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Suicidal Ideation and Attempts in Trichotillomania and Skin-Picking Disorder: A Comparative Study with Healthy Controls

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WHAT IS ALREADY KNOWN ON THIS TOPIC?

- *Trichotillomania (TTM) and skin picking disorder (SPD) are categorized under obsessive-compulsive and related disorders and are associated with emotion regulation difficulties, impulsivity, and psychiatric comorbidities.*
- *Although suicidal behavior is well documented in obsessive-compulsive disorder and body dysmorphic disorder, the relationship between TTM, SPD, and suicidality has been less frequently studied.*

WHAT DOES THIS STUDY ADD ON THIS TOPIC?

- *This is one of the first studies to systematically compare suicidal ideation and behavior in treatment-seeking patients with TTM and SPD against healthy controls.*

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ABSTRACT

Objective: The relationship between trichotillomania (TTM) and skin picking disorder (SPD), classified under the category of obsessive-compulsive and related disorders (OCRDs) in the DSM-5, and suicidal behavior remains unclear. The aim of this study is to investigate sociodemographic characteristics, clinical variables, psychiatric comorbidities, suicidal ideation, and behavior in treatment-seeking individuals diagnosed with TTM and SPD, as well as to identify the determinants of the severity of suicidal behavior.

Methods: The study included patients who were diagnosed with TTM (n = 26) or SPD (n = 40) according to DSM-5, and healthy controls (n = 54). Comorbidities were determined by the Clinician Version of the Structured Clinical Interview for DSM-IV Disorders (SCID-I). Beck Depression Inventory (BDI), The Scale for Suicidal Ideation (SSI), and Suicidal Behavior Scale (SBQ) were administered to all participants.

Results: The lifetime prevalence of suicide attempts, BDI scores, SSI and SBQ subscale and total scores, as well as the rates of suicidal ideation, were statistically significantly higher in TTM and SPD patients compared to the control group ($P < .05$). Psychiatric comorbidity, BDI scores, and the course of the disorder were identified as predictors of SBQ scores ($P < .05$).

Conclusion: Suicidal ideation and behaviors are significantly higher in individuals with TTM and SPD compared to healthy controls. Psychiatric comorbidities, depression severity, and the chronic course of the disorders were found to be significantly associated with suicidal behavior. These findings highlight the need for comprehensive suicide risk assessments in TTM and SPD patients to guide effective interventions.

Keywords: Trichotillomania, skin picking disorder, suicidal ideation, suicide behavior, chronicity

INTRODUCTION

Obsessive-compulsive and related disorders (OCRDs) are psychiatric conditions that significantly impair individuals' quality of life and may have serious outcomes when untreated. Under this category, trichotillomania (TTM) and skin picking disorder (SPD) are characterized by picking or pulling behaviors that challenge self-control. These disorders lead to physical problems such as hair loss, skin lesions, or ulcers, as well as feelings of shame and social isolation.[1] A recent epidemiological study

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- *The study found that both TTM and SPD groups had significantly higher levels of suicidal ideation and attempts compared to controls.*
- *Depression severity, psychiatric comorbidity, and chronicity of the disorder emerged as key predictors of suicidal behavior, emphasizing the need for routine suicide risk assessment in clinical practice for these conditions.*

reported the prevalence of TTM as 1.7% and SPD as 2.1%. Although both disorders exhibit similar prevalence across genders in these studies,[2,3] women are generally known to seek treatment more often than men.[4] TTM typically begins in childhood or adolescence, while SPD often starts during adolescence or adulthood.[5]

The course of SPD and TTM can be chronic and progressive, but it may also fluctuate, with episodes of increased severity. Patients report that these episodes are often triggered by factors such as stress, the menstrual cycle, or co-occurring psychiatric conditions.[5-7] Stressors can trigger picking/pulling behaviors in individuals who experience emotional dysregulation, poor stress coping, or difficulties with impulse control, often resulting in a cycle of distress, picking, and relief.[7,8]

Individuals with TTM and SPD often exhibit impaired emotion regulation and heightened impulsivity, with more than half known to have comorbid psychiatric diagnoses. These comorbidities most commonly include mood disorders, anxiety disorders, obsessive compulsive disorder (OCD), and alcohol or substance use disorders, in that order of prevalence.[5,9] These comorbidities reflect a complex and dynamic psychopathology, where the disorders and co-occurring conditions mutually influence each other.

Suicide, as a condition with high mortality, poses a significant threat to public health worldwide. Therefore, identifying risk factors at individual, environmental, and societal levels is crucial for developing effective suicide prevention strategies. Additionally, identifying high-risk groups and developing targeted intervention programs for these populations stand out as effective approaches to reducing suicide rates. A meta-analysis identified several risk factors for suicide, including sociodemographic conditions such as social isolation, low economic status, and religiosity, as well as family history, psychiatric disorders, personality disorders, previous suicide attempts, adverse life events, and self-harming behaviors. Among these, the presence of a psychiatric disorder and self-harming behaviors increase the risk the most, by approximately tenfold.[10] Among psychiatric diagnoses, depression ranks first, followed by schizophrenia spectrum disorders, bipolar disorder, and alcohol/substance use disorders.[10,11]

In past years, the relationship between OCRDs and suicide has received little attention. Recent meta-analyses have highlighted the association between OCD and suicidal behaviors.[12,13] Other disorders within the OCRD category, particularly body dysmorphic disorder (BDD) and hoarding disorder, stand out in relation to suicidal behaviors. However, the literature on the association between TTM and SPD with suicidal behaviors remains limited.[14-16]For instance, a study involving individuals diagnosed with TTM reported lower rates of suicidal ideation and attempts compared to the broader OCRD group. However, individuals with comorbid depression were found to be more vulnerable to suicide risk, highlighting a complex and multifaceted relationship between hair-pulling behaviors, depression, and suicidal thoughts.[15] Similarly, a survey conducted with individuals diagnosed with SPD indicated a significant positive relationship between the presence of SPD and suicidal ideation.[16] However, these findings reflect the overall gaps and inconsistencies in the literature. To better understand the impact of TTM and SPD on suicidal behaviors, there is a need for more comprehensive and methodologically robust studies in this area.

TTM and SPD are associated not only with behavioral symptoms but also with psychological factors such as emotional regulation difficulties, impulsivity, and intense shame, all of which may contribute to an increased risk of suicide .[17-19] These indicators suggest that self-harming behaviors, such as suicidal actions, may occur more frequently than expected in patients diagnosed with TTM and SPD. This study aims to investigate suicidal ideation and attempts in individuals diagnosed with TTM and SPD and compare these findings with healthy controls. Additionally, it seeks to identify risk factors associated with suicidality, with the goal of contributing to the development of more effective treatment approaches.

MATERIAL AND METHODS

Patients aged 18 to 65 who presented to the psychiatry outpatient clinic at the Şişli Etfal Training and Research Hospital between September 2018 and August 2019 and were primarily diagnosed with TTM (n = 26) or SPD (n = 40) according to the DSM-5 diagnostic criteria by a psychiatrist were included in the study. Additionally, age- and sex-matched healthy controls (n = 54) were recruited from hospital staff who reported no current or past psychiatric diagnoses. Exclusion criteria for patients were defined as follows: 1. Mental retardation, 2. A diagnosis of bipolar disorder or psychotic disorder, and 3. The presence of serious medical conditions that could affect clinical status (e.g., neurological disorders, metabolic diseases, cancer). Comorbidities were determined by the Clinician Version of the

Structured Clinical Interview for DSM-IV Disorders (SCID-I), which was the most widely used and validated version available in Turkish at the time of data collection (2018), although primary diagnoses were made based on DSM-5 criteria. All participants completed the Sociodemographic Data Form, the Beck Depression Inventory (BDI), The Scale for Suicidal Ideation (SSI), and the Suicide Behavior Scale. Prior to inclusion in the study, participants signed informed consent forms. The study was approved in December 11, 2018 by the Clinical Research Ethics Committee of the Şişli Etfal Training and Research Hospital with the protocol number 2106.

Evaluation Tools

The Sociodemographic Data Form: It was specifically designed for this study by the researchers. It consisted of 3 stages: demographic data, characteristics of suicide, and characteristics of picking/pulling behaviors. The demographic data section included questions about age, gender, marital status, education level, employment status, smoking/alcohol use habits, family history of psychiatric disorders, history of medical illnesses, and previous psychiatric hospitalizations. The section on characteristics of suicide attempts included questions such as the method used, whether the attempt was planned or impulsive, whether someone was present during the attempt, whether there had been suicidal thoughts in the past year, and whether there was a family history of suicide attempts. The section on picking/pulling behaviors included questions about the age of onset, duration of the behavior, clinical course, reasons for engaging in the behavior, targeted body areas, and the participant's awareness of the behavior.

Clinician Version of the Structured Clinical Interview for DSM-IV Disorders: In this study, the Turkish adaptation of the Structured Clinical Interview for DSM-IV Axis I Disorders, Clinical Version (SCID-I), was used to identify the DSM-IV comorbid diagnoses of the participants. [20] SCID-I is a structured interview tool designed to diagnose mental disorders based on DSM-IV diagnostic criteria.

Beck Depression Inventory: In this study, the Turkish version of the BDI was used to assess the participants' levels of depression.[21] The BDI is a widely used 21-item self-report scale developed to measure the severity of depressive symptoms. The total score ranges from 0 to 63, with higher scores indicating greater severity of depression.

The Scale for Suicidal Ideation: This scale is a 17-item scale designed to evaluate the severity of suicidal ideation over the past week.[22] The total score ranges from 0 to 17, with higher scores indicating greater severity of suicidal thoughts. It includes parameters that increase the risk of suicide, such as uncontrollable anger, the desire to harm oneself or others, hopelessness, thoughts and desires of death, decreased self-esteem, feelings of guilt, slow thinking, and slow speech.

Suicidal Behavior Scale: This scale investigates lifetime suicidal behavior, suicidal ideation, and the likelihood of suicidal behavior in the future. [23] This scale consists of 4 items: suicide plan and attempt (0-5 points), suicidal thoughts (0-4 points), suicide threat (0-1 point), and the repetition of suicidal behaviors (0-4 points), respectively. The total score ranges from 0 to 14, with higher scores indicating more severe suicidal behaviors.

Statistical Analysis

Statistical analyses were performed using Statistical Package for the Social Sciences (SPSS) for Windows, Version 15.0 (SPSS Inc.; Chicago, IL, USA). Descriptive statistics were presented as numbers and percentages for categorical variables, and as medians and interquartile ranges for numerical variables. The Chi-square test was used to compare proportions in independent groups. Since the independent variables did not meet the assumption of normal distribution, the Kruskal-Wallis test was applied for group comparisons, followed by pairwise comparisons corrected with the Mann-Whitney U test. Relationships between numerical variables were analyzed using Spearman's correlation analysis due to the non-parametric nature of the data. Determinant factors were examined using linear regression analysis. The statistical significance level was set at $P < .05$.

RESULTS

Sample

The comparison of sociodemographic characteristics of the participants is presented in Table 1. There were no significant differences between the patient and control groups in terms of age, gender, marital status, or medical illnesses ($P > .05$). However, significant differences were observed among the TTM, SPD, and control groups regarding educational level, employment status, family history of psychiatric disorders, and smoking, alcohol, or substance use

Table 1. Sociodemographic Data of Patients and Healthy Control Groups

	TTM (n = 26)	SPD (n = 40)	HC (n = 54)	*P*
Gender, female, n(%)	21 (80.8)	33 (82.5)	41 (75.9)	.721
Age, median (IQR)	25.5 (20.8-38.2)	31 (23-38.8)	26.5 (20-40)	.701
Marital status, n(%)				
Married	9 (34.6)	16 (40)	17 (31.5)	
Single	15 (57.7)	21 (52.5)	35 (64.8)	
Divorced	2 (7.7)	2 (5)	1 (1.9)	
Widowed	–	1 (2.5)	1 (1.9)	
Education level, n(%)				
<13 years	15 (57.7)	17 (42.5)	15 (27.8)	.751
≥13 years	11 (42.3)	23 (57.5)	39 (72.2)	
Employment status, n(%)				
Working	7 (26.9)	17 (42.5)	26 (48.1)	.047
Unemployment	2 (7.7)	3 (7.5)	1 (1.9)	
Retired	1 (3.8)	2 (5)	2 (3.7)	
Student	8 (30.8)	8 (20)	21 (38.9)	
Housewife	8 (30.8)	10 (25)	4 (7.4)	
Psychiatric family history, yes, n(%)	10 (38.5)	15 (37.5)	7 (13)	.009
Habits, n(%)				
None	15 (57.7)	18 (45)	26 (48.1)	
Smoking	10 (38.5)	9 (22.5)	10 (18.5)	.036
Alcohol	1 (3.8)	3 (7.5)	9 (16.7)	
Smoking + alcohol	–	8 (20)	9 (16.7)	
Smoking + alcohol + substance	–	2 (5)	–	
Medical disease, yes, n(%)	6 (23.1)	18 (45)	16 (39.6)	.237

HC, Healthy control; IQR, interquartile range; SPD: skin picking disorder; TTM: trichotillomania.

($P=.032$, $P=.047$, $P=.009$, and $P=.036$, respectively). The proportion of individuals with 13 or more years of education was higher in the control group compared to the patient groups ($P=.032$).

Clinical Features of Trichotillomania and Skin Picking Disorder

Table 2 presented the clinical characteristics of patients with TTM and SPD, including age of onset, disease duration, number of episodes per day, daily pulling/picking duration, levels of awareness during the behavior, and disease course. Among patients diagnosed with TTM, 80.8% (n=21) pulled hair, 15.4% (n=4) pulled eyebrows and eyelashes, and 3.8% (n=1) exclusively pulled eyebrows.

Table 2. Clinical Features of Patients with Diagnosed Skin Picking Disorder and Trichotillomania

	TTM, n (%)	SPD, n (%)	*P*
Onset			
<13 age	5 (19.2)	12 (30.0)	.468
13-20 age	11 (42.3)	15 (37.5)	
21-30 age	6 (23.1)	7 (17.5)	
31-40 age	2 (7.7)	5 (12.5)	
41-50 age	–	1 (2.5)	
>50 age	2 (7.7)	–	
Duration of disease			
<1 year	2 (7.7)	1 (2.5)	.71
1-5 years	9 (34.6)	12 (30)	
6-10 years	5 (19.2)	11 (27.5)	
>10 years	10 (38.5)	16 (40)	
Episode number/day			
1-3 times	4 (15.4)	10 (25)	.518
4-6 times	6 (23.1)	5 (12.5)	
7-10 times	3 (11.5)	7 (17.5)	
11-20 times	2 (7.7)	6 (15)	
>20 times	11 (42.3)	12 (30)	
Urge intensity time			
Morning (08:00-12:00)	–	1 (2.5)	.82
Afternoon (12:01-16:00)	2 (7.7)	4 (10)	
Evening (16:01-20:00)	3 (11.5)	5 (12.5)	
Evening (20:01-24:00)	10 (38.5)	10 (25)	
During the night	3 (11.5)	3 (7.5)	
During most of the day	8 (30.8)	17 (42.5)	
Duration of behavior/day			
<30 min	11 (42.3)	23 (57.5)	.483
30 min - 1hr	4 (15.4)	5 (12.5)	
>1 hr	11 (42.3)	12 (30)	
Course			
Continous/Chronic	13 (50)	22 (55)	.691
Episodic	13 (50)	18 (45)	
Awereness			
Mostly aware	17 (65.4)	30 (75)	.399
Mostly unaware	9 (34.6)	10 (25)	

SPD, skin picking disorder; TTM, trichotillomania.

In patients with SPD, 42.5% (n=17) picked their face, 15% (n=6) picked their arms and legs, 15% (n=6) picked their hands and feet, 20% (n=8) picked multiple body areas, 5% (n=2) picked only their hands, and 2.5% (n=1) picked only their legs. Of patients with TTM, 76.9% (n=20) had at least 1 psychiatric comorbidity. Of these, 42.3% (n=11) had major depressive disorder (MDD), 53.8% (n=14) had anxiety disorders, 3.8% (n=1) had OCD, 15.4% (n=4) had dysthymia, 3.8% (n=1) had alcohol use disorder, and 7.7% (n=2) had posttraumatic stress disorder. In patients with SPD, 82.5% (n=33) had at least 1 psychiatric comorbidity. Among these, 25% (n=10) had MDD, 67.5% (n=27) had anxiety disorders, 15.0% (n=6) had adjustment disorder, 10.0% (n=4) had OCD, 5.0% (n=2) had dysthymia, and 2.5% (n=1) had alcohol or substance use disorder. No significant differences were found between the patient groups regarding psychiatric comorbidities ($P=.578$). In terms of pharmacotherapy, 30.8% (n=8) of TTM patients did not receive any treatment, while 42.3% (n=11) received only antidepressants, 19.2% (n=5) received a combination of antidepressants and antipsychotics, and 3.8% (n=1) were treated with antipsychotics alone. Among SPD patients, 32.5% (n=13) did not receive any treatment, 62.5% (n=25) were treated with antidepressants alone, and 5.0% (n=2) received a combination of antidepressants and antipsychotics.

Suicidal Ideation and Attempts

Participants' suicidal ideation, attempts, and the characteristics of these attempts are presented in Table 3. Suicidal ideation over the past year was reported by 38.5% of individuals with TTM, 42.5% of those with SPD, and only 1.9% of participants in the healthy control group. Lifetime suicide attempts were identified in 19.2% of individuals with TTM, 15% of those with SPD, and 1.9% of the healthy control group. Suicidal ideation and attempts were significantly higher in the patient groups compared to the control group ($P=.014$ and $P < .001$, respectively). The comparison of depression, suicidal ideation, and behavior scores between the patient and control groups is presented in Table 4. The total scores of BDI, SSI, and SBQ ($P < .001$), as well as the subscale scores of SBQ ($P < .01$), were significantly higher in TTM and SPD patients compared to the control group. In the analyses conducted among TTM and SPD patients, no statistically significant differences were found ($P > .05$).

Among the factors predicting the SBQ scale score, the chronic course of the disease (beta=−0.353, $t=-3.456$, $P=.001$), BDI scores (beta=0.395, $t=3.889$, $P < .001$), and the presence of comorbidity (beta=−0.246, $t=-2.545$, $P=.017$) were found to be significant, whereas a history of suicide attempts (beta=−0.155, $t=-1.509$, $P=.136$) and disease duration (beta=0.009, $t=0.091$, $P=.928$) were not significant. This model was found to significantly explain 44.3% of the variance ($R^2=0.443$, $P < .001$).

DISCUSSION

This is the first study to examine the presence of suicidal ideation and attempts in treatment-seeking individuals with TTM and SPD and to compare them with a healthy control group. In this context, the study aims to address a significant gap in the literature regarding suicidal behaviors in these patient groups and to identify potential risk factors. Mood disorders, impulse control disorders, substance and alcohol use disorders, psychotic disorders, and personality disorders are among the psychiatric disorders that constitute the highest risk group for suicidal behavior.[10] Studies investigating the relationship between OCRDs and suicidal behavior remain relatively limited. A systematic review revealed a significant relationship between

Table 3. Suicidal Ideations, Attempts, and Clinical Features Among Participants

	TTM	SPD	HC	*P*
Suicidal ideation, yes, n (%)	10 (38.5)	17 (42.5)	1 (1.9)	<.001
Suicidal attempt, n (%)	5 (19.2)	6 (15)	1 (1.9)	.014
Attempt methods, n (%)				
Drug overdose	4 (80)	4 (66.7)	1 (100)	1
With a sharp object	1 (20)	1 (16.7)	–	
By drowning	–	1 (16.7)	–	
Presence of others, n (%)				
Alone	6 (100)	2 (33.3)	1 (100)	.193
Accompanied	–	3 (50)	–	
In a crowd	–	1 (16.7)	–	
Notified Someone?, Yes, n (%)	3 (60)	2 (33.3)	1 (100)	.553
Nature of attempt, n (%)				
Planned	1 (20)	1 (16.7)	–	1
Impulsive	4 (80)	5 (83.3)	1 (100)	
Family history of suicide attempt, Yes, n (%)	4 (15.4)	5 (12.5)	5 (9.3)	.668
Psychiatric hospitalization, n (%)	–	1	–	.544

HC, healthy control; SPD, skin picking disorder; TTM, trichotillomania.

OCD and suicidal behavior, thereby challenging existing biases on this subject.[12] In OCD patients, the prevalence of current suicidal ideation was found to be 27.3%, while the rate of suicide attempts was 13.5%.[13] Individuals with BDD are generally reported to be the most at-risk group for suicide among disorders categorized under OCRDs. [14]

In this meta-analysis examining suicidal behaviors in OCRDs, TTM and SPD were evaluated together as grooming disorders. The study reported a suicide attempt rate of 13.3% and a suicidal ideation rate of 40.4% in these disorders. However, among the studies included in the analysis (n=6), the number of studies specifically focusing on TTM and SPD as primary diagnoses was limited, the sample sizes were small, and suicidal behaviors were not comprehensively examined.

In this study, the lifetime prevalence of suicidal ideation was found to be 38.5% in individuals with TTM and 42.5% in those with SPD. The rates of suicide attempts were found to be 19.2% in TTM and 15.0% in SPD. This study's findings revealed that suicidal ideation in individuals with TTM and SPD is at similar levels to other OCRDs. This indicates that TTM and SPD carry a psychopathological risk as serious as other OCRDs. In contrast, a recent study reported the rate of suicidal ideation in TTM cases as 18.3% and the rate of suicide attempts as 2%.[15] However, this study noted that TTM cases exhibited a surprisingly lower risk of suicide compared to the general population and OCD data. The authors of the study suggested that these findings might be attributed to data collection methods and certain methodological limitations. Given the limited data in the literature on this subject, this study provides a significant contribution to understanding suicidal behaviors and thoughts in individuals diagnosed with TTM and SPD.

One of the key findings of this study is that comorbidity, depression severity, and the course of illness were significantly related to the severity of current suicidal behavior. More than half of TTM and SPD patients seeking treatment are found to have at least 1 comorbidity, primarily mood disorders and anxiety disorders.[5,9] In this study,

Table 4. Comparison of Depression, Suicidal Thoughts, and Behavior Scores Between Patient and Control Groups

	TTM (n=26)	SPD (n=40)	HC (n=54)	*P*	P^1	P^2	P^3
BDI, Mean ± SD	21.5 ± 12.3	21.3 ± 11.4	6.8 ± 6.1	<.001	.901	<.001	<.001
SSI, Mean ± SD	5.1 ± 3.6	5.7 ± 3.8	1.1 ± 1.6	<.001	.616	<.001	<.001
SBQ-Total, Mean ± SD	2.3 ± 2.5	2.7 ± 2.9	0.4 ± 0.9	<.001	.688	<.001	<.001
Items, Mean±SD (Min-Max)							
1 -Suicide Plan and Attempt	0.7 ± 0.9 (0-2)	1 ± 1 (0-3)	0.2 ± 0.4 (0-2)	<.001	.305	.002	<.001
2-Suicide Ideation	0.7 ± 0.9 (0-2)	0.9 ± 1.1 (0-4)	0 ± 0.3(0-2)	<.001	.601	<.001	<.001
3-Suicide Threat	0.2 ± 0.4 (0-1)	0.2 ± 0.4 (0-1)	0 ± 0.1(0-1)	.006	.767	.002	<.001
4-Repetition of Suicide	0.6 ± 0.7(0-2)	0.7 ± 1 (0-4)	0.2 ± 0.4 (0-1)	.001	.759	.001	.001

BDI, Beck Depression Inventory; HC, healthy control; SSI, Suicidal Ideation Scale; SBQ, Suicidal Behavior Scale; SPD, skin picking disorder; TTM, trichotillomania.
P^1=TTM & SPD.
P^2=TTM & HC.
P^3=SPD & HC.

MDD and anxiety disorders were identified as the most frequently observed comorbid conditions. In addition to a primary psychiatric disorder, the presence of comorbidity is known to be a strong risk factor for suicidal behaviors.[24]

Similarly, it is well-established that depression is a strong predictor of suicidal ideation. [11] Machado et al[16] (2018) demonstrated a significant positive association between SPD and major depressive episodes, nicotine dependence, alcohol dependence, and suicidal ideation. In OCD, comorbid psychiatric disorders, severity of depressive and anxiety symptoms, hopelessness, history of suicide attempts, and obsession severity have been found to be associated with the severity of suicidal behavior.[12]

Another noteworthy finding of the study is that the course of the illness was also significantly associated with suicidal behavior. After developing TTM or SPD, some individuals might experience suicidal thoughts more frequently but attempt to cope with these thoughts through compulsive picking or pulling behaviors rather than acting on them. From another perspective, the chronic course of the disorder might worsen psychosocial functioning, lead to stigma, increase susceptibility to depression, undermine confidence in treatment, and, in turn, trigger suicidal ideation. Particularly, chronic outcomes of these disorders, such as hair loss and the presence of wounds and ulcers on the skin, may impact aesthetic appearance and, combined with social isolation, exacerbate suicidal ideation. Supporting this idea, a study involving 681 dermatology patients suggested that acne and hair loss are the dermatological conditions most strongly associated with suicidal ideation. [25] Therefore, assessing the severity and chronicity of the disorder in patients may be crucial in evaluating the risk of suicidal behavior.

