



Faculty of
Psychology and
Educational Sciences
"Ovidius" University
of Constanta, Romania



BLACK SEA JOURNAL OF PSYCHOLOGY



www.bspsychology.ro



9 772068 464001



Psychological intervention program for an adolescent with onychophagia

MELANIA DUMITRAȘCU (BODODEL) ¹, RODICA GABRIELA ENACHE²

¹MD. Ovidius University of Constanța, Romania, The Faculty of Psychology and Educational Sciences

²PhD. Ovidius University of Constanța, Romania, The Faculty of Psychology and Educational Sciences

¹melaniabododel@yahoo.com, ²rodicaenache3@gmail.com

Abstract. This paper deals with a major issue in adolescence, with a wide scope in psychology, namely adolescent anxiety. In this project we have pursued the following objectives: analysis of the concept of anxiety and the main trends in the conceptualization of anxiety; determination of the etiological factors involved in the onset of anxiety in adolescents; evaluation of an adolescent with onychophagia, anxiety disorders, stress-related problems or compulsive behaviors. The assessment results in this paper explain the formation of adaptive body responses to stress and confirm the relationship between the assessed subject's chronic harmful oral habits under the influence of anxiety and social stress.

Keywords. adolescence, anxiety, stress, nail biting, onychophagia

1. Theoretical framework: Anxiety disorders affecting adolescents

Adolescence is a period of life described as the most troubled, stressful, and challenging of all stages of development Sion G. (2007, p.189). Adolescence is a social construct. In pre-industrial societies, children were considered adults when they matured physically or entered an apprenticeship to learn a trade (Papalia et al.,2010, p.354). It was only in the 20th century that adolescence was defined as a distinct stage of an individual's development. Moreover, although



adolescence may take different forms in different cultures today, it has become a global phenomenon.

Adolescence is a phase of change, and the many works dealing with this issue show that no other age is characterized by so many attributes, epithets, and metaphors. The word 'crisis' has often been invoked, and sometimes this epithet is well-deserved (Rose, in Rayner et al., 2012, p.249).

Laufer (1965, in Rose, 2012, in Rayner et al., 2012, p.251) proposes that adolescence should be described as a period of narcissistic crisis, and the purpose of researching this process should allow us to find out how the adolescent copes with the crisis they are going through.

Life crises have been defined as personal situations that arise when the tried and tested structures of adaptation and defense are no longer adequate to assimilate new demands, which may come from within or outside the individual. A weakening of thinking and feeling and at least partial disintegration occurs, accompanied by anxiety, perplexity, and impulsive actions. In this context, regression is very likely, with the reappearance of coarse and primitive forms of thought and emotion.

This period is about establishing a stable identity and becoming a mature, complete, and productive adult. The challenges of adolescence are related to the development of new social relationships; adolescents gradually learn to interact with others more adultly by experimenting and developing masculine social roles. Acceptance of self-image (physical appearance) to cope with these changes also depends on the extent to which they can conform to a clear template (stereotype) of the 'perfect body' depends on the extent to which they can conform to this template. These life events influence adolescents' development and emotional quality (Sălceanu, C., 2016).

Emotional fragility can lead to maladjustment in the family, school, and socio-community environment (Crețu, C., 2009). Thus, adolescents can become distrustful, sad, depressed, anxious, and even make profound gestures such as suicide. At other times, to relieve unbearable internal tensions, they may resort to alcohol and drugs.

Anxiety disorders are the most prevalent mental health problem facing adolescents today, but they are primarily under-treated. This is particularly worrying given that there is pretty good data to support an evidence-based approach to the diagnosis and treatment of anxiety and also that untreated; these problems can continue into adulthood, increasing in severity. Therefore, knowing how to recognize and respond to anxiety in adolescents is of utmost importance in primary care settings (Dickstein, 2011).

Anxiety manifests itself in worries that are not focused on a specific object. They have ongoing anxiety about family, friends, school, health, and their performance in general (Wilmshurst, 2007, p116). Added to these characteristics is a defining feature of the disorder, namely the inability to control the worry felt (Sălceanu, C., 2016; Sandu M., 2020).

At their most basic level, all anxiety disorders share common characteristics, including excessive fear, avoidance of what is feared, and anticipation and worry when expecting to encounter whatever is feared (Dickstein, 2011).

Anxiety disorders often emerge before adulthood, thus the need for those working with children and adolescents to be vigilant. For example, data from the National Comorbidity Replication Survey, a nationally representative epidemiological study, found that most anxiety disorders have an average age of onset of 11 years (Kessler et al., 2007)

First, anxiety disorders are generally more common in adolescent girls than in boys (Merikangas et al., 2010).



In addition, youth may exhibit more behavioral manifestations of anxiety rather than cognitive or conscious patient endorsement, as is more common in adults. For example, children and adolescents often have physical or somatic complaints of anxiety symptoms (e.g., stomachaches or headaches) rather than acknowledging anxiety symptoms as such (Dickstein, 2011).

Studies have shown that academic difficulties, decreased school performance, and even high school failure are associated with anxiety in children and adolescents. Social withdrawal from peers and activities is also common (Dickstein, 2011).

Nail biting (onychophagy) is a stress-relief habit many children and adults adopt. People usually do it when they are nervous, stressed, hungry, or bored. All these situations have one common phenomenon between them, and that is anxiety. Onychophagia is also a sign of other emotional or mental disorders. It is a habit that is not easy to give up and reflects extreme nervousness or inability to cope with stressful conditions (Sachan et al., 2012).

Onychophagia is a type of trichotillomania that includes picking or manipulating nails.

The urge to bite or bite nails is linked to a psycho-emotional state of anxiety. A child who chews his nails shows a developmental disorder related to the oral stage of psychological development (Pearson, 1948).

The problem is usually not noticed before the age of 3 or 4 years. Most cases of nail biters or onychophagia are seen between 4 and 6 years of age; it stabilizes from 7 to 10 and increases considerably during adolescence, as this period is a crisis period. For most adolescents, this is a complex and even traumatic period. Up to the age of 10, the incidence of nail biting is relatively equal, but later, it is observed that boys are significantly more affected than girls (Sachan et al., 2012).

On the other hand, Deardoff et al., (1974) administered the Child Manifest Anxiety Scale to 90 seventh and eighth graders to investigate the relationship between nail biting and manifest anxiety. It was found that 12.2% of the students had bitten their nails, and this was a considerably lower percentage than previously reported by C. M. Pierce (1972), who indicated that approximately 40% of children bite their nails, which is more than 3 times the percentage found in this study. Possible reasons for this difference in findings are discussed. Although nail-biters reported more anxiety than non-nail-biters, this difference was not significant and raised doubts about the frequently implicated relationship between anxiety and nail-biting.

More recently, Tanaka et al., 2008 stated that Onychophagia, or nail biting, is a common oral habit observed in children and adults. Etiologies suggested to explain nail biting include anxiety, stress, loneliness, imitation of another family member, heredity, inactivity, transfer from a thumb-sucking habit, and poorly groomed nails.

2. Psychological assessment report

2.1 General data on the client and reason for referral

- Brief presentation of client data and referral pathways

Gender: Male

Date of birth: September 2009

- Informed consent



During the first meeting, the client is informed about the purpose of the assessment and confidentiality issues. The client is informed that the psychological assessment will include personal information, the examiner's clinical observations and conclusions, and treatment recommendations. The appendix contains the signatures of both parents giving their consent to the assessment.

- Brief description of the client and problem

The parents bring him to the psychological office because of persistent nail-biting, known as onychophagia, on the recommendation of the dermatologist. Despite their attempts to intervene, they have noticed that this habit has worsened over the past year. The patient is unaware of the problem and finds it hard to stop.

- Formulating clinical questions

In this context, we will look at possible anxiety disorders, stress-related problems or compulsive behaviors, and self-harming behaviors.

