



## Trichotillomania and emotion regulation: Is symptom severity related to alexithymia?



Michael Rufer<sup>a,\*</sup>, Tsering Bamert<sup>a</sup>, Richard Klaghofer<sup>a</sup>, Steffen Moritz<sup>b</sup>, Lisa Schilling<sup>b</sup>, Steffi Weidt<sup>a</sup>

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

<sup>b</sup> Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf, Martinistrasse 52, 20246 Hamburg, Germany

### ARTICLE INFO

#### Article history:

Received 6 November 2013

Received in revised form

2 February 2014

Accepted 24 March 2014

Available online 4 April 2014

#### Keywords:

Alexithymia

Trichotillomania

Emotion regulation

### ABSTRACT

Previous research on trichotillomania (TTM) has demonstrated an emotion regulation function of hair pulling behavior. One condition that can impede the regulation of emotions is alexithymia. The present study aimed to explore the relationship between the degree of alexithymia and the severity of hair pulling behavior in individuals with TTM. Multiple strategies were used to recruit a sample of 105 participants via the internet. All participants were diagnosed with TTM by an experienced clinician via a subsequent phone-interview. Multiple linear regression analysis was performed to test the potential predictive value of the different facets of alexithymia (20-item Toronto Alexithymia Scale) on the severity of TTM (Massachusetts General Hospital Hair-Pulling Scale). Both the difficulty in identifying feelings (DIF) facet of alexithymia ( $p=0.045$ ) and depression ( $p=0.049$ ) were significant predictors of the severity of TTM. In conclusion, alexithymia seems to play a role in hair pulling behavior in individuals with TTM. However, the significant association was small in terms of the overall variance explained, thus warranting further research. If replicated in prospective studies, then these results indicate that therapeutic approaches aimed at supporting patients in recognizing and differentiating feelings might be useful for the treatment of TTM.

© 2014 Elsevier Ireland Ltd. All rights reserved.

### 1. Introduction

Trichotillomania (TTM) is characterized by the repetitive pulling out of one's own hair from the scalp, eyebrows, eyelashes, or other areas of the body. Epidemiological studies have demonstrated a lifetime prevalence rate of about 1% (Duke et al., 2010). TTM often has negative psychosocial consequences such as low self-esteem, strong feelings of shame, and avoidance of social activities. In the DSM-IV-TR, TTM was classified as an impulse control disorder (not classified elsewhere). In the DSM-5, TTM is listed in a new chapter entitled Obsessive Compulsive and Related Disorders and the term "hair pulling disorder" has been added parenthetically to the disorder's name. This change in the classification reflects some important similarities between TTM and obsessive-compulsive disorder (OCD).

In OCD, the most prominent function of obsessive-compulsive symptoms is emotion regulation, such as dealing with anxiety, anger, or disgust (Kulz et al., 2010). Similarly, previous research on

TTM has demonstrated an emotion regulation function of hair pulling behavior (Diefenbach et al., 2008; Shusterman et al., 2009). The hair pulling behavior is frequently preceded by an increase of tension followed by relief when pulling out the hair. In addition, situations associated with unpleasant emotions are common triggers for hair pulling. Thus, it has been suggested that TTM can be conceptualized as a maladaptive method of regulating emotions (Shusterman et al., 2009).

Most previous studies have explored emotions that directly accompany hair pulling behavior. To our knowledge, only one study has addressed difficulties in emotion regulation beyond the arc of emotions that accompany hair pulling behavior: An internet survey of 1154 people with hair pulling behavior showed a significant relationship between difficulties in regulating emotions and problematic hair pulling (Shusterman et al., 2009). However, this study had a rather narrow focus on emotions that are typically related to TTM, such as boredom. As far as we know, the question of whether emotion regulation in general is impaired in patients suffering from TTM has never been studied.

One condition that may generally impede the regulation of emotions is alexithymia, which has a prevalence rate of 10% in the German general population (Franz et al., 2008). Alexithymia, which

\* Corresponding author. Tel.: +41 44 255 5251; fax: +41 44 255 4408.

E-mail address: [michael.rufer@usz.ch](mailto:michael.rufer@usz.ch) (M. Rufer).

was introduced in the early 1970s (Nemiah, 1977; Sifneos, 1973), is a personality construct characterized by difficulty in identifying and describing one's own feelings, an externally oriented style of thinking, and a restricted imagination (Taylor and Bagby, 2012).

Alexithymia is considered to be an important factor in the maintenance and possible etiology of various psychiatric and psychosomatic conditions such as anxiety and obsessive-compulsive disorders (Rufer et al., 2010, 2004), binge eating (Wheeler et al., 2005), functional gastrointestinal disorders (Porcelli et al., 1999), depression (Honkalampi et al., 2007), addictions (de Haan et al., 2012) and schizophrenia (Cedro et al., 2001). Due to their deficits, high-alexithymic individuals have difficulties in tolerating and regulating emotional arousal (Chen et al., 2011; Majohr et al., 2011). Theoretically, alexithymic deficits may impede coping with aversive affective states in some people with TTM, and hair pulling may serve a function of the regulating of emotional arousal. However, to our knowledge, no previous study has examined alexithymia in TTM.

The present study aimed therefore to explore the relationship between alexithymic features and hair pulling behavior in individuals with TTM. The hypothesis was that the degree of alexithymic deficits would positively correlate with the severity of hair-pulling, independent of potentially confounding factors such as depression.

## 2. Methods

### 2.1. Participants and procedure

The study was approved by the Ethics Committee of the Canton of Zurich, Switzerland. Informed written consent was obtained from all participants prior to their enrollment. Participants were recruited online by notices on German and Swiss trichotillomania and obsessive-compulsive disorder websites, online self-help forums, and trichotillomania chat rooms. In TTM, the advantage of data collection by internet is the accessibility of individuals who avoid seeking professional help because of the shame that is often associated with this condition (Moritz and Rufer, 2011). We chose specific trichotillomania websites and forums to ensure that the online-survey would mainly be accessed by people with trichotillomania. In addition, we asked university dermatology departments to display information about the study on their notice boards in the patients' waiting room.

The online and paper announcements included a short description of the study and a link or web address, respectively, for further information. This web link/web address directed potential participants to the survey, constructed using the Unipark (Questback) software package. The program prevented multiple logons from the same computer by means of cookies. On the first page of the internet assessment, the study was explained and the potential participants were asked to give their written (electronic) consent to participate.

Exclusion criteria were current suicidal ideations, dependency of alcohol or drugs, and psychosis (as assessed, via phone interview, with the Mini-International Neuropsychiatric Interview (Sheehan et al., 1997)).

A total of 141 individuals signed the electronic informed consent form and entered the survey; 105 were included in the study. Individuals were not included if they failed to complete the survey ( $n=20$ ), could not be contacted for the phone-interview ( $n=6$ ), did not meet the diagnostic criteria for TTM ( $n=4$ ), or decided not to take part in the study ( $n=1$ ). Five individuals met exclusion criteria due to suicidal ideations ( $n=4$ ) and alcohol dependency ( $n=1$ ). These people were carefully informed about health care services and provided with emergency numbers during the phone-interview.

### 2.2. Assessments

#### 2.2.1. Web-based assessments, self-rated

The German version of the Massachusetts General Hospital Hair-Pulling Scale (MGH-HPS) was administered to measure the severity of hair pulling (Bohne, 2009; Keuthen et al., 1995). The MGH-HPS is a reliable and valid 7-item self-report instrument (O'Sullivan et al., 1995). Its items are rated on a 5-point Likert scale from 0 to 4 with higher scores indicating greater symptom severity. The total score is the sum of all seven items (range: 0–28).

Alexithymia was evaluated using the German version of the 20-Item Toronto Alexithymia Scale (TAS-20), a reliable and valid self-rating measure of the alexithymia construct (Bach et al., 1996; Bagby et al., 1994a; Taylor et al., 2003). Empirically validated, the TAS-20 has a three-factor structure comprising the following factors: difficulty identifying feelings (DIF), difficulty describing feelings (DDF), and externally oriented thinking (EOT). Individuals with a TAS-20 total score of  $\geq 61$  are considered high-alexithymic, (Bagby et al., 1994b). However, for the German population, Franz et al. (2008) found that a TAS-20 cutoff score of  $\geq 53$  (for

men) and  $\geq 52$  (for women) might be more appropriate. The measurement equivalency between internet and paper and pencil administrations of the TAS-20 was shown in a recent study (Bagby et al., 2014).

