contain empirical measurements that correlate positive psychology, mindfulness and chronic pain. **Results and discussion** The results show that interventions in positive psychology and mindfulness have favorable effects on depression and pain; however, more studies are required to provide greater support to this thriving field of research. **Conclusion** Given the preliminary evidence, positive psychology and mindfulness are established as true alternatives in the treatment of chronic pain, as they produce improvements in pain, disability and the user's quality of life.



## PSYCHIATRIC PHYSIOTHERAPY - PHENOMENOLOGY AND THE WORLD OF LIFE

**Tanja Johnsen**, physiotherapist, certified clinician in psychiatric and psychosomatic physiotherapy, Certified Basic Body Awareness Therapy (BBAT) Teacher; **Jonna Jensen** Physiotherapist, specialist in psychiatric and psychosomatic physiotherapy, Certified Basic Body Awareness Therapy (BBAT) Teacher. Professor at the University of Copenhagen

### ABSTRACT

The presentation is about psychiatric physiotherapy, including descriptions of the problems and life situations that patients may find themselves in when they are undergoing physiotherapy treatment in psychiatry. It also provides concise explanations of the various examination and treatment approaches employed in this context. The presentation is based on a humanistic phenomenological-hermeneutic framework of understanding, where several selected concepts are presented in relation to psychiatric physiotherapy, namely the concept of the life world, body-based identity, autonomy, the intersubjective encounter, and the importance of breathing.

In addition, the presentation describes the role of the physiotherapist, where a reflective, open, and non-judgmental phenomenological attitude is used in conjunction with a hermeneutic, interpretive approach guiding physiotherapeutic practice. Central to this approach is prioritizing the patient's first-person experiences and perspectives which inform and shape the organization of the physiotherapeutic effort.

Furthermore, the chapter focuses on the relationship between the physiotherapist and the person undergoing psychiatric treatment. Here, descriptions and examples from practice are supported by theories and concepts concerning embodied identity in the meeting with the psychiatric patient and emphasizes the incorporation of the patient's life world.



## TORTURE, LIVING WITH FEAR AFTER RESETTLEMENT

**Rolf Vaardal**, Physiotherapist, Work in Center for Migration Health

### ABSTRACT

There are thousands of persons having been exposed to torture now living in exile in many countries of the world. Many of those fear for consequences for family members at home if they are exposed as torture survivors in the host country. This is mainly due to the local authorities' fear of being accused of using illegal means to remain in control of their societies. For many survivors in exile this will result in a constant worry regarding telling their stories. How will this affect the survivor health wise, and can physiotherapists play a constructive role in the healing process? This presentation takes aim at sharing stories of survivors and their strategies for living with their experiences in a healthy way, supported by physiotherapy interventions. Still, their experiences leave a mark on the individual that cannot be erased. Stories shared are collected in and around Bergen, Norway, and from the region of Ayacucho, Peru, during more than 25 years of work with this truly diverse group and will be presented anonymised but based on their real-life experiences. Some stories are documented in the book "Our voices - we who would be silenced", from 2022. How can we all as professionals but also as fellow human beings contribute to the phenomenon of torture being exposed and support the survivors in establishing themselves in a society that is not necessarily receptive of this topic? Competence is in demand.



## PSYCHOSOMATIC PATTERNS AND FUNCTIONAL ANALYSIS IN PATIENTS WITH FIBROMYALGIA

**Andrés Marchant Mellado,**

Valentina Boyacá, Daniela Roa, David Carneros, Daniela Roldán, Ismael Canales, Cristina Bravo.



## AURORA AND ME IN TOUCH, LOVE AND MOVEMENTS TOWARD HEALTH

**Mette Albertsen**, Psychomotor physiotherapist MSc.; **Kjersti Gulliksen**, Psychologist Phd

### ABSTRACT

**Background:** There is a need to expand the understanding of the embodied mind and the therapeutic relationship within Norwegian psychomotor physiotherapy (NPMP). A theoretical study has resulted in a tentative model of the embodied mind, illuminating how we can understand the embodied mind, why it is important and how the therapeutic relationship between two embodied minds can promote health. This presentation explores how this theoretical understanding can be clinically implemented. **Purpose:** Clinical implementation can evolve the understanding of our embodied mind, and help set the patients embodied mind in motion towards health. **Methodology:** The theoretical understanding is based on a study applying a hermeneutical interpretation of a contemporary psychodynamic text. The clinical presentation implements the theoretical understanding through a therapeutic journey between the patient Aurora and her therapist. **Results:** This study is creating a fuse of horizons between contemporary psychomotor physiotherapy and contemporary psychodynamic therapy. The understanding has met welcoming responses from Norwegian Character Analytical Institute, NPMF therapists and patients. To articles from this study are soon to be submitted to Physiotherapy Theory and Practice. **Conclusion:** Clinical implementation has evolved our knowledge. We assume the embodied mind forms the basis of our self and has dimensions of verticality, temporality and relationality. Lack of formation, or disruptions of the embodied mind can cause suffering both to oneself and others. The embodied therapeutic relationship can through touch, love, secure attachment, movements and three-dimensional sensitivity help heal a disrupted embodied mind. Evaluating the interdisciplinary and clinical value will be important future work.



## BBAT GROUP PHYSIOTHERAPY: A STRATEGY TO PROMOTE MENTAL HEALTH IN INSTITUTIONALIZED SENIORS

**Sandra Milena Hincapié Garaviño**, Physiotherapist. MSc. Education and Human Development. BBAT Therapist; **Ana María Arias Pérez**, Physiotherapist. MSc. Public Health. BBAT Therapist.

### ABSTRACT

Human aging is a multidimensional process in human beings, characterized by being heterogeneous, intrinsic and irreversible. In Colombia, institutionalization for seniors care has been increasing, due to the economic difficulties of families that prevent them from devoting their time to care or hiring service to do it, and events related to abandonment (Guevara-Peña, 2016).

Group interventions favor therapeutic factors considered advantages when addressing the complex through the simple, the total phenomenon through basic component processes. These interventions make it possible to improve individual mental health conditions, promote the consolidation of therapeutic group factors that contribute to life quality and generate spaces to create links between the participants.

This clinical experience report was based on the analysis of secondary sources of information from Basal Body Awareness Therapy (BBAT) interventions in a group of 19 institutionalized seniors. This is a structured method of exercises, which considers the connection of the body and awareness of movement through physical, mental and relational factors. It focuses on movement quality and how it is performed, establishing a relationship between space, time and energy. Sources of information about evaluations before and after group sessions were analyzed with the application of BAS-I and BARS-MQE, records of verbalizations made by the participants during evaluations and group sessions, and therapist observations.

These interventions allowed the emergence of categories related to group therapeutic factors, among which were found instilling hope, altruism, imitative behavior and group cohesion. These therapeutic factors are elements that promote mental health and influence the structuring of interpersonal relationships.



## **BEING SENSITIVE DOES NOT TAKE AWAY BEING BRAVE: CONSTRUCTION OF SENSITIVE MASCULINITIES IN YOUNG PEOPLE THROUGH THE PROMOTION OF QUALITY MOVEMENT**

**Margarita Lucia Correa** Physiotherapist. Specialist in University Research Teaching. Master of Collective Health. BBAT Physiotherapist - Coordinator of CES Body-Mind study group: Physiotherapy in Mental Health. Professor at Universidad CES

### **ABSTRACT**

This abstract describes, analyzes and reflects on the experience of the practice group carried out with ten (10) youngsters from 19 to 21 years of age in the city of Medellín, between the months of February and May of the year 2023, within the training framework to become a BBAT physiotherapist.

The findings are the result of guided group practice in which was carried out an individual pre and post evaluation with the application of BARS-MQE and BAS-I instruments and a total of 10 group movement sessions.

The qualitative findings that stand out in the BBAT group clinical practice with a group of youngsters could be classified as: those related to the process and phenomena of consciousness and movement pedagogy, and; those corresponding to the results, expressed in increased body awareness and better body attitude through the promotion of movement quality, and the construction of ethics of care, associated with the group therapeutic factors catharsis, universality, cohesion and altruism, which favor the construction of sensitive masculinities through the promotion of quality of movement.



## CASE STUDIES IN A MULTIDISCIPLINARY COMPLEX PRIVATE CLINIC IN CONNECTICUT

**Caryn McAllister**, CEO High Quality Home Therapy New England Institute for Neurology and Headache

### **ABSTRACT**

The traditional US system of healthcare provision is not helpful to people suffering from complex medical conditions that include mental health components. The in network insurance model doesn't allow for therapists to work 1:1 with these patients and truly help them identify and manage their symptoms, often resulting in medical trauma and worsening of symptoms. At my private clinic in Stamford, CT we service patients in our multidisciplinary private clinic and offer telehealth and home visits as needed and specialize in working with patients with complex medical and psychological needs. In the hope to share ideas of what can and should be done for patients with complex physical and mental health needs, this presentation will highlight 3 cases in which physical therapy, combined with a comprehensive multidisciplinary medical team, successfully helped patients function again.