2.2 Evaluation Procedures Used

The following methods were used to understand the nature and severity of this problem:

1. Clinical interview
2. Behavioural observation
3. The Millon Adolescent Clinical Inventory (MACI)
4. Achenbach System of Empirically Based Assessment (ASEBA)
5. Personal Autonomy Assessment (PA) Questionnaire
6. Diagnostic criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)

2.3 Behavioural observations and present status assessment

Outward appearance and behavior: The boy presents a neat appearance, appropriate attire for context, and a neat haircut, with a curious facial expression and hypermobility but cooperative attitude; eye contact and gaze are present; natural posture; inhibited social behavior; frequent changes in body position. Speech: increased verbal output, regular rhythm, promptness of responses, volume, and tone appropriate to the context. Affectivity: feels slightly anxious and shy about coming into the practice. It is suspicious, elusive, and curious. Thinking: good intellectual functioning; Orientation: good about time, place, and people. Memory: perfect; Perception: no perceptual disturbances. Insight: absent, denying the presence of mental problems.

2.4. Background information (life history and problem history)

The boy is a pupil in grade 8, part of a family consisting of a mother, a father, and a sister 5 years older than him. The mother is a kindergarten teacher, and the father is a military officer. They are financially well off. There are no significant family problems. His parents have high expectations of his school performance, which contributes to the pressure he feels, especially since it is 8th grade. He is awaiting the first critical evaluation of his life. He is an intelligent and creative



person who performs well in school. He has a few close friends at school with whom he keeps in touch in his free time and peers who often ridicule him because of his short height. He participates in almost all school competitions and olympiads with excellent results. The boy bit nails several times throughout the day, especially in stressful situations, while studying or alone. He bites his nails until they bleed and cause pain. His problems with nail biting started when he was 3 years old and coincided with starting kindergarten. Nail biting occurs most frequently during assessment periods or when he is overwhelmed with schoolwork. It is also a response to social anxiety during group discussions or presentations. Nail biting is one way he can cope with these emotions. He hardly admits to feeling anxious and stressed about school performance and social interactions by feeling denial about his nail-biting habit problems.

2.5 Results of psychological tests and questionnaires

A. Millon Clinical Inventory for Adolescents (MACI)

Following the application of the Millon Clinical Inventory for Adolescents (MACI), which allows the multi-axial assessment of personality characteristics and clinical syndromes in adolescents, according to DSM-IV symptomatology, we have the following results that draw our attention from a clinical point of view. According to the second clinically significant combination based on pleasure-pain polarity issues, the patient is an adolescent with a low capacity to express pleasure but with unusual anticipation of and sensitivity to psychological pain. The boy expects life to be unpleasant, with few rewards and much suffering. He has a minimal sense of joy and contentment, exhibiting the capacity to feel worry and anguish, and tends to slip into isolating circumstances and alienating behaviors. The patient scores BR= 68 at the upper end of the range for both scales on concerns expressed about sexual discomfort and disagreements with family. He is an adolescent who wants to move beyond the dependent and somewhat secure role of childhood to one that leads to adult responsibility.

The boy expects life to be unpleasant, with few rewards and much suffering. He has a minimal sense of joy and contentment, exhibiting the capacity to feel worry and anguish, and tends to slip into isolating circumstances and alienating behaviors. The patient scores BR= 68 at the upper end of the range for both scales on concerns expressed about sexual discomfort and disagreements with family. He is an adolescent who wants to move beyond the dependent and somewhat secure role of childhood to one that leads to adult responsibility. So, the patient is faced with the task of reconciling previously learned beliefs (moving from innocent curiosity to sneaking, guilt-ridden examination) with new and powerful sexual urges. Integrating this new aspect given by the interplay of normal biological maturation makes accepting change more difficult.

The BR score of 68 for Sexual Discomfort reflects an immature attitude and a problematic sense of shame and guilt, possibly due to problematic parental relationships, cultural beliefs, or the impact on older adults. The BR score equal to 68 on the Discomfort with Family scale reflects a problematic relationship the adolescent has with family as well as perceptions of what that relationship should be like. It relates to his emotions and perceptions and not what objectively exists; it is also related to internal struggles between independent and dependent. He seeks to create an image of himself as capable of making his own decisions and perceives his parents as adversaries, fighting for the right to set his expectations. The result of the Anxious Experiences scale with a score of BR=72 indicates a high level of anxiety manifesting states of increased



tension, agitation, indecision, inability to relax, showing tendencies, and accusations of physical discomfort. A depressed mood with a score of BR=77 indicates an increased level of feelings of discouragement or guilt, lack of initiative, apathy, low self-esteem, and self-depreciation. Thus, he may not function adequately in a typical environment, be sad, express fears for future events, and be resigned. The concentration problems reported by the boy can also be explained in this way.

