

ORIGINAL ARTICLE

## Assessment of motor and process skills in daily life activities of treated substance addicts

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### Abstract

**Aim:** The purpose of this study was to apply the Assessment of Motor and Process Skills (AMPS) in a sample of people in treatment for addictive behaviours and to study the results. **Methods:** The test was applied to a sample of 101 outpatients in treatment for addiction to substances. The results were studied in relation to gender, age, level of education, and variables related to addiction. **Results:** Motor and cognitive performance was negatively related to time of addiction and its severity. Sixty per cent of the sample reached suboptimal scores and 25% showed scores suggesting significant deterioration, especially with regard to cognitive processing skills. **Conclusions:** The AMPS seems to be a useful instrument to estimate the cognitive and motor impairment associated with addiction in daily life activities. The present work is the first to consider its applicability to drug users under treatment. The percentage of subjects affected and the magnitude of the observed impairment in the sample suggest the need to consider taking these deficits into account in treatment programmes and the convenience of incorporating functional rehabilitation as a basic element of the treatment of persons with addictions. Future studies should develop this instrument in larger samples, increasing the representativeness and generalizability of the results.

**Key words:** occupational therapy, motor skills, cognitive skills, AMPS, addiction, activities of daily living

### Introduction

An important target of intervention for programmes of public health (understood in its broadest sense: medical health, mental health, and social issues) is the problems associated with substance abuse. Among other aetiological conceptualizations, addiction is currently seen as a complex system of interactions between diverse brain structures that cause dysfunctions in motivational, emotional, cognitive, and behavioural processes (1). One of the main circuits involved is the fronto-cerebellar, which

would link failures in oversight mechanisms with motor behaviour linked to addiction (2). The behavioural translation of these disturbances is expressed in a wide range of neuropsychological deficits (some of which are common and may be generalized to all addictive processes, whereas others are specific for each substance (3), and ultimately in more or less severe alterations which imply, first, a significant impact on activities of daily living and, second, worse outcomes in rehabilitation treatments: poor adherence, worse compliance patterns and poorer outcomes after treatment (4). However, no studies

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