

# Sci-Lit Zine

**BFRB Awareness Week 2022**



*expanding our community*  
**SCIENTIFIC LITERACY 2022**

# WEIRD Framework



The BFRB community is extremely diverse; however, this diversity is not always represented, especially in BFRB research. In fact, most published research isn't representative of the majority of populations because samples are chosen that overrepresent certain characteristics, such as whiteness. This prevents findings from being generalized to a larger, more diverse population. The WEIRD framework was developed to assess whether samples are representative. If a sample is WEIRD (Western, Educated, Industrialized, Rich, and Democratic), then it's not representative of global populations. While it is a good start, this framework is not perfect. Some note that the framework doesn't acknowledge race or ethnicity, doesn't address diversification of research contexts, and doesn't do enough to highlight that we also need to welcome non-WEIRD researchers into the mainstream literature. You'll see in our infographics, the Sci-Lit team has attempted to highlight who's included in this BFRB research, and critically, who isn't. Our goal is to encourage samples that are as diverse as our community.

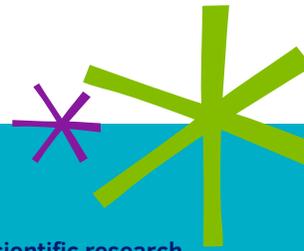
University of Minnesota Library, Conducting Research through an Anti-Racist Lens, <https://libguides.umn.edu/antiracismlens>

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2. Zheng, H., Yang, W., Zhang, B., Hua, G., Wang, S., Jia, F., Guo, G., Wang, W., Quan, D. (2020). Reduced anterior cingulate glutamate of comorbid skin-picking disorder in adults with obsessive-compulsive disorder. *Journal of Affective Disorders*, 265, 193-199.
3. Tan, Y. T., Rehm, I. C., Stevenson, J. L., & De Foe, A. (2021). Social media peer support groups for obsessive-compulsive and related disorders: understanding the predictors of negative experiences. *Journal of Affective Disorders*, 281, 661-672.
4. Cavic, E., Valle, S., Chamberlain, S., Grant, J. (2021). Sleep quality and its clinical associations in trichotillomania and skin picking disorder. *Comprehensive Psychiatry*, 105.
5. Grant, J.E., Chamberlain, S.R. (2021). Personality traits and their clinical associations in trichotillomania and skin picking disorder. *BMC Psychiatry*, 21(1).
6. Grant, J. E., Valle, S., Aslan, I. H., & Chamberlain, S. R. (2021). Clinical presentation of body-focused repetitive behaviors in minority ethnic groups. *Comprehensive Psychiatry*, 111.
7. Moritz, S., Penney, D., Ahmed, K. & Schmotz, S. (2021). A Head-to-Head Comparison of Three Self-Help Techniques to Reduce Body-Focused Repetitive Behaviors. *Behavior Modification*, 46(4), 894-912.

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**Acknowledgements:** A huge thank you to Dr. Darin Dougherty and Jen Monteleone for their invaluable help in putting this zine together.



## Meet the Sci-Lit Team

**Our mission:** The scientific literacy committee aims to make scientific research about BFRBs accessible and understandable to the general public. We want to empower people to trust in science and use it to advocate for themselves and their loved ones.



**HANNAH**

Hannah is 23 years old from Moorestown, New Jersey. She received her B.A. in biology and psychology from McDaniel College in 2021 and currently works as a hematology research technician in Philadelphia, Pennsylvania. She is interested in a career in medicine or public health. Hannah joined the TLC community in 2014 when she attended her first conference which inspired her to become a BFRB advocate. In 2020 she joined the Young Adult Action Council and in 2021 became the head of the scientific-literacy subcommittee. Her first scientific paper, "Prevalence and gender distribution of trichotillomania: A systematic review and meta-analysis" was published this year. Outside of her BFRB work, Hannah is a huge Taylor Swift and gymnastics fan, and enjoys baking, sewing, and bullet journaling.



**OLIVIA**

Olivia is 23 years old and lives in Montreal, Quebec, where she works as a medical scribe, researcher, and direct support worker. She holds a B.Sc. in cellular biology and medical anthropology from McGill University and is now working towards a career in family medicine. Olivia grew up in Arlington, MA, but decided to stay in Montreal after graduation because of the wonderful community she built there. She draws strength, in part, from the Montreal BFRB Support group which she founded and runs. Olivia's interests are broad and evolving. Some things she's excited about are: dogs, artistic activism, peer support, skiing, cooking, community-based participatory research, dancing with friends, and of course, BFRB advocacy and scientific literacy. To inquire about joining the Montreal BFRB support group (which accepts folks from all over while in its virtual format), search Montreal on the TLC online referral directory.



**MAYA**

Maya is 20 years old and is from Long Island, New York. Maya is an undergraduate student at Harvard University, planning to study Environmental Engineering and Spanish. She has had dermatillomania and onychotillomania for as long as she can remember, and has been regularly co-hosting TLC's Teen Support Group since 2020. Maya has a strong background in scientific research, so she is excited to apply this within the BFRB community. When she is not busy studying, Maya loves to make art or music, write poetry, and play sports!

# Visual Triggers of Skin Picking Episodes: An Experimental Study in Self-Reported Skin Picking Disorder and Atopic Dermatitis

L. Mehrmann, A. Urbana, A.L. Gerlach

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Research on the triggers for skin picking episodes in individuals with Skin Picking Disorder (SPD), commonly referred to as Dermatillomania or Excoriation Disorder, has previously suggested that the visual perception of one's skin plays an important role in the urge and initiation of skin picking behavior. Additionally, pruritus (itching), or the urge to scratch, shares many parallels with the urge to pick, particularly in individuals with Atopic Dermatitis (AD). Itching that is induced via auditory or visual stimuli is called contagious itch. The present study aims to determine if skin picking can also be "contagious" by visual stimuli and triggers. It compared picking-related, itch-related, and neutral visual stimuli among experimental groups of people with SPD, AD, both (SPD+AD), and a control group with neither condition.

Over 1000 German adult women were recruited for this study. The final data set contained 147 women with SPD only (24.5%), 47 with AD only (7.8%), 46 with SPD+AD (7.7%), and 361 in the control group (60%). Male-identifying participants were initially sought out for this study but were ultimately excluded after low recruitment. The study was conducted online in both German and English.

Each participant received 24 pictures in random order. Pictures were divided into three stimulus types and eight from each group were presented: (1) picking-related images depicting pimples, scabs, or loosening skin flakes, (2) itch-related images with skin conditions (e.g., eczema, mosquito bites), and (3) neutral images with pictures of intact, healthy skin. After viewing an image the participant answered four questions on a 5-point scale (0 = not at all, 4 = very strong): How itchy do you feel? How itchy do you think the person in the picture feels? How strong is your urge to pick (not scratch)? How strong do you think is the urge to pick (not scratch) of the person in the picture?

The results of this study confirmed that there is an increased urge to pick when people with Skin Picking Disorder are presented with picking-related stimuli. More specifically, participants with SPD reported a stronger urge to pick for picking-related stimuli compared to itch-related and/or neutral stimuli, and the difference was significantly higher in SPD participants compared to participants without SPD. Furthermore, the SPD-only group was more responsive to picking stimuli than itch or neutral stimuli compared to the SPD+AD group, while the AD-only group was more responsive to itch stimuli than picking or neutral stimuli compared to the SPD+AD group.

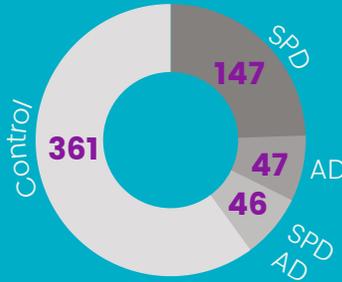
This study demonstrated that the urge to pick can, in fact, be triggered by visual stimuli, which is analogous to the induction of itch via visual stimuli. Findings thus suggest that visual stimuli may trigger specific types of somatosensory perception without actual somatosensory stimulation. The study did not, however, determine if the urge to pick induced by visual stimuli translates into actual picking episodes. Further research on this should be conducted in a laboratory setting. Additional limitations include the following: low sample size for AD participants, usage of self-report information, differentiating between the urge to scratch and pick may have been difficult for some participants, itch and urge to pick were not compared to their corresponding behaviors of actual scratching or picking, and only females participated in this study.

Overall, this study has very useful and practical applications for improving treatment of SPD. Understanding the role of visual triggers may help with stimulus control treatment, in which triggers are identified and then changed to reduce the harmful behavior. Specific visual triggers can thus be targeted to prevent the urge to pick and ultimately prevent the picking behavior.

# Visual Triggers of Skin Picking Episodes: An Experimental Study in Self-Reported Skin Picking Disorder (SPD) and Atopic Dermatitis (AD)

## Participants

- ✓ **W** Western
- ✓ **E** Educated
- ✓ **I** Industrialized
- ✓ **R** Rich
- ✓ **D** Democratic

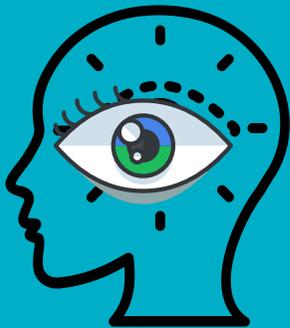


Participants were shown 24 images in a random order, 8 from each of the following groups - picking related skin images, itch related skin images, and neutral skin images



**Urge to pick in participants with SPD when shown picking related images**

**SPD participants were more responsive to picking related images than SPD+AD participants**



**Visual stimuli can trigger the urge to pick, but it is unknown if this translates to picking episodes. Understanding the role of visual triggers could help develop treatments.**

## Reduced Anterior Cingulate Glutamate of Comorbid Skin-picking Disorder in Adults with Obsessive-Compulsive Disorder

H. Zheng, W. Yang, B. Zhang, G. Hua, S. Wang, F. Jia, G. Guo, W. Wang, D. Quan

Magnetic resonance spectroscopy (MRS) is a noninvasive method to examine the biochemical makeup in the brain. One theory of the pathophysiology of obsessive-compulsive disorder (OCD) and skin-picking disorder (SPD) is dysfunction in the anterior cingulate cortex (ACC) and cortico-striato-thalamo-cortical (CSTC) loop since the ACC is an integral part of the CSTC. The ACC and CSTC are important in movement, emotion, habit formation, and reward processing. Prior MRS studies in OCD have been inconsistent, but as more evidence has come out linking the neurotransmitter glutamate to OCD further research is warranted. One possibility for inconsistency is because they could not distinguish glutamate from glutamine. Furthermore, in its limited imaging research, SPD has shown lower ACC activation, opposite of OCD, creating a potential interactive effect that could affect the MRS imaging. This study aimed to clarify the ambiguities in this research by isolating glutamate in MRS imaging and separating participants with just OCD from those with OCD and SPD.

This study included 47 participants in total: 17 with OCD, 13 with OCD and SPD, and 17 healthy controls. All participants had a whole brain MRI and localized MRS in the ACC area measuring glutamate, glutamine, choline, myo-inositol, n-acetyl-aspartate + N-acetyl-aspartyl- glutamate (tNAA), and creatine+phosphocreatine (Cr). Clinical measures of OCD, anxiety, depression, and SPD were also performed on all participants

This study found that the OCD+SPD had lower glutamate levels in the ACC than the OCD and control groups. Lower ACC glutamate levels in all OCD+SPD participants was correlated with higher clinical measures of anxiety, while in female OCD+SPD participants, higher glutamate levels were correlated with greater clinical measures of OCD. No correlations were found between the OCD only group and any clinical measures. No significant difference in glutamine or glutamate and glutamine levels was found between any groups. Between all three groups, tNAA level was found to have a significant difference, though no difference between the two OCD groups was found. Female OCD only participants were found to have significantly lower Cr levels than the male OCD only participants.

These results show that glutamate levels in the ACC may play a role in OCD with SPD but not in OCD alone. The lack of abnormal glutamate in the OCD only group could be due to OCD and SPD interacting to create a reduction in glutamate. OCD with SPD could also be a subgroup of OCD that has lower glutamate. Glutamate modulators, like n-acetylcysteine, have some clinical studies backing them for treating SPD which would align with the decrease in ACC glutamate in the OCD+SPD group only. The results also show that isolating glutamate from glutamine may be important for identifying abnormalities since the glutamate and glutamine measure had no significance in any group while glutamate alone did. Like any study, there are some limitations. Firstly, this was a small study and the study was cross sectional which limits causality. Secondly, many participants were on medications that could change metabolism, though all had been on a stable dose for 8 weeks. Lastly, there was no SPD only group, which would help distinguish the effects of OCD and SPD on glutamate in the OCD+SPD group. Future studies could expand on this research by including an SPD only group and/or use tissue segmentation to distinguish glutamate levels between the grey and white matter areas of the ACC.



# Reduced Anterior Cingulate Glutamate of Comorbid Skin-picking Disorder in Adults with Obsessive-Compulsive Disorder



**THIS STUDY COMPARED PEOPLE WITH OCD AND THOSE WITH OCD AND SPD BY MEASURING SEVERAL BRAIN METABOLITES IN THE ACC**

## Participants

- ✓ **W** Western
- ✓ **E** Educated
- ✓ **I** Industrialized
- ✓ **R** Rich
- ✓ **D** Democratic



### Magnetic Resonance Spectroscopy

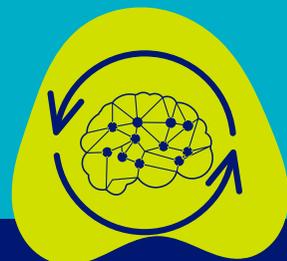
A noninvasive method to examine the biochemical makeup of the brain

### OCD and SPD

- Lower glutamate levels in the ACC
- Lower levels of glutamate were associated with higher measures of anxiety
- Higher glutamate levels in females was associated with greater measures of OCD

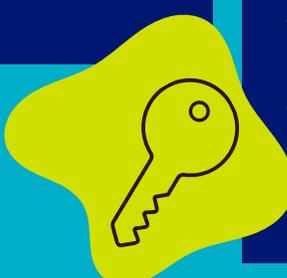
### OCD Only

- No difference in glutamate level compared to control
- No correlations with any clinical measures
- Females had higher creatine levels than males



The Anterior Cingulate Cortex (ACC) is a primary part of the cortico-striato-thalamo-cortical loop. This loop is important in movement, emotion, habit formation, and reward processing.

### Key Takeaways

- Glutamate in the ACC may play a role in OCD with SPD
  - This may explain why glutamate modulators, like n-acetylcysteine, can reduce skin picking
  - Isolating glutamate from glutamine is important, and future studies should continue to do this
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## Social Media Peer Support Groups for Obsessive-Compulsive and Related Disorders: Understanding the Predictors of Negative Experiences

Y.T. Tan, I.C. Rehm, J.L. Stevenson & A. De Foe

Online peer support groups (PSGs) hosted on social media platforms have become an increasingly popular resource for people living with physical and mental health issues. Although the benefits of using online PSGs have been well documented, the potential risks have not been thoroughly studied. People living with obsessive-compulsive related disorders (OCDs), including BFRBs, may be particularly vulnerable to negative experiences in such groups. OCDs include Obsessive-Compulsive Disorder (OCD), Hoarding Disorder, Body Dysmorphic Disorder (BDD), Excoriation (skin picking) Disorder, and Trichotillomania.

The present study used a mixed-methods approach including standardized surveys and interviews to identify the predictors of negative experiences among people who use social media PSGs for OCDs. Adult participants were recruited from thirteen online PSGs from Facebook ( $n = 10$ ) and Reddit ( $n = 3$ ). The groups catered to users who were experiencing trichotillomania ( $n = 3$ ), skin picking disorder ( $n = 4$ ), OCD ( $n = 4$ ), BDD ( $n = 1$ ), and one group focused on both OCD and BDD. The final sample included 54 online PSG users (93% female, average age = 27). Participants completed 12 standardized questionnaires that asked about hair pulling, skin picking, OCD, depression, stress, anxiety, reasons for engaging in online support, online PSG use, online PSG experiences, quality of online relationships, interpersonal support, barriers to treatment, and internalized stigma about mental illness. All participants also answered two open-ended interview questions about their perceived benefits and negative consequences of accessing PSGs for OCDs. A third question allowed for any additional comments.

Results indicated that barriers to treatment and quality of offline interpersonal support predicted users' negative experiences in social media PSGs for OCDs. Although more passive use of social media PSGs (any form of indirect use, like browsing and 'liking' posts) was significantly correlated with fewer negative experiences, it was not a significant predictor (cause and effect could not be suggested) of such experiences. Qualitative analysis of interview responses suggested that the contributing factors towards participants' negative experiences included: (1) confronting triggering content (i.e. bald spots); (2) misinformation; (3) increased preoccupation with symptoms; (4) negative social comparison; and (5) hopelessness about recovery prospects.

The authors concluded that using social media PSGs for OCDs, without adequate support structures in place, may put users at the risk. Moderation of PSGs by suitably qualified volunteers or professionals and by the hosting platforms were suggested to potentially reduce negative experiences. Further research is necessary to gain a deeper understanding of how to enhance positive experiences and protect against the possible risks. The results of this study should be interpreted in the context of several limitations. First, the sample size was small and may not be representative of the broader population of people living with OCDs. Second, answering the qualitative questions were optional, meaning it is possible that those who volunteered responses had unique experiences in social media PSGs that they felt compelled to share. Third, the majority of participants were located in the United States where they may face different treatment barriers than the rest of the participants who resided in Australia or Canada, due to vastly different healthcare systems. Fourth, some surveys were adapted for this study which may affect their generalizability.

The authors do note that peer support is a central component of mental healthcare and thus, they do not mean to suggest that social media PSGs should not be accessed by people living with OCDs or that the groups must be moderated by health professionals. Rather, they suggest that successful social media PSGs ensure that users are: (1) informed about the benefits, risks, and limitations of accessing support via these groups, and (2) have accessible support systems that can provide immediate assistance if negative experiences arise. Given that treatment barriers were found to be a significant predictor of negative experiences, the authors note that there is an opportunity for mental health professionals, social media platforms, and social media PSG users to work together to ensure that users can access reliable information about evidence-based treatment and how to seek help from reputable healthcare providers, if and when these forms of support are desired.

# Social Media Peer Support Groups for Obsessive-Compulsive and Related Disorders: Understanding the Predictors of Negative Experiences

## Participants

- ✓ **W** Western
- ✓ **E** Educated
- ✓ **I** Industrialized
- ✓ **R** Rich
- ✓ **D** Democratic

## Who was included?

- 93% Female (Gender vs. sex not addressed)
- Average Age: 27 yrs  
Age Range: 18 - 44 yrs
- Race or Ethnicity not addressed
- Sexual orientation not addressed



**Facebook and  
Reddit online peer  
support group  
(PSG) users**

## QUANTITATIVE RESULTS

### Negative experiences were predicted by...

- 1 (Poorer) Quality of "offline" relationships
- 2 Barriers to treatment (i.e. insurance, shame)

## QUALITATIVE RESULTS

### Themes that contributed toward negative experiences

- 1 Triggering content (i.e. bald spots)
- 2 Misinformation
- 3 Preoccupation with symptoms
- 4 Hopelessness about recovery
- 5 Social comparison

While this study **highlights risks**, PSG benefits have been well-documented. The authors support PSG use as long as users are (1) **informed** about virtual PSG limitations and (2) have **access to support systems** if harmful content is encountered

## Sleep Quality and its Clinical Associations in Trichotillomania and Skin Picking Disorder

E. Cavic, S. Valle, S.R. Chamberlain & J.E. Grant

Lifestyle factors such as sleep have recently been shown to have a possible effect on the onset and symptom severity of mental illnesses. Some prior small studies demonstrated sleep problems in those with BFRBs. Poor sleep has been associated with increased stress and anxiety, impaired impulse control, and emotion dysregulation, which also have links to BFRBs. The goal of this study was to identify clinical measures of sleep quality in adults with BFRBs. The authors hypothesized that sleep problems would correlate with increased impulsivity and BFRB severity.

37 adults with trichotillomania (TTM), 32 with excoriation disorder (skin picking disorder [SPD]), and 18 unaffected controls completed a set of assessments to examine clinical features and measures.

This study found worse sleep quality in the participants with TTM and SPD compared to the control participants, but no significant difference between those with TTM and SPD. The TTM and SPD group had an average sleep quality index indicating “poor sleep quality”. The TTM and SPD groups also had more perceived stress and worse distress tolerance than the control group. A statistical model found that older age, worse hair pulling severity, higher perceived stress, lower distress tolerance, greater impulsivity, and amount of co-occurring mental disorders were correlated with the poorer sleep quality in participants. Skin picking severity was not correlated with poorer sleep quality.

The results of this study partially confirmed the authors’ hypothesis, suggesting that TTM and SPD participants have worse sleep quality than the unaffected controls, but only TTM severity was related to sleep quality. Interestingly, the sleep quality in TTM and SPD participants was better than that of participants in studies of depression, PTSD, and OCD, which may suggest that even small changes in sleep could affect BFRB symptom severity. This is further supported by a study which found people with OCD and sleep disturbances had worse symptoms than those with OCD and no disturbance. This study indicated for the first time that distress tolerance, perceived stress, and impulsivity were associated with poor sleep quality in people with BFRBs but the causality and direction of association is unknown. The authors suggest the sleep disturbances could be due to hyperactive limbic responses, changes in the hypothalamic-pituitary-adrenal pathway, and abnormalities in brain circuitry. This study is limited by its small sample size, mainly female sample, only adult participants, and use of self report measures only. Overall, this study shows that sleep problems are an area for future BFRB research and an area for clinicians to address when treating BFRBs.



# Sleep Quality and Its Clinical Associations in Trichotillomania and Skin Picking Disorder

This study examines sleep quality in people with trichotillomania and skin picking disorder, and compares them to a control group.



## Sleep quality may affect mental health

Poor sleep has been associated with increased stress and anxiety, impaired impulse control, and emotion dysregulation, which also have links to BFRBs. This study aimed to identify clinical measures of sleep quality in adults with BFRBs.



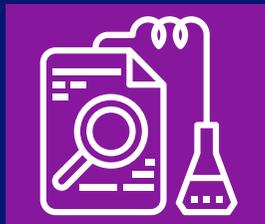
## Participants

37 adults with trichotillomania, 32 adults with skin picking disorder, and 18 controls completed assessments examining clinical features and measures.



## TTM and SPD had worse sleep quality

The TTM and SPD participants worse sleep quality and distress tolerance and more perceived stress on average than the controls. Only hair pulling severity was associated with worse sleep quality. Sleep quality for TTM and SPD was not as poor as sleep quality found in other mental disorders



## This baseline study needs future research

Sleep quality is an important area to continue researching in relation to BFRBs and other mental disorders, especially to determine causality and the direction of association.