1. Introduction to the US healthcare system where physiotherapy is very orthopedic, and insurance based. 2. Case studies (3 unique true cases including Somatic Pain Disorder, EDS(h) & CRPS) 3. Q-nA





## MENTAL HEALTH FROM AN INTERDISCIPLINARY PERSPECTIVE: SUCCESSFUL EXPERIENCES AT THE INSTITUCIÓN UNIVERSITARIA ESCUELA NACIONAL DEL DEPORTE

**Ayda Zulamy Agudelo Martínez**, Pt, Ms Neurorehabilitation; **Carlos Alfonso Medina Riaño**, Pt. Ms Neurorehabilitation; **María Isabel Torres Coral**, Pt, Ms(c) Public Health

### ABSTRACT


**Background:** Mental Health (MH) is framed in the right to health, interculturality, social participation and public policy. It highlights then the importance of the Specialization in Neurorehabilitation from the National School of Sport (IUEND), to address the MH in line with the Sustainable Development Goals and PAHO guidelines. Globally, measures are implemented to address these issues, highlighting the proactive role of academia in raising awareness of MH as a universal human right. It is proposed to design and implement a social projection project to raise awareness of the entire university community in the Faculty of Health and Rehabilitation of the IUEND. Methods: systematization of qualitative experiences in retrospective of the project implemented for three years consecutive at IUEND. The results include the interdisciplinary articulation of academic programs, the opening of spaces for awareness and discussion, and the motivation of students and teachers in MH research. Conclusion: Addressing MH is an institutional priority, highlighting the dynamizing role of the Neurorehabilitation program. The importance of integrative professional practice and the role of human body movement in the promotion of a healthy culture and the fight against stigmatization in MS is emphasized.


# PÓSTERS



**10<sup>Th</sup> CONFERENCE**  
**IOPTMH 2024**  
*Mental Health on the Move*  
September 19, 20 y 21 Barranquilla, Colombia

 **World Physiotherapy**  
SPECIALTY GROUP

 International Organization of  
Physical Therapy in Mental Health

 **ASCOFI**  
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**UNIVERSIDAD  
SIMÓN BOLÍVAR**

# THE RELATIONSHIP BETWEEN PHYSICAL FUNCTION AND PSYCHOLOGICAL SYMPTOMS IN PARKINSON'S: A SURVEY OF UK BASED PHYSIOTHERAPISTS

PRESENTED AT:



P. Hodgson<sup>1,2</sup>, A. Jordan<sup>1</sup>, C. Sinani<sup>1</sup>, M. Olamaie<sup>1</sup>, D. Charura<sup>1</sup>

<sup>1</sup> York St John University, York, United Kingdom,

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## Introduction

People with Parkinson's Disease (PwP) can experience both physical and psychological symptoms such as tremor, muscle stiffness, anxiety, depression, and apathy.

At present, any potential relationship between physical function and common psychological symptoms is poorly understood and has not explored the perspectives of physiotherapists.

Considering any relationship between physical and psychological symptoms, including the perspectives of physiotherapists, should improve our understanding of the condition and may translate to improved symptom management and outcomes for patients.

## Purpose

This online survey sought to investigate whether UK based physiotherapists perceive a connection between physical and psychological symptoms, while also considering common assessment practices and barriers to onward referral for psychological symptoms identified.

## Methods

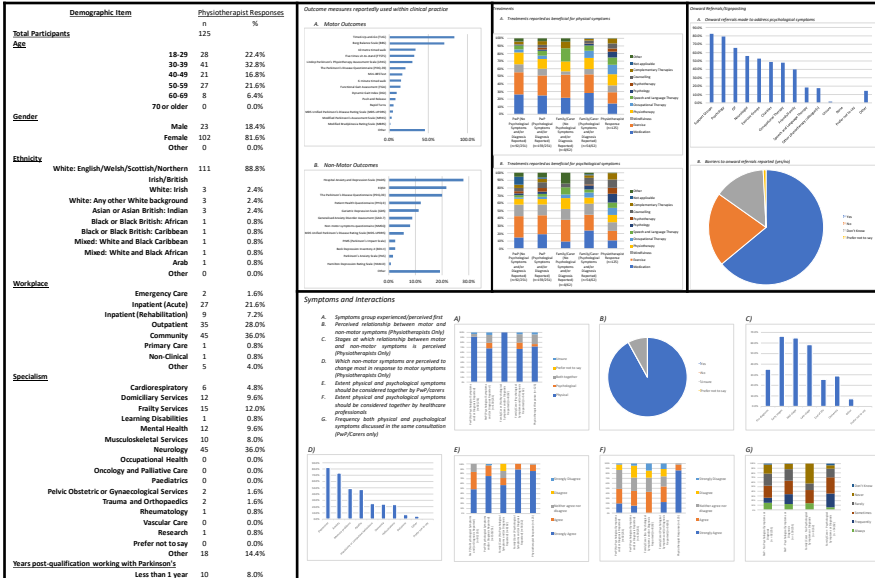
A UK-wide survey of 125 UK based physiotherapists was conducted.

Survey questions focused on their workplace setting and work with PwP, formal mental health training/experience, outcome measures used, symptoms and potential interactions, treatments and onward referrals including potential barriers.

Responses were summarised using descriptive statistics and where able, responses were compared to PwP and carers from a concurrent survey.

## Results

Most reported extensive experience working with PwP and reported greater use of outcome measures to assess physical function than non-motor symptoms. Whilst motor symptoms were often reported to precede non-motor symptoms, a direct link between the two was widely recognised, notably including the non-motor symptoms of anxiety and depression. Barriers to onward referrals for psychological symptoms were commonly reported.



- 92% of physiotherapists reported a relationship between physical and psychological symptoms of PD, 64% report barriers to onward referrals
- The most common physical outcome measure reported used within clinical practice was the Timed-Up-and-Go, with the most common psychological outcome measure being the Beck Depression Inventory
- PwP and carers generally agreed on exercise and medication as being the most effective treatments for all symptom types. Physiotherapists broadly agree with this for physical symptoms however reported psychological interventions as most effective for psychological symptoms.

## Conclusions

UK-based physiotherapists appear to perceive an interaction between physical function and non-motor symptoms in Parkinson's and are well-placed to also identify psychological symptoms.

Despite this there is currently a lack of assessment of psychological symptoms within reported clinical practice, and barriers to onward referrals when issues are identified.

Efforts should be made to improve assessment of psychological symptoms by physiotherapists and address barriers to onward referrals.

## Implications

Enhancing physiotherapists assessment of psychological symptoms and overcoming barriers to onward referrals is essential to provide comprehensive care for PwP.

## References

1. All-Fairly Parliamentary Group on Parkinson's. (2018). 'Mental health matters: too often overlooked'.  
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## Acknowledgements

Ethical approval was obtained from York St John University (ETH2023-0035).  
 Presented at the International Organization of Physical Therapy in Mental Health (IOPIMH) Conference 2024, Barranquilla, Colombia. Funding to attend has been provided by York St John University and the Council for Allied Health Professions Research (CAHPR) Yorkshire and the Humber.

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THE RELATIONSHIP BETWEEN PHYSICAL FUNCTION AND PSYCHOLOGICAL SYMPTOMS IN PARKINSON'S:

A SURVEY OF PEOPLE WITH PARKINSON'S AND CARERS

PRESENTED AT:



P. Hodgson<sup>1,2</sup>, A. Jordan<sup>1</sup>, C. Sinani<sup>1</sup>, M. Olamaie<sup>1</sup>, D. Charura<sup>1</sup>

<sup>1</sup> York St John University, York, United Kingdom,

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Introduction

People with Parkinson's Disease (PwP) can experience both physical and psychological symptoms such as tremor, muscle stiffness, anxiety, depression, and apathy.

At present, any potential relationship between physical function and common psychological symptoms is poorly understood and has not explored the perspectives of PwP and carers.

Considering any relationship between physical and psychological symptoms, including the perspectives of PwP and carers, should improve our understanding of the condition and may translate to improved symptom management and outcomes for patients.

Purpose

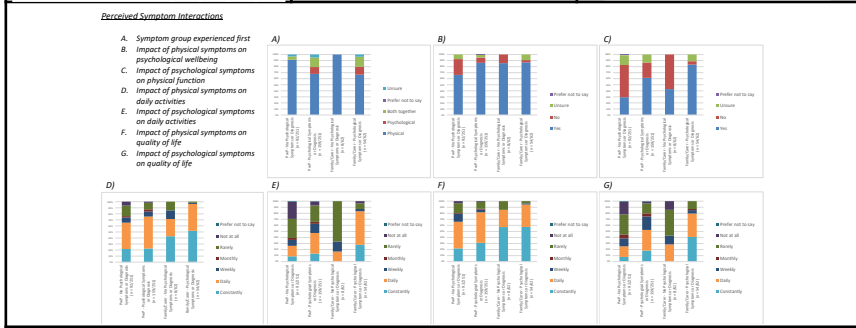
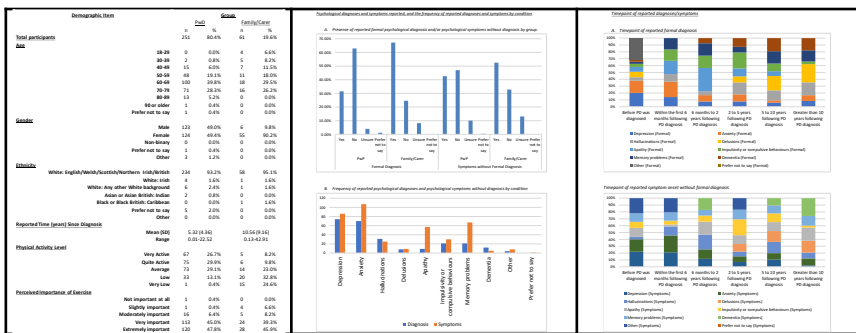
This online survey sought to investigate whether individuals perceive a connection between physical and psychological symptoms, while also considering the influence of personal roles and past symptom experiences.

Methods

A UK-wide survey of 251 PwP and 61 family/carers was conducted. The survey focused on reported diagnosed and non-diagnosed psychological symptoms experienced, their onset, and the perceived impact of physical and psychological symptoms on one another. Responses were summarised using descriptive statistics.

Results

A substantial proportion of respondents reported at least one diagnosed psychological condition (38.5%) or undiagnosed psychological symptoms (44.6%) such as anxiety and depression. Half of respondents reported perceiving a bi-directional interaction between physical and psychological symptoms, with this perception most reported in people with prior experience of psychological symptoms. Our sample shows that while PwP and carers have similar views on the impact of psychological symptoms, carers perceive the impact of physical symptoms to be greater than PwP.



Conclusions

PwP and carers appear to perceive an interaction between physical and psychological symptoms in Parkinson's, noting that psychological symptoms frequently precede Parkinson's diagnosis but are often under-recognised.

There is large variation in the timepoint of reported diagnosis/symptoms received and experienced, with psychological symptoms preceding formal diagnosis of Parkinson's in many cases.

Given the widely reported perceived interaction between physical and psychological symptoms, efforts should be made to improve formal symptom recognition and optimise signposting to appropriate services.

Implications

Improved awareness of the potential link between physical and psychological symptoms in PwP may help to improve assessment, and onward referral processes to enhance care. Further research may assist in identifying potential sub-groups and allow the prediction of changes in physical and psychological presentation.

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1. All-Party Parliamentary Group on Parkinson's (2018). Mental health matters too: <https://www.parliament.uk/global-assets/documents/2018-19/all-party-parliamentary-group-on-parkinsons-mental-health-matters-too-report.pdf>  
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# Basic Body Awareness Therapy in Grief: Moving from Pain to Honor

AFILIACIONES



The motor domain is used as a gateway to improve an individual's social-affective functioning. (Probst & Diedens, 2017).

## INTRODUCTION

Grief is the adaptation process that must be activated to face a loss. Its consequences are multidimensional. The greatest impact is on an emotional level. The global challenge of COVID-19 caused multiple losses; Thus, as a society we faced grief without mourners present, without funeral rites, without hugs, crying in silence and loneliness (Sierra, 2020). These feelings may have been previously unconscious but stored in the body. This work proposes to increase awareness of bodily reactions and their influence on feelings of loss and pain. Finally, grief can be transformed into a learning experience by carrying out reparative and healing actions in honor of those who have died (Sierra, 2020). Therefore, this is the title of the research.

## METHODS

**Intervention Design:** The study comprised of two assessments, an initial and a final one. In addition, ten group sessions were conducted once a week from February to May 2023, each lasting 90-120 minutes. The group is closed in structure. The session will progress through supine, sitting, bipedal, relational, and walking postures.



The study employed a mixed research design, incorporating quantitative of type descriptive, cross-sectional, and to content analysis qualitative approaches.

The exercises are designed with emphasis on specific aspects within each dimension, using the three elements without dividing them, with the aim of promoting motor learning and conceptualizing the personal experience of the grief.



The BARS-MQE demonstrates improves important in movement quality by promoting greater stability, integrating the axis, recovering intention, elasticity and rhythm, and synchronizing breathing with movement. The group demonstrates good attention and body awareness in daily tasks, which helps them cope with grief and experience greater well-being.

## DISCUSSION & CONCLUSIONS

BBAT enables individuals who have experienced grief to identify resources within their body, such as breathing, balance, improved posture, increased energy and resilience. The perception of movement was considered a way to acknowledge the body's role in the expression and regulation of emotions. This understanding helps individuals find new significance of loss in your corporality by creating meaningful connections that enable them to establish a renewed relationship with themselves and their absent loved ones. By integrating resilient actions into their daily lives, they can honour their loved ones and constructively face the present.

## ETHICAL APPROVAL

The patients were informed about the research objective and provided their acceptance by signing the informed consent. Declaration of Helsinki.

## ACKNOWLEDGEMENTS

In honor of the life of my Mother Maria.

## REFERENCES

Skjærven, L.H. (2019). Doctoral Thesis. The phenomena: Quality of movement and Movement Awareness- Theoretical construction and communication within physical therapy in Mental Health-University of Murcia-Spain.  
Sierra, Gloria (2020). From pain to honor. Bogotá. San Pablo Editorial.

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FULL TEXT



## PURPOSE

Examine and understand the experience of grief in relation to the quality of movement through the methodology of Basic Body Awareness Therapy in Cúcuta, Colombia from February to May 2023.

## PARTICIPANTS

Demographic Summary

Sex	Age (years)	Type of Loss	Time of Grief (years)	Mental Health Care Required
Women (4)	40-49 (2) 50-59 (3)	Children (2) Parents (3)	0-1 (1) 2-5 (1)	Psychiatry (5) Psychology (4)
Men (2)	60-69 (1)	Partner (1)	5-10 (4)	Medications (3)

## RESULTS

Patient	SI	IS	%60%
Patient 1	37	50	74%
Patient 2	40	48	72%
Patient 3	41	52	75%
Patient 4	51	59	80%
Patient 5	55	66	71%
Average	46.5	55	70.4%

Rating of the Body Awareness Scale-Intervent



The study identified several prevalent symptoms among participants, including worry about trivial matters, difficulty concentrating, muscle tension, pain, vegetative discomfort, a sedentary lifestyle, and important omissions in their bod. The prevalence of aggressiveness, difficulty experiencing pleasure, sadness, apathy, sleep and appetite problems are all important factors that contribute to a perception of deteriorated physical and mental health.



Figure 3. Categories and theme variation in detail

"I see my profile picture and now I see my face and I like my face more than before, and I don't want to take it away, I like it and I like it because I see that I look like my dad, and I feel a lot of happiness." Ana.

"To improve the quality of life, accept that I no longer have my son, in this anniversary that passed I was better, mentally at peace and follow his advice: "Dad, be calm." Cleo

## Sensory Rooms and the use of it in an inpatient unit

Jes Bech Engsted and Michael Timmermann

Mathias Hansen, Nana Troelsgaard, Kristina Schwartz, Siv Bjørkedal, Merethe Lønne Kjær, Christina Obarzanek, Jeanette Præstegaard

### ABSTRACT

Physio and occupational therapists' use of sensory rooms. We are particularly interested in whether there is any effect for the patients using sensory rooms and sensory modulation. We would also like to describe the differences and what we have in common with the profession of occupational therapists, with whom we have a close daily partnership. In this process we started interviewing inpatients, occupational therapists, and physiotherapists. Next step was to find literature showing the effect of sensory modulation. We now are in a process making an educational program for the two groups of therapists and creating a manual for the use of sensory modulation. The research is made in partnership with clinical practitioners, research units and our own unit. In 2026 most wards in Psychiatric Centre Copenhagen will move to a new hospital where every ward has its own standardized sensory room. With standardized conditions we will be better able to conduct further research on the subject of sensory modulation across wards. For physiotherapists, the use and outcome using sensory room is almost not described in research literature.

### Background and purpose

The intention and goal in our unit for occupational therapists- and physiotherapists is to contribute to research and progress for our professions in psychiatry and mental health. One of the promising focus areas supported in the region is the use of sensory rooms and sensory modulation in the treatment of inpatients in psychiatric ward. We have been using sensory tools, exercises, sensory rooms, and sensory modulation for a long time in our practice but there is a lack of evidence which we would try to change.

During the last 4 years the unit of occupational therapists- and physiotherapists in our center has improved focus in using sensory rooms and sensory modulation. We have made 20 narrative interviews with patients questioning their experience followed by interviewing the therapist upon their experiences using the sensory rooms. Now we are making a manual describing the role of physiotherapy in sensory modulation. We aim to make a program to educate all physiotherapists in the use of sensory modulation. In the region we use time from the therapist's clinical practice, examinations/AASP (Adult Adultery Sensory Profile) in the use of sensory modulation. Besides that, the cost of Sensory Rooms is significant although we still need stronger evidence to justify this priority.

### METHODS AND MATERIALS

Study of research literature with key words sensory rooms, sensory modulations, occupational therapy and physiotherapy. Narrative interviews and focus group interviews. The 9 involved therapists interviewed 20 patients. The therapists were afterwards interviewed individually and in a focus group interview.

Upcoming is a manual in sensory modulation for physiotherapist through literature study and clinical experience. We aim to have feasibility in our research in the cooperation between research unit and clinical practice.

We are preparing an educational program in sensory modulation for all physiotherapists in the autumn 2024.

Next step is the project "Sense" where we will try to find more evidence in using sensory rooms and sensory modulation. We hope to be able to finance this project as a RCT-study.

### RESULTS

The focus in using sensory rooms and how we use it in our profession has increased in our organization. Beside that the attention and understanding of sensory modulation among physiotherapists has grown. The patients use the sensory rooms as a free space in the unit, where they can recover and find quietness. As the research is ongoing, we only have some preliminary results and need to do more research.

### DISCUSSION

Our profession as physiotherapists in psychiatric ward often is in cooperation with occupational therapists. Occupational therapists have a longer tradition in using sensory rooms and sensory modulation. Physiotherapists have a potential in this part of our profession. It seems to be something we use already in practice but needed to be closer described. Especially the vestibular and proprioceptive sense is used in many exercises. If physiotherapists develop this part of the profession, it could open a closer interprofessional collaboration and make our position in psychiatric ward stronger.

In this project we are trying to develop skills and language in this area as physiotherapists and describe how our profession can contribute.

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### CONCLUSIONS

The therapists are aware that they are working in a system where nonpharmacological interventions and physiotherapy must be promoted if the patients has access to this service. The alliance between patient and therapist is essential in the treatment. Therapists are good in having a holistic approach to the patient seeing, hearing and embracing. To assess and adjust the treatment is a significant part of the intervention. The therapists are representing interventions without coercion. The therapy is builded on free participation of the patient.

### REFERENCES

"Projekt: Sensing and pull yourself together" The interviews of the therapists is published in a candidate's thesis (SDU Denmark, 2022 Christina Obarzanek). The article about patients' experience using sensory rooms is still in progress (Jeanette Præstegaard, Dr. Med. Sc., Siv Bjørkedal, occupational therapist, PhD and Merethe Lønne Kjær, occupational therapist), 2024?



# ASSOCIATION OF GRIP STRENGTH WITH COGNITIVE FUNCTION, PHYSICAL ACTIVITY AND MENTAL HEALTH IN OLDER ADULTS: A MULTIVARIATE ANALYSIS.

Leila Onela Marin<sup>1</sup>, Mirary Mantilla-Morrón<sup>1</sup>, María Victoria Quintero-Cruz<sup>2</sup>, José Rafael Consuegra Machado<sup>3</sup>, Damaris Suarez Palacio<sup>2</sup>, Aida Marina Ferrer Parejo<sup>2</sup>, Karina Reniz Acosta<sup>1</sup>, Enso Jiménez Turizo<sup>3</sup>

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## INTRODUCTION

Grip strength is related to general health and is a good indicator of health status in older people. Studies have shown its relationship with mental and physical health, including cognitive impairment, depression, anxiety and stress, affecting quality of life.

## PURPOSE

To determine the relationship between grip strength, cognitive function, physical activity and mental health in older people attending a living center in Colombia.

## PARTICIPANTS

Adults over 60 years of age attending in a life center in Malambo, Atlántico, Colombia.



## METHODS

**Design:** cross-sectional descriptive study. **Sample:** 58 subjects randomly selected by convenience. **Instruments:** HandSensor dynamometer, Pfeiffer, test DASS-21, Reuben questionnaire **Statistical analysis:** Measures of central tendency and frequencies were analyzed. Odds ratios (OR) and 95% confidence intervals (CI) were calculated.

## RESULTS

Most participants were female, aged 60-79 years, single or widowed, with low educational level and unemployed. There was a tendency to a higher risk of anxiety in people with muscle weakness (2.6 times higher), without statistical significance due to the sample size. Inactive people had a higher risk of depressive symptoms (3.8 times higher), also without statistical significance.

**Table 1.** Handgrip strength associated with symptoms depression, anxiety and stress

FUERZA	DEPRESSIVE SYMPTOMS		OR(95% CI)
	PRESENT	ABSENT	
MUSCLE WEAKNESS	18(45.2)	23(56.8)	1.3(0.43-4.08)
NORMAL GRIP STRENGTH	40(79.2)	33(66.2)	
	ANXIETY SYMPTOMS		2.6(0.89-7.62)
	PRESENT	ABSENT	
MUSCLE WEAKNESS	18(45.2)	23(56.8)	
NORMAL GRIP STRENGTH	3(16.6)	13(67.3)	
	STRESS SYMPTOMS		1.8(0.59-6.71)
	PRESENT	ABSENT	
MUSCLE WEAKNESS	16(39.5)	20(48.8)	
NORMAL GRIP STRENGTH	4(20.0)	13(65.0)	
	COGNITIVE DETERIORATION		1.6(0.49-6.0)
	PRESENT	ABSENT	
MUSCLE WEAKNESS	18(45.2)	27(64.3)	
NORMAL GRIP STRENGTH	4(20.0)	12(60.0)	
	MIL EDUCATION		3.3(0.82-13.7)
	MINOR BASIC EDUCATION	EDUCATION ACQUEDARY	
MUSCLE WEAKNESS	17(40.9)	8(19.0)	
NORMAL GRIP STRENGTH	1(5.0)	3(15.0)	

**Table 2.** Physical activity associated with symptoms depression, anxiety and stress

PHYSICAL ACTIVITY	DEPRESSIVE SYMPTOMS		OR(95% CI)
	PRESENT	ABSENT	
INACTIVITY	5(12.5)	2(2.8)	3.8(0.48-27.0)
ACTIVE	20(39.6)	31(63.2)	
	ANXIETY SYMPTOMS		1.6(0.32-8.20)
	PRESENT	ABSENT	
INACTIVITY	3(42.9)	4(57.1)	
ACTIVE	18(34.6)	29(58.0)	
	STRESS SYMPTOMS		0.7(0.124-4.1)
	PRESENT	ABSENT	
INACTIVITY	2(28.6)	6(71.4)	
ACTIVE	16(30.3)	35(69.7)	
	COGNITIVE DETERIORATION		1.9(0.2-16.2)
	PRESENT	ABSENT	
INACTIVITY	3(42.9)	4(57.1)	
ACTIVE	18(34.6)	29(58.0)	

## DISCUSSION & CONCLUSIONS

There was a trend toward greater anxiety in persons with muscle weakness and greater depression in inactive people. Studies with more participants are needed.

## REFERENCES

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Contact details



## RESILIENCE FACTORS CAN BE PROMOTED IN THE CHILD FROM BIRTH TO SIX YEARS IN THE EARLY INTERVENTION AREA OF THE ATLACOMULCO MUSCULARTE CENTER DURING THREE MONTHS.

Maria del Rosario Montoya Zúñiga, MS, PG and PT  
Luz Gabriela López Blas, PT  
Helen Castro Garduño, MS

### INTRODUCTION

Psychomotor development refers to the functional skills that a child acquires progressively from conception to adulthood (Laguens, A. Quejta, M. 2020). Resilience is a crucial concept within this development. It reflects a person's adaptive capacity in a given time and context to respond to present and the future challenges. This study focuses on building resilience in children, which develops through their relationships with the people around them and the environment in which they grow up.

### PURPOSE

The purpose of this study is to examine the resilience factors that can be promoted in children from birth to six years old in the early intervention program at the Muscularte Center in Estado de México. The study was conducted over three months.

### METHODS

The design research methodology was cross-sectional and descriptive, with a focus on discovering the meaning of the phenomenon. The data analysis was developed with the model proposed by Amadio Giorgi (Englander, M. 2023) and modified by Walterud. Data were collected through semi-structured interviews with physiotherapists and caregivers.

### PARTICIPANTS

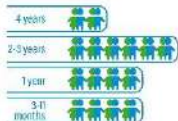
The analysis of this research was conducted on 16 children who were part of the early intervention program. Out of these, 59% (10) were boys and 31% (5) were girls.



A total of 51 interviews were conducted, out of which:



Based on their stay in the early intervention program:

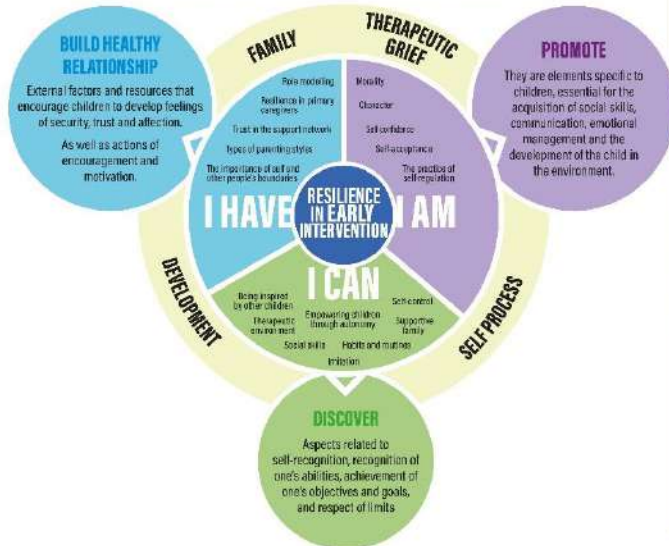


### RECOMMENDATIONS

We recommend enriching pediatric physiotherapy sessions by considering resilience as an important factor to promote, paying careful attention to every element of this vital process.

### RESULTS

The analysis focused on three qualitative factors of resilience construction as described by E. Grolberg: "I have," "I am," and "I can."



### CONCLUSIONS

This study focuses on the child as a whole within an early intervention area provided by a physiotherapy service. It sheds light on the qualitative resilience factors reported in 51 Mexican caregivers, asking us to understand which factors can be promoted to enhance the development of resilience in children. This is an important aspect for achieving our objectives, ensuring adherence to physiotherapy follow-up and promoting the child's development in their environment.

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### ACKNOWLEDGEMENTS

Special thanks to Sharon Dey, PhD, FAS at Genesteck

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### Introduction



PT students often experience psychological stress during education, especially when supporting complex patients in distress. To cope with the challenges of both study and life, many resort to maladaptive coping strategies.

- Entry-level physiotherapists reported lacking knowledge within mental health<sup>1</sup>
- That may affect their ability to cope with increasing levels of stress in their personal life and their clinical practice.

### Purpose

The purpose of this project is to investigate how a five-day intensive course (IC) for strengthening mental resilience impacts students' perception in their stress, resilience, and self-efficacy.

### Participants

- 42 students will be invited to participate in this course (intervention group)
- 42 controls on their respective home institutions matching age, gender, length of study will be invited. (control group)

### Teaching Approach



- Understanding Resilience and how to improve it<sup>2,3</sup>
- Understanding and experiencing how mind-body approaches can affect their well-being
- Discuss and practice concepts such as:
  - the cognitive diamond model
  - window of tolerance,
  - allostatic loads,
  - interoceptive awareness,
  - neuroplasticity mechanisms
  - exercise and body-mind practices.



### Perspectives



- Transformative learning process that can contribute to the development of their personal and professional identities

- The results of this study will support the development of courses in PT programs aiming to strengthen mental resilience of PT students
- Such students may be better equipped to support their clients coping.



### Acknowledgements

The Intensive Course is funded by Nordplus Higher Education Project number: NPHE-2024/10066.

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### Methods



- PROMS - assess the course's impact on perceived stress, resilience, self-efficacy, and an evaluation<sup>2</sup>
- Survey 1 will assess students' perception of the topic.
- Survey 2 will evaluate how integrated the practices were in the participants daily routine and the impact of the practices in the investigated parameters.



We are looking for your input. Answer our anonymous survey via the QR code where you will find my contact information. Thank you ☺

# Developing a Rehabilitation Approach Focused on the Body and Environmental Awareness in Autism Spectrum Disorder

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## 【Background】

Autism Spectrum Disorder (ASD) is a brain disorder that affects daily life. Cognitive neuroscience has helped understand its symptoms and the role of somatosensory perception. However, rehabilitation approaches for ASD still need to focus on improving self and environmental awareness.

## 【Purpose】

The study aims to understand the relationship between somatosensory perception and symptoms in individuals with developmental disorders, and how they interact with their environment. This research search to take the first steps towards constructing a rehabilitation approach for ASD.

## 【Methods】

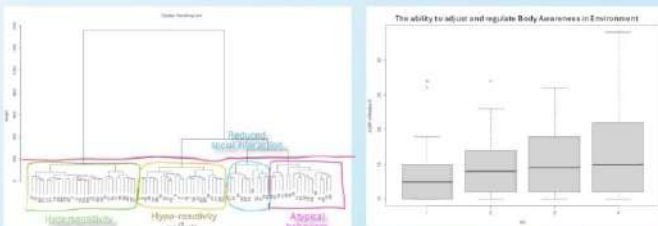
The study involved 101 parents of children with developmental disorders, aged 7 to under 18 (mean age:  $10.51 \pm 3.18$  years, 22.7% female). Questionnaire surveys using the Sensory Profile and Autism Quotient were conducted to assess symptom severity. A semi-structured questionnaire survey was also conducted to identify challenges in school and daily life. Cluster analysis and text mining were used to analyze the data.

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## 【Results】

The Sensory Profile cluster analysis identified four categories: hypersensitivity, hypo-reactivity, reduced social participation, and atypical behaviors. Comparing these categories to ASD symptoms assessed by the AQ showed no significant differences in symptom severity ( $p > 0.05$ ). Text mining within each cluster revealed that terms related to parental stress were more prevalent when ASD symptoms were milder in school and daily life settings.



## 【Conclusions】

This study identified four clusters representing different sensory profiles in individuals with ASD, highlighting the importance of addressing the impact of these characteristics on self-environment interaction in future rehabilitation approaches. Comprehensive rehabilitation programs based on these findings have the potential to improve psychophysical symptoms of ASD and enhance social participation.

## 【Funding】

This work was supported by JSPS KAKENHI Grant Numbers 21K11303

## 【Ethical Approval】

This study was approved by the ethics review committee of the Kobe Gakuin University (No. SOURIN-22-10)

## 【Implications】

Symptoms in individuals with ASD can be categorized despite sensory diversity, but symptom severity does not necessarily correlate with difficulties in school or daily life. Even minor differences can cause significant stress due to high behavioral expectations. Therefore, a rehabilitation approach focusing on sensory inputs and promoting gradual growth while improving self-environment interaction is important.

The integration of sensory experiences in ASD has been shown to be characterized by the severity of symptoms as measured by the AQ. Moving forward, it is essential to utilize these classifications to support improvements in daily living for individuals with ASD. A key challenge ahead is to explore how approaches aimed at enhancing body awareness and improving the quality of movement can transform the lives of those with ASD.

**Conflicts of Interest**  
 We have no conflict of interests related to this presentation



## BACKGROUND

According to the WHO, around 17.9 million people die from heart disease. On the other hand, cardiac rehabilitation has demonstrated a positive impact on quality of life, mental health, job reintegration, among other factors. However, participation and adherence are low (<50%), mainly due to logistical and personal factors, such as anxiety and depression, which can influence the recovery process.



Image source: freemove. (n. generated image) <https://www.shutterstock.com/image-photo/fitness-people>

## PURPOSE

To establish the relationship between the prevalence of anxiety and depression and cardiac rehabilitation adherence, as well as the perception of barriers to accessing these programs

## METHODS



## RESULTS

Fifty-one participants were included (33 men, 18 women), with a mean age of  $67 \pm 10.4$  years. Table 1 shows the distribution of participants according to the results of the Hospital Anxiety and Depression Scale.

Table 1: Distribution of the participants according to the results of HADS

Variable	No case n (%)	Borderline case n (%)	Probable case n (%)
Anxiety	33 (64.7)	6 (11.8)	12 (23.5)
Depression	40 (78.4)	4 (7.8)	7 (13.79)

When exploring the relationship between adherence and barriers to cardiac rehabilitation, it was found that people with a prevalence of depression had lower adherence to rehabilitation ( $p = 0.05$ ), as well as a direct relationship with the barrier 'I feel old' (OR: 18.67, 95% CI: 1.28-272.13,  $p = 0.03$ ).



Image source: <https://www.shutterstock.com/search/old-person>

## CONCLUSIONS

Feeling old and presenting depressive traits are possible factors that determine participation and adherence to phase 2 cardiac rehabilitation programs.

**Implications:** The results of this study suggest the need for further research into the influence of mental state on increasing adherence to cardiac rehabilitation programs.

The presence of anxiety disorders and depression can reduce the effectiveness of treatments, increase the likelihood of relapse, and have a negative impact on quality of life.

The project received ethical approval from the University Hospital of Bucaramanga Los Comuneros.

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**SOKISAM**  
SOCIETY OF KINESIOTHERAPY AND YOGA

# Mind-body intervention effect on positive and negative symptoms of schizophrenia: a case report

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## INTRODUCTION

Schizophrenia, as defined by ICD-10, involves significant distortions in perception, thought, and emotions while often preserving consciousness and intellect but may lead to cognitive deficits. It affects social, educational, and occupational aspects of life and is linked with anxiety. In Chile, its prevalence ranges from 1.4 to 4.6 per thousand, with an annual incidence of 12 per hundred thousand. Despite antipsychotic treatments, negative symptoms like social withdrawal remain challenging. This study examines the potential of yoga as adjunct therapy in a 22-year-old male with schizophrenia, focusing on dynamic postures and breathing techniques to alleviate symptoms.

## CASE PRESENTATION

### Patient Background:

The patient is a 22-year-old male, single, with incomplete technical professional education. He is unemployed but occasionally assists a family member with commercial tasks. His support network primarily consists of his maternal grandmother, who has hypertension and dyslipidemia, and his father. His mother is being treated for gambling addiction.

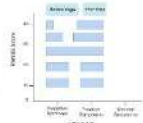


### Treatment Regimen:

The patient is currently on a pharmacological regimen of olanzapine and aripiprazole, which has led to weight gain and physical side effects. He participated in a weekly yoga-based physical therapy intervention, which focused on dynamic postures, to manage his symptoms.

### Medical History:

The patient began consuming alcohol and THC recreationally at age 19. In 2019, he was diagnosed with moderate depression, which later evolved into organic psychosis with symptoms like hallucinations. He initially received risperidone treatment, which stabilized his condition. In December 2021, he was hospitalized for severe psychiatric symptoms and began treatment with olanzapine, showing improvements by January 2022.



### Assessment Tools:

The effectiveness of the yoga intervention was measured using the Positive and Negative Syndrome Scale (PANSS), a widely used tool for assessing symptoms in schizophrenia. The PANSS questionnaire was administered before and after the four yoga sessions to evaluate changes in the patient's condition.

## RESULTS



## CONCLUSION

Yoga strategies have a beneficial effect on negative psychopathology, and improve coordination, posture, balance, and cooperation in patients with schizophrenia.

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# Basic body awareness therapy in women with chronic pain: case series

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BBAT REDUCES PAIN, IMPROVES QUALITY OF MOVEMENT, ATTITUDE TO PHYSICAL ACTIVITY AND PAIN ASSOCIATED PSYCHOLOGICAL SYMPTOMS



## INTRODUCTION

Chronic long-lasting musculoskeletal pain (CP) is a leading cause of disability worldwide (1). Treatment is challenging given the modest efficacy of pharmacological treatments. Basic Body Awareness Therapy (BBAT) is a health-oriented approach used in mental health and long-lasting pain, based on the hypothesis that a person's lack of contact with body awareness in relation to physical, mental and relational factors can lead to dysfunctional movement quality, pain and reduced function (2). Focusing on movement quality and body awareness, BBAT seems to be a good complementary method in the treatment of musculoskeletal problems(3).

## OBJECTIVE

This study aims to evaluate the effectiveness of BBAT on movement quality and pain-related symptoms in a group of women diagnosed with CP

## METHODOLOGY

A quantitative study was conducted with 9 adult women with CP diagnosed 6 months ago or more. Intervention consisted of 10 group sessions based on BBAT; an individual assessment was made before and after the intervention using the BARS-MQE to assess movement quality and the BAS-Interview to assess pain-related symptoms in three items: psychological, physiological and body attitude. Quantitative data were obtained from these scales and analyzed for this study.

## Total Score: Initial vs Final



## KEY FINDINGS

All participants showed improvement in related symptoms and movement quality, evidenced by a 21.4% average increase (range: 14 - 27,8%) in total BARS-MQE score and a 64% (44 - 83%) average decrease in BAS-Interview score.

## ETHICS

Patients were informed of the purpose of the project and, after being asked whether they agreed to the procedure, signed an informed consent form. The researchers declare that they know and respect the ethical principles for medical research involving human subjects, Helsinki

## ANALYSIS

**BASI:** Psychological aspects showed a decrease (58 to 70%), with improvements mainly in fatigue, concentration, anxiety and intrusive thoughts. Physiological aspects decreased (52 to 65%), especially muscle tension, tiredness and pain. In pain 8 patients reported a decrease in intensity, frequency, distribution and use of medication (1 of them reported no pain), 1 reported that the pain remained the same, but with a decrease in muscle tension and disappearance of tinnitus. The pain item score on the BASI showed a global reduction of 52.6%.

In body attitude, there was a 57% score reduction, with the biggest change being in attitude to physical activity.

**BARS-MQE** initial sum for the group was 434.5 with a mean of 48.3 (s.d. 3.2). The final BARS-MQE sum of the group was 527 with a mean of 58.6 (s.d. 3.7), showing that the quality of movement improved by an average of 21.4% at group level, (14 to 27.8%).

The improvement is evident in the contact with the centre, the reduction of staccatos and the integration of the whole body. The most difficult point was the asymmetric stretch in supine.

## CONCLUSION

BBAT might be an effective therapy for CP improving movement quality and reducing pain an CP related symptoms. Further studies are needed to strengthen this evidence.

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# EMOTIONAL INTELLIGENCE, BODY AND OCCUPATIONAL SELF-PERCEPTION AS MEDIATING STRATEGIES FOR SCHOOL COEXISTENCE IN 11TH GRADE STUDENTS FROM FOUR EDUCATIONAL INSTITUTIONS IN PASTO

Marcela Canchala- Eunice Yarce Pinzón- Mayra Escobar  
UNIVERSIDAD MARIANA

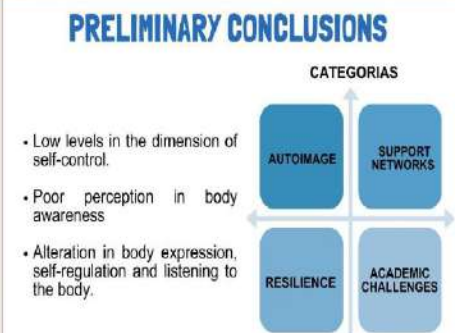


**METODOLOGY**

**MIXED**  
Action Research Approach  
Participant Observation  
Interviews

**INSTRUMENTS**  
TEIQUE- MAIA-Y

Kawa Model- Techniques based on Body Awareness



**OBJETIVE**

To evaluate the effects of the implementation of a program of emotional intelligence, body and occupational self-perception that promotes school coexistence of students in grade 11 of four educational institutions in the city of Pasto.

**PARTICIPANTS**

11th Grade Students  
Sample: 200/164 students  
IEM Public and Private in Pasto



**RECOMMENDATIONS**  
Promover Ecosistemas Saludables

**REFERENS**

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### JUSTIFICATION

The WHO (2022) considers mental disorder as a significant alteration in the individual's cognition, management of emotions or behavior. The disorders can develop functional disabilities, among which are considered anxiety disorders, depression, bipolar disorder, post-traumatic stress disorder, schizophrenia, eating disorder, disruptive and dissocial behavior disorders, neurodevelopmental disorder. People who currently experience these disorders are prone to suffering stigmatization, discrimination and even having their human rights violated. For UNICEF (2021), 16 million adolescents between 10 and 19 years old live with a mental disorder. With a prevalence in the countries of the Americas of 16.4%, placing Colombia with 12.9% and Argentina with 15.1%, and an estimated rate of deaths by suicide of 68% in boys and 32% in girls (between ages from 15 to 19 years). For its part, the ICD-11 (2019:308), in its section for the diagnostic classification of mental and behavioral disorders, considers that these disorders are problems that require timely attention, proposing three streams of work, I) from the evidence available scientific evidence, II) on the clinical application; and III) clinical usefulness (focusing on the training field). The evidence shows broad consistency in medical conceptual models and there is a need to expand the evidence in the field of Physiotherapy.

### PARTICIPANTS

Professional physiotherapists/kinesiologists with at least one year of training and at least one year of work experience in the care of people experiencing mental disorders with or without a medical diagnosis.

### GOALS

Present the partial results of an ongoing research that seeks as its objective: identify the training competencies in physiotherapy/kinesiology professionals in the field of mental health, based on grounded theory and experiential description in the Argentine and Colombian context.

### METHODS AND MATERIALS

Type of study: Grounded theory, qualitative approach. Instruments: Semi-structured interviews, Field diaries, Focus groups, Observation. Analysis: Triangulation of information from open coding, axial coding, selective coding. ATLAS-ti computer program to identify training competencies in physiotherapy/kinesiology professionals in the field of mental health. Analysis techniques: Interpretation through a critical reading matrix based on objective, method, population, methodology, results, conclusions; theoretical sampling matrix (theoretical saturation and coding). Units of analysis: I) basic competencies (identify skills, knowledge and attitudes adapted to different contexts); ii) generic competencies (identify instrumental competencies, interpersonal competencies, systemic competencies) (Blenzbas and Vallente, 2020).



### PARTIAL RESULTS

Physiotherapy has been developing multiple actions that have managed to strengthen its role in interdisciplinary teams, establish essential elements for addressing mental health, and design effective techniques specific to this field. An example of this is the evidence of physical exercises that positively impact symptoms, evaluations based on the use of reliable scales, physical health techniques for health maintenance, and promoting public policies focused on this field. In this field, oriented to the context, leading to a verifiable evaluation of its structural aspects.

### ACKNOWLEDGMENTS

To our colleagues who have allowed me to develop this research based on their experiences. To the CUI and UGRA Universities.

### DISCUSSION AND CONCLUSIONS

So far, in the Colombian/Argentine context, no exercises have been found that support training competencies in this field, oriented to the context, that lead to a theoretical support of its structural aspects. This research continues in the analysis of the data collected, in such a way that the actions that are being carried out can be systematized to propose criteria from the grounded theory of new possibilities for the quality training of future physiotherapists.

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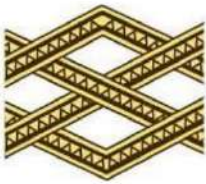
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# STRENGTHENING ROOTS IN THE MAYAPO CULTURE

FORTALECIENDO LAS RAÍCES EN LA CULTURA MAYAPO

Autores: Marisol Urrego Aguilera, Mónica Julieth Cruz Ramírez  
Corporación Universitaria Iberoamericana



## INTRODUCTION

The Wayúu Mayapo community is located in the reservation of the upper and middle Guajira in Colombia. Its pillars are territory (mmapa), autonomy and unity (painjirawa). This makes evident the desire of the Wayúu to preserve their culture and social organization; hence the importance of generating trade strategies and stress management that allows this community to generate income from preserving their handicrafts and that their culture is valued and continues from generation to generation.

## METHODOLOGY

Participatory diagnosis - Joint strategy planning - Strategy design and implementation.

A comprehensive analysis was conducted that examined demographics and ethnography, identifying both strengths and areas of opportunity. A manual was developed to enable the Mayapo community to acquire marketing skills, manage stress in the face of unmet goals and value their traditions and knowledge.

## PURPOSE

To design a didactic booklet that teaches strategies for the commercialization of handicrafts and stress management to the Mayapo community.

## RESULTS

Socialization and participation. The community reported that they have often felt humiliated for wanting to obtain a fair price for their handicrafts, causing feelings of frustration and helplessness, and losing interest in their craft.

Creation and dissemination of the booklet: marketing strategies for effective sales. Stress management through useful breathing exercises and physical activity. From the Wayúu culture, these strategies are related to their cosmivision of nature and human beings.

## DISCUSSION Y CONCLUSIONS

Given the lack of improvements for the commercialization of handicrafts of the indigenous community, which causes stress and frustration, it is advisable to implement a marketing and stress management plan, in which it is possible to identify different commercial strategies, breathing techniques and physical activity related to their concept of body and mind, thus allowing a good living (Allende-Hernández, O. & Acevedo Villegas, E., 2022).

## RECOMMENDATIONS

- The creation of a legal framework that regulates in a special way:
- The safe dissemination of indigenous handicrafts through electronic media, without risk of plagiarism, undue reproduction and commercialization.
  - Generate interculturality with the Mayapo community, so that strategies for wellbeing, such as stress management and ancestral knowledge, allow for mutual learning.



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LUND UNIVERSITY

# Measurement properties of the Body Awareness Scale Movement Quality (BAS MQ) in autistic persons

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1 LUND UNIVERSITY; 2 HABILITATION & HEALTH REGION VÄSTRA GÖTALAND; 3 RISE INSTITUTE GOTENBURGH; 4 GOTENBURGH UNIVERSITY; 5 HABILITATION REGION KRÖNBERG

## Conclusions

In autistic persons, BAS MQ:

- has acceptable measurement properties
- contribute with relevant information about movement quality
- items do not target the most abled persons

## Background

Autistic persons exhibit poorer body awareness than neurotypical persons. Movement quality may be regarded as an expression of body awareness. Sound assessments of movement quality are essential if reliable decisions about body awareness interventions for autistic persons are to be made.

## Objective

To assess measurement properties of the Body Awareness Scale Movement Quality (BAS MQ) in an autism and a neurotypical reference group.

## Method

Autistic persons (n=108) and neurotypical references (n=32) were assessed with BAS MQ. Data were analyzed according to the Rasch model.

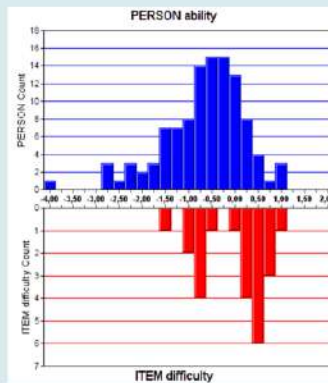


Figure 1. Distribution of autistic person ability (upper panel) and item difficulty (lower panel) measures. Measures are presented in logits, the more negative value the better movement quality or the more difficult items.



Figure 2. BAS MQ average scores for each item in the autism and the reference groups. The x-axis shows the items in hierarchical order, and the y-axis the average scores of the item responses (BAS MQ scores 0-4, higher score is worse movement quality).

## Results

### Measurement properties for autistic persons:

Item fit statistics were good for 22 out of 23 items, and they formed a unifying dimension for movement quality with a clinically expected item hierarchy. Person reliability was 0.85.

Limitations in the measurement properties included slight off-targeting for the most abled persons (Figure 1), local dependency in 7% of item pairs. All response categories were used in 12 out of 23 items.

### Measurement properties for autism and reference groups:

One balance item showed a significant differential item function (DIF) between the autism and the reference groups. Discriminative validity showed a significant difference between the groups ( $p < 0.001$ ), the autism group exhibiting worse movement quality (Figure 2).

## Discussion

The off-targeting may be due to that several persons had relatively good movement quality, and with fewer difficult items than easier. The DIF may be due to problems with automated movements and inflexibility in autistic persons. Overall the BAS MQ can be used to assess movement quality in autistic persons.

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# The Relationship between Exposure to Psychosocial Factors and Musculoskeletal Disorders in Ward-Based Therapists: a UK Based Study.



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Affiliations: Keele University

## Introduction

Ward-based therapy is a highly exposed area of practice to both psychosocial and manual stressors. Despite current evidence, research within ward-based therapists is limited, with little reviewing the stressors of working in the NHS.

## Purpose

This study highlights the relationship between psychosocial factors and musculoskeletal disorders in ward-based therapists.

## Participants

A multimodal recruitment strategy and snowball sampling method using a recruitment email and social media poster, shared through the Keele University's Allied Health and researchers social media pages.

This was to reach as many UK ward-based therapists as possible with a minimum of one year experience of inpatient ward work. Data was collected from August 2023 to February 2024.



## Acknowledgements

Firstly, I would like to thank my supervisor Aasha Monga for her continued support, guidance and patience throughout the duration of this project, her expertise and dedication has been instrumental. My sincere thanks go to all other staff members within Keele's School of Allied Health Professions, for providing the support and academic environment and guidance needed for this project. Finally, a thank you to my family for their unconditional support and motivation throughout the creation of this project.

## Methods

The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement checklist has been adhered to in the report of this cross-sectional study, to ensure rigor and enhance reporting.

## Ethics

Ethical approval for this research project was gained from the Student Projects Ethics Committee (SPEC) School of Allied Health Professions. An inability to withdraw from the study due to anonymity of results was also disclosed to patients at multiple points of the questionnaire, not solely at the beginning.

## Study Design

This cross-sectional study collected data on psychosocial factors and musculoskeletal complaints from individuals at a single time point. No personal data was collected, ensuring participant anonymity. Consent was obtained through Microsoft Forms, and participants with less than one year of ward therapy experience or a clinical diagnosis of depression were excluded.

Table 1: Total Participants, Inclusion and Exclusion

Total Participants	41
Total Participants Excluded	5 (within 1 year experience)
	2 (clinical diagnosis of depression)
Total Participants Included	36

## Outcome Measures and Analysis

Psychosocial factors were assessed with the 2003 Copenhagen Psychosocial Questionnaire (COPSOQ), while musculoskeletal complaints were measured using the Cornell Musculoskeletal Discomfort Questionnaire (CMDQ). Data analysis included descriptive statistics, Pearson's correlation for linear relationships, and Spearman's rank correlation for non-linear relationships, with significance set at  $p=0.05$ .

## Results

Of the 34 participants, 26 were female and 8 male, representing assistant practitioners, occupational therapists, physiotherapists, and therapy assistants. Most had 1-5 years of experience. Four were Black/Black British, one Caribbean/African, 27 White, and two of other ethnicities. 14 participants reported musculoskeletal complaints, with lower back pain being the most common (43%), followed by shoulder (23%) and foot pain (14%). The highest severity scores were recorded for neck, lower back, and knee pain.

General health scores were lower in those with musculoskeletal complaints, showing a significant negative correlation between the statement "My health is excellent" and complaint severity ( $r=-0.75$ ,  $p=0.0009$ ). Emotional demands showed minimal differences between those with and without complaints, with no significant correlations.

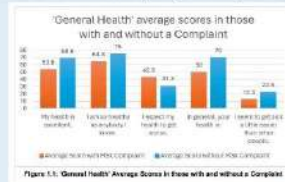


Figure 3.1: 'General Health' Average Scores in those with and without a Complaint

Participants with complaints reported poorer social support and leadership quality. Notably, a significant correlation ( $r=-0.66$ ,  $p=0.009$ ) was found between complaint severity and perceived support from superiors. Lower motivation and involvement at work were observed in those with complaints, but correlations with complaint severity were not statistically significant.

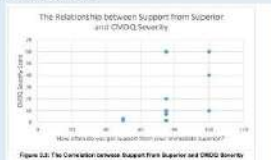


Figure 3.2: The Correlation between Support from Superior and CMDQ Severity

For job satisfaction, individuals with complaints were less satisfied with work prospects, though correlations with complaint severity were weak, except for a significant negative correlation ( $r=-0.59$ ,  $p=0.023$ ) regarding how well participants' abilities were utilized.

## Conclusion

Psychosocial factors and musculoskeletal disorders share a relationship in ward-based therapists. Despite not showing the causal relationship, the results show the presence of complaints are associated with negative attitudes regarding general health, mental health, job satisfaction and social support and relationships.

## Discussion

- Health and MSCs:** Participants with musculoskeletal complaints (MSCs) reported negative perceptions of their health and lower mental health scores. They also showed less job satisfaction and motivation.
- Workplace Relationships:** MSCs were linked to poor workplace relationships and inadequate support, especially from senior staff, leading to dissatisfaction with job prospects and work environment.
- Gender Bias:** The study's sample (76% female) may overrepresent women, aligning with existing research that shows women report more MSCs and poorer health outcomes (Vlasoff, 2007; Carol and Weber-Baghdadijan, 2016).
- Psychosocial Factors:** Although no causal link between psychosocial factors and MSC severity was found, prior studies suggest depressive and anxious symptoms may worsen MSCs (Tyrovolas et al., 2020; Luchetti et al., 2012).
- Common Findings:** The study supports previous findings that low back pain (LBP) is the most common MSC and that poor social support at work exacerbates it (Bezina et al., 2023; Pelliser et al., 2023).
- Limitations of Tools:** The use of the 2003 COPSOQ tool may limit generalizability; newer versions offer better standardization and applicability across professions.
- Alignment with HCPC:** Findings align with HCPC standards promoting awareness of workplace stress and mental health for high-quality practice.

