

Body Modification and Self-Destructive Behavior in Adolescents: Psychological Manifestations

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Abstract—People change their bodies because of many reasons over many thousand years. Tattoo, piercing, and other types of body modifications have found a new life now. In present-day societies, tattoos and piercing are associated with risky behavior, alcohol and drug use in adolescents. The purpose of the study is to study the psychological manifestations of body modification and self-destructive behavior in adolescents. 86 boys and girls aged 14 to 18 attending socio-rehab center were examined by Mini-Mult (SMOL) and SOP questionnaires. It was revealed that body modifications in them are accompanied by tendencies to the use of alcohol, soft drugs and other psychoactive substances and by tendencies to different types of aggressive and autoaggressive behaviour. Adolescents who have body modifications are emotionally more unstable.

Keywords—adolescents, self-destructive behavior, body modification, psychological manifestations

I. INTRODUCTION

People change their bodies because of many reasons over many thousand years. Tattoo, piercing, scarification modification and other types of modifications have stood the test of time and not only have fallen as trade and art but also have found a new life and popularity. The earliest found tattoo is more than five thousand years old. It was found on the female mummy in the Alps. It had more than 50 tattoos on the different parts of the body [1].

The explanation of the body modifications sense differed depending on the culture and time. Researchers highlight the core functions of body modifications: (1) marking, which purpose is a designation of age, gender, social and host

ethnic background; (2) a ritual-socially creative function, which is related to the rituals of healing, transition, and group membership; (3) an aesthetic function - aspiration to beauty and (4) a charm function [2].

Not only has the number of members, who modify their bodies, increased lately, but also the diversity of modifications variants. Extremist disfiguring modification variants spread (teeth modifications, implantation, tongue splitting, etc.). Moreover, these variants were used more and more by some persons, when tattoo spreads a significant percentage of the bodies, frequently the whole body, and the number of piercing decorations increased, spreading on the different parts of the body by the way, including genitals.

Every year the number of people, who are not satisfied with their own body and who would like to modify it, increases. It often happens during adolescence influences of a peer group. Tattoos and piercing in adolescents are associated with risky behavior, alcohol and drug use [3]. Professor Viren Swami found out that face tattoo expressed the higher level of verbal aggression, anger, and reactionary rebellion awakening in comparison with untattooed people. This reaction is to disappointment and traumatic life events [4]. Piercing making correlates with truancy regardless of the adolescent gender, also with the beginning of an early sexual experience and smoking among adolescent girls [5].

On the one hand, studies note that self-destructive behavior in a crisis may be manifested by suicide [6], and behavioral and emotional disorders in children may reflect maladaptive family environment with situations of violence and alcohol abuse [7]. On the other hand, self-destructive behavior in adolescents in form of victimization is closely related to intensity and type of bullying in school [8].

In spite of a number of the available theoretical and

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applied researches of this theme, on a practical note the research problem of psychological characteristics of adolescents, who modify their bodies and their relation to self-destructive behavior, remains understudied.

That is why the purpose of the research is to study the psychological manifestations of body modification and self-destructive behavior in adolescents.

II. METHODS

A. Research instruments

Shorter multi-factor questionnaire for examination of the personality (Mini-Mult, SMOL) is focused on the identification of more common situational or stagnant personality disorder [9]. The SOP questionnaire (Determination of tendency to deviance by A.N. Orel) is a set of special psycho-diagnostic scales that are directed at the dimension of tendency to the realization of separate forms of deviant behavior [10]. A specially designed form for quantification of type, time, method or features of body modifications.

Statistical analysis included frequency statistics, average values, Student’s t-criterion and by Pearson correlation analysis.

B. Sample

The research was performed among adolescents of the social-rehab center for minors in groups as of day-care department so on a 24-hour basis. 86 adolescents were examined aged 14 to 18 (Mean = 15.9; SD = 1.4), 44.2% (n = 38) - girls and 55.8% (n = 48) - boys. Two target groups have been singled out in the sample: 1) adolescents having body modifications - n = 51 (59.3%); 2) adolescents without body modifications - n = 35 (40.7%).

C. Procedure

Providing informed consent (the age < 18) or consent (the age = 18), respondents in the presence of the center psychologists answered the form questions about body modifications and the questions of the forms. The time was limited - from 30 to 60 minutes. Because of the fact, that the form was directed to receive information of existing modifications, their types and the reasons for their existence, so the questionnaires were conducted with these adolescents, who during their initial conversations recognized in having one. The survey was anonymous.

III. RESULTS

Fifty one adolescent (59, 3%) reported at least about one body modification; the girls had more often body modifications than the boys did (71.1% vs 50%, t-criterion = 1.662, p ≤ 0.05).

Having analyzed the results of the form, the following observations were made: 27.5% (n = 14) of respondents made their first body modification at 17 years, the earliest

one was at 12 (2.0% of the respondents), 5.9% (n = 3) of adolescents made their first one at the age of 13. Mostly adolescents with body modifications reported about piercing 66.7% (n = 34); 22 adolescents reported about their tattoo (43.1%), 2 adolescents (3.9%) had a scarring, 1 adolescent (2.0%) had a branding.

Most adolescents made their tattoos in a tattoo salon (45.1%) or at a tattoo party (35.3%). Most adolescents with the piercing (88.2%) made it in a salon, in so doing there were adolescents in the group, whom relatives made a piercing (7.8%), or they made it of their own or with a friend help (2.0%) or other types (3.9%).

Further found, that 100% (n = 51) of respondents in an experiment group did not want to concealer their body modifications, and 33.3% (n = 17) would like to change them. In so doing 78.4% (n = 40) of the respondents were going to make new tattoos, 9.8% (n = 5) were going to make a piercing, and just 3.9% (n = 2) did not want to make more body modifications.

In the choice of factors, that restraint before the residents made their body modifications, it was highlighted: the absence of a possibility – 52.9% (n = 27), a fear of family criticism, a fear of blood poisoning and other unpleasant consequences and a fear of pain (every 21.6% (n = 11)).

The statement "You need to choose three more common reasons for body modifications" was responded with the following: aesthetic questions – 56.9% (n = 29), imitation of somebody – 31.4% (n = 16), philosophical convictions - 19,6% (n = 10), religious or fetish considerations – 7.8% (n = 4), like a memory of an important event or a person – 35.3% (n = 18), self-affirmation – 45.1% (n = 23), protest – 7.8% (n = 4).

TABLE I. AVERAGE VALUES OF THE SHORTER MULTI-FACTOR QUESTIONNAIRE OF THE PERSONALITY RESEARCH (MINI-MULT, SMOL)

Scale	Research Groups		Student’s t-criterion
	Adolescents with body modifications	Adolescents without body modifications	
Hs	46.6	48.7	1.1
D	51.4	48.3	1.5
Hy	42.9	47.4	2.3
Pd	43.8	45.9	0.7
Pa	47.9	46.7	0.8
Pt	44.4	49.4	1.8
Se	44.8	47.8	1.3
Ma	58.3	51.0	3.7

66.7% of adolescents with body modifications reported about positive feelings toward their own body modifications; 45.1% were delighted of their body modifications, 33.3% were proud of them, and 15.7% of the

adolescents reported, that after these body modifications they became more attractive. 54.9% felt "neutral" about their body modifications and just 9.8% reported about negative feelings to their body modifications (they felt a sense of regret, anger, guilt).

Further, we compared two groups of adolescents with body modifications and without them. The results of the shorter multi-factor questionnaire of the personality research are presented in Table 1.

Adolescents regardless of whether they have body modifications do not have any clinical implications such as hypochondria, depression, hysteria, paranoia, psychopathy, psychasthenia, schizoid personality disorder. In so doing, there is a revealing predisposition to the existence of such a feature as hypomania, especially in the group where the quest for the body modifications firstly appeared at the age of 16.

