



Chapter 11

Behavioral Change Techniques to Increase Adherence to Physical Activity in Severe Mental Disorders: The Psychiactive Project


Ismael Asad-Cabrera

 <https://orcid.org/0009-0002-9225-8940>
Universidad Pablo de Olavide, Spain


Jesús Borrucco-Sánchez

 <https://orcid.org/0009-0003-3818-4386>
Universidad Pablo de Olavide, Spain


Camilo López-Sánchez

 <https://orcid.org/0009-0008-5517-8144>
Universidad Pablo de Olavide, Spain


Alvaro Lopez-Moral

 <https://orcid.org/0000-0003-0862-8655>
Universidad Pablo de Olavide, Spain

Diego Munguía-izquierdo

 <https://orcid.org/0000-0001-7817-747X>
Universidad Pablo de Olavide, Spain

Javier Bueno-Antequera

 <https://orcid.org/0000-0001-8063-3980>
Universidad Pablo de Olavide, Spain

ABSTRACT

People with severe mental disorders (SMD) coexist with other diseases derived from a lack of physical activity and sedentary lifestyles. Although physical exercise programs can be interesting when it comes to solving this problem, adherence to them is low and the dropout rate is notable, so that these people do not manage to benefit from the positive effects of physical activity. In this sense, encouraging autonomous motivation seems to be the key to achieving greater attendance at training sessions and achieving a stage of change of action or maintenance. To this end, directing attention toward the support and satisfaction of three basic psychological needs (autonomy, competence, and relationships) seems essential. In this endeavor, different behavior change techniques (BCTs) have been successfully used to promote more self-determined motivations and increase physical activity.

DOI: 10.4018/978-1-6684-6040-5.ch011

PHYSICAL HEALTH PROBLEMS IN MENTAL HEALTH

Severe Mental Disorder (SMD) is defined as “a mental, behavioral, or emotional disorder resulting in serious functional impairment, which substantially interferes with or limits one or more major life activities” (National Institute of Mental Health, n.d.). Some examples of severe mental disorders are: schizophrenia, major depressive disorder or bipolar disorder (Fibbins et al., 2021).

People with SMD are characterized by higher levels of suffering from diseases that occur in the general and healthy population such as obesity, diabetes and cardiovascular diseases (Firth et al., 2019). In addition, respiratory problems, osteoporosis, impaired lung function, diabetes, or metabolic syndrome are another of the comorbidities (De Hert et al., 2011). This translates into people with SMD having a reduced life expectancy of around 20 years less compared to healthy individuals (Chan et al., 2022; Liu et al., 2022).

The increase in the number of people suffering from some type of mental disorder is reflected in greater economic expenditure by the public health system. In Spain specifically, common mental disorders account for annual costs equivalent to 2.2% of Gross Domestic Product (GDP), in addition, depression alone is a leading cause of disability worldwide (Ruiz-Rodríguez et al., 2017). These comorbidities are the result of a mixture of economic, social and cultural factors. Some of the most important factors that most directly impact the prevalence of these diseases in this population are medication, physical inactivity, smoking, sedentary lifestyle, and sleep problems (Firth et al., 2020; Lally & MacCabe, 2015).

Another major problem for this population is low physical fitness and cardiovascular problems. In fact, cardiovascular diseases are the main cause of death in people with SMD with 23.9% in men and 17.6% in women, with this being a very high figure compared to the healthy population (Nielsen et al., 2021). On the other hand, the physical condition of people has a great relationship with mental health problems and, the performance of physical activity, even below the recommended minimums, provides a significant benefit rather than if no physical activity is performed (Pearce et al., 2022). Moreover, both variables are related, so that a lower level of physical fitness, in particular cardiorespiratory fitness, is associated with a higher risk of suffering from cardiovascular diseases (Vancampfort, Firth, et al., 2017).

Therefore, physical activity in this population can contribute to improving the situation described above by reducing or combating the probability of suffering from obesity and cardiorespiratory problems. This, added to a reduction in the number of cigarettes smoked per person, would improve the quality of life of these people (Firth et al., 2020).

LIFESTYLE IN MENTAL HEALTH

In this chapter, lifestyle is understood as health-related behaviors, such as level of physical activity, diet, sleep and tobacco use, which would be related to the onset and symptoms of various mental illnesses (Firth et al., 2020). In fact, a psychiatric commission in a joint review paper identified these variables as key risk factors to be modified to improve mental health and physical comorbidities (Firth et al., 2019). Evidence accumulated in recent years highlights that people with SMD are more physically inactive compared to healthy people, having a sedentary behavior of about 476 minutes per day during waking hours. Moreover, the physical activity performed by these individuals is significantly lower than that of healthy people. This sedentary lifestyle leads those with SMD having a significantly higher Body Mass Index (BMI) compared to the healthy population (Vancampfort, Firth, et al., 2017). In the scientific

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/behavioral-change-techniques-to-increase-adherence-to-physical-activity-in-severe-mental-disorders/334586

Related Content

Games We Play: Wellbeing of Players of Live and Digital Games

Tihana Brkljai, Ines Sui, Renata Glavak Tkali, Anja Wertagand Lana Lui (2019). *Multifaceted Approach to Digital Addiction and Its Treatment* (pp. 118-137).

www.irma-international.org/chapter/games-we-play/229195

Financial Stressors Among Students in Higher Educational Institutions

Peter Omae Onderiand Christine Mwajuma Opondo (2024). *Student Stress in Higher Education* (pp. 79-90).

www.irma-international.org/chapter/financial-stressors-among-students-in-higher-educational-institutions/334871

Determining the Risk of Digital Addiction to Adolescent Targets of Internet Trolling: Implications for the UK Legal System

Jonathan Bishop (2015). *Psychological and Social Implications Surrounding Internet and Gaming Addiction* (pp. 31-42).

www.irma-international.org/chapter/determining-the-risk-of-digital-addiction-to-adolescent-targets-of-internet-trolling/134500

Maladaptive Coping Mechanisms to Stress Among University Students From an Integrative Review

Peter Aloka, Mary Ooko, Tom K. O. Onyangoand Remi Orao (2024). *Student Stress in Higher Education* (pp. 201-217).

www.irma-international.org/chapter/maladaptive-coping-mechanisms-to-stress-among-university-students-from-an-integrative-review/334878

Advanced Intervention Strategies for Suicide in Patients with Chronic Mental Illness

Shailesh Jha, Amit Khannaand Prerna Khanna (2017). *Chronic Mental Illness and the Changing Scope of Intervention Strategies, Diagnosis, and Treatment* (pp. 271-291).

www.irma-international.org/chapter/advanced-intervention-strategies-for-suicide-in-patients-with-chronic-mental-illness/159947