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# Tattoos and Other Body Modification Practices among Child Sex Offenders in Greece

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Body modification encompasses procedures to achieve permanent or temporary alterations of the human body. Tattooing and body piercing have become the most prevalent forms of body modification. It is reported that getting tattoos while in detention is reported to be a common practice. Only a few studies have examined the prevalence of body modification practices in prisoners. The objectives of this study were to determine the prevalence of body modifications (tattoos and body piercing) and self-injuries among child sex offenders in a Greek prison, as well as to identify factors associated with having a tattoo or acquiring one while in prison. One secondary aim was to examine this population's main motives for body modifications and shed new light on their functions. The authors present the results of their original quantitative study (with a sample of 181 imprisoned child sex offenders) and discuss them in comparison to those of other studies.

KEYWORDS: body modification, child sex offenders, tattooing, prisoners, self-injury

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# Introduction

Tattooing has been used by humans for centuries and is one of the oldest forms of irreversible skin alteration (Awofeso, 2004; Choudhary et al., 2010). Nowadays, its use has increased, and tattoos are accepted by a growing number of individuals as mainstream practices (Cossio et al., 2012; Nowosielski et al., 2012).

Tattoos and body piercing are often categorized as "body art" or "body modification". Body modification encompasses procedures to achieve permanent or temporary alterations of the human body (Patel, Cobbs, 2015). Tattooing and body piercing have become the most prevalent forms of body modification, alongside other practices such as scarification, branding, and surgical modification (Stirn, 2003; Wohlrab et al., 2007). Many individuals undergo their first tattoo or body piercing during adolescence or young adulthood (Braverman, 2006).

A tattoo is a permanent mark or design created by inserting ink into the layers of skin, resulting in dermal pigmentation (Burris, Kim, 2007; McCarron, 2008). The arms, legs, shoulders, and upper back are the most common tattoo locations. However, tattoos can be placed on any part of the body, including the palms and soles, eyelids, face, genitals, and tongue. Men are more likely than women to have visible tattoos (Patel, Cobbs, 2015).

Body piercing is defined as the insertion of jewelry into openings made in various body areas. Common piercing sites include the eyebrows, the helix of the ears, lips, tongue, nose, navel, nipples, and genitals (Patel, Cobbs, 2015; Sindoni et al., 2022). It's important to note that earlobe piercing (ear piercing) is not included in this definition. Unlike tattoos, body piercings are not considered permanent (Stirn, 2003).

Contemporary body modifications may serve different purposes than those in the distant past (Rabinerson, Horowitz, 2005). In Western societies up to the 1970s, tattoos were primarily associated with specific groups, such as incarcerated criminals, gang members, and other marginalized or counter-cultural individuals (Roggenkamp, Nicholls, Pierre, 2017). In modern times, body modifications have become a global trend and are often used to express identity, autonomy, and fashion (Gustafson, 1997; Stirn, 2003; Wohlrab et al., 2007).

The prevalence of tattoos and body piercings has increased in recent decades (Patel, Cobbs, 2015). In Western countries, 10%-56% of respondents have at least one piercing at a site other than the earlobe, while 8%-24% of individuals in North America and Europe have at least one tattoo (Swami, Harris, 2012).

Body modifications signify a unique relationship between individuals and their bodies, often intertwined with concepts of intimacy (Farrell, 1988). For many, body modification serves as a form of artistic or creative expression, offering long-term enjoyment and thus can be viewed as a recreational pursuit (Patel, Cobbs, 2015).

Tattooing is frequently perceived as trivial, yet research indicates that it encompasses highly complex and social behaviors (Lane, 2014). The symbolic significance of tattoos has evolved over time and is deeply individualized, both from the internal perspective of the wearer and the external perspective of an observer (Roggenkamp, Nicholls, Pierre, 2017).

Tattooing may unveil the participants' process of identity transformation as they acquire tattoos (de Almeida, 2009). In the context of personal and social aspects of embodiment, tattoos could be regarded as a form of visual communication (Frank, 1995). Kosut (2000) argues that the tattooed body is inherently communicative, conveying not only the identity of the wearer but also insights into the culture in which they reside.

Moreover, tattoos function as a repository of memories and evidence of a livingbody. In this regard, the tattooed body can be seen as an archive or document, immortalizing and symbolizing the events and relationships an individual has experienced throughout their life (Sundberg, Kjellman, 2018). Finally, tattoos present themselves as documents that may represent a critique of the dominant society or simply the voice of the alienated (Sundberg, Kjellman, 2018).

Wohlrab et al. (2007) argue that the primary motivations for acquiring tattoos and body piercings are very similar and can be classified into ten categories: beauty, art, and fashion; individuality; personal narrative; physical endurance; group affiliations and commitment; resistance; spirituality and cultural tradition; addiction; sexual motivation; and no specific reason.

Several studies have indicated that practitioners of body modification exhibit a significantly higher incidence of sexual abuse, physical injury, and a criminal history (Sarnecki, 2001). They also show signs of addictive behavior and substance abuse (Braithwaite et al., 2001; Brooks et al., 2003), and may use body modifications to cope with trauma (Hewitt, 1997; De Mello, 2000). Additionally, individuals with tattoos display enhanced risk-taking behavior (Bui et al., 2010; Cossio et al., 2012), and body piercings and tattoos are significantly correlated with the trait of anger (Carroll, Anderson, 2002).

Furthermore, body modifications can range from a single small tattoo to large areas of tattoos covering the entire body. The psychological reasons for such extensive body modifications may differ from those behind a single body modification (Stirn et al., 2011).

Additionally, other forms of body modification are considered psychopathological, such as self-cutting and self-injury (De Mello, 2000; Stirn, Hinz, 2008). Moreover, there is an association between body modification and deviant or illegal activities (Deschesnes, Fines, Demers, 2006).

At least 50% of individuals regret their tattoos in later years (Burris, Kim, 2007). Moreover, some people may develop acute inflammatory, allergic, hypersensitivity, or granulomatous reactions that necessitate tattoo removal. This process can be painful, expensive, and not without adverse effects (Mafong, Kauvar, Geronemus, 2003).

A special form of body modification is prison tattooing. Getting tattoos while in detention is reported to be a common practice (Tran et al., 2018). McCarron (2008) distinguishes between the tattoos of inmates who are in prison because they are addicted to drugs and those of individuals who are in prison due to criminal activities. Additionally, it is important to differentiate between individuals who have body modifications before imprisonment and those who acquire tattoos or self-injuries while incarcerated.

Tattoos obtain a rather specific meaning if made behind prison walls. This is because of their symbolism, their relation to criminal behavior, their role inside the prison community, their impact on offenders' re-socialization and re-offending, as well as the health risks they are connected to (Batrićević, Kubiček, 2020).

In prison, convicts' bodies are often their only actual possessions, and therefore, these bodies are never uncontested or unproblematic, nor are they even personal (McCarron, 2008). According to Hall (1997), the prison tattoo is also a statement that the convict, though resigned to the reality of prison life, still clings to his right to do what he will with his own body and mind. The skill of the tattoo artist, and the finished work on the wearer's body, provide the freedom of creative artistic expression.

Tattoos seemingly confer status on prisoners, enabling them to transcend and separate themselves from the faceless, homogenized, and uniformed mass that the disciplinary life of prison typically aims to create. For many tattooed inmates, their inked skin serves as visual declarations of emotional pain and sentiments they might otherwise find difficult to express. For instance, symbols of aggression such as dragons and skulls are overrepresented in prison tattoos.

Tattooing could also be considered the most common written form of prison argot, and one of its primary purposes is to signify inclusion in a prison group (Awofeso, 2004). Also common are tattoos depicting the names of inmates' mothers, partners, gang members, and/or loved ones. Tattoos may convey coded messages about an inmate's place in the criminal milieu, announcing a particular skill or nefarious predilection, a past criminal career, or a particular fate (Awofeso, 2002; Awofeso, 2004; Awofeso & Williams, 2000). Religious tattoos are also still prevalent within the prison community (Perju-Dumbrava et al., 2016).

While prison tattoos may still be distinguishable from "professional" tattoos due to poor quality, most current prison tattoo designs are similar to those of inmates' peer groups in the community (Wacquant, 2001).

Only a few studies have examined the prevalence of tattooing and body piercing in prisoