LET'S GET MOVING – THE EFFECT OF SPORTS AND EXERCISE THERAPY IN THE TREATMENT OF MENTAL ILLNESS ON PHYSICAL ACTIVITY

Katrin Friedrich, Vanessa Rößner-Ruff, Julia Krieger, Cassandra Penkov, Marcel Wendt & Marc Ziegenbein

Introduction

Sports and Exercise Therapy (SET) has been shown to have a therapeutic effect on the symptoms of mental illness [1]. Consequently, treatment guidelines recommend the integration of SET as a complementary therapy within a multimodal treatment approach [2]. However, in Germany, the data on the use of SET during treatment are inconsistent [3, 4]. Therefore, it remains unclear to what extent SET influences patients' level of physical activity.

Objectives

The present study examines the extent to which patients' activity levels in the last 7 days change at the start of treatment, at the end of treatment and 12 weeks after the end of treatment.

Methods

In a longitudinal study, adults are surveyed using a self-report questionnaire at the start of (partial) inpatient treatment, at the end of treatment and 12 weeks after the end of treatment. The study is being conducted in a psychotherapeutic and psychosomatic specialist hospital in Lower Saxony, Germany. SET is a therapeutic intervention that is part of the treatment approach. The level of physical activity is documented in minutes per week by means of a self-report questionnaire [5]. A distinction is made between daily physical activities and exercise activities.

Preliminary Results

Only significant pairwise comparisons are reported. The Friedman test revealed **significant differences in daily physical activity levels** ($\chi^2(2) = 8.5$, $p = .015$, $W = .15$). Post-hoc comparison with Bonferroni correction showed significant differences between t_0 (MD = 320 min/week) - t_2 (*MD* = 478 min/week) with $p = .012$, $r = .145$.

Furthermore, the Friedman test revealed **significant differences in exercise activity levels** ($\chi^2(2) = 18.77$, $p < .001$, $W = .34$). Post-hoc comparison with Bonferroni correction showed significant differences between t_0 (*MD* = 0 min/week) - t_1 (*MD* = 211 min/week) with $p = .001$, $r = .206$ and t_1 - t_2 (*MD* = 70 min/week) $p = .018$, $r = .138$.

Table 1: Sample characteristics (*n* = 28)

Characteristic	Category	
Sex	men	11 (39 %)
	women	16 (57 %)
	non-binary	1 (4%)
Age *M (SD)*		45 (12)
Diagnosis	F32.1	1 (4 %)
	F32.2	3 (11 %)
	F33.1	11 (39 %)
	F33.2	10 (36 %)
	F43.1	3 (11 %)

Table 2: Descriptive Statistics and Friedman Test Results

Physical activity in min/week *n* = 28	t_0	t_1	t_2	*p*
Daily physical activity				
M (*SD*)	507 (548)	638 (631)	841 (887)	**.015*[a]**
MD	320	378	478	
Exercise activity				
M (*SD*)	119 (249)	239 (154)[b]	141 (207)	**<.001***[a]**
MD	0	211	70	

[a] Friedman test

[b] Consists of exercise activities in leisure time *M* = 73 (0) and the documented SET minutes *M* = 166 (142). SET includes strength and endurance-oriented fitness training, yoga, table tennis, badminton, football, volleyball, neuroathletics, chair gymnastics, darts, nordic walking, therapeutic climbing, archery and boxing.

* $p < .05$

*** $p < .001$

Conclusion

Exercise activity levels increased significantly during inpatient treatment, with patients successfully achieving the WHO recommendation of at least 150 minutes of physical exercise activity per week. The increase was primarily driven by structured SET supervised by qualified exercise professionals. ***However, a significant reduction in exercise minutes was observed 12 weeks post-discharge***, suggesting patients might face substantial barriers in maintaining active lifestyles once clinical supervision ends. These findings highlight a critical need for enhanced discharge planning and transitional support to bridge the gap between clinical SET and long-term community-based activity. The current study is limited by a small sample size from a single centre, small effect sizes ($r = .138$ - $.206$) and the absence of objective intensity measurements. Further longitudinal research with larger cohorts is essential to identify effective strategies for sustaining physical activity levels following the treatment of mental illness.

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katrin.friedrich@wahrendorff.de

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Wahrendorff