# Personality Traits and their Clinical Associations in Trichotillomania and Skin Picking Disorder

J.E. Grant, S.R. Chamberlain

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The study of personality and BFRBs is interesting, particularly because therapies already exist to target some specific personality traits and may help alleviate BFRB symptoms. The authors of this study recruited 98 total adults (37 with trichotillomania, 32 with skin picking disorder, 10 with both disorders, and 19 controls with neither). All participants completed self-reported personality questionnaires, measures of BFRB severity, and neurocognitive function tests which provided objective measures of learning/adaptability, response inhibition, and decision making. The last set of tests were included because those cognitive domains have been implicated in one or more obsessive-compulsive related disorders in prior research. Personality was assessed by the NEO Five-Factor Inventory which used the following 5 main domains: Neuroticism (the tendency towards unstable and negative emotions such as anxiety), Extraversion (related to sociability, assertiveness, and emotional expression), Openness (curiosity and willingness to engage with a broad range of interests and ideas), Agreeableness (cooperation, trustworthiness, and good-nature), and Conscientiousness (associated with competence, self-discipline, thoughtfulness, and being goal-driven).

The authors found that compared to controls, the BFRB group had significantly elevated neuroticism scores, lower extraversion scores, and lower conscientiousness scores. They didn't find significant differences between the skin-picking and trichotillomania cases. The BFRB group didn't differ on openness or agreeableness scores, compared to control. Next, the authors attempted to find which other psychological experiences these BFRB-related personality traits were associated with. Analyses revealed that neuroticism was also associated with skin-picking and hair pulling severity, elevated perceived stress, worse anxiety and depressive symptoms, and overall poorer quality of life. Introversion (i.e. lower extraversion) was significantly associated with high skin picking severity (but not hair pulling severity), higher perceived stress, and higher depression. Lack of conscientiousness was associated with more depressive symptoms, higher perceived stress, and higher impulsivity.

These results are consistent with a previous study that found trichotillomania to be associated with neuroticism. However, the finding that neither openness nor agreeableness were significantly different in those with BFRBs compared to controls contradicts significant findings in 2 previous studies. The most clear association between BFRBs and personality appears to be the connection to neuroticism but the question of their relationship remains. Previous research has associated neuroticism with multiple psychiatric disorders. The lack of specificity of neuroticism to BFRBs suggest that perhaps this personality trait causes vulnerability to many disorders, to varying degrees, including BFRBs. On the other hand, the causality has not been confirmed and the relationship could be flipped. Does the tendency to experience negative emotions lead to pulling and picking or does the BFRB behavior drive the neuroticism? More longitudinal studies are needed to better understand this relationship but regardless, this study highlights the potential for BFRB treatments targeting negative emotions. Treatments, such as cognitive behavioral therapy, which are effective in increasing extraversion for people with anxiety disorders, may also help increase extraversion and subsequently improve symptoms in people with BFRBs. Lack of conscientiousness, the last trait found to be significantly associated with BFRBs in this study, has been previously and presently linked to heightened impulsivity. This is particularly interesting as recent data (from the TLC Precision Medicine Initiative!) suggests that there appears to be a subtype of both trichotillomania and skin picking disorder characterized by increased impulsivity. Perhaps, increasing conscientiousness could decrease impulsivity and thus provide some BFRB relief. One recent study in adults with depression found that mindfulness-based cognitive therapy successfully improved conscientiousness (though with a small effect size).

This study is exciting yet limited by some methodological constraints. Because the sample sizes were small, the between-group comparisons focused on BFRB vs. control rather than comparisons between subpopulations such as women vs. men. For the same reason, the statistics were limited as the researchers could not undertake multivariate modeling or multiple comparison corrections with such a small sample. Still, as one of very few studies examining personality in the context of BFRBs, this research fills an important hole and suggests potential treatment courses. Personality tests measuring the "Big Five" traits are widely available online and may provide insight into our own BFRB management.

# Personality Traits and their Clinical Associations in Trichotillomania and Skin Picking Disorder

## Participants

- ✓ **W** Western
- ✓ **E** Educated
- ✓ **I** Industrialized
- ✓ **R** Rich
- ✓ **D** Democratic

## Who was included?

98 Non-treatment Seeking Adults  
85% Female (Gender)  
Average Age: 30 yrs  
Age Range: 18 - 65 yrs  
76% White  
Sexual orientation not addressed

**37** people with trichotillomania  
**32** people with skin picking disorder  
**10** people with both  
**19** people with neither (control group)

## BFRBS ASSOCIATED WITH INCREASED...

## BFRBS NOT ASSOCIATED WITH

Openness  
Agreeableness



### Neuroticism...which was then associated with:

- BFRB severity
- Perceived stress
- Anxiety/depression
- Poor quality of life



### Introversion...which was then associated with:

- Skin picking severity
- Perceived stress
- Depression



### Lack of Conscientiousness... which was then associated with:

- Depression
- Perceived stress
- Impulsivity



We don't yet know if personality traits cause BFRBs or vice versa

## THE THEORY

Step 1: Identify personality traits associated with BFRBs

Step 2: Use existing therapies aimed to reduce these personality traits

Step 3: Experience decrease in traits associated with the targeted personality traits (in effect, lowering BFRB severity)

## Clinical Presentation of Body-Focused Repetitive Behaviors in Minority Ethnic Groups

J.E. Grant, S. Valle, I.H. Aslan & S.R. Chamberlain

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Research into trichotillomania (TTM) and skin picking disorder (SPD) has been consistently limited by having mainly white samples. This creates an area of unknowns regarding clinical presentation and effect of TTM and SPD on Black, Asian, and Minority Ethnic (BAME) populations. In non psychiatric skin conditions like acne and psoriasis, research has shown differences in self consciousness between ethnicities. In the few prior studies that have focused on BAME populations anxiety was correlated with TTM severity, they were less likely to seek treatment, have more noticeable hair loss, and racial identity was correlated with affect before, during, and after pulling. These prior studies suggest that there may be an important difference in TTM and SPD presentation between BAME and non-BAME populations.

A total of 539 adults with TTM and/or SPD participated in the study, with 14.1% being part of a BAME population. Interviews and clinical measures were performed to assess hair pulling and skin picking behaviors and severity, anxiety, depression, impulsivity, quality of life, and psychosocial impairment.

This study found several differences between the BAME and non-BAME groups. The BAME group spent more time pulling or picking and were more likely to pull or pick at their fingers or feet. The BAME group was less likely to have received any treatment or medication treatment than the non-BAME group. Quality of life, severity, automatic or focused subtype, and rates of co-occurring disorders did not differ between the two groups.

These results confirm the author's hypothesis that there are some differences in presentation of TTM and SPD between BAME and non-BAME groups, but many aspects remain similar between the groups. The lower rates of treatment for the BAME group is of particular interest because it leaves an important hole to fill and area to explore in future research. Past research has suggested that black individuals are more likely to seek help from a hair care professional, and that they may be better able to conceal hair loss compared to their non-black counterparts. Interestingly, though, this study found that those with SPD also lacked treatment, meaning other variables like access to healthcare, medical distrust, and social stigma may be at play. This study was limited by grouping multiple minorities together for analysis, not separating TTM from SPD, and having a lower than expected enrollment of BAME individuals compared to the general population where the study was conducted (14.1% versus 55%). Minority groups were combined because each group was too small to produce meaningful results on their own. This study opens the door for future research into minority differences in body-focused repetitive behaviors. Studies on individual minority groups, individual BFRBs, and inclusion of more sociodemographic and clinical variables are strong future steps.

# Clinical Presentation of Body-Focused Repetitive Behaviors in Minority Ethnic Groups

## Participants

- ✓ **W** Western
- ✓ **E** Educated
- ✓ **I** Industrialized
- ✓ **R** Rich
- ✓ **D** Democratic



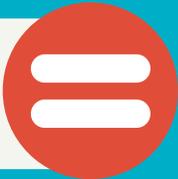
**BFRB** research has consistently lacked racial and ethnic diversity

Minority groups spent more time pulling or picking and picked or pulled at their fingers or feet



Minority groups were less likely to have received any treatment

There was no difference in quality of life, severity, subtype, or rates of co-occurring disorders



Lack of access to healthcare, medical distrust, and social stigma may be at play

# A Head-to-Head Comparison of Three Self-Help Techniques to Reduce BFRBs

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The objectives of the study were to 1) compare 3 self-help treatments, 2) determine whether people with different BFRBs respond differently to these treatments, and 3) use a generic form of the Skin Picking Scale-Revised (GBS) that was designed to allow assessment of different BFRBs. With no FDA approved drug options and limited access to affordable, knowledgeable BFRB treatment providers, many people with BFRBs turn to self-help techniques for relief. Many self-help techniques developed for people with BFRBs are variations of techniques clinicians use with their patients. Though BFRB research is limited, the growing body of work points to habit reversal training (HRT), usually guided by a clinician, as the best treatment choice for BFRBs. HRT involves a series of techniques, including an initial observation period to identify triggers (i.e. awareness training), progressive muscle relaxation, and competing response training where patients perform a non-damaging behavior, such as clenching fists, in response to urges to engage in a BFRB. The author's group has recently developed lesser known variants of HRT, termed decoupling (DC) and decoupling in sensu (DC-is). In DC, the participant, who for this example has trichotillomania, moves their hand towards their hair and then right before engaging in the BFRB, accelerates their hand in a quick, sharp movement, towards another point, such as the lap. For those who chew nails/skin/hair, the mouth can be moved instead of the hand. DC has been successfully tested for nail biting! DC-is is similar to DC, but instead of acting out the motions, the participants close their eyes and imagine their movements leading up to engaging in the BFRB and right before they pick/pull/bite/etc., they engage in a real disruptive behavior, such as fist clenching. There's currently very little evidence on how effective DC-is is.