## Contact Details



## Recommendations

- Recruit larger samples for more robust results.
- Analyse gender-specific differences in MSC reporting.
- Use updated, validated tools like COPSOQ for standardization.
- Further research into MSCs among therapists using validated tools is needed.

## References



# Determination of the Relationship Between Illness Cognition, Physical Activity and Depression Levels in Patients with Chronic Low Back Pain

## MSc. Thesis by Betül Eksi Ozata, Istanbul Arel University/2021

### INTRODUCTION

In the early stages of pain treatment, the focus was solely on the physiological component of pain. With the emergence of the biopsychosocial model of pain, it has been established that particularly chronic pain treatments need to be organized with a multifaceted approach. When pain becomes chronic, a decreased response in the sympathetic system is observed, and the cognitive, behavioral, and emotional aspects of the condition become important. The Illness Cognition Questionnaire specifically includes the patient's perception of their illness.

### PURPOSE

The aim is to identify the cognitive levels of patients with chronic low back pain and provide findings related to their physical activity and depression levels.

### PARTICIPANTS

108 patients with chronic low back pain participated in our study.

### METHODS

The population of the study consists of individuals who applied for outpatient consultancy services at a wellness center in Florya, Istanbul, within the borders of Turkey. Data Collection: Administered questionnaires in the presence of the researcher.

#### Data Collection Tools

Illness Cognition Questionnaire (ICQ)  
International Physical Activity Questionnaire (IPAQ-SF)  
Beck Depression Inventory (BDI)

Analysis: SPSS 25 used for data analysis. Various statistical tests (Student's t Test, Mann-Whitney-U test, One-Way ANOVA, Pearson Correlation Coefficient) applied based on data type and distribution.

### RESULTS

There is a positive relationship between sitting, one of the Physical Activity sub-dimensions, and Helplessness, one of the Illness Cognition Questionnaire sub-dimensions.

### RESULTS

There is also a positive relationship between Beck Depression Inventory Total Score and Helplessness, one of the subscales of the Illness Cognition Questionnaire.

Relationships between Physical Activity and its Sub-Dimensions with the Illness Cognition Questionnaire and its Sub-Dimensions

		Desperation	Acceptance	Perceived Benefits	Illness Cognition Questionnaire Total Score
Active Physical Activity	r	-0,016	0,138	-0,023	0,072
	p	0,873	0,156	0,816	0,462
Middle Physical Activity	r	0,097	-0,131	-0,186	-0,078
	p	0,316	0,177	0,054	0,420
Walking	r	0,026	-0,006	-0,151	-0,021
	p	0,787	0,948	0,118	0,833
Sitting	r	0,261**	-0,011	-0,025	0,123
	p	0,006	0,913	0,797	0,206
Total Physical Activity Score	r	0,014	0,083	-0,128	0,056
	p	0,888	0,396	0,186	0,567

Individuals who exercise have a higher average score on the Illness Cognition scale compared to those who do not exercise. Individuals with higher illness cognition are observed to have a better understanding of their illnesses and thus exert more effort to maintain their health.

### RESULTS

In the study, it was noted that individuals with an exercise habit have a higher perception of illness, and this was found to be statistically significant. This indicates that individuals who exercise are more knowledgeable about their illnesses and use this knowledge to improve their health.

Relationships between the Beck Depression Inventory and the Illness Cognition Questionnaire and its Sub-Dimensions

		Desperation	Acceptance	Perceived Benefits	Illness Cognition Questionnaire Total Score
Beck Depression Scale Total Score	R	0,268**	0,004	-0,177	0,035
	p	0,005	0,999	0,066	0,722

### DISCUSSION & CONCLUSIONS

Many researchers emphasize the importance of considering patients' beliefs about their illnesses, especially in the treatment of chronic diseases. Regular exercise improves illness cognition. Positive correlation between sitting time and helplessness. Exercise is crucial for managing chronic low back pain.

### RECOMMENDATIONS

Future research should explore these relationships in broader populations and other chronic conditions. Moreover, longitudinal studies are needed to determine the causal relationships and long-term effects of interventions targeting illness cognition.

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## RELATIONSHIP BETWEEN LIFESTYLE AND MENTAL HEALTH IN UNIVERSITY STUDENTS OF HEALTH AREA

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Universidad del Rosario, EMCS, CI: Ciencias de la Rehabilitación, Centro de Estudios en medición en actividad física.

### INTRODUCTION

Mental health problems (MHP) in university students have been raising in the last decade and health care students (HCS) are a specially population of interest. This is due to their exposure to different stressors and changes in lifestyles (LS). Few studies have explored the relationship of LS and anxiety (AN) and depression(DP) in HCS

### METHODS

Observational, correlational and cross-sectional study. The FANTASTIC questionnaire was used for LS, PHQ9 to evaluate DP, BAI Test for AN and IPAQ for physical activity. HCS signed the informed consent form. Descriptive statistics and correlations between DP and AN with lifestyle were determined. Statistical significance was estimated at  $p < 0.05$ . Ethics committee approval of the Universidad del Rosario DVO005 1519 – CV1356.

### CONCLUSION AND DISCUSSION

The relationships found indicate that HCS with better LS present less anxious and depressive symptomatology. Also, HCS with greater LS have better levels of PA. The latter will help to prevent MHP. These findings would be in agreement with studies in the general university population that relate healthy LS with better MH. This study provides new information on this population and would be the baseline for developing new research to analyze which elements of the LS are more effective for the management of MHP.

### PURPOSE

To determine the relationship between lifestyle and anxiety and depression in HCS.

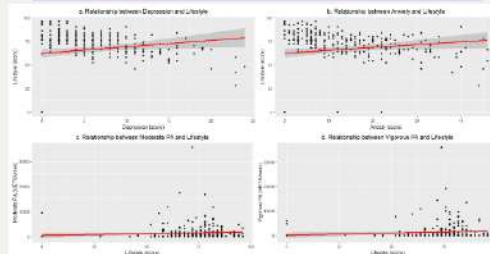
### PARTICIPANTS



298 HCS

23.8%  76.2%   
20.29 ± 3.1 years 

### RESULTS



Significant differences were found between DP and LS ( $\rho = -0.151$ ) and AN and LS ( $\rho = -0.150$ ). Also, moderate and vigorous PA and LS were positively correlated ( $\rho = 0.298$ ,  $\rho = 0.299$ ).

### REFERENCES



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# From pain to awareness: Basic body awareness therapy in a group of women with Chronic Pain

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BBAT TRANSFORMS THE PERCEPTION OF PAIN, MOVEMENT AND SELF-NARRATIVE



### INTRODUCTION

Chronic long-lasting musculoskeletal pain (CP) is a leading cause of disability worldwide (1). CP comprises multiple components: sensory, emotional, cognitive, and behavioral elements (2), Body Basic awareness therapy (BBAT) seems to have an impact in the therapeutic process in patients with CP, previous findings suggest changes in "relation to self", "pattern of body awareness" and "experiencing physical capacity" (3)

### OBJECTIVE

The aim of this study is to get an approximation on BBAT's effect on the experience of CP in a group of 9 women diagnosed 6 months or more ago.

### KEY FINDINGS

Through the BBAT intervention, participants were able to change the way they perceived pain and their own movement, while changing the narratives about themselves.



### METHODOLOGY

Intervention consisted of 10 group sessions based on BBAT, a mixed qualitative-quantitative study was conducted. Data collection for qualitative analysis came from two sources: 1. Interviews from the BARS scale and BAS-I at baseline and at end of treatment. 2. 10 weeks follow-up conducted at the end of each group session.

### ETHICS

Patients were informed of the purpose of the project and, after being asked whether they agreed to the procedure, signed an informed consent form. The researchers declare that they know and respect the ethical principles for medical research involving human subjects, Helsinki

### CONCLUSION

BBAT appears to have a positive effect on the way people with CP experience their body, movement and pain. Further studies are needed to know the impact of BBAT on the experience of people with CP.

### ANALYSIS

Three categories were analyzed:

It becomes a sensory experience among many others in the body, rather than an invader of attention. New awareness of painless areas of the body and a new perception of sensations such as tension, relief, and freedom.



Maladaptive behavior:



The achievement of pain-free ranges of motion and the consolidation of fluidity within these ranges. The enhanced ability to perceive early bodily alerts facilitates the implementation of clear coping strategies, such as breathing, rest, and the modulation of physical activity, at an early stage. This enables the tolerance of previously avoided movement and contact, stopping fighting pain, anxiety, and isolation to live from a place of body listening with others.

The perception of illness or disability, was shifted to perspective of embracing the experience of being alive in the present moment. Pain should be present or not here and now but is not an obstacle to well-being, it is an opportunity to live fully in the moment.

Pain-centered identity



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