In general, adolescents having body modifications share such psychological features as openness, flexibility, activity, confidence, social skills, goodwill, prudence, determination. Our research results show that these respondents are also characterized as diffident, cautious personalities, who are afraid of the consequences for their actions. Personalities with body modifications have a tendency to criticism about themselves and surrounding society, a wide range of interests, a high degree of identification with their social status, flexible thinking. The results of the test show, that they have problems with interpersonal relations and with emotional stability.

The respondents of the group without body modifications may be characterized as confident, open, active, flexible, communicative, hardworking, decisive, socially adapted, inclined to control their behavior, overlooking social norms. The personalities without any body modifications have vast knowledge, good interpersonal relationships, and a high level of social adaptation. Significant differences are identified just in one scale - hypomania ($p \leq 0.01$).

The study results obtained by use of SOP questionnaire are presented in Table 2.

Significant differences were identified on two scales - a tendency to "addictive behavior" and "a tendency to self-destructive behavior" ($p \leq 0.01$). There were not determined any important differences in the other dimensions. The reported results reflect as the confirmation of the connection between a tendency to addictive behavior and body modifications, which is repeatedly discussed by various researchers [3]. Body modifications and a tendency to addictive behavior, in particular to substance abuse, is a risky behavior. Detection of artificial changes in the body during adolescence may be indicative of another aberrant behavior, including alcohol consumption and drug use.

The connection of body modifications with self-damaging and self-destructive behavior is emphasized by different researchers [11-14]. In particular, they "build their decisions on the assessment of the body modifications within the framework of identification type of self-damaging behavior, that explains different forms and methods of social authorized, ritual-ceremonial self-damages" [12].

The analysis of the connection between the presence of body modifications with studied indicator allowed to find positive connections: with the scale of psychopathy ($r = 0.29$, $p \leq 0.05$), with the scale of hypomania ($r = 0.347$, $p \leq 0.05$), also almost with all scales of the SOP questionnaire - a tendency to overcoming of rules and requirements ($r = 0.279$, $p \leq 0.05$), a tendency to addictive behavior ($r = 0.368$, $p \leq 0.01$), a tendency to self-damaging and self-destructive behavior ($r = 0.399$, $p \leq 0.01$), a tendency to aggression and violence ($r = 0.295$, $p \leq 0.05$), a scale of strong-willed emotional reaction ($r = 0.305$, $p \leq 0.05$).

According to these results, correlates of body modifications are informed by social maladjustment, aggression, resentment, excitability, a tendency to feel-good value regardless of the circumstances, neglect of social norms and values. Marking of body modifications represents a tendency to different types of dependencies, to acts of self-damage and autoaggression, to forms of aggression and violence toward other people, and because of the fact, that the scale of strong-willed emotional reactions is reversing, to the weakness of strong-willed emotional reactions, to unwillingness or inability to control behavioral outcomes of emotional response.

IV. CONCLUSION

Body modifications during adolescence are one of the forms of risky behavior. A tendency to such kind of behavior manifests by girls and boys.

Tattoos, piercing, branding in adolescence are accompanied by a tendency to the use of alcohol and soft drugs, other psychoactive substances, to the manifestation of

TABLE II. AVERAGE VALUES OF THE SOP QUESTIONNAIRE

Scale	Research Groups		Student's t-criterion
	Adolescents with body modifications	Adolescents without body modifications	
Tendency to circumventing	54.1	53.3	2.4
Tendency to addictive behavior	65.2	59.8	3.1
Tendency to self-destructive behavior	48.9	43.3	2.8
Tendency to aggression and violence	51.6	50.7	1.6
Strong-willed emotional reaction	52.8	53.1	1.7
Tendency to delinquent behaviour	54.5	54.0	2.0

aggressive and autoaggressive tendencies. Adolescents who have body modifications are emotionally unstable, can be engaged in extremism, have adaptation problems.

When working with adolescents, that have body modifications, it is important to study motivation, importance, and feelings towards a modification to know the difference between positive expression and self-destruction. Body modifications, which are made independently, can be as one of the manifestations of self-damaging behavior, and also as a risk factor of its manifestation.

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