In addition, questions about gender, age, education and duration of TTM symptoms were included in the assessment.

#### 2.2.2. Assessments via phone, expert-rated

Participants were diagnosed with TTM by an experienced clinician according to DSM-IV-TR criteria. Comorbid axis I disorders were assessed with the German version (Ackenheil et al., 1999) of the Mini-International Neuropsychiatric Interview (MINI), a reliable and valid structured diagnostic interview (Lecrubier et al., 1997; Sheehan et al., 1997). The severity of the depressive symptoms was assessed using the German version (Collegium, 1990; Hamilton, 1960) of the 17-item Hamilton Depression Rating Scale (HDRS; Hamilton, 1960). The HDRS is the most commonly used clinician rating scale for depression. The content validity of the scale seems to be not satisfactory, while its convergent validity, discriminant validity, and internal reliability are adequate (Bagby et al., 2004). The HDRS was frequently administered along with the TAS-20, as alexithymic features are often associated with depression (e.g., Gulec et al., 2013; Rufer et al., 2006). Two clinically experienced and trained raters conducted all MINI and HDRS ratings.

### 2.3. Statistical analyses

The associations between MGH-HPS, TAS-20, and HDRS-17 were analyzed using Pearson correlations. Multiple linear regression analysis (method enter) was performed to test the potential predictive value of different facets of alexithymia, as represented by the TAS-20 subscales, on the severity of TTM in a multivariate context. Potential confounding variables were included in the model: HDRS-17, age, gender, comorbid disorders (0=no comorbid disorder, 1=one or more comorbid disorders), and education (0=below high school level, 1=high school level and above). Assumptions for regression analyses were tested in terms of linearity of the relationship between MGH-HPS and independent variables, autocorrelation of residuals (Durbin-Watson-test=2.1), homoscedasticity and normal distribution of residuals and were found to be satisfactory. Furthermore, we found no multicollinearity between independent variables (all VIF < 2.6). Results are reported in terms of  $b$  (SE( $b$ )), Beta (95%CI) and adjusted  $R$ -square.

All statistical calculations were performed using the software-package IBM SPSS Statistics (Version 20.0). The level of significance was set at  $p \leq 0.05$  (two-sided).

## 3. Results

One-hundred (95%) of the 105 participants were female. The mean age was 32.1 (S.D.=9.8), the mean duration of TTM 19.4 years (S.D.=10.2), and the mean MGH-HPS score 17.9 (S.D.=4.98). Using the traditional TAS-20 cutoff score of  $\geq 61$ , 16 participants (15%) were considered high-alexithymic. Using the cutoff scores of  $\geq 53$  (for men) and  $\geq 52$  (for women), which were suggested by Franz et al. (2008) for the German population (see above), 41 participants (39%) could be considered high-alexithymic. The mean TAS-20 total score was 48.1 (S.D.=11.7). Fifty five participants (52.4%) had one or more additional comorbid axis I disorders. Most common were general anxiety disorder ( $n=31$ ), major depression ( $n=18$ ), and social anxiety ( $n=18$ ). Further socio-demographic and psychometric data are shown in Table 1.

The MGH-HPS correlated significantly with the TAS-20 total scale ( $r=0.35$ ,  $p < 0.001$ ), all TAS-20 subscales, and the HDRS-17 (Table 2). To test the predictive value of different facets of alexithymia (DIF, DDF, and EOT) for the severity of TTM, multiple linear regression analysis was carried out. The model revealed a significant association (beta weight) between DIF and MGH-HPS and a nearly significant association between EOT and MGH-HPS (model summary: adjusted  $R^2=0.18$ ,  $F=3.79$ ,  $p=0.001$ ). HDRS-17 was also significantly associated with MGH-HPS ( $p=0.049$ ) while all other included covariates showed no significant associations (Table 2). A separate model, which included the TAS-20 total scale instead of the factor scales (model summary: adjusted  $R^2=0.21$ ,  $F=4.38$ ,  $p=0.001$ ), revealed a significant association between TAS-20 and MGH-HPS ( $b$  (SE( $b$ ))=0.14 (0.04), Beta (95%CI)=0.27 (0.06/0.47),  $p=0.01$ ) and a nearly significant association between HDRS-17 and MGH-HPS ( $p=0.07$ ).

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