This study recruited participants through Facebook and a website, where they were led through a registration process that ensured they remain anonymous. The participants had to be at least 16 years old with at least one self-reported BFRB. Unlike many studies, this study allowed participants who were undergoing concurrent treatments (medication, psychotherapy, etc.). The majority of participants were female and in their late 20's/early 30's. Most participants had no further psychiatric diagnoses (based on self-report). Depression was reported in approximately one fourth of the participants; obsessive-compulsive disorder was rare. Nail biting and trichotillomania were the most common BFRBs in the sample, followed by skin picking and cheek chewing. Participants had an average total of 1.76 BFRBs. Ultimately 113 participants were included in analyses.

First, the participants took the adapted questionnaire about their BFRB severity to establish baseline scores and then began either the HRT, DC, or DC-C treatments, depending on the group they were randomly assigned to. They were given PDF instructions on how to start using the self-help techniques and after 4 weeks, asked to retake the initial BFRB questionnaire.

There was a significant dose-effect relationship between frequency of technique practice and lower Generic BFRB Scale (GBS) score for all groups, especially the HRT group. This means that on average, the more participants reported practicing the technique, the more BFRB reduction they saw. Overall, most participants saw some decrease in BFRB symptoms, though a significant decrease was defined by the authors as a 35% decrease in GBS score from baseline to post-treatment measurement. Among participants that completed all questionnaires, 10% had significant GBS decreases in the HRT group, 34% in the DC group, and 35% in the DC-is group. There were no statistically significant differences in how people with different BFRBs responded to the different treatments, though the authors found a trend, suggesting that DC may show the best results for people without a lifetime history of skin picking. This is not to say that the DC technique isn't possibly beneficial for skin pickers. Interestingly, more than 80% of participants agreed that the interventions would make more sense if they were used in combination with psychotherapy.

The results of this study should be considered within the context of several limitations: 1) The study did not measure whether the responses to the self-help treatments were sustained past the 4 week measurement; 2) Some participants noted that they had trouble adapting the self-help strategies to their specific BFRBs, though this may more point to the difficulties of performing self-help treatments without the support of a clinician; 3) Adherence was low, meaning that less than approximately 60% of people who signed up for the study completed the entire course of treatment and the final questionnaire.

This study is a necessary first step toward demonstrating the preliminary efficacy of 3 brief self-help interventions for BFRBs. All techniques are available online for free: [www.uke.de/decoupling](http://www.uke.de/decoupling). Since significant outcomes were only seen in a minority of participants, further refinement and ongoing examination is required to increase the efficacy of these treatments.

# A Head-to-Head Comparison of Three Self-Help Techniques to Reduce BFRBs

## Participants

- ✓ **W** Western
- ✓ **E** Educated
- ✓ **I** Industrialized
- ✓ **R** Rich
- ✓ **D** Democratic

## Who was included?

- 114 People with BFRBs
- 74% Female (Gender)
- Average Age: 33 yrs
- Race or Ethnicity not addressed
- Sexual orientation not addressed

## SELF-HELP TECHNIQUES



Habit Reversal Training (HRT)

-VS-

Decoupling (DC)

-VS-

Decoupling in sensu (DC-is)

**NEW • NEW • NEW • NEW • NEW • NEW • NEW • NEW**

The authors developed a modification of a standard BFRB scale to be able to measure a broader variety of BFRBs/multiple BFRBs: The GBS

Download the manuals



## Results

### SIGNIFICANT DOSE-EFFECT RELATIONSHIP:

The more participants reported practicing the technique, the more BFRB reduction they saw, especially in the HRT group

**NO SIGNIFICANT DIFFERENCE IN HOW PEOPLE WITH DIFFERENT BFRBS**

(trich vs. nail biting etc.) responded to the different techniques



**A MINORITY OF PARTICIPANTS IN ALL GROUPS SAW SIGNIFICANT REDUCTIONS IN THEIR GBS SCORES ( AT LEAST 35% REDUCTION)**

HRT group (n=35)

**10%**

DC group (n=43)

**35%**

DC-is group (n=35)

**23%**

# *Thank you*

for reading and sharing this work brought to you by the TLC Young Adult Action Council's Scientific Literacy Committee. To learn more about TLC and the BFRB community, please visit us at [bfrb.org](https://bfrb.org).