Some authors have suggested that TTM and SPD may fall within a spectrum of self-harm behaviors, including suicide and other self-injurious actions. [26] Hair-pulling and skin-picking symptoms can be superficially conceptualized as non-life-threatening self-injurious behaviors. However, the presence of these behaviors may indicate underlying psychiatric disorders or suicidal tendencies in the individual. For instance, the association of TTM and SPD with factors such as emotional regulation difficulties and impulsivity suggests that these behaviors are not merely simple habits or superficial issues but may reflect a deeper psychopathological structure. Indeed, self-injurious behaviors often emerge as attempts to alleviate or cope with intense emotional distress. However, over time, such behaviors can severely impact an individual's social functioning, self-esteem, and quality of life, potentially paving the way for higher-risk behaviors, such as suicide attempts. A study highlighted the complex relationship between hair-pulling, depression, and suicidal ideation. It was noted that some individuals may experience depression and suicidal thoughts due to hair-pulling, while others may have depressive and suicidal thoughts independent of their hair-pulling behavior. Additionally, a third group may exhibit suicidal thoughts that are independent of both hair-pulling and depressive symptoms.[15] In this context, evaluating TTM and SPD solely based on their behavioral symptoms risks overlooking their potential association with suicide risk. This study's findings highlight the role of TTM and SPD within the self-harm spectrum and emphasize the need to assess suicide risk in these patients. The limited data in the relevant literature underscore the necessity for more comprehensive investigations into suicidal behaviors among individuals diagnosed with TTM and SPD.

This study has some limitations. First, the sample size is limited and includes only clinical populations, which may restrict the generalizability of the findings. Second, the study employs a cross-sectional design, making it impossible to establish causal relationships between suicidal behavior and psychiatric comorbidities. Furthermore, as suicidal thoughts and attempts may vary over time, the focus of this study on a specific timeframe might not fully capture the dynamic nature of these thoughts.

In conclusion, the study revealed that suicidal thoughts and attempts in individuals diagnosed with TTM and SPD are at similar levels to those observed in other OCRDs. The findings indicate that suicidal behavior in TTM and SPD is associated with the presence of psychiatric comorbidities, the severity of depression, and the chronic course of the disorder. This study highlights that assessing suicidal thoughts and behaviors in individuals with TTM and SPD is a critical aspect to be considered during treatment processes. Evaluating patients in outpatient settings with a focus on risk factors may be a practical and effective approach to preventing suicidal behavior. Future research with larger samples and longitudinal designs is necessary to confirm these findings and to develop interventions aimed at reducing suicide risk in TTM and SPD.

Data Availability Statement: The data that support the findings of this study are available on request from the corresponding author.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Şişli Etfal Training and Research Hospital (Date: 11.12.2018; No.: 2106).

Informed Consent: Written informed consent was obtained from patients who participated in this study.

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REFERENCES

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington, DC: American Psychiatric Association; 2013. [CrossRef]
2. Grant JE, Dougherty DD, Chamberlain SR. Prevalence, gender correlates, and co-morbidity of trichotillomania. *Psychiatry Res*. 2020;288:112948. [CrossRef]
3. Grant JE, Chamberlain SR. Prevalence of skin picking (excoriation) disorder. *J Psychiatr Res*. 2020;130:57-60. [CrossRef]
4. Grant JE, Redden SA, Leppink EW, et al. Sex differences in trichotillomania. *Ann Clin Psychiatry*. 2016;28(2):118-124.
5. Grant JE, Stein D, Woods DW, Keuthen N. *Trichotillomania, Skin Picking and Other Body Focused Repetitive Behaviors*. Washington, DC: American Psychiatric Publishing; 2012.
6. Pirdogan Aydin E, Bilge Y, Demirci H, Ozer OA. Hair pulling in a sample of Turkish university students: prevalence, clinical characteristics, predictors, and sex differences. *Curr Psychol*. 2024;43(32):26093-26104. [CrossRef]

7. Pirdoğan Aydın E, Demirci H, Güler Kenar J, Özer ÖA, Karamustafalıoğlu O. Psychological resilience and impulsivity in trichotillomania and skin picking disorder. *J Clin Psy*. 2022;25(4):366-375. [CrossRef]
8. Roberts S, O'Connor K, Bélanger C. Emotion regulation and other psychological models for body-focused repetitive behaviors. *Clin Psychol Rev*. 2013;33(6):745-762. [CrossRef]
9. Pirdoğan Aydın E, Güler Kenar J, Kıvanç Altunay İ, et al. Clinical characteristics and comorbidities of patients with trichotillomania and skin picking disorder who admitted to a psychodermatology outpatient clinic: a comparative study. *Turk Psikiyatri Derg*. 2021;32(2):100-108. [CrossRef]
10. Favril L, Yu R, Uyar A, Sharpe M, Fazel S. Risk factors for suicide in adults: systematic review and meta-analysis of psychological autopsy studies. *Evid Based Ment Health*. 2022;25(4):148-155. [CrossRef]
11. Nock MK, Hwang I, Sampson NA, Kessler RC. Mental disorders, comorbidity and suicidal behavior: results from the national comorbidity survey replication. *Mol Psychiatry*. 2010;15(8):868-876. [CrossRef]
12. Angelakis I, Gooding P, Tarrier N, Panagioti M. Suicidality in obsessive compulsive disorder: a systematic review and meta-analysis. *Clin Psychol Rev*. 2015;39:1-15. [CrossRef]
13. Pellegrini L, Maietti E, Rucci P, et al. Suicide attempts and suicidal ideation in patients with obsessive-compulsive disorder: a systematic review and meta-analysis. *J Affect Disord*. 2020;276:1001-1021. [CrossRef]
14. Pellegrini L, Maietti E, Rucci P, et al. Suicidality in patients with obsessive-compulsive and related disorders: a meta-analysis. *Compr Psychiatry*. 2021;108:152246. [CrossRef]
15. Grant JE, Collins M, Chesivoir E, Chamberlain SR. Suicidal ideation and attempts in trichotillomania. *Psychiatry Res*. 2023;325:115245. [CrossRef]
16. Machado MO, Köhler CA, Stubbs B, et al. Skin picking disorder: prevalence, correlates, and associations with quality of life in a large sample. *CNS Spectr*. 2018;23(5):311-320. [CrossRef]
17. Öğüt Ç, Öğüt ND. Trichotillomania, skin picking disorder, and different aspects of impulsivity: a systematic review. *Psychiatr Ann*. 2022;52(12):527-540. [CrossRef]
18. Aydin EP, Demirci H, Begenen AG, et al. Facial emotion recognition difficulties may be specific to skin picking disorder, but could also be related to the presence of alexithymia in trichotillomania. *Eur J Psychiatry*. 2022;36(2):130-136. [CrossRef]
19. Houazene S, Aardema F, Leclerc JB, O'Connor K. The role of self-criticism and shame in body-focused repetitive behaviour symptoms. *Behav Change*. 2021;38(1):10-24. [CrossRef]
20. Çorapçıoğlu A, Aydemir Ö, Yıldız M, Esen A, Köroğlu E. *DSM-IV Eksen I Bozuklukları (SCID-I) İçin Yapılandırılmış Klinik Görüşme, Klinik Versiyon*. Ankara: Hekimler Yayın Birliği; 1999.
21. Hisli N. Reliability and validity of Beck Depression Inventory among university students. *Turk J Psychol*. 1989;7:3-13.
22. Dilbaz N, Holat H, Bayam G, Tuzer T. İntihar Düşüncesi Ölçeği'nin geçerlilik ve güvenirliği. 31. *Ulusal Psikiyatri Bilimleri Kongresi Bilimsel Çalışma Kitabı*. 1995:40-41.
23. Bayam G, Dilbaz N, Bitlis V, et al. İntihar davranışı ile depresyon, ümitsizlik, intihar düşüncesi ilişkisi: intihar davranışı ölçeği geçerlilik, güvenirlik çalışması. *Kriz Derg*. 1995;3(1):223-225.
24. Nock MK, Borges G, Bromet EJ, et al. Cross-national prevalence and risk factors for suicidal ideation, plans, and attempts in the WHO World Mental Health Surveys. *Br J Psychiatry*. 2008;192(2):98-105. [CrossRef].
25. Golpour M, Hosseini SH, Khademloo M, Mokhmi H. Mental health and suicidal ideation in patients with dermatologic disorders. *World Appl Sci J*. 2010;11:573-577.
26. Stanley B, Winchel R, Molcho A, Simeon D, Stanley M. Suicide and the self-harm continuum: phenomenological and biochemical evidence. *Int Rev Psychiatry*. 1992;4(2):149-155. [CrossRef]