B. The Achenbach System of Empirically Based Assessment (ASEBA)

According to the Achenbach System of Empirically Based Assessment (ASEBA) results, which assesses the competencies, adaptive functioning, and problems of children and adolescents, the psychologist has drawn the following conclusions. Analyzing the boy's Competency Profile, it is observed that he falls within the normal range, obtaining a raw score equal to 12 on the Activity Scale, which includes scores for various sports, other recreational activities, chores, and tasks, as well as assessments of the quantity and quality of the child's participation in various activities. The Social Domain Scale, with a score equal to 11, puts the boy in the normal range, which includes scores for participation in various group activities, number of close friends, number of weekly contacts with friends, how well he gets along with other children, and how effectively the child plays and works alone. For the School Scale, the patient scored a maximum raw score equal to 6 and included above-average academic performance ratings. Inter-rater correlations indicated an average level of agreement between the mother and patient on the proficiency profile.

The CBCL profile completed by the patient's mother on the scale measuring syndromes showed a score in the normal range on all scales except the scale measuring syndromes on anxiety and depression, with a total score equal to 10 located between the standard and clinical range with a T=58 on internalizing (normal range) and DSM derived scales on anxiety problems with a score equal to 7 which is in the clinical range. On the other hand, the YSR profile completed by the boy showed a score in the normal range on all scales, indicating a low level of awareness of his problems.

C. Personal Autonomy Assessment (PA) Questionnaire

The patient has a slightly low personal autonomy (T-score on the whole questionnaire is less than 40 but close to 40). He has low T-scores (less than 40) on the Behavioural Autonomy and Emotional Autonomy scales, which means that the boy acts as dictated by others or as he thinks others would like him to; needs encouragement during his actions; abandons performing complex tasks if he is not helped; avoids expressing his feelings when they are different from those of others or when he does not know how others feel.

2.6. Discussions and interpretations

Correlating the information obtained from the Unstructured Interview, Behavioural Observation, the results obtained from the Millon Clinical Inventory for Adolescents (MACI), the Achenbach System of Empirically Based Assessment (ASEBA), and the Personal Autonomy Questionnaire (PA), we can conclude that D. fits into the typology of anxiety disorders. The patient is an ambitious, competitive teenager who wants to prove he is among the best; he is intelligent, creative, and performs well in school. Adolescence is also a time of physical, emotional, and social change for them.



Anxiety can arise from the stress of these changes or identity exploration, peer pressure, and school expectations, especially from parents. The adolescent has a decreased ability to express pleasure but an unusual anticipation of and sensitivity to psychological pain. The adolescent expects life unpleasant, with few rewards and much suffering. He has a minimal sense of joy and contentment, showing a capacity to feel worried and anguish, and tends to slip into isolating circumstances and alienating behaviors. This adolescent wants to move beyond the dependent and somewhat secure role of childhood to one that leads to adult responsibility.

It is more difficult for the boy to integrate this new aspect due to the interaction between normal biological maturation and acceptance of change. The BR score highlights a possible source of stress equal to 68 of sexual discomfort, reflecting an immature attitude and a problematic sense of shame and guilt, possibly due to problematic parental relationships, cultural beliefs, or the impact of physiological changes.

In terms of personal autonomy, the boy has slightly low autonomy. He has low T-scores (below 40) on the Behavioural Autonomy and Emotional Autonomy scales, which means that the boy acts as dictated by others or as he thinks others would want him to; he needs encouragement during his actions; he abandons performing complex tasks if he is not helped; he avoids expressing his feelings when they are different from those of others or when he does not know how others feel.

Nail redness is a defense mechanism when the body feels powerless to cope with stressors. To reduce the impact of stressors, children generally use oral habits: sucking their fingers, biting their nails, pencils, or pens, which may be a person's reaction to adapt to existing chronic stress. Aggression and anger masked on the outside but experienced intensely on the inside are discharged by causing harm to themselves. He fails to refrain from such actions because otherwise, all the anger felt internally would have to be vented externally, leading to rejection and isolation.

