

Emotional profile and risk behaviours among tattooed and non-tattooed students

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ABSTRACT

Aim To determine differences in emotional profile and frequencies of certain risk behaviours between tattooed and non-tattooed students.

Methods One hundred students fulfilled personality assessment (trust, timid, depressive, distrust, aggressive, gregarious, controlled, uncontrolled) and questionnaire of socio-demographic data that also included some questions about possession of tattoo (time, place, motive) and about certain risk behaviours (court punishment, consumption of alcohol, psychoactive substances and cigarettes).

Results The total number of 35 (out of 100) students had a tattoo, and 67 wished to have a tattoo. There was no statistically significant difference in emotional profile between tattooed and non-tattooed individuals, yet the differences were detected when the group of subjects who wanted a tattoo and those who did not want a tattoo were compared. Higher result on the aggression scale of and lower on control scale was gained by those with the wish for tattooing. Students with bigger tattoos (23) showed higher score on depression scale. Students in the tattooed group more frequently abused drugs and committed traffic offences compared to the students in non-tattooed group.

Conclusion Results of this research as well as previous research show that the presence of a tattoo could be a rough indicator for possible emotional problems and risk behaviour, which could have significant implications in preventing these behaviours. Future studies are required on a larger and more representative sample as well as to clarify why young people decide to be tattooed.

Key words: tattooing, personality, drug abuse, traffic offences

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INTRODUCTION

Main assumption in the theory of personality is that characteristics of personality are partly genetically predisposed and are manifested as individual differences in cognitive, emotional and behavioural functioning in different time and situations (1). Personality is manifested through behaviour, therefore researching connections between specific behaviour, emotions and personality characteristics can help in predicting the appearance of certain behaviours (1). This can be especially useful in the research of risk behaviours because of the prevention and treatment plans.

Through history in most cultures tattooing had a negative meaning. Common attitude is that tattooed persons are "different" and that they have a certain pathology in personality (2-11).

There are also some stereotypes connected to tattooing. People can perceive tattooed males as more dominant which means more attractive, and tattooed females as less healthy compared to non-tattooed (2,3), more sexually promiscuous and heavier drinkers than non-tattooed females (3).

Researches showed that a differences in personality between tattooed and non-tattooed individuals have existed. Studies found tattooed persons more extroverted, with a greater need to be unique and more prone to adventurous behaviours as compared to non-tattooed individuals (4). They also showed a more positive attitude towards tattoos in comparison with non-tattooed individuals. According to that research it is assumed that tattooing has become a sign of self-expression used by individuals to differ more from others (4). There are many studies conducted worldwide which show connection between tattooing and risk and violent behaviours. A few new studies (5-9) show that tattooing is connected with high-risk behaviours. Tattooed young people drink more alcohol drinks (5,6,7) and more frequently (6), use psychoactive substances more frequently (6,7), have higher incidence of school throw-outs (6), practice more insecure sexual intercourses (6,7), while suicidal behaviors and suicidal ideation were not related to tattoo status among university students (7). These differences occurred not only in young population, but in the population through the lifespan also (8). Tattooed students were also significantly more often depressed (6).

Higher impulsivity, adventurism and risk behaviours in tattooed soldiers with PTSD were found (9), and more tattooed patients were diagnosed with antisocial personality disorder (10) compared to the non-tattooed.

Non-psychiatric population study showed that tattooed individuals more often had unconventional sexual relationships, they were more extroverted, more prone to adventurist/risk behaviour and that they had less consciousness than non-tattooed individuals (11). Bender et al.(12) showed that impulsiveness has an indirect relationship to suicidal behavior, and that this relationship is mediated by painful and provocative events that include tattooing as well. Nevertheless, there are also researches that show that nowadays tattooing is only the expression of fashion and is not connected with higher rate of risk behaviour and personality differences (13,14). The motivation for different body modifications like tattooing and piercing was found in expressing self-consciousness, identity, and a wish to demonstrate autonomy and thereby to control one's own body (15).

Although tattooing is planetary popular today and it does not stigmatize individuals as much as it used to, there is still an open question if there is connection between tattooing and different kind of disturbed or high-risk behaviour, and if tattooing can be a certain predictor of such behaviour.

