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Research Article

Ameliorating Obsessive-Compulsive and Related Disorder with Oppositional Defiant Disorder and Enuresis Through Behaviour Therapy Approach – A Case Study

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Abstract

Preoccupation and subsequent repetitive behavioural or mental acts in response to it are distinct characteristic features of a group of disorder referred to as obsessive-compulsive and related disorder. Due to relatedness to each other, these conditions are often found to co-occur. Among these conditions, trichotillomania or hair-pulling disorder is characterised by the tendency to pull one's own hair recurrently and the pulling occur from any region of the body where hair grows. It may occur in brief episodes scattered throughout the day or for more sustained periods that can continue for hours (APA, 2013).

Keywords: behavioural or mental acts

Introduction

Preoccupation and subsequent repetitive behavioural or mental acts in response to it are distinct characteristic features of a group of disorder referred to as obsessive-compulsive and related disorder. Due to relatedness to each other, these conditions are often found to co-occur. Among these conditions, trichotillomania or hair-pulling disorder is characterised by the tendency to pull one's own hair recurrently and the pulling occur from any region of the body where hair grows. It may occur in brief episodes scattered throughout the day or for more sustained periods that can continue for hours (APA, 2013). The onset of trichotillomania is generally in childhood or adolescence and the disorder usually runs a chronic course (Christenson & Crow, 1996). Again, another disorder on this spectrum, which is also a frequently associated comorbidity of trichotillomania is excoriation disorder which is characterised by recurrent picking at one's own skin. Repetitive body-focussed symptoms other than hair-pulling or skin picking (e.g., nail biting, lip biting) also commonly occur in a majority of the individuals lying on this continuum (APA, 2013). Research reveals that pharmaco-therapy in trichotillomania, has shown inconsistent results in terms of long-term gains (Swedo & Leonard, 1992). Post-treatment evaluation studies of behaviour therapy have been found to be more effective in reducing symptoms of trichotillomania (Keijsers, et al., 2006). The techniques commonly used in behaviour therapy are habit reversal, self-monitoring, response prevention, progressive muscle relaxation, and use of pleasant imagery (Rangaswami, 1997). The specific style of behaviour therapy called habit reversal therapy has given positive outcomes in many cases of trichotillomania, however there is limited completed RCT in this area (Rehm, et al., 2015). Researchers have reported mixed results using insight-oriented psychotherapy. Although some researchers (Kumar et al., 1982) report failure in a case, others (Aggarwal, et al., 1988) however, reported complete recovery which was maintained till 1-year follow-up. Advances in the understanding of the phenomenology of trichotillomania revealed behavioural treatments when combined with dialectical behaviour therapy and acceptance and commitment therapy augmented benefits of treatment (Rehm, et al., 2015). Again, though no distinct and recommended treatment option has been delineated for excoriation disorder, however, cognitive–behavioral therapy, particularly habit-reversal therapy and acceptance and commitment therapy have shown promise with this condition (Jafferany & Patel, 2019). Oppositional defiant disorder is a frequent and persistent pattern of angry or irritable mood and argumentation or defiant behaviour. Enuresis is distinguished by a tendency of repeated voiding of urine during day and night into bed or clothes and conversion disorder characterised by abnormal limb

shaking with apparent impaired consciousness (APA, 2013). Researches indicate that behaviour therapy has also been effective in improving symptoms of enuresis (Caldwell, Nankivell, & Sureshkumar, 2013). Psychoanalytic psychotherapy along with behaviour therapy facilitated alleviation of symptoms of oppositional defiant disorder (Laezer, 2015). The present study attempts to explore the effectiveness of behaviour therapy techniques (habit reversal, aversive therapy, differential reinforcement and bladder control therapy) in a child suffering from obsessive-compulsive and related disorder with oppositional defiant disorder and enuresis. The conditions under obsessive compulsive disorder that were present include trichotillomania, excoriation disorder, and other specified obsessive compulsive and related disorder like body-focussed repetitive behaviour disorder (e.g., lip biting). Though previous researches indicate positive outcomes of behaviour therapy in all of these conditions separately, however its effectiveness in above mentioned conditions when present together and subsequent complexity that it entails has been rarely explored and hence has been focussed in the present study.

Materials and Methods:

Study Design:

A pre-post intervention single case design was used to evaluate the effect of the behaviour management techniques employed.

