



## Movement decoupling: A self-help intervention for the treatment of trichotillomania

Steffen Moritz<sup>a,\*</sup>, Michael Rufer<sup>b</sup>

<sup>a</sup>University Medical Center Hamburg-Eppendorf, Department of Psychiatry and Psychotherapy, Martinistr. 52, D-20246 Hamburg, Germany

<sup>b</sup>Department of Psychiatry and Psychotherapy, University Hospital of Zürich, Culmannstrasse 8, 8091 Zürich, Switzerland

### ARTICLE INFO

#### Article history:

Received 24 March 2010  
Received in revised form  
30 June 2010  
Accepted 7 July 2010

#### Keywords:

Trichotillomania  
Impulse control  
Cognitive-behavioral therapy  
Habit reversal training  
Cognition

### ABSTRACT

Trichotillomania (TTM) is classified as an impulse control disorder characterized by the recurrent urge to pull out one's own hair resulting in noticeable hair loss. Cognitive-behavioral therapy, involving habit reversal training, currently represents the treatment of choice. The present study assessed the feasibility and effectiveness of a novel self-help technique, entitled decoupling (DC). DC aims at attenuating TTM by performing movements that decouple the behavioral elements involved in hair pulling. A total of 42 subjects with TTM were recruited via self-help forums for TTM and were randomized either to DC or progressive muscle relaxation (PMR). After four weeks, participants were asked to fill out the same questionnaires as before and rate the effectiveness of the intervention. The completion rate was high and the reliability of the assessments at least satisfactory. The DC group showed a significantly greater decline on the Massachusetts General Hospital – Hair-Pulling Scale, which served as the primary outcome, relative to PMR indicating a medium to strong effect size. Declines on scales tapping depression and obsessive–compulsive disorder were comparable between the two groups. Despite some methodological limitations and the need for replication including follow-up and expert ratings, the present study suggests that DC may prove beneficial to a substantial number of individuals affected with TTM.

© 2010 Elsevier Ltd. All rights reserved.

### 1. Introduction

Trichotillomania (TTM) is presently classified in DSM-IV-TR and ICD-10 as an impulse control disorder, characterized by the recurrent and irresistible urge to pull out one's own hair resulting in noticeable hair loss. The hair pulling is often preceded by an increase of tension and a relief when pulling out the hair. The prevalence rate for TTM is estimated at 0.6% if all diagnostic criteria are met (Christenson, Pyle, & Mitchell, 1991; Duke, Bodzin, Tavares, Geffken, & Storch, 2009). However, a substantial subgroup of patients with hair pulling behavior neither reports a build up of tension nor a subsequent relief (Franklin et al., 2008). If this subgroup is included, the prevalence rises to an estimated rate of 1.2% (Duke et al., 2009). Three subtypes of TTM have been identified across several studies: TTM with early onset hair-pulling, automatic hair-pulling and focused hair-pulling (Christenson, Ristvedt, & Mackenzie, 1993; Swedo et al., 1992; Walsh & McDougle, 2001), whereby the latter types are often mixed (Shusterman, Feld, Baer, & Keuthen, 2009). Shusterman et al. (2009) assume that “automatic

pulling” is primarily driven by boredom and “focused pulling” by anxiety and tension. Whereas most studies of community samples reported a similar prevalence of TTM in men and women (Duke et al., 2009; Graber & Arndt, 1993), in clinical settings TTM is more frequent in women (Christenson & Crow, 1996; Cohen et al., 1995; Shusterman et al., 2009).

Cognitive-behavioral therapy (CBT), including Habit Reversal Training (HRT; Azrin & Nunn, 1973) is regarded as the first line treatment for TTM (Duke, Keeley, Geffken, & Storch, 2010). HRT involves different components with the focus on motor habits, in particular awareness training and competing response training (Azrin & Nunn, 1973). As the name expresses, competing response training teaches patients to substitute the malbehavior with an (freezing) alternative behavior (e.g. clenching one's fist for some time). Various studies have confirmed the effectiveness of HRT in the treatment of TTM (overview in Duke et al., 2010). A systematic review reported that HRT was even superior to pharmacological approaches (SSRI and clomipramine) for TTM (Bloch et al., 2007).

Many individuals with TTM fear that their areas of hair loss due to hair pulling could be discovered by others. Wigs and special haircuts often successfully cover the hair loss to the public. Patients often avoid social activities and do not disclose their problem to

\* Corresponding author. Tel.: +49 40 7410 56565; fax: +49 40 7410 57566.  
E-mail address: [moritz@uke.uni-hamburg.de](mailto:moritz@uke.uni-hamburg.de) (S. Moritz).

others (Neudecker & Rufer, 2004). Feelings of embarrassment and shame can also result in avoidance of professional treatment such as CBT (Diefenbach, Tolin, Hannan, Crocetto, & Worhunsky, 2005; Shusterman et al., 2009). Hence, functional impairment and decreased quality of life associated with TTM receive increased recognition in current research (Diefenbach, Reitman, & Williamson, 2000; Duke et al., 2010; Franklin et al., 2008; Woods et al., 2006).

To help people with TTM and other auto-aggressive impulse control disorders such as nail biting at a low threshold, we have developed a novel self-help technique, entitled decoupling (DC). Parts of DC may be considered a variant of HRT. HRT and DC both aim to stop the dysfunctional movements by actively interfering at the motor level. Whereas HRT typically teaches the subject to perform a “freezing” behavior (e.g. clenching a fist) instead of hair-pulling or other habits, the aim of DC is to mimic the initial motor phase of the malbehavior but then to shift its behavioral target: The new behavior at first resembles the hair-pulling movement but, close to its usual target (hair, nails), it is deviated onto another one (e.g. nose instead of hair). The final motor phase should be executed with an accelerated movement which intends to override strong future impulses to execute hair pulling and to make the movement become more aware and salient by means of the irritation resulting from two strong competing motor programs. Since many patients describe an almost sensory urge in their fingers and scalp to perform hair pulling, these body parts are included in further motor sequences: (1) The fingers of one hand should perform the individual pulling procedure on the fingers of the other hand so that the motor program is acted out to some degree but its target is again shifted, (2) The hairy part of the head should be massaged making sure at the same time that the hair is not pulled out or is otherwise compromised. DC is perhaps most beneficial for those who have problems detecting cues for hair-pulling. It may serve as an alternative to HRT for those who experience difficulties to initiate the alternative competing response in time. Since it is easy to learn and available via self-help it is a treatment option for those not (yet) seeking or even avoiding professional help.

TTM, like OCD (Moritz, 2008), is a hidden disorder as many sufferers do not seek professional help (Cohen et al., 1995; Woods et al., 2006). Our study was therefore deliberately conducted over the Internet. As will be outlined in greater detail in the discussion, internet studies are an important complementary approach to clinical studies and psychometric properties, completion rates and fidelity are at least satisfactory (Chinman, Young, Schell, Hassell, & Mintz, 2004; Moritz, Jelinek, Hauschildt, & Naber, 2010; Ritter, Lorig, Laurent, & Matthews, 2004; Riva, Teruzzi, & Anolli, 2003) if certain precautions are met (e.g. “cookies” to prevent multiple log-ons from the same computer, control questions, incentive at the end of the study to ensure completion, careful choice of specialized Internet networks).

For the present study, we hypothesized that the application of DC would decrease hair pulling to a greater degree than progressive muscle relaxation (PMR), an intervention commonly recommended in the treatment of TTM and one component of HRT. No group differences were expected for scales tapping depression and OCD.

## 2. Methods

### 2.1. Recruitment

With the consent and support of two Internet support networks exclusively devoted to TTM, an invitation for an Internet-based self-help trial was posted. Both Internet pages offer a platform for

people with TTM to exchange opinions and advice and disseminate information about the disorder. In our invitation, we did not describe the techniques beforehand to prevent selection biases. People interested in the study were requested to refrain from participation if they did not have TTM or had no time to read the manual or perform the exercises in the course of the following 4 weeks. Further, participation in an anonymous (Internet-based) study before and after the intervention was mandatory. No compensation was offered for study participation except for the free delivery of two self-help techniques (one manual was dispatched immediately after the baseline survey, the other only after finishing the post-survey as an incentive for study completion). A weblink directed potential participants to the baseline survey which was implemented using [www.unipark.de](http://www.unipark.de). The program prevented multiple log-ons from the same computer by means of “cookies”.

On the first page of the baseline Internet survey the rationale of the study was essentially repeated. Again, the two methods were neither mentioned nor described beforehand to avoid recruitment biases. The baseline survey consisted of the following sections: introduction, sociodemographic questions (e.g. age, gender, school education), medical history (e.g. previous and current treatments, diagnoses, time of first symptoms, profession of person who diagnosed TTM) and a psychopathological section. The psychopathological section encompassed three questionnaires (these will be described in the Questionnaires section below). At the end of the survey, participants were required to enter their email address and a code word to allow the dispatch of the manual and to allow anonymous identification at the post-intervention phase. No other personal information such as name, telephone number or postal address was requested. The survey lasted 15–20 min.

### 2.2. Treatment allocation

Participants who left their email addresses at the end of the baseline survey were randomly allocated to the DC or PMR group according to the order of registration.

PMR was described on a 3-page pdf file. The PMR approach followed standard instructions. The progressive muscle relaxation was developed by Edmund Jacobson and is a deep relaxation technique that has been effectively used to control stress and anxiety and relieve other symptoms (Manzoni, Pagnini, Castelnuovo, & Molinari, 2008). PMR is also commonly used in the framework of HRT. Progressive muscle relaxation is based upon the simple two-phase practice of deliberately tensing, or tightening, certain muscle groups for a short time followed by a deliberate relaxation phase with release of the tension. The technique can be easily learnt and applied without direct guidance by a therapist.

DC was described on a 7-page pdf file for people pulling hair and biting nails, whereby study participants were requested to focus on the specific instructions for TTM (the manual can be downloaded cost-free in different languages at [www.uke.de/impulskontrolle](http://www.uke.de/impulskontrolle)). The manual contained the following parts: (a) Introduction: A one-page overview on the symptoms and somatic and social consequences of nail biting and TTM including photos depicting the behavior and its manifestations. (b) Observational period: Prior to the application of the core exercises, subjects were requested to identify contextual triggers for malbehavior which should be noted into a table. (c) Rationale: The rationale was subsequently described. Patients were familiarized with our approach to shape the malbehavior into a behavior without self-harming consequences by decoupling the involved behavioral elements. (d) Exercises: The core exercises were conveyed, first for nail biting, then for TTM. Subjects were instructed to perform

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

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