The aim of the study was to determine the differences in emotional profile and frequencies of certain risk behaviour between individuals with a tattoo and those without it. As having tattoo can be a rough indicator of emotional and behavioural problems, we hypothesized that students with a tattoo were more prone to emotional problems and risk behaviours.

EXAMINEES AND METHODS

The study was conducted among students of Josip Juraj Strossmayer University of Osijek. One hundred students were included (37 males, 63 females) between 19 and 30 years of age. Mean age was 23.05 years (SD=2.53). Students participated in the research on voluntary basis, they were invited by an advertisement on information board of a few faculties.

From the total number of 100 students, two (2%) were first year students, 38 (38%) second year, 18 (18%) third year, 10 (10%) fourth year,

15 (15%) fifth year, eight (8%) sixth year students, and nine (9%) students were at the point of finishing their study.

Socio-demographic questionnaire was designed for this study and it included questions about age, sex, faculty and year of the study, eventual court punishment, consumption of alcohol, psychoactive substances and cigarettes, existence of a tattoo, wish for a tattoo and questions about the tattoo (place, motive, time of tattooing). In the second part of the study participants fulfilled Emotions Profile Index (PIE) assessment, which was supervised by a licensed psychologist. Participants completed questionnaires anonymously and voluntarily, in groups or individually, in presence of the skilled person, and were allowed to ask questions and get additional explanations relating to questionnaire completeness. Written consent was obtained from the subjects for collecting the data and publication of the study. This study was approved by the Ethical Committee of School of Medicine, J.J. Strossmayer University of Osijek.

Assessment PIE is designed for measurement of emotionality of participants according to the Plutchik multidimensional model of emotions (16). The theory assumes existence of 8 basic dimensions of emotions: Trust, Timid, Depressive, Distrust, Aggressive, Gregarious, Controlled, and Uncontrolled. Assessment PIE is composed of 62 questions which are pairs of expressions for characteristics of personality (total of 12), and the task for the participants was to choose which one of the two words describe him/her better (16).

Results were presented as frequencies and percentages (for descriptive variables), means and standard deviations (for numerical variables). Furthermore, independent samples t-test was performed for testing differences in emotional dimension between tattooed and non-tattooed students, and Chi-square was performed for testing differences in frequencies of certain risk behaviours. In cases where expected frequency was lower than 5, Fisher exact test was used. Results were considered statistically significant on the level of risk equal to or less than 5% ($p < 0.05$).

RESULTS

In the observed group ($n=100$), 35 (35%) had tattoo: six (17.1%) of them had 2 tattoos, two (5.7%) had 3 tattoos, two (5.7%) had 5 tattoos,

and one (2.9%) had 6 tattoos. Considering the size of the tattoo, 12 (34.3%) had small tattoos, 23 (65.7%) had medium or large tattoos.

More than half of the students, 18 (51.4%), responded that love for tattoos was their motivation to have it, personal connection with the motive of the tattoo was declared by five (14.3%), a moment decision was stated by three (8.6%), two (5.7%) had it done for memories, two (5.7%) because their close persons told them to do it, one (2.9%) out of curiosity, one (2.9%) because of wish to have the tattoo seen by everyone, one (2.9%) student said he/she did it for love. The remaining two students had different reasons like: a song, nothing, feeling that everyone has something, life road etc. Most of the subjects had their tattoos made at the age between 18 and 21, 16 (45.7%). The majority of the students, 31 (88.6%), were not sorry for having a tattoo, while four (11.4%) affirmed that they were sorry.

There was no statistically significant difference in the distribution of the dimensions of emotions between the groups of tattooed and non-tattooed subjects.

From the total number of subjects, 67 (67%) wished to have a tattoo. There was statistically significant difference in the distribution of the dimensions of emotions between those with and without a wish for tattooing. Statistically significant difference resulted in the distribution of dimension "Controlled" between those two groups ($p=0.05$). Students who had a wish to tattoo had lower result on scale "Controlled" ($M=15.9$; $SD=4.04$) compared to those who had no wish to tattoo ($M=17.67$; $SD=4.11$). Statistically significant difference resulted in the distribution of the dimension "Aggressive" ($t=2.29$; $p<0.05$). Students with the wish to tattoo had a higher result on the scale "Aggressive" ($M=11.09$; $SD=5.77$) compared to those without the wish for tattooing ($M=8.36$; $SD=5.13$).