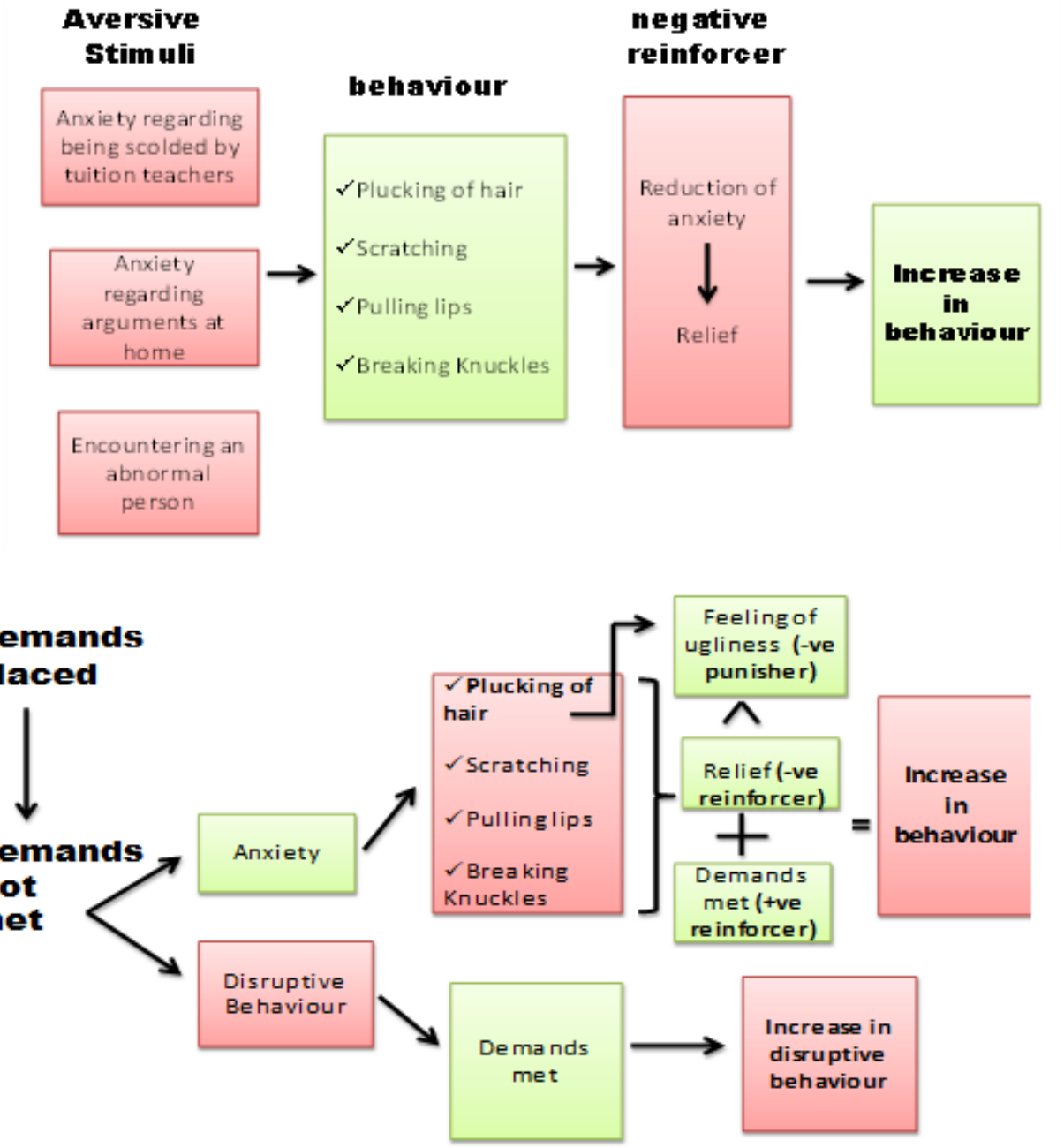
Case History:

Ms. S.R., a 9-year-old Hindu, Bengali female, studying in class 5, belongs to a rural nuclear family with low socio-economic status. Parents reported bedwetting since early childhood, repeated tendency to pull out hair from head and excessive worry for 6 years of age, stubbornness, demanding behaviour and hitting others for 7 years of age, scratching palm, feet and head repeatedly and episodes of stiffening of hands, jerky movements, inability to recognize people since past 7 months and tendency to pull lip, break knuckles frequently for past 2 weeks. The symptoms had an insidious onset, episodic course for episodes of stiffening of hands, jerky movements and inability to recognise other people and continuous course for other symptoms, and improving progress for episodes of stiffening of hands and deteriorating for others.The child was found to continue bedwetting almost every day even when she was around 4 – 5 years of age, despite of repeated preventive measures taken by family members. Since around 5 ½ years of age incidence of bedwetting decreased to around 3-4 times a week and continued to occur in that frequency. At around 6 years of age, the mother noticed bald patches on the child's head and on inquiring the child reported to her mother that she plucked her hair herself. Then on careful monitoring the mother observed that the child often pulled out her hair. The child then, at times even plucked her hair, gathered it and showed it to her mother. She reported that, whenever she felt uncomfortable and uneasy, she liked to pull out her hair and she felt better after plucking hair. The family consulted a skin specialist for the problem; however, it did not get resolved even after taking medicines and hence medications were discontinued. The mother also observed that sometimes she used to hit her head after plucking her hair. The child also reported that she pulled her hair in front of people who did not know about her tendency, mostly without them noticing her do it. She felt bad about losing her hair and though at times she tried not to pluck her hair but was unable to stop herself from doing it. Since around 7 years of age the mother also observed that the child use to worry over various issues excessively, like argument going on in the house, what will happen to the abnormal person she sees on the road, about being scolded by the tuition teacher for not doing homework etc. Whenever she felt tensed, she got relief by plucking her hair or scratching her head. At times on feeling tensed she had trembling and increased palpitation and felt better if she could tell whatever happened to her mother. Since around 7 years of age the mother also reported that the child became very demanding and stubborn and wanted things she demanded to be given immediately. If she was not given the things, she demanded she used to shout, cry, hit mother, spoiled the bed by turning over the bed sheets and pillows, verbally abuse others and also pluck hair. For past 7 months the child also had a tendency to scratch her palm, feet and head with pen or fingernails. She reported that she had an itching sensation on her head; palm and feet which made her scratch it vigorously. She sometimes scratched her hands at the edges of the table or other furniture or over any rough edge. At times scratching on the bald portion of the head resulted in injury in that area. When her mother asked her not to do that, she tried but could not control it. For past 7 months, the mother also reported that there were episodes of stiffening of hand, jerky movements and tremor. She was also unable to recognise the people around her during the episode, but she could talk a little with people and hear what others were saying. The first episode occurred before an exam. Indigenous treatment was done. Second episode occurred after a fight with friends. Since that time, the family started taking psychiatric help. No such incidents occurred after that. For past 2 weeks the frequency of occurrence of bedwetting has increased to almost every day. It was also observed that the child developed a tendency to pull her lower lip and also squeeze her upper lip with her hand often. She also developed a tendency to break knuckles frequently. She exhibited these behaviours more frequently whenever she was tensed over any issue. The scratching of head and hand had also increased. Throughout this period her predominant mood was euthymic. Presently the symptoms continue.There was no history suggestive of significant head injury; hair loss due to skin disease (alopecia); primary skin infection, incontinence, tongue bite, confusion during fainting spells, periods of elevated or depressed mood, pattern of fire setting for pleasure; recurrent impulses to steal objects; episodes of failure to resist aggressive impulses; repetitive, persistent, unwanted, ideas, images or acts; preoccupation with one or more perceived defect in physical appearance; free-floating anxiety, fear of being separated from attachment figures, sudden, rapid, recurrent, non-rhythmic motor movements, excessive restlessness and inattention and disruptive behaviour that violates rights of others and social norms. Treatment history revealed that the child was under anxiolytics, antidepressants and atypical antipsychotics since past 6 months with no significant improvement. There was nil contributory family history and normal development milestones. There was a personal history of father staying away from home till past 1 year and past medical history of kidney malfunctioning resulting in body swelling at 5 months of age and difficult temperament. Mental status examination was suggestive of well kempt and tidy appearance, ectomorphic body built, easily established rapport, cooperative attitude, easily aroused and sustained attention, normal motor behavior, relevant, coherent and goal directed speech, average intellectual functioning, feeling good subjective affect and stable objective affect, which was normal in depth, adequate in range, communicable, reactive and appropriate and thought content suggestive of preoccupation with hair plucking tendency. On psychological assessment she has average current intellectual functioning (IQ=91), anxieties over physical harm and over loss of love in Children's Apperception Test – Human (Bellak & Bellak, 1965), being separated from loved ones in Spence Children's Anxiety Scale (Spence, 1998), experiences of low self-esteem and difficulty in social interactions in Children's Depression Inventory – 2 (Kovacs, 2011).The child was diagnosed with 312.39 Trichotillomania with 698.4 Excoriation Disorder with 313.81 Oppositional Defiant Disorder with 307.6 Enuresis with 300.11 Conversion disorder currently in remission with 300.3 Other Specified Obsessive Compulsive and Related Disorder according to DSM-5.

Psychopathology Formulation:

Figure 1 shows that anxiety regarding being scolded by tuition teachers, regarding arguments at home and encountering an abnormal person are aversive stimuli for the child and she gets rid of them through the behaviours of plucking of hair, scratching, pulling lips and breaking knuckles. Hence these behaviours are increased by the negative reinforcer relief or reduction of anxiety. Again, demands that are not met, results in either anxiety or disruptive behaviour like stubbornness, arguing and

hitting others. Anxiety as already mentioned results in the behaviours of plucking of hair, scratching, pulling lips and breaking knuckles. Now plucking of hair results in feelings of ugliness which is a negative punisher and hence is supposed to decrease the behaviour of plucking. However, this decrease outweighs the two strong reinforcers (relief a negative reinforcer and demands met a positive reinforcer) and hence there is an increase in all the four above mentioned behaviours. On the other hand, disruptive behaviour results in family members meeting the demands which being a positive reinforcer increases the disruptive behaviour. Lastly staying alone in the paternal house and father not being present till past 1 year, results in unmet needs for love and attention leading to the behaviours of plucking of hair, scratching, pulling lips and breaking knuckles; conversions and bedwetting symptoms. The positive reinforcer attention direct or indirect in turn leads to an increase in these behaviours. (Figure 1 to be inserted here)



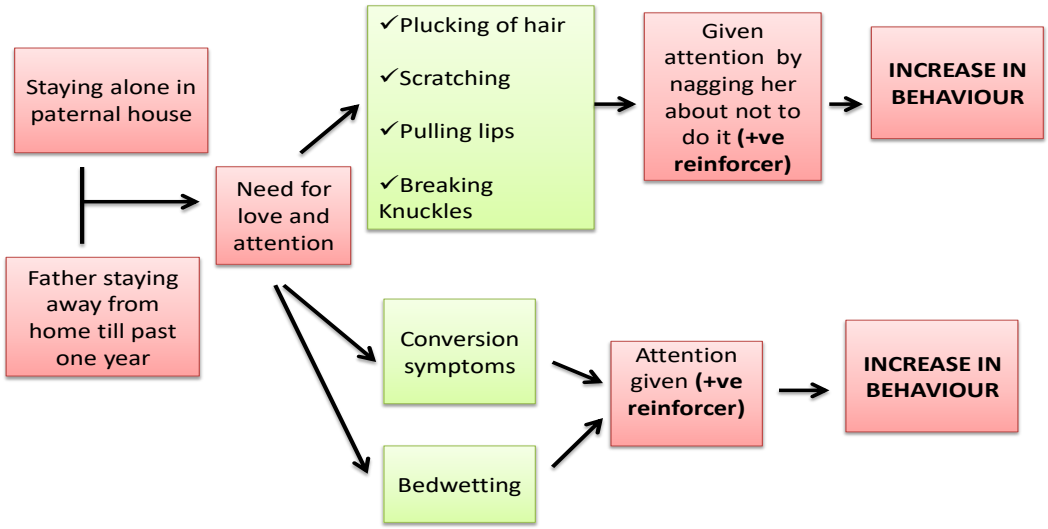


Figure 1: Etiological explanation of the case

Pre-intervention Assessment (Baseline Assessment):

Recording of frequency, duration and intensity of problem behaviour hair plucking, scratching, pulling lips, breaking knuckles (1st session), temper tantrums and bedwetting (6th session) through responses given by the informant was done.

Intervention:

The combination of the behaviour therapy techniques of habit reversal (awareness training, competing response training and relaxation), differential reinforcement (differential reinforcement of other behaviour and differential reinforcement of alternative behaviour), bladder control therapy and aversive therapy were employed in the intervention sessions conducted. The child's maladaptive behaviours were maintained by various positive and negative reinforcers and negative punisher as elaborated in the psychopathology formulation. Hence behaviour therapy techniques were accordingly chosen to modify the antecedents or consequences of these behaviours. Self-monitoring was used to make her aware of each instance of plucking behaviour and in turn decrease behaviour as she found them inappropriate. Competing response training was used as there was a concern present, after being aware of the urge, the child was taught to use a competing response contingent on the occurrence of the habit behaviour or its antecedents. Symptoms of hair plucking, scratching, pulling lips and breaking knuckles were maintained as it served to reduce anxiety through the arousal of the parasympathetic nervous system. Relaxation training reduces anxiety through arousal of the parasympathetic nervous system and hence it was used to reduce the behaviour. Differential reinforcement was used to reduce disruptive behaviour through manipulation of the consequences of her behaviours and aversive therapy was used as a punishment strategy to reduce the urge to pull hair.