3. Intervention plan in clinical psychological counseling

Sessions 1-2

1. First contact and establishment of the therapeutic alliance: Start the session with an introduction and establish a relationship of trust and collaboration with the client. I am building a relationship of trust and openness and creating a safe and accepting environment for expressing emotions.

2. Initial assessment:

- Anamnesis and assessment of the present situation: Collecting information about the client's medical and psychological history and assessing the present situation, including symptoms, concerns, and reasons for seeking counseling.

- Identifying triggers for onychophagia: Support identifying triggers for nail biting behavior. It may be stress related to school, social relationships, or other challenges they face.

- Symptom assessment To understand the nature and severity of this problem, the following methods will be used: Clinical interview/ Behavioural observation/ Millon Clinical Inventory for Adolescents (MACI)/ Achenbach System of Empirically Based Assessment (ASEBA)/ Personal Autonomy Assessment (PA) questionnaire.

3. Awareness of the behavior: It is essential that the patient is aware of their nail-biting habit and understands that it is a response to stressors.



4. Identifying personal resources:

□ Exploring positive past experiences: These experiences can provide important clues about an individual's resources.

□ Identifying personal qualities and skills: The boy is encouraged to recognize and appreciate his personal qualities, such as resilience, empathy, creativity, emotional intelligence, and social skills. Identifying these qualities can help increase self-esteem and develop a more positive outlook.

□ Exploring the social support network: The boy is helped to identify and assess his social support network, including friends, family, colleagues, or significant others. These relationships can be important resources for emotional, practical, and informational support.

□ Exploring personal values and goals: helping the client identify and clarify personal values and life goals. Identifying these fundamental issues can provide a solid foundation for making decisions, managing difficulties, and increasing self-confidence.

5. Psychoeducation: Providing information about the nature of anxiety, its mechanisms, and ways of managing it. Personal hygiene education: support understanding the importance of personal hygiene and proper hand and nail care. Explain the negative consequences of nail hygiene on the health and appearance of their hands and encourage them to take responsibility for their proper care.

Sessions 3-4

1. Set small and achievable goals.

1. a) Setting short-term goals (3 months):

- Restoring the adolescent's psycho-affective balance. He needs to know that he can talk to a psychologist about anything that makes him anxious or worries him. With an empathetic attitude, he should be listened to carefully without feeling judged. This emotional support can be essential in restoring psycho-affective balance.

- Replace the habit of nail-biting with alternative behaviors. The boy is encouraged to replace the nail-biting behavior with other relaxing or fun activities, such as using stress balls or a stress cube.

- Dealing with emotions: The boy is encouraged to talk about his emotions and share his feelings with another trusted adult. He is reassured that it is okay to feel overwhelmed or anxious and that they are there to listen and support him in any way. He is advised to understand and identify the emotions he is experiencing. He is encouraged to use an emotion journal or other self-reflection techniques to express and better understand his feelings.

- Counselling to identify new passions and interests: The boy is supported in discovering and developing passions and interests that make him happy and help him feel good. These activities can distract him from negative thoughts and emotions and give him a sense of achievement and fulfillment.

- Keeping your nails neat: An achievable goal might be to keep your nails trimmed and groomed every week. This could reduce the temptation to chew her nails and improve the overall appearance of her hands.

- Develop personal independence skills. Encouraging him to take responsibility: he will be given tasks and responsibilities in the home or other settings to help him feel more independent



and develop his decision-making and time-management skills. This can help him feel more confident in his abilities and improve his self-esteem.

- Develop coping skills by identifying and understanding his emotions, including anxiety.

The teenager must recognize when he feels anxious and understand what makes him feel this way.

- Learning deep breathing technique: Deep breathing can be an effective relaxation technique that can help reduce anxiety.

- Meditation and mindfulness: The boy is encouraged to practice meditation and mindfulness to calm his mind and reduce his anxiety.

1. b) Setting medium-term objectives (6 months):

Develop social skills and develop potential by promoting positive social interaction. The boy is encouraged to get involved in group activities such as sports, school clubs, artistic activities, or volunteering. These activities allow him to meet and interact with other children and develop social skills.

He is encouraged to improve his verbal and non-verbal communication skills, listen carefully, speak clearly, and express his thoughts and feelings appropriately.