A statistically significant difference ($p=0.02$) in the personality dimension "Depressive" between students with small tattoo ($n=12$) and those with medium or big tattoo ($n=23$) was found. Students who had medium or big tattoos had higher score on the scale "Depressive" ($M=7.74$; $SD=3.01$) than those with small tattoos ($M=5.00$, $SD=3.25$) (Table 1).

Table 1. Mean and standard deviation of participants' answers on dimensions of aggression, control and depression considering wish for tattoo and size of tattoo

Dimension of emotions	Groups	M (SD)
Aggression	With wish	11.09 (5.77)
	Without wish	8.36 (5.13)
Control	With wish	15.93 (4.04)
	Without wish	17.67 (4.11)
Depression	Big tattoo	7.74 (3.01)
	Small tattoo	5.00 (3.25)

M=Mean, SD=Standard deviation

More tattooed students reported to use drugs ($p < 0.05$) and have traffic offenses ($p < 0.05$) than the non-tattooed ones. In the results distribution consummation of alcohol, cigarettes, other offenses (domestic violence, disturbing public peace, crime) there was no statistically significant difference in the frequency distribution between tattooed and non-tattooed students (Table 2).

Table 2. Frequencies of specific risk behaviours in two groups of subjects

Risk behaviour	Answer	No (%) of students	
		With tattoo	Without tattoo
Punishment for traffic offence	Yes	5 (14.7)	0
	No	29 (85.3)	66 (100)
Drug abuse	Yes	19 (55.88)	14 (21.21)
	No	15 (44.12)	52 (78.79)

DISCUSSION

From the total number of students who participated in the study, 35% had a tattoo, and 67% had a wish for tattoo in the future. In the western civilization, the number of tattooed persons is growing (13, 17) possibly because of the promotion of the tattoos by celebrities in music, film industries, resulting in the transfer of tattooing from the edge of society to the main stream.

No statistically significant difference occurred in dimensions of emotions between the two groups, but differences were found between the students with/without a wish to tattoo. It seems that students who wish to tattoo are more aggressive and have less control than students without a wish to tattoo. It is proposed that students with a wish to tattoo can be considered as the group of tattooed (they are still too young and financially dependent, but will have a tattoo done in the future); both groups have the same attitudes towards tattoos. Moreover, a significant difference in emotional profile between the groups with and without a wish for tattoo were found, which is in concordance with the results of the previous

researches (4,9). However, it is important to notice, contrary to the findings of Tate and Shelton (14), that some differences in emotional dimensions found in our study emerged as important. Although in Tate and Shelton study differences in personality between tattooed and non-tattooed have emerged, mean scores for those variables fell within the range of standardized norms. In the presented study mean scores of tattooed students were either above (for Aggression) or below the average (for Control). That indicates some emotional problems in tattooed students that are not negligible.

The size of the tattoo was also connected with the differences in the student's emotional profile in this study, students with a big tattoo were more depressed than those with a small tattoo. Similar results were detected in other studies too, where tattooed persons (males) were more depressed than non-tattooed (7).

Furthermore, results of this research have shown that more tattooed compared with non-tattooed are involved in risk behaviour, such as consummation of drugs and traffic offences, but it was not confirmed that tattooed students drink alcohol more often than non-tattooed, like in some other studies (5-8). This could be explained by the fact that a 4-point scale for measuring frequency of drinking alcohol used in this questionnaire is not appropriate for this population. Both groups of students mostly answered that they occasionally drank alcohol. So the findings in this study just partly confirmed previous findings about tattoos and risk behaviour (5-8).

Regarding the choice of the tattoo place we can conclude that our subjects wanted to have a possibility to hide the tattoo, showing that there is still stigma about tattoos. Hands were the most frequently used place for tattooing (31%) followed by the back (24%). Those are the places where tattoo is visible but also can be hidden. In one study, 68% of tattooed subjects admit that they hide their tattoos in special occasions, such as exams, certain festivities, and the main reason for that behaviour is because they consider them inappropriate (17).

In this study 89% of the tattooed students were not sorry because they had a tattoo. New research among American population showed that 14% of tattooed persons want to have it removed

because they were too young when they made a tattoo (21%), they did not like to be marked for the rest of the life (19%) and did not like it any more (18%) (18). The results in this study are not the same, probably because young population was investigated, so their first tattoo was not made long time ago, at the age between 18 and 21 (45.7%). Our results are similar to those of the study of Aslam and Owen (19), but in their study one third of subjects regretted their tattoos. Considering that fact and a short period from the tattooing in which they could feel regret, our results are expectable.

The act of tattooing is rather painful, maybe persons who have tattoos are considered braver, more special, more capable compared to the non-tattooed, and therefore this courage leads them to risk behaviours. According to the interpersonal theory of suicide, impulsive people often do painful and provocative things and have more capability for self-harm and over time they get accustomed to pain, which gives them more capability to suicidal behavior if they ever desire it (20). Maybe stable personality or just current immaturity of those who decide to have a tattoo is the reason, because later in their life they regret for this act. Most young people have tattoos done in the adolescent age, which is marked with emotional instability and less capacity for the anticipation of consequences later in life.

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To summarize, based on the results from our and other studies, although tattoos have become planetary popular and do not stigmatize individuals as in the past, they still carry and lead to some risk behaviour and possible markers of those behaviours, respectively. The presence of a tattoo in a person could be a rough indicator for possible risk behaviour, like drug abuse and traffic offences, and also for emotional problems like aggression and lack of behavioural control. This could have significant implications in therapeutic interventions and prevention. A similar study had not been performed in Croatia before and this one gives some interesting insights into tattooing, emotional profile and risk behaviours in this region. Future studies should be done on a larger and more representative sample, which will include young people with or without finished high school who are not going to the college. Also, it would be interesting to include in the study the population of broader age scale. Reasons for the tattooing should be determined with more details, with the aim to discover whether this behaviour has deeper meaning or is it just a part of fashionable behaviour.

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TRANSPARENCY DECLARATION

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Profil emocija i rizična ponašanja kod tetoviranih i netetoviranih studenata

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SAŽETAK

Cilj Utvrditi postoji li razlika u emocionalnom profilu i u kojim dimenzijama između tetoviranih i netetoviranih studenata, te ispitati učestalost javljanja određenih rizičnih ponašanja kod ove dvije skupine ispitanika.

Metode U istraživanju su sudjelovali studenti koji su ispunili upitnik o ličnosti (povjerljivost, bojažljivost, depresivnost, nepovjerljivost, agresivnost, društvenost, kontroliranost, nekontroliranost) i učestvovali u anketi posebno osmišljenoj za ovo istraživanje, a koja je uključivala sociodemografska pitanja, pitanja o tetovažama (posjedovanje, želju za posjedovanjem, dob tetoviranja, lokaciju tetovaže, motiv), te učestalosti rizičnih ponašanja (sudsko kažnjavanje, konzumiranje alkohola, droge i cigareta).

Rezultati Od ukupnog broja studenata, 35 (od ukupno 100) ih je imalo tetovažu, a 67 ih je imalo želju za tetoviranjem. Nisu pronađene statistički značajne razlike u emocionalnom profilu između tetoviranih i netetoviranih, ali su utvrđene razlike u agresivnosti i kontroliranosti između studenata sa željom za tetoviranjem i onih koji nemaju takve želje. Studenti s većim tetovažama (23) pokazali su veću depresivnost od onih s malim i srednjim tetovažama. U odnosu na rizična ponašanja, kod tetoviranih ispitanika utvrđena je češća zloraba droga i kažnjavanje za prometne prekršaje.

Zaključak: Postojanje tetovaže kod osobe mogao bi biti grubo indikator za mogućnost postojanja emocionalnih problema i rizičnog ponašanja što može imati implikacije u prevenciji takvih ponašanja. Potrebna su daljnja istraživanja na većem i reprezentativnijem uzorku.

Ključne riječi: tetoviranje, osobine ličnosti, zloraba droga, prometni prekršaji