

# MOTIVATION TO PHYSICAL ACTIVITY IN OBESE PSYCHIATRIC PATIENTS

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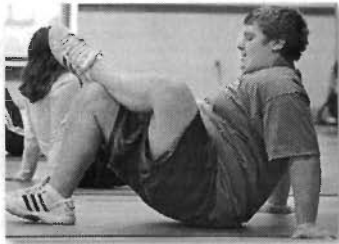
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## Introduction

Obesity is frequently comorbid with psychiatric disorders, representing a crucial question in terms of the compliance to treatments and of several medical complications. Obesity is multifactorial particularly in persons with psychiatric disorders: physical inactivity and unhealthy diets are commonplace (Daumit et al., 2005). In addition, many psychotropic medications, often required for long-term symptom control, cause weight gain, through increased appetite and the resultant high caloric intake (Jerom et al., 2009). Regular exercise need to be supported by personal motivation but people with mental diseases are often characterized by lack of motivation. Recent studies underlined the importance to promote intrinsic motivation to engage individuals in targeted behaviors, stimulating enjoyment and personal satisfaction rather than external reward (Choi et al., 2010).

## Objective

The aim of this study was to compare the modifications in motivation to physical activity (PA) of seriously overweight and obese psychiatric patients, with normal weight or moderate overweight psychiatric patients, during a multidimensional residential treatment which included daily group-based exercise programs.



## Method

### Participants

Participants were 32 seriously overweight (BMI: 27.5-29.9) or obese (BMI ≥ 30), and 71 normal-weight or moderate overweight (BMI ≤ 27.4) psychiatric patients (mean age=46.3, SD=10.9 years; men=39; women=65). They were consecutively admitted to a middle term (45-60 days) residential treatment.

### Measures

*Objective measurements:*

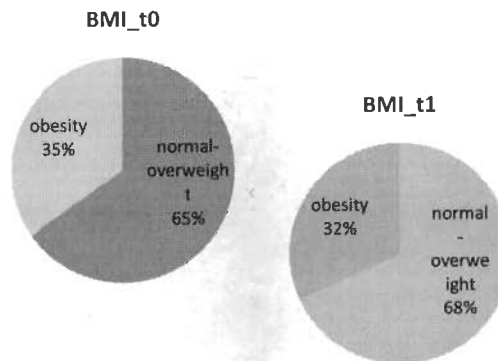
#### the 6 Minutes Walking Test

*Questionnaires for patients:*

- the **Situational Motivation Scale (SIMS)**
- the **Physical Activity Enjoyment Scale (PACES)**
- the **Decisional Balance Questionnaire (DBS)**

## Results

Overweight and obese patients reported at the baseline (t0) significantly lower level in the 6MWT ( $p < .01$ ), in the SIMS Identified Regulation subscale ( $p < .05$ ) and in the PACES tot ( $p < .05$ ) compared to moderate overweight and normal weight patients ( $t=$ ,  $t=$ ,  $T=$ ).



### Pre-post differences in normal-overweight patients

	t	p Value
6Min Walking test_t0 - 6Min Walking test_t1	-9,049	,000
Amotivazione_t0 - Amotivazione_t1	2,827	,006
PACES pros_t0 - PACES pros_t1	-2,230	,029
DBS_t0 - DBS_t1	-2,112	,038

### Pre-post differences in obese patients

	t	p Value
6Min Walking test_t0 - 6Min Walking test_t1	-6,181	,000
Intrinsic Motivation_t0 - Intrinsic Motivation_t1	-3,167	,003
Identified Regulation_t0 - Identified Regulation_t1	-4,158	,000
PACES pros_t0 - PACES pros_t1	-3,071	,004
PACES cons_t0 - PACES cons_t1	3,385	,002
PACES totale_t0 - PACES totale_t1	-3,071	,004
DBQ_t0 - DBQ_t1	-4,528	,000

At the end of the treatment obese patients improved significantly exercise tolerance as measured by the 6MWT, intrinsic motivation and identified regulation, enjoyment in PA and decisional balance.

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## Linear regression analysis

Independent	r <sup>2</sup>	β	p
6MWT			
Intrinsic Motivation	0.06	0.25	< .05
External Regulation	0.04	- 0.22	< .05
Paces tot	0.08	0.29	< .01
DBQ	0.05	0.23	< .05

6MWT results seemed to predict motivation, enjoyment and decisional balance scores.



## Conclusion

The organization of exercise programs appears a cost-effective strategy to change, in the short time, the attitudes toward PA of obese psychiatric patients, increasing their motivation and enjoyment. Exercise should be regularly included in psychiatric treatment protocols and strategies to facilitate and stimulate participation should be implemented also at community-based levels. Further research is needed to understand the long-term effect of exercise by means of follow-up assessments and objective measures of the levels of PA for leisure. In addition, educational interventions are needed to support patients and guide them to a more active and healthy life style.

### References

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