Sessions:

The 10 sessions conducted were focussed on the various behaviour therapy techniques as discussed below:

The first 3 sessions (1-3) started with on history clarification, psycho-education about illness and baseline recording of frequency, duration and intensity of problem behaviour (hair plucking, scratching, pulling lips and breaking knuckles). Then the focus was training in progressive muscular relaxation (child script), self-monitoring of hair plucking behaviour and competing response training of fist clenching. The next 4 sessions (4-7) focussed on continuation of previous techniques, behavioural analysis and differential reinforcement of behaviour. Along with this from the 6th session the aversive therapy technique of pulling a single hair and bladder control therapy for non-organic enuresis was started. On 6th session baseline recording of temper tantrums and bedwetting was done.The last three sessions (8-10) were focused on treatment compliance, addressing difficulties in maintenance of differential reinforcement, habit reversal techniques, bladder control and aversive therapy and post assessment recording of frequency, duration and intensity of problem behaviours.

Post-intervention Assessment:

Recording of frequency, duration and intensity of problem behaviour hair plucking, scratching, pulling lips, breaking knuckles, temper tantrums and bedwetting (10th session) through responses given by the informant was done.

Results:

Table 1 and Figure 2 indicate that after intervention there was significant improvement in the symptoms of hair plucking, scratching and pulling lips. These symptoms completely reduced post therapy. Though comparatively lesser improvement was found in the symptoms of breaking knuckles, temper tantrums and enuresis, yet substantial decrease of symptom manifestations in these areas were also observed. Intervention for the symptoms of temper tantrums and enuresis was initiated in the 6th session, and hence there was scope of more improvement with few more sessions. (Table 1 and Figure 2 to be inserted here).

Problem Behaviours	Frequency/day				Intensity				Duration/occurrence			
	Session				Session				Session			
	1st	4th	6th	10th	1st	4th	6th	10th	1st	4th	6th	10th
Hair Plucking	5	2	2	0	3	3	3	0	3	2	2	0
Scratching	4	2	2	0	10	10	10	0	2	2	2	0
Pulling Lips	5	3	3	0	3	3	3	0	3	2	2	0
Breaking Knuckles	5	3	3	3	3	3	3	2	2	2	2	1

Temper tantrums			3	2			25	3			3	1
	Frequency/week				**Intensity**							
Enuresis			7	4			3	2				

Table 1: Frequency, intensity and duration of problem behaviour across sessions:

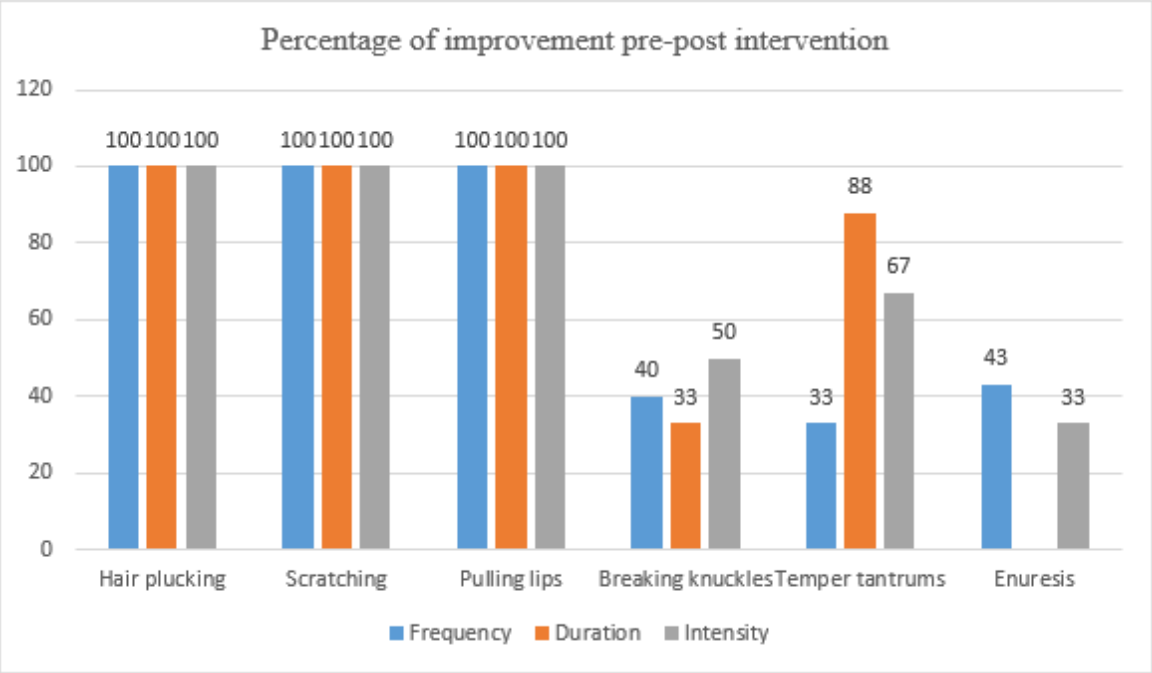


Figure 2: Percentage of improvement in frequency, duration and intensity of problem behaviour pre and post intervention

Discussion:

The purpose of the case study was to explore the effectiveness of behaviour therapy techniques (habit reversal, aversive therapy, differential reinforcement and bladder control therapy) in a 9-year-old, female currently child suffering from trichotillomania, excoriation disorder, other specified obsessive compulsive and related disorder, oppositional defiant disorder and enuresis. Pre and post intervention ratings by informants of frequency, duration and intensity of problem behaviour revealed substantial improvement in all areas. In the current case, presence of multiple comorbid conditions complicated the psychopathology manifestation and its management. Planning of management techniques and steps taking into account the case formulation rendered substantial help. The current study exhibited positive outcomes of behaviour therapy even when multiple comorbid conditions of obsessive-compulsive and related disorder, oppositional defiant disorder and enuresis magnified the complexity of the psychopathology.

Conclusion:

Behaviour therapy techniques of habit reversal, aversive therapy, differential reinforcement and bladder control therapy are beneficial and can be effectively used in obsessive-compulsive and related disorders along with oppositional defiant disorder and enuresis.

References:

1. Agarawal, S. M., Divakara, P. G., & Pramanik, K. B. (1988). Trichotillomania in depression-a case report. *Indian journal of psychiatry*, 30(4), 423.
2. American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: American Psychiatric Association
3. Bellak, L., & Bellak, S. (1965). The CAT-HA human modification. Larchmont, NY: CP S.
4. Caldwell, P. H., Nankivell, G., & Sureshkumar, P. (2013). Simple behavioural interventions for nocturnal enuresis in children. Cochrane Database of Systematic Reviews, (7).
5. Christenson, G. A., & Crow, S. J. (1996). The characterization and treatment of trichotillomania. *The Journal of clinical psychiatry*, 57, 42-47.
6. Jafferany, M., & Patel, A. (2019). Skin-picking disorder: a guide to diagnosis and management. *CNS drugs*, *33*(4), 337-346.
7. Keijsers, G. P., van Minnen, A., Hoogduin, C. A., Klaassen, B. N., Hendriks, M. J., et al. (2006). Behavioural treatment of trichotillomania: Two-year follow-up results. *Behaviour research and therapy*, 44(3), 359-370.
8. Kovacs M. (2011). Children's Depression Inventory 2nd edition (CDI 2): Technical manual. *Multi-Health Systems.*
9. Kumar, D., Singh, H., & Trivedi, J. K. (1982). Trichotillomania—a brief review and case report. *Indian journal of psychiatry*, 24(1), 95.
10. Laezer, K. L. (2015). Effectiveness of psychoanalytic psychotherapy and behavioral therapy treatment in children with attention deficit hyperactivity disorder and oppositional defiant disorder. *Journal of Infant, Child, and Adolescent Psychotherapy*, 14(2), 111-128.
11. Rangaswami, K. (1997). Management of a case of trichotillomania by cognitive behaviour therapy. *Indian Journal of Clinical Psychology*, 24, 89-92.

12. Rehm, I., Moulding, R., & Nedeljkovic, M. (2015). Psychological treatments for trichotillomania: Update and future directions. *Australasian Psychiatry*, 23(4), 365-368.
13. Spence, S. H. (1998). A measure of anxiety symptoms among children. *Behaviour research and therapy*, 36(5), 545-566.
14. Swedo, S. E., & Leonard, H. L. (1992). Trichotillomania: an obsessive-compulsive spectrum disorder? *Psychiatric Clinics*, 15(4), 777-790.

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