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RESEARCH ARTICLE

Group therapy for excoriation disorder: Psychodrama versus support therapy

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BACKGROUND: Excoriation disorder (ED) is characterized by recurring excoriation of the skin resulting in tissue damage, usually associated with emotional deregulation. Psychotherapy is a valuable treatment; however, no studies emphasize the patients' interactional aspect, nor the potential benefit of group treatment.

METHODS: We recruited a convenience sample of 38 individuals with ED according to DSM-5 criteria, in which 19 individuals proceeded to treatment, 10 with psychodrama group therapy (PGT), and 9 with support group therapy (SGT) in an open pilot study.

RESULTS: The entire sample presented improvement of skin excoriation on both self-report and clinician rating and improvement of social adjustment; however, there was no difference between groups (ie, time × group interaction). Also, there was no relevant change for anxiety, depression, or emotional regulation throughout treatment. Emotional deregulation was associated with excoriation severity as well as depression, anxiety, and social maladjustment, both at the beginning and end of treatment.

CONCLUSIONS: Although both groups showed improvement of skin picking, the results contradict our primary hypothesis that PGT would have a superior efficacy to SGT for patients with ED. The findings encourage future studies of group interventions for ED in larger samples with a focus on emotional regulation enhancement.

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INTRODUCTION

Excoriation disorder (ED) is characterized by recurring picking, skin lesions, and frequent and frustrated attempts to cease this behavior. Excoriations may be associated with several feelings, including anxiety and boredom. Individuals with ED may present different levels of awareness of this behavior, varying from focused and even automatic excoriation, with low awareness level. According to DSM-5, ED is diagnosed according to the following criteria[1]:

- recurrent skin picking resulting in skin lesions
- repeated attempts to decrease or stop skin picking
- the skin picking causes clinically significant distress or impairment in social, occupation, or other important areas of functioning
- the skin picking is not attributable to the physiological effects of a substance (eg, cocaine) or other medical condition (eg, scabies)
- the skin picking is not better explained by symptoms of another mental disorder (eg, delusions or tactile hallucinations in a psychotic disorder, attempts to improve a perceived defect or flaw in appearance in body-dysmorphic disorder, stereotypies in stereotypic movement disorder, or intention to harm oneself in nonsuicidal self-injury).

Studies indicate the prevalence of ED is 1.4% to 5.4%[2,3] among the general population; the majority of affected individuals are female (65.5%)[2] and Caucasian (87.5%).[4] Excoriation disorder may initiate at any age, but generally begins in adolescence between age 12 to 15.[5,6] Not rarely, it develops as a result of a dermatological problem, such as acne.[7]

Excoriation disorder is associated with a high index of comorbidities[8]; the main disorders are anxiety, depression, and obsessive-compulsive disorder (OCD).[3] Excoriation disorder also generates psychosocial difficulties, including the avoidance of social events and engaging in intimate relations (due to the excoriations),[9] and considerable suffering due to feelings such as guilt and shame.[10]

One of the hypotheses for the repetitive excoriating of the skin is that this has the function of affect regulation. Similar to trichotillomania and nail biting, ED is a type of denominated body-focused repetitive behavior (BFRB), which constitute recurring, problematic, and self-harming habits. Individuals with BFRB have difficulty in handling their affect regulation and, when they undergo negative feelings, they use BFRB to dodge, modulate, or alleviate negative feelings. The behavior persists despite the negative consequences, because it is reinforced by the escape or distraction from the undesired emotional state. Frequently, BFRB has emotional triggers, including frustration, boredom, dissatisfaction, and impatience. Guilt, shame, sadness, and anger may develop during or after the behavior, as well as feelings of indifference or relief.[11-14]

Some individuals with BFRB demonstrate a form of perfectionism characterized by difficulty relaxing, inability to plan and accomplish tasks, and unrealistic expectations of always being productive. Consequently, they are susceptible to frustration, impatience, and dissatisfaction when their goals are not completed, and boredom when the goal is impossible.[15] Therefore, the frustration of an individual with BFRB is generated specifically by dissatisfaction with his or her own performance,[16] and the repetitive behaviors alleviate the negative effects, and at the same time they offer the feeling of "accomplishing something."[13]

Dissociation also is a symptom of emotional deregulation. This typically occurs in severe stress situations, when emotions are at their extreme. Dissociation is defined as the rupture of the normally integrated functions of awareness, memory, identity, or perception. The slight efficacy of the treatments for BFRB may be attributed to the absence of a specific approach for this emotional regulation deficiency.[17]

Present literature on psychotherapeutic treatments for ED focuses on behavioral techniques and methods, with and without the use of medication.[18] Among the behavioral methods utilized is differential reinforcement of incompatible behavior, which focuses on the reinforcement of physically conflicting behavior with undesirable behavior (in this case, skin excoriation)[19] and differential reinforcement of other behavior, in which some behavior is stimulated, after the cessation of the undesirable behavior.[20] Studies also mention acceptance and commitment therapy (ACT), which involves procedures for strengthening values and life goals, preparation to accept and deal with internal adverse feelings, and management of rigidity of thought associated with the excoriation behavior, as well as acceptance-enhanced behavior therapy, which consists of a union between ACT and a traditional behavioral approach called habit reversal treatment.[21] Habit reversal treatment is the most studied treatment for ED; it covers several strategies that target the immediate and lasting reduction of the undesirable habit by raising the individual's awareness of the moment when the excoriation behavior is most likely to happen, through the identification of

triggers and the acquisition of new and competing behaviors (such as fist clenching), as well as aid from close contacts, who may help point out when a excoriation moment has started.[22]

Although ED is being increasingly researched, there are yet few studies of ED that were controlled clinical trials and featured significant samples, which makes it difficult to reach any conclusions, both regarding pharmacologic treatment as well as psychotherapy. A systematic review and meta-analysis concluded that insufficient evidence exists to safely affirm that specific treatment is clearly superior to control, mainly in relation to treatment with medication.[23]

Existing literature tends to focus on the individual's repetitive behavior that produces lesions on his or her skin, without being concerned with the psychopathological factors that are subjacent to this state. The efficacy of treatments that target the potential relationship between the severity and frequency of the excoriation behavior with the problems of emotional regulation, affective dissociation, and interpersonal difficulties that are characteristic of these individuals has not been evaluated.[17]

Also, to our knowledge, there has been no previous report on the use of group psychotherapy for ED. One of the advantages of group treatment is its interactive focus, which facilitates the development of basic social abilities and the possibility of recognition, learning, and correction of communication deviations in participants' interpersonal interactions. Homogeneous groups that focus on one disorder only have the advantage of more rapidly providing cohesion, support, and relief of its members' symptoms.[24] The treatment structure, with a pre-determined number of sessions, facilitates the acquisition of a sense of personal responsibility, with a catalyzing effect for the desired changes, in addition to the opportunity for taking responsibility for one's well-being towards the end of the process, with the integration of the content covered during the psychotherapy course.[25] Upon becoming aware of their interactive deficits and their relation to ED, individuals start dealing with these underlying features and may achieve improvements beyond the target symptoms.[26]

Psychodrama methods are rich in expression and transcend mere verbal expression. Information about the group's individuals is explored and considered in dimensions beyond what is said, but also in how it is said, considering elements such as corporal expression of each participant and of the group, including its movement or its silence.[26]

In its psychotherapeutic approach, psychodrama operates with facts and situations brought by the patient, mainly taking into consideration the "here/now" in the patient's relations and emotional experience together with a cognitive comprehension of the lived experience. The present quality of the experience makes it emotionally more intense and, therefore, more susceptible to transformation and fixation of the new experience.[27]

Role-playing, one of the psychodrama methods, helps the participant to develop the ability to deal with specific situations, which may be simulated similarly to how they would occur in real life. The participant experiences and plays a specific role, perfecting their performance in a situation with which he or she has difficulty, in a quicker and more protected manner than in real life.[28]

Another advantage of psychodrama is the principle of therapeutic interaction, which is the establishment of a group culture that considers that any group member may generate a therapeutic effect, and not only the therapist.[27]

With the goal of creating a basis for a future controlled, randomized investigation of psychodrama group therapy (PGT) for the treatment of patients with ED, we formulated a PGT program for ED and another for a controlled condition support group therapy (SGT). Both interventions consisted of 20 sessions and were tested in a group of patients who sought treatment for ED in a public university treatment center.

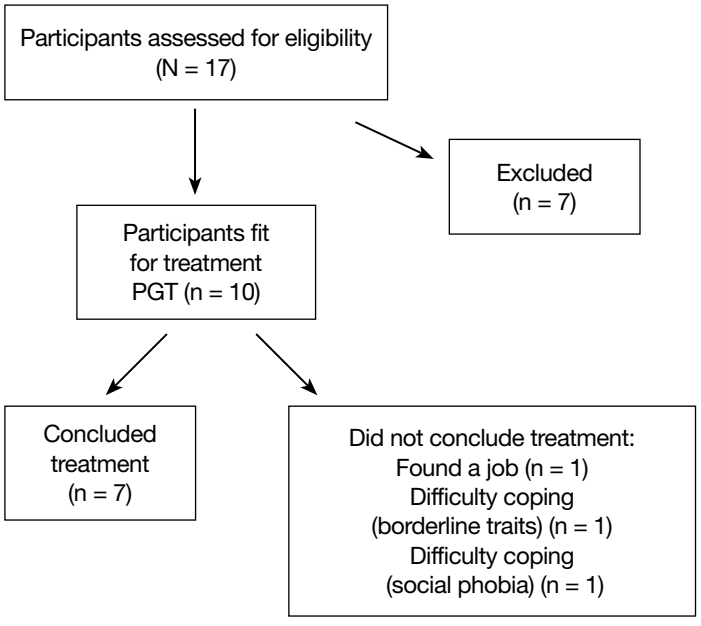
The goal of this study is to report the therapists' experience in carrying out the treatment and to preliminarily offer some comparative measures of efficacy for these 2 pilot interventions. As a secondary goal, we compared the severity of the excoriation behavior with measures of emotion deregulation, anxiety, depression, and social adjustment in order to further test the hypothesis of an association between ED, affect regulation, and interpersonal difficulties.

METHODS

This was an open pilot study of a convenience sample of individuals who sought treatment for skin self-excoriation. Thirty-eight patients were assessed; the first 10 individuals who sought treatment from September 2014 to January 2015 and fulfilled the study inclusion criteria were designated to PGT. The next 10 patients who sought treatment between May 2015 and September 2015 and fulfilled the inclusion criteria were designated to SGT. At the last

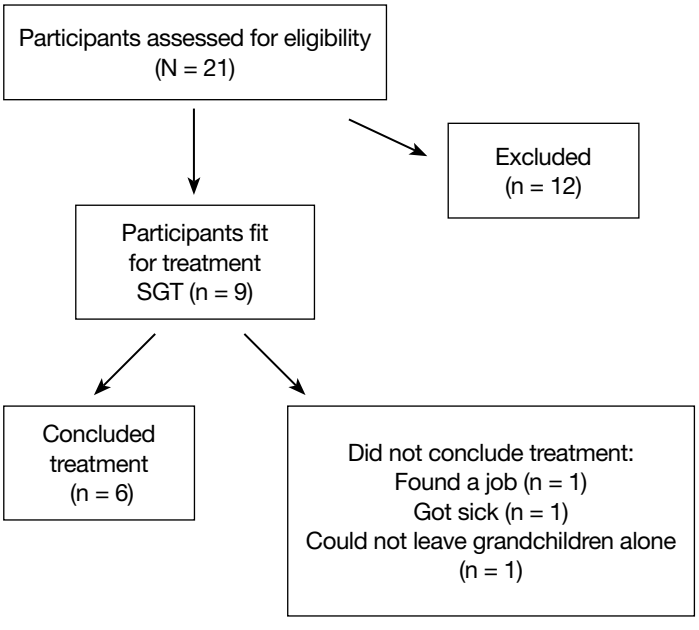
FIGURE
Study flow diagram

Stage 1: Psychodrama group treatment



Exclusion criteria	n (%)
Did not fill out diagnostic criteria	1 (14.3%)
Lives too far	1 (14.3%)
No-show	4 (57.2%)
Illiterate	1 (14.3%)
Total	7 (100%)

Stage 2: Support group treatment



Exclusion criteria	n (%)
Did not fill out diagnostic criteria	2 (16.7%)
Lives too far	1 (8.3%)
No-show	6 (50.0%)
No time available	3 (25%)
Total	12 (100%)

PGT: psychodrama group therapy; SGT: support group therapy.

TABLE 1
Sociodemographic characteristics of therapy groups

Characteristic	PGT (n = 10)	SGT (n = 9)	Total (N = 19)	Test	*P*
Sex					
Male	3 (30.0%)	2 (22.2%)	5 (26.3%)	$\chi^2 =$ <0.001[a]	1.000
Female	7 (70.0%)	7 (77.8%)	14 (73.7%)		
Age					
Mean (SD)	38.6 (11.3)	40.1 (13.9)	39.3 (12.3)	U = 50.0[b]	.720
Ethnicity					
Caucasian	8 (80.0%)	6 (66.7%)	14 (73.7%)	χ^2 = 0.019[a]	.891
Others	2 (20.0%)	3 (33.3%)	5 (26.3%)		
Years of formal education					
Mean (SD)	12.4 (3.8)	13.8 (4.1)	13.1 (3.9)	U = 58.5[b]	.278
Marital status					
With partner	4 (40.0%)	5 (55.6%)	9 (47.4%)	χ^2 = 0.048[a]	.827
Without partner	6 (60.0%)	4 (44.4%)	10 (52.6%)		
Work status					
Working regularly	8 (80.0%)	6 (66.7%)	14 (73.7%)	χ^2 = 0.019[a]	.891
Not working	2 (20.0%)	3 (33.3%)	5 (26.3%)		
Religion					
Christian	7 (70.0%)	5 (55.6%)	12 (63.2%)	χ^2 = 0.031[a]	.861
Without religious designation	3 (30.0%)	4 (44.4%)	7 (36.8%)		

[a]Chi-square test
[b]Mann-Whitney U test

PGT: psychodrama group therapy; SD: standard deviation; SGT: support group therapy.

moment, 1 patient who had been selected dropped out the study; therefore, the SGT group started with 9 participants. At the beginning and at the end of each treatment, 2 clinicians (HT and EO) who were not blinded to the type of treatment received but who did not take part in administering the treatment assessed the patients. The **FIGURE** shows the study flow diagram.

Participants

Participants in this study were volunteers who sought treatment in the Programa Ambulatorial dos Transtornos dos Impulsos (Impulse Control Disorder Outpatient Clinic Program) of the Instituto de Psiquiatria do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, (Department and Institute of Psychiatry, Faculty of Medicine, University of São Paulo, Brazil). These individuals became aware of the treatment through the Internet and oral disclosure by the professionals and patients of the Institute. This study was approved by the local ethics committee and participants signed an informed consent form.

The inclusion criteria were:

- being at least age 18
- having a primary diagnosis of ED according to DSM-5 criteria,[1] assessed by registered psychologists and psychiatrists using structured clinical interviews
- having at least 4 years of formal education to ensure literacy and free consent.

The exclusion criteria were the presence of:

- a severe psychiatric disorder or any other medical condition requiring inpatient treatment
- mental retardation, psychosis, or any condition affecting the central nervous system, with severe harm to cognitive functions.

Instruments

To gather descriptive analysis data and to evaluate the homogeneity of the sample, we utilized the sociodemographic data questionnaire (SDQ).[29] For evaluation

TABLE 2
Psychiatric comorbidities, suicide risk, and treatment compliance for psychodrama and support therapy groups

Variable	PGT (n = 10)	SGT (n = 9)	Total (N = 19)	Test	*P*
Depression	9 (90.0%)	7 (77.9%)	16 (84.2%)	$\chi^2 = 0.010$[a]	.921
GAD	8 (80.0%)	6 (66.7%)	14 (73.7%)	$\chi^2 = 0.019$[a]	.891
Agoraphobia	3 (30.0%)	4 (44.4%)	7 (36.8%)	$\chi^2 = 0.031$[a]	.861
BED	3 (30.0%)	3 (33.3%)	6 (31.6%)	$\chi^2 < 0.001$[a]	1.000
CBD	3 (30.0%)	1 (11.1%)	4 (21.1%)	$\chi^2 = 0.198$[a]	.656
Suicide risk	4 (40.0%)	2 (22.2%)	6 (31.6%)	$\chi^2 = 0.114$[a]	.735
Sessions completed, mean (SD)	13.0 (6.1)	12.8 (3.7)	12.9 (4.9)	U = 38.5[b]	.604

[a]Chi-square test
[b]Mann-Whitney U test

BED: binge eating disorder; CBD: compulsive buying disorder; GAD: generalized anxiety disorder; PGT: psychodrama group therapy; SD: standard deviation; SGT: support group therapy.

of psychiatric comorbidities and to control for intervenient variables, we utilized the brief, standardized Mini-International Neuropsychiatric Interview (MINI)[30] and the Structured Clinical Interview for Impulse Disorders of DSM-IV (SCID-ID).[31] For primary outcome analysis, we utilized the Skin Picking Scale–Revised (SPS–R).[32] For secondary outcome analysis, we utilized the Beck Anxiety Inventory (BAI),[33] the Beck Depression Inventory (BDI),[34] the Social Adjustment Scale (SAS),[35] and the Difficulties in Emotion Regulation Scale (DERS).[36] All scales were adapted and validated for Brazilian Portuguese, with the exception of SPS–R, DERS, and SCID-ID, which are undergoing the validation process. The SDQ, MINI, and SCID-ID were administered to patients upon their arrival at the outpatient clinic. All others were self-report scales completed at the beginning and end of the treatment.

Interventions

Psychodrama Group Therapy

The PGT was structured based upon its 2 main goals: I) exploring patterns of interpersonal interactions, and II) raising awareness of internal emotions processing. The first 3 sessions were dedicated to establishing the therapeutic contract and the group formation. The subsequent sessions alternated between goals I and II, with 2 sessions dedicated to reviewing the therapeutic process at the end of the first and second thirds, and the final session dedicated to the therapy's closure. Here is a description of the sessions' content:

Sessions 1, 2, and 3: Presentation of the group (including the therapists), establishing the operating group contract, and administering the primary and secondary evaluation instruments. In addition, we utilized psychodramatic exercises to facilitate the participants' presentation[27] and integration of the group. As a general principle, some freedom of content was desirable and allowed, upon agreement between the therapists and the patients, in order to adapt therapy to the patients' timely demands, whenever needed. For example, during the course of the intervention, 1 patient lost her husband, and the next session was dedicated to embrace her mourning, as well as any other similar experience ever lived by other participants.

Sessions 4, 6, 9, 11, 13, 16, and 18: The general goal of these sessions was the exposure, comprehension, and adaptation of the individual in relation to his or her social universe (their interpersonal interactions) through psychodramatic exercises.[27] In order to accomplish this, their most significant relationships were explored dramatically, investigated, and analyzed in relation to the excoriation behavior. The goal was to expand the participant's social repertoire, searching for more adapted and satisfactory relationships.

Sessions 7 and 14: These sessions took place after the first and second thirds of the treatment, and were utilized for partial evaluation of the treatment process. The patients had to think about and report what they had learned/developed so far and what they expected to achieve by the end of the treatment.

TABLE 3
Outcome analysis of group therapies for excoriation disorder (N = 19)[a]

	Psychodrama group therapy		Support group therapy	
Outcome measures	**Pre-intervention**	**Post-intervention**	**Pre-intervention**	**Post-intervention**
SPS–R	n = 10	n = 10	n = 9	n = 9
Mean (SD)	18.9 (5.8)	15.6 (6.6)	18.7 (5.2)	13.8 (6.1)
DERS	n = 7	n = 7	n = 6	n = 6
Mean (SD)	103.7 (22.2)	96.0 (26.2)	102.2 (27.9)	99.3 (35.0)
BAI	n = 7	n = 7	n = 6	n = 6
Mean (SD)	17.7 (5.3)	17.6 (8.9)	18.2 (11.4)	21.0 (14.0)
BDI	n = 7	n = 7	n = 6	n = 6
Mean (SD)	20.7 (8.2)	15.1 (9.2)	24.2 (9.6)	22.8 (11.4)
SAS	n = 7	n = 7	n = 6	n = 6
Mean (SD)	2.2 (0.4)	2.1 (0.7)	2.4 (0.7)	2.2 (0.6)
Illness severity[b]				
• Not assessed	–	4 (40.0%)	–	3 (33.3%)
• Absent-borderline	0	2 (20.0%)	0	1 (11.1%)
• Mildly ill	2 (20.0%)	2 (20.0%)	4 (44.4%)	4 (44.4%)
• Moderate-markedly ill	5 (50.0%)	2 (20.0%)	2 (22.2%)	0
• Severe-extremely ill	3 (30.0%)	0	3 (33.3%)	1 (11.1%)

[a]Nonparametric analysis of ordered categorical data.
[b]Measured by the Clinical Global Impression scale.

BAI: Beck Anxiety Inventory; BDI: Beck Depression Inventory; DERS: Difficulties in Emotion Regulation Scale; SAS: Social Adjustment Scale; SD: standard deviation; SPS–R: Skin Picking Scale-Revised.

Sessions 5, 8, 10, 12, 15, 17, and 19: The general goal of these sessions was exposition and comprehension of the patient's emotions and their relation to the excoriation behavior (internal relationships). First, participants were directed to self-examine their emotions at the moment, to name and recognize them. Then, through psychodramatic exercises they were trained to find alternative healthy ways to express those emotions.[27]

Session 20: Termination of the process and evaluation of the work. Dedicated to retrospective analysis of the therapeutic process and the patients' prospects in the near future.

Support Group Therapy

Support therapy (ST) is an eclectic model of psychotherapy, indicated both for treating patients with severe and chronic disorders (eg, psychosis or severe social disability) as well as for patients considered mentally healthy, but under emotional crisis or severe distress. Support therapy aims to reinforce defenses and reestablish capacities that have been harmed. It is a modality of treatment centered in the therapeutic relationship and work alliance, where the therapist offers support, enlightenment, and help in solving problems.[37]

Studies indicate that this modality of psychotherapeutic treatment, largely utilized both in institutions as well as in private clinics, offers results similar to those of other methods, such as dynamic approaches.

The ST method suggests that the therapists utilize several techniques to help patients feel safe, accepted, protected, and encouraged in emergency situations, including[37]:

- affectionate and strong leadership
- help to develop pleasant activities
- adequate rest and diversion
- removal of excessive pressure
- orientation and advice to cope with present problems.

Some of the interventions are:

- confrontation (in a friendly manner, aims at coping with something that the patient is avoiding or non-receptive)
- encouraging elaboration (the therapist openly requests the patient to develop more on a specific theme)

	Within participant comparison		Interaction (time vs group)	
	Wald's χ^2	*P*	Wald's χ^2	*P*
	13.068	<.001	0.584	.445
	1.219	.270	1.779	.182
	0.048	.827	1.334	.248
	2.113	.146	0.623	.430
	6.428	.011	0.313	.576
	7.342	.007	0.003	.955

- empathic validation (the therapist demonstrates that he or she understands the individual's subjective experiences)
- advice (the therapist gives direct suggestions as to how the patient should behave or deal with a given situation)
- praise (reinforcing the patient's initiatives)
- clarification (re-elaboration or retransmission of a patient's view, organized in a coherent manner).

Support group therapy is an adaptation of ST that utilizes the same techniques and interventions described above. Both PGT as well as SGT were conducted by therapists with experience in each methodology.

Data analysis

The small sample size precluded the assumption of normal distribution for the continuous variables; therefore, we decided to use non-parametric statistics for all data comparisons. First, the groups' homogeneity was tested regarding demographic and clinical profiles at baseline, using either the chi-square test or Fisher's test (when expected values <5 in more than 2 cells) for categorical data and Mann-Whitney U test for continuous or categorical data.

For the outcome analysis, we used nonparametric analysis of ordered categorical data for longitudinal observations for small sample sizes,[38] using an Excel algorithm available from the Math and Statistical Institute of the University of São Paulo, Brasil.[39] To address with drop-outs and avoid self-selection bias, we used an intention-to-treat approach to the primary outcome variable; therefore, even if the patient had not finished psychotherapy, at the end of the programmed intervention contact was established by phone call and the individual was invited to participate in a final assessment with the SPS–R.[40] Intention-to-treat was not used with the secondary outcome measures because it would be too lengthy to be carried out over by phone. Finally, Spearman's correlation analyses were performed between all outcome variables.[41]

RESULTS

At baseline, the PGT and SGT groups were homogenous regarding both sociodemographic and clinical profiles. Generally, the full sample was three-quarters Caucasian working females, in their 40s, with a Christian background and some college degree, half living with a partner (**TABLE 1**).

Regarding the clinical profile, out of the 19 patients, only 1 had ED only. The median number of psychiatric comorbidities was 3.5, with 6 patients (31.6%) presenting with 1 to 2 comorbidities, 5 (26.3%) presenting with 3 comorbidities, and 7 (36.8%) presenting with 4 to 5. The most common comorbidities were depression (84.2%) and generalized anxiety disorder (73.7%). Impulsive behaviors were also present, mainly binge eating (31.6%), suicide risk (31.6%), and compulsive buying (21.1%). Other comorbidities were identified, but the small numbers did not yield statistical analysis: In the PGT group, 1 patient fulfilled criteria for borderline personality disorder (BPD), another patient for social phobia, and a third for bulimia nervosa; in the SGT group, 1 patient had social phobia, another patient had substance addiction (cannabis), and 1 patient presented with polydrug abuse, compulsive sex, and intermittent explosive disorder. Compliance to treatment was fair, with an overall attendance rate of 13 sessions, and a drop-out rate of 31.6%, with no statistical differences between groups (**TABLE 2**). Symptomatically, 2 patients with greater difficulties in social relationships who were designated to the PGT—1

with social phobia and the other with BPD—did not complete treatment.

Regarding the outcome analysis, both the PGT (Z = −2.053, P = .040, n = 10) and SGT (Z = −2.366, P = .018, n = 9) groups experienced significant reductions in skin excoriation according to the SPS-R. Additionally the PGT group experienced improvement on the Clinical Global Impressions (CGI) scale (Z = −2.121, P = .034, n = 7), but the SGT group did not (Z = −1.633, P = .102, n = 6). When the groups were analyzed together, the entire sample experienced improvement on the SPS–R (P < .001, N = 19), the CGI (P < .007, n = 13) and the SAS (P = .011, n = 13). However, there were no differences between groups (ie, time × group interaction). Also, there was no statistically relevant change for anxiety, depression symptoms, or emotional regulation throughout treatment (n = 13, all P > .05) (**TABLE 3**).

The correlational analysis revealed significant correlations between the SPS–R score and the CGI, DERS, and SAS scores at the beginning of treatment. At the end of treatment, most correlation coefficients retained their magnitude but lost their significance, probably due to the loss of sample power, with the exception of the correlation between the SPS–R and the DERS, which dropped from 0.470 (P = .042, N = 19) at the beginning to 0.167 (P = .586, n = 13) at end of treatment. Moreover, the DERS and SAS scores had significant correlations between each other and with the BAI and BDI scores both at the beginning and end of treatment. **TABLE 4** presents the main results.

DISCUSSION

In terms of sociodemographic characteristics, the PGT and SGT groups were mostly Caucasian and female, which matches the profile previously reported for patients with ED.[2,4] Also in accordance with previous reports, patients with ED presented high rates of comorbidities,[8] most commonly depression and anxiety.[7]

In terms of treatment, both PGT as well as SGT were effective at treating ED, ie, both reduced the skin excoriation significantly. However, no statistical difference in improvement was found between the groups. This contradicts the initial hypothesis that PGT would be more effective than SGT, although it is in accordance with previous studies that indicate that psychotherapy improves excoriation symptoms in ED, regardless of the type of psychotherapy.[23] For both treatments, there was no improvement in the status of depression, anxiety, or emotional regulation. However, social adjustment improved for the entire sample.

Interestingly, the severity of excoriation correlated significantly with emotional deregulation and social adjustment at the beginning of treatment, but not with anxiety and depression scores. The magnitude of such correlations was retained at the end of treatment, despite the loss of statistical significance due to the reduction of the sample, except for the correlation between excoriation severity and emotional deregulation, which dropped to almost one-third of its original value. Although speculative, one could hypothesize that despite the fact that the treatment did not present a significant reduction in emotional deregulation, it may have provided a disruption of its association with the excoriation behavior. These findings also reinforce the perception that excoriation severity has a direct relationship to social maladjustment that is independent of the effects of comorbidity with anxiety and depression.

As to the fact that emotional regulation did not improve with treatment, possibly emotional regulation has a characteristic of difficult transformation, or of slow transformation, or since it contains multiple dimensions, it may have some relevant dimension for this condition that the scale did not capture. Nevertheless, since this was a pilot study with a small sample, it still is early to reach any conclusions regarding the similarity in efficacy between the treatment models, especially because PGT could be reviewed and modified to achieve a greater specificity and efficacy.

This is an innovative study because it indicates that group psychotherapy may be an option for ED treatment. Group treatment has the advantage of being able to treat a larger number of people at the same time; additional benefits include the exchange of experiences between participants, the feeling of belonging, and a decrease in existential solitude. This has been confirmed by the fact that, by the end of the treatment, a great majority of patients in both groups reported that it had been positive for them to get to know other people with the same problems. Indeed, many exchanged contact information and, particularly among some of the members of PGT, carried out meetings and even trips together after the termination of the group. The fact that 2 patients, 1 with a borderline personality trait and another with social phobia, abandoned the PGT group due to difficulties in coping may mean that this modality is particularly sensitive for individuals with an exacerbated difficulty of interpersonal interaction.

TABLE 4
Spearman's correlation analysis between skin picking severity and outcome variables

Beginning of treatment (N = 19)					
Correlations	**Difficulties in Emotion Regulation Scale**	**Beck Anxiety Inventory**	**Beck Depression Inventory**	**Social Adjustment Scale**	**Clinical Global Impressions scale**
Skin Picking Scale-Revised	Rho = 0.470 *P* = .042	Rho = 0.303 *P* = .208	Rho = 0.260 *P* = .282	Rho = 0.472 *P* = .041	Rho = 0.588 *P* = .008
End of treatment (n = 13)					
Correlations	**Difficulties in Emotion Regulation Scale**	**Beck Anxiety Inventory**	**Beck Depression Inventory**	**Social Adjustment Scale**	**Clinical Global Impression scale**
Skin Picking Scale-Revised	Rho = 0.167 *P* = .586	Rho = 0.310 *P* = .302	Rho = 0.319 *P* = .288	Rho = 0.438 *P* = .155	Rho = 0.722 *P* = .008

Limitations

This was an open study with a small convenience sample and without randomization. However, it accomplished its goal as a pilot study, which was to refine the structure of the proposed treatments for future randomized controlled trials. In that regard, it is important to underscore several lessons learned with this experience. First, the number of sessions may be reduced to 15, considering that the average total of sessions attended was approximately 13 for the entire sample.

Second, the division between sessions dedicated to interpersonal interactions and sessions dedicated to emotions turned out to be artificial and should be eliminated because both topics seemed to always overlap.

Third, while retaining some flexibility, which is inherent to psychodrama and the so-called expressive therapies, the time-limited nature of the proposed PGT program for ED treatment may benefit from some structuring by the election of specific activities throughout the start, middle, and end of the intervention. For instance, we perceived that at the beginning of treatment some patients had difficulties in enacting and exposing their challenging life moments. Notably, 2 patients from the PGT group with the greatest difficulties in social relationships did not finish the intervention. For such situations, psychodrama therapists have proposed that patients may start by enacting a fictional character and then smoothly progress from talking about a third party to talking about themselves.[42]

Fourth, we observed that usually patients do not bring to therapy the scenes and context in which they engage in self-excoriation. If it happens spontaneously, it should be embraced, but the opposite (ie, early attempts at dramatizing the excoriation behavior) must be avoided, because doing so could reinforce the entrapment in a loop of false understanding: "I excoriate myself because I am distressed, and I am distressed because I excoriate myself." Instead, as PGT leaves behind the inhibitions of the start and approaches its middle phase, the therapist should gently introduce exercises dedicated to exploring patients' core relationships, the so-called social atom.[43] This can be achieved by the empty-chair exercise, in which the patient sits in front of an empty chair and imagines a person, then switches chairs and develops a dialogue with his/her significant other.[44] Then, afterwards the therapist has patients in a good position to suggest the potential links between the way they cope with their life challenges and the excoriation behavior.

Finally, the group's closure must not be neglected, as patients usually look toward the end of treatment as a return to the vulnerability state from before treatment. We suggest including an imaginary prospection of the future, followed by a dramatizing exercise in which patients try to envision his or her situation 6 months ahead. This exercise aims to identify high-risk situations, prevent relapse, and build self-confidence.[45]

CONCLUSIONS

Our results do not yield any inference as to whether PGT may have a specific contribution to the treatment of ED. However, the fact that both treatment models were group-based, and both achieved a significant clinical response, opens the opportunity for further study of the contribution of group therapy in the treatment

of ED. Indeed, group interventions address aspects of patients' emotions and social interactions. Although these are not core features of ED psychopathology, they may well be important factors in the persistence of the excoriation behavior, as previously suggested.[17] Thus, in addition to the potential adjustments to PGT described above, our findings encourage future studies with larger samples to evaluate the ability of group interventions to achieve clinical and social improvement in ED by promoting better emotional regulation. ■

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