



118 Relationship Between Self-Injurious Behaviors and Levels of Aggression in Judicial Examination of Children and Adolescents

Sait Özsoy, MD*, *Gulhane Askeri Tip Akademisi, Adli Tip AD. Etlik-Kecioren, Ankara 06018, TURKEY;* Koray Kara, *GATA Child and Adolescent, Psychiatry Department, Ankara, TURKEY;* Hacer Teke, MD, *Ministry of Justice, Forensic Science Dept, Sıhhiye, Ankara, TURKEY;* Mehmet Ayhan Congologlu, *GATA Child and Adolescent, Psychiatry Department, Ankara, TURKEY;* Turker Turker, MD, *GATA Public Health Dept Etlik, Ankara, TURKEY;* Tulay Renklidag, MD, *Ministry of Justice, Forensic Science Dept, Sıhhiye, Ankara, TURKEY;* Mustafa Karapirli, *Adli Tip Kurumu Ankara Grup, Baskanligi, Kecioren, Ankara 06300, TURKEY*

After attending this presentation, attendees will understand that, when the aggression levels increase, self-injurious behaviors also increase in children and adolescents who have judicial problems.

This presentation will impact the forensic science community by showing how self-injury behaviors are related withto aggression levels and how these behaviors may be used as a predictive validity of unstructured clinical risk assessment and associated risk factors for aggression in predicting self- and other-directed aggression.

Background: The link between aggression and psychiatric disorders has been shown in previous studies. Aggression is a behavioral pattern typically expected in children and adolescents who have judicial problems. Aggression is defined as behavior aimed at causing harm or pain, psychological harm, personal injury, or physical distraction. Aggression may be direct or indirect, active or passive, and physical or verbal. Aggression can be directed toward self as well as others. It has been reported that self-directed aggression and self-injury are interrelated. However, the current literature consists of a limited number of studies on this issue.¹⁻⁴

Purpose: The goal of this study was to examine the relationship between aggression and self-injurious behavior in children and adolescents who have judicial problems.

Methods:

- **Subjects:** This study was approved for 295 children and adolescents who were consecutively brought for judicial examination. The mean age of the subjects was 14.27 ± 1.05 years (age range: 10-18 years); 75.6% were males and 24.4% were females; 81.4% had graduated from either junior or senior high school; and 47.5% were of low socioeconomic status.
- **Measurement:** The socio-demographic profile of subjects and data about self-injurious behavior were collected with semi-structured interviews. The aggression levels of the subjects were determined by using the Aggression **Questionnaire (AQ)**, which is an updated form of the Buss-Durkee Hostility Inventory. AQ is a Likert scale, consisting of 34 items which measure five traits: aggressiveness/anger; hostility; verbal aggression; physical aggression; and indirect aggression. These traits are typically used both individually and also combined to create an overall aggressiveness index. A validity and reliability study of the Turkish version of AQ was developed by Can in 2002. AQ has a high degree of internal consistency as evidenced by its Cronbach's alpha value of 0.95. According to the total score of the AQ, the **level of aggression has threshold definitions** (≤ 29 : very low; 30-39: low; 40-44: low-medium; 45-55: medium; 56-59: high-medium; 60-69: high; and ≥ 70 : very high).
- **Analysis:** Data on the comparison of continuous variables between groups was analyzed using Students-*t* test. In this study, statistical significance was accepted as $p < 0.05$.

Results: The mean total AQ score of the subjects with self-injurious behavior was 78.04 ± 21.0 . The mean total AQ score of the subjects without self-injurious behavior was 62.75 ± 18.05 ($p < 0.01$). AQ subscale scores of physical aggression, verbal aggression, aggressiveness/anger, hostility, and indirect aggression were: 16.78 ± 6.48 ; 12.70 ± 4.01 ; 19.03 ± 5.05 ; 17.43 ± 6.12 ; and 11.72 ± 4.37 , respectively, for the group with self-injurious behavior. For the group without self-injurious behavior, the scores were: 12.91 ± 5.6 ; 10.54 ± 3.52 ; 15.86 ± 4.71 ; 14.52 ± 10.36 ; and 9.61 ± 3.14 , respectively. There were significant statistical differences between the two groups with respect to their subscale scores ($p < 0.01$).

Conclusions: This study indicates that, when the levels of aggression increase, self-injurious behaviors also increase in children and adolescents who have judicial problems. This finding shows that self-injurious behaviors are related with aggression levels, and that these behaviors may be used with



Psychiatry and Behavioral Sciences Section - 2014

predictive validity in unstructured clinical risk assessment of aggression in predicting aggression directed toward self and others. Future studies are needed to investigate the relationship between self-injurious behaviors and psychopathology, particularly aggression.

References:

1. Webb L. Deliberate Self-harm in Adolescence: A Systematic Review of Psychological and Psychosocial Factors. *Journal of Advanced Nursing* 2002;38(3), 235–244.
 2. In-Albon et al. Non-Suicidal Self-Injury and Emotion Regulation: A Review on Facial Emotion Recognition and Facial Mimicry. *Child and Adolescent Psychiatry and Mental Health* 2013, 7:5.
 3. Whitlock J, Knox KL. The Relationship Between Self-Injurious Behavior and Suicide in a Young Adult Population. *Arch Pediatr Adolesc Med.* 2007;161(7):634-640.
 4. Brunner R, Parzer P, Haffner J, Steen R, Roos J, Klett M, and Resch F. Prevalence and Psychological Correlates of Occasional and Repetitive Deliberate Self-harm in Adolescents. *Arch Pediatr Adolesc Med.* 2007;161(7):641-649.
-

Aggression, Self-Mutilation, Children and Adolescent