**Table 1.**

*Data chart of the included studies*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Title** | **Design of the study** | **Author, year** | **Country** | **Setting** | **Methodology** | **Results** |
| **Occupation-focused interventions for in-patient mental health settings: Pilot study of effectiveness** | Experimental, pre-post design | (Lipskaya-Velikovsky et al., 2020 ) | Israel | Hospital Inpatients | **Participants**: Inpatients with schizophrenia **Sample size**: 33 **Instrument used**: Impact on Participation and Autonomy, Intention for Participation Scale and Recovery Self- Assessment. | Improvements were found in the study group in the following measurements: intention to participate in daily activities participation diversity experience the recovery, orientation of the service, functional capacity, cognitive abilities of language understanding, memory and shifting, and schizophrenia symptoms (positive and negative). |
| **Activity groups for people with schizophrenia: a randomized control trial** | Randomized Control Design | (Dean et al., 2014) | England | secondary care settings including rehabilitation services, supported  accommodation and day centres. | **Participants:** Diagnosed with Schizophrenia from a secondary care setting **Sample size:** 140 **Instrument used:** PANSS, Global Assessment of Functioning (GAF) | Study result found that mental health improved significantly among those offered activity groups. |
| **Community involvement, planning and coping** **skills: pilot outcomes of a recreational-therapy** **intervention for adults with schizophrenia** | | Pilot Intervention | (Snethen et al., 2012) | Philadelphia | Community | **Participants:** adults with schizophrenia spectrum disorders (SSD) **Sample size:**  8 | The main reported results of the intervention, according to theme analyses of seven exit interviews, were improved planning and coping skills, as well as enhanced community involvement. The therapeutic alliance between the client and the therapist made this possible. |
| **Going Beyond: An Adventure- and Recreation-Based** **Group Intervention Promotes Well-Being and Weight** **Loss in Schizophrenia** | case–control study | (Voruganti et al., 2006) | France | Hospital Inpatients | **Participants**: clinically stabilized schizophrenia patients **Sample size:** 23 **Instrument used:** PANSS, Global Assessment of Functioning (GAF), The Subjective Scale to Investigate Cognition in Schizophrenia (SSTICS), Sickness Impact Profile (SIP) | Participants within the study group exhibited slight enhancements in perceived cognitive capacities and domain-specific functioning measures. However, they notably experienced a substantial boost in self-esteem and overall functioning, alongside a weight reduction exceeding 12 pounds. These improvements were maintained throughout a one-year period, accompanied by additional advancements in occupational and social spheres. |
| **Painting a path to wellness’: correlations between participating in a creative activity group and improved measured mental health outcome** | A retrospective study | (Caddy et al., 2011) | Australia | Hospital Inpatients | **Participants:** group sample comprised individual inpatients admitted to the hospital over a 5-year period (2004–2009) **Sample size**: 403 **Instrument used:** DASS-21; Q-LES- The Quality of Life Enjoyment and Satisfaction Questionnaire; Medical Outcomes Short Form Questionnaire;  Health of the Nation Outcome Scale (HoNOS) | Engaging in creative activities holds promise for individuals grappling with mental health issues, potentially leading to decreases in both self-reported symptoms and those evaluated by clinician |
| **Active Leisure in the Emotional Experience of People With Schizophrenia** | cross sectional study | (McCormick et al., 2012) | United States of America | Psychiatric day-treatment | Participants:  45 adult patients suffering from schizophrenia.  Self-reported activity data were gathered using the experience sampling method (ESM) and classed as either active/sedentary or leisure/non-leisure. Additionally, self-reported positive and negative emotional experiences that happened in parallel with activities were gathered using ESM. | A significant portion of leisure activities was sedentary, as was the bulk of activities. Physically active leisure was not shown to be linked to positive emotion, although it was significantly associated with lower negative emotion. |
| **Role of Leisure in Recovery From Mental Illness** | Quantitative study | (Iwasaki et al., 2014) | Philadelphia | community | Survey interviews with individuals with mental illness were done one-on-one (N = 101). The sample included individuals with a range of mental health diagnoses, including schizophrenia, major depressive disorder, and bipolar disorder. Utilized as outcome measures were the Recovery Assessment Scale (RAS), SF-12 Health Survey, Colorado Symptom Index (CSI), Leisure Meanings Gained Scale (LMGS), Leisure Coping Scale, Leisure Satisfaction Scale, Leisure Boredom Scale, and Perceived Active Living Scale. | Two key factors that are important for recovery: (a) the meanings that people with mental illness derive from leisure (e.g., connection/belonging, identity, freedom/autonomy) (meaning making via leisure); and (b) the opportunities for leisure to combat or lessen feelings of boredom (i.e., boredom reduction in leisure). Leisure may offer a crucial setting for pursuing active living, as a higher sense of engagement or involvement was also found to be a strong predictor of recovery, general physical and mental health, and a decrease in the frequency of psychiatric symptoms. Moreover, less mental symptoms were significantly predicted by the utilization of leisure for stress management and boredom reduction. |
| **The participation in leisure activities and the quality of life of people with psychosis in England: A multi-site cross-sectional study** | cross sectional study | (Ngamaba et al., 2021) | England | Outpatients | Six NHS community mental health trusts participated in a cross-sectional survey. Adults diagnosed with a psychosis-related disorder (N = 533) were gathered from secondary mental health outpatient services. The Time Use Survey (TUS) and the Manchester Short Assessment of Quality of Life (MANSA) were two of the metrics used. Multiple regression analyses and descriptive statistics were used. | Individuals suffering from psychosis who engage in more recreational activities tend to lead better lives. The quality of life was higher for men who participated in recreational activities. |
| **Time Use of Unemployed and Employed Single Male Schizophrenia Subjects** | Qualitative | (Hayes & Halford, 1996) | Australia | Psychiatric day hospital,  a psychiatry outpatient department,  or a community psychiatry clinic. | Three matched groups of sixteen Caucasian participants (total n = 48) made up the subjects: one group had a history of mental illness and was diagnosed with schizophrenia; the other two groups were unemployed and had no history of mental disease; and the third group worked full-time and had no history of mental illness. Actions. The Time-Use Diary (TUD), the Adapted Pleasant Events Schedule (APES), and the Social Situations Questionnaire were the three measures that were employed. Three aspects were used to code diary entries: (1) the location of the respondents' activities; (2) the people they were with; and (3) the action itself. | The schizophrenia group slept more than the employed group did on weekdays and more than the unemployed group did on weekends. Additionally, the schizophrenia group spent more time with family than the unemployed group did on weekdays and more time than both groups did on weekends. The results showed that the schizophrenia and unemployed groups spent a significant amount more time at home during the week than the employed group. On weekends, the schizophrenia group engaged in more passive leisure activities and less social interaction and active leisure than the other two groups.  Compared to the employed group, the schizophrenia group and the unemployed group spent more time engaging in passive leisure during the week, but they also spent less time engaging in social activities and engaging in active leisure overall. |
| **Time Use of People Living with Schizophrenia in a North London Catchment Area** | Qualitative | (Shimitras et al., 2003) | London, England | Day care centres and hospital inpatients | An epidemiological survey conducted in London, England, yielded 229 persons with a diagnosis of schizophrenia, whose time utilization is examined in this study. Time utilization for ten main categories of occupations was calculated using twenty-four-hour time budgets that were gathered. | The majority of the participants' professions were sleeping, taking care of themselves, and passive leisure; very few were involved in employment, active leisure, education, or volunteer activity. Compared to men, women worked in domestic roles for a notably longer period of time and engaged in less passive leisure activities. Compared to the other age groups, the younger individuals engaged in social occupations for a notably longer period of time. The majority of time was spent in passive leisure by the older participants and those who attended day centers. |
| **A question of time: A study of time use in people with schizophrenia** | cross-sectional and longitudinal | (Cella et al., 2016) | England | Hospital inpatients | The "Time Use Survey" was used to evaluate and compare 1124 members of the general population with 170 individuals who had been diagnosed with schizophrenia.  Time use survey is semi-structured interview to identify how much time individual spent on various activities in the past.  More frequent activities are evaluated using a shorter time reference (e.g., sleeping hours in the previous week) and less frequent activities are evaluated over a longer period of time. Work, education, volunteer work, leisure, sports, socializing, hobbies, resting, housework/chores, childcare, and sleep are among the activities that are being questioned about. The duration of the interview was set at thirty to forty-five minutes per participant.  Schizophrenia patients' time-use was studied in relation to clinical factors and the intensity of their symptoms. | In contrast to the general population, those with schizophrenia spent more time sleeping and “doing nothing” and less time engaging in social, recreational, and functional activities. People with schizophrenia spent similar amounts of time on functional activities but far less on leisure, socializing, and travel when compared to unemployed people and those with physical disabilities. The intensity of unpleasant symptoms was correlated with time spent in inactive activities and had an adverse effect on social and recreational activities. |

***Note.****PANSS- The Positive and Negative Syndrome Scale, DASS21- The Depression, Anxiety and Stress Scale - 21 Items, N- total number.*