Empathetic and respectful behavior towards others, being attentive to the feelings and needs of others, and treating everyone with kindness and respect are promoted.

They are encouraged to explore different activities and discover their passions and interests. This will enable him to develop and fulfill his potential in different areas.

He is given support and encouragement to achieve his goals and overcome obstacles, recognise and appreciate his qualities, and have confidence in his abilities.

Strengthen conflict resolution and negotiation skills: identify and address problems effectively and constructively; find solutions and learn from mistakes.

Coping with stress: He is encouraged to find ways to cope healthily, such as engaging in recreational activities, spending time in nature, or talking to a trusted adult.

c) Setting long-term objectives (12 months)

Pursue the proposed short and medium-term objectives.

Valuing the child to form positive character traits through recognition and appreciation of efforts, praise, and appreciation of following efforts, regardless of final results. We focus on process and perseverance in trying to achieve their goals by promoting respect and confidence; the boy needs to feel respected and trust his abilities and choices. He is encouraged to express his opinions and pursue his passions and interests by encouraging risk-taking and resilience. He is encouraged to try new things and take risks in order to achieve his goals. He is helped to understand that failures are part of the learning process and that it is essential to be persistent and continue his efforts despite setbacks.

Preventing adolescents from relapsing into the trap of dysfunctional behavior.

Sessions 5-10

Implementation of the intervention. Establish regular therapy sessions. Schedule and conduct regular therapeutic sessions to explore and work on identified issues and achieve proposed therapeutic goals as well:

Identifying and correcting cognitive distortions: The boy is helped to recognize and examine his negative, distorted, or unrealistic thoughts and beliefs and replace them with more realistic and balanced thoughts.



- Identifying and changing negative and distorted thoughts associated with anxiety.
- Learning about negative thought cycles
- Developing positive thinking skills
- Self-observation exercises: The boy learns to observe himself and record his thoughts and emotions in a journal to identify patterns and work on them during therapeutic sessions.
- Work on avoidant behaviors and promote gradual exposure to anxious situations. Systematic Exposure and Desensitization: This technique is used to help the client overcome fears and anxieties through gradual and controlled exposure to stimuli that provoke these reactions.
- Behavioral Activation: The client learns to identify and engage in pleasurable and rewarding activities that distract from anxious thoughts and improve mood.
- Worry postponement techniques: The client learns to postpone their worries and concerns to a specific time instead of allowing them to dominate their entire day. This technique helps them to reduce their anxiety levels and maintain focus during daily activities.
- Exposure exercises in imagination: The boy will be guided to imagine scenarios that cause him anxiety. The imaginary experience can help to desensitize him to these stimuli and develop strategies to manage anxiety.
- Exercises and homework: Assign homework and exercises for the client to help them apply and reinforce skills and techniques learned during therapeutic sessions.
- Parent Involvement: Counselling or education sessions for parents to help them understand and support their child's needs. Close collaboration between therapist and parents to implement strategies at home.

Sessions 11-14

Monitoring and evaluation of progress:

- Ongoing Progress Assessment: Regularly monitor and evaluate the client's progress towards established therapeutic goals. Adjustment of the intervention plan according to the client's progress.
- Reassessment and revision of the plan: Regularly reassess the goals and intervention plan to ensure they remain relevant and practical.

Session 15

End of therapy:

- Consolidating progress and preparing for independence: Consolidating the client's achievements and progress and preparing them to cope with independence and continue applying their skills in everyday life.
- Planning for maintenance and relapse prevention: Developing an action plan to manage relapse situations and maintain progress in the future.

Follow-up and support:

- Follow-up sessions: Schedule regular follow-up sessions to check the client's condition and provide ongoing support as needed.
- Additional resources and support: Provide additional resources and support such as support groups, crisis intervention services, and referrals to other mental health professionals if needed.



Conclusions

Adolescence is a time of immense change - physically, emotionally, and socially. Anxiety can arise from the stress of navigating these changes, identity exploration, peer pressure, and academic expectations. Stressful life events or ongoing stressful situations can lead to the development or exacerbation of anxiety. These might include bullying, abuse, loss, or significant life changes. The pressure to fit in, perform well academically, excel in extracurricular activities, or maintain an ideal online presence in the age of social media can create significant stress for teens, contributing to anxiety. The desire for perfection or fear of failure can lead to high levels of anxiety in adolescents, especially in competitive academic or social environments. Some adolescents may develop coping behaviors to cope with anxiety, such as nail or pen biting, pencil biting, hair twirling, etc. These harmful habits help reduce stress's impact on quality of life and their emotional state.

References

American Psychiatric Association, DSM-5 Task Force. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5™* (5th ed.). American Psychiatric Publishing, Inc.. <https://doi.org/10.1176/appi.books.9780890425596>

Baghchechi, M., Pelletier, J. L., & Jacob, S. E. (2020). Art of Prevention: The importance of tackling the nail-biting habit. *International Journal of Women's Dermatology*. doi:10.1016/j.ijwd.2020.09.008

Deardoff, P. A., Finch, A. J., & Royall, L. R. (1974). Manifest anxiety and nail-biting. *Journal of Clinical Psychology*, 30(3), 378. [https://doi.org/10.1002/1097-4679\(197407\)30:3<378::AID-JCLP2270300348>3.0.CO;2-0](https://doi.org/10.1002/1097-4679(197407)30:3<378::AID-JCLP2270300348>3.0.CO;2-0)

Dickstein, D. (2011). Anxiety in adolescents: Update on its diagnosis and treatment for primary care providers. *Adolescent Health, Medicine and Therapeutics*, 1. doi:10.2147/that.s7597

Halteh, Pierre & Scher, Richard & Lipner, Shari. (2016). Onychophagia: A nail-biting conundrum for physicians. *Journal of Dermatological Treatment*. 28. 1-7. 10.1080/09546634.2016.1200711.

Kathleen Ries Merikangas, Jian-ping He, Marcy Burstein, Sonja A. Swanson, Shelli Avenevoli, Lihong Cui, Corina Benjet, Katholiki Georgiades, Joel Swendsen, (2010). Lifetime Prevalence of Mental Disorders in U.S. Adolescents: Results from the National Comorbidity Survey Replication–Adolescent Supplement (NCS-A), *Journal of the American Academy of Child & Adolescent Psychiatry*, Volume 49, Issue 10, <https://doi.org/10.1016/j.jaac.2010.05.017>.

Kessler, R.C., Angermeyer, M., Anthony, J.C. et al. (2007) Lifetime Prevalence and Age-Of-Onset Distributions of Mental Disorders in the World Health Organization's World Mental Health Survey Initiative. *World Psychiatry*, 6, 168-176.

Ollendick, T. H., & Hirshfeld-Becker, D. R. (2002). The developmental psychopathology of social anxiety disorder. *Biological Psychiatry*, 51(1), 44–58. doi:10.1016/s0006-3223(01)01305-1

Pacan P, Grzesiak M., Reich A., Szepietowski J (2009), Onychophagia as Spectrum of Obsessive- compulsive Disorder,

<https://www.medicaljournals.se/acta/content/html/10.2340/00015555-064601>, *Acta Derm Venereol* 2009; 89: 278–280



Pearson G. H. (1948). The psychology of finger-sucking, tongue-sucking, and other oral habits. *American journal of orthodontics*, 34(7), 589–598. [https://doi.org/10.1016/0002-9416\(48\)90157-2](https://doi.org/10.1016/0002-9416(48)90157-2)

Sachan, Avesh; Chaturvedi, (2012) TP. Onychophagia (Nail biting), anxiety, and malocclusion. *Indian Journal of Dental Research* 23(5):p 680-682, Sep–Oct 2012. | DOI: 10.4103/0970-9290.107399

Sandu, M. L., & Rus, M. (2020). Features of aggression regarding homeless children. *Technium Soc. Sci. J.*, 2, 90.

Sălceanu C. (2016). *Psychology of human development*, Publisher: SITECH

Sion, G., (2003). *Psychology of Age, Romania of Tomorrow* Foundation Publishing House

Tanaka, O. M., Vitral, R. W. F., Tanaka, G. Y., Guerrero, A. P., & Camargo, E. S. (2008). Nailbiting, or onychophagia: A special habit. *American Journal of Orthodontics and Dentofacial Orthopedics*, 134(2), 305–308. doi:10.1016/j.ajodo.2006.06.023