



Pergamon

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

**EATING
BEHAVIORS**

Eating Behaviors 5 (2004) 67–74

Hyperactivity in anorexia nervosa: A case study using experience sampling methodology

Kristof Vansteelandt^{a,b,*}, Guido Pieters^b, Walter Vandereycken^{a,b}, Laurence Claes^a, Michel Probst^{b,c}, Iven Van Mechelen^a

^a*Department of Psychology, Katholieke Universiteit Leuven, Tiensestraat 102, B-3000 Leuven, Belgium*

^b*University Center, St. Jozef, Kortenberg, Belgium*

^c*Department Rehabilitation Sciences, Katholieke Universiteit Leuven, Leuven, Belgium*

Accepted 22 July 2003

Abstract

Hyperactivity is frequently observed in eating disorders, and several biopsychological mechanisms have been proposed to explain its pathogenetic role. In view of the lack of a reliable method to study hyperactive behavior, we did an experiment with experience sampling methodology (ESM). During 1 week, an anorexia nervosa (AN) patient was asked at nine random times a day to report her momentary tendency to be physically active, her emotions and several other variables including calorie expenditure, drive for thinness, attractiveness, obsessions, compulsions, and attitudes towards hyperactivity. Results indicate that the patient's tendency to be hyperactive was (a) positively related to her weight preoccupation and her negative emotions, and (b) negatively related to her positive emotions and the absence of depression. In this patient, obsessions and compulsions were not related to hyperactivity. The usefulness of ESM for studying the role of hyperactivity in AN is discussed.

© 2004 Elsevier Ltd. All rights reserved.

Keywords: Hyperactivity; Anorexia nervosa; Experience sampling methodology

1. Introduction

Hyperactivity is frequently observed among patients with anorexia nervosa (AN) (Beumont, Arthur, Russell, & Touyz, 1994; Davis, 1997; Davis & Fox, 1993), and research indicates that the proportion of excessive exercisers among this group is substantially larger than in a nonclinical population (Kron, Katz, Gorzynski, & Weiner, 1978). Several biopsychological mechanisms have been proposed to explain

* Corresponding author. Tel.: +32-16-326123; fax: +32-16-326000.

E-mail address: Kristof.Vansteelandt@psy.kuleuven.ac.be (K. Vansteelandt).

the role of hyperactivity in AN. Three major ones can be summarized as follows: (1) By means of physical hyperactivity, AN patients burn calories and lose weight in order to feel more attractive. As such, undereating and overexercising may become mutually reinforcing behaviors that are resistant to change and cause “activity anorexia” (Davis, 1997; Davis, Kennedy, Ralevski, & Dionne, 1994; Epling & Pierce, 1996). (2) Obsessive–compulsive behavior may play an important role in the hyperactivity of AN patients, with physical hyperactivity being a ritualized or stereotyped obsessive–compulsive behavior (Davis, Kaptein, Kaplan, Olmsted, & Woodside, 1998; Davis et al., 1995). (3) Hyperactivity may act as a form of mood regulation or coping with stress; consequently, physical hyperactivity is a way of regulating negative emotions or affects (Casper, 1997; Davis & Fox, 1993; Davis, Katzman, & Kirsh, 1999; Markland & Ingledew, 1997).

But the research literature is still limited, probably in part because of the lack of a reliable methodology for the assessment of hyperactive behavior. Apart from animal experiments (see for example, Epling & Pierce, 1996) the majority of clinical–psychological research in eating disorders is based on retrospective self-reports of patients who are asked to report on their symptoms, emotions, behaviors, cognitions, and so forth. However, Shiffman and Stone (1998) convincingly argue that such self-reports are prone to serious errors and biases arising from the characteristics of autobiographical memory.

The experience sampling methodology (ESM) or ecologically momentary assessment (EMA) (Stone & Shiffman, 1994) is a method of data collection introduced by Csikszentmihali and Larson (1987) that tries to solve (at least partially) a number of problems related to traditional self-reporting. ESM essentially comes down to a collection of repeated momentary assessments by participants in their natural environments. Participants are provided with a wristwatch or palm top computer and are signaled or “beeped” at a number of random moments in a day for several days or weeks. At each signal, they have to report their momentary emotions, cognitions, and behaviors rather than being asked to summarize their emotions, cognitions, and behaviors. The advantages of ESM in comparison to traditional self-report can be summarized as follows (Shiffman & Stone, 1998): ESM data are less subject to bias introduced by recall and retrieval processes; ESM can claim strong ecological validity; and finally, ESM data are very well suited to explore the dynamic relationship between variables that interact over time, like eliciting factors, symptoms, emotions, cognitions, and behavior. Finally, ESM has been used in many areas of research including eating pathology (Smyth, Wonderlich, Crosby, Miltenberger, Mitchell, & Rorty, 2001) and its validity is well established (Stone et al., 1998).

The goal of the present study was to test the three biopsychological mechanisms concerning hyperactivity in AN as mentioned above by means of the ESM in a single case in order to find out whether the methodology could be useful and applicable in larger studies.

2. Method

2.1. Participant

The patient is an 18-year-old woman with AN of the restrictive type (DSM-IV) with a body mass index (BMI) of 15 kg/m² at the moment of the study; she stayed 4 weeks in the specialized inpatient eating disorders unit of the University Center St-Jozef in Kortenberg, Belgium. The patient gave informed consent and the Ethical Committee of the University Center in Kortenberg approved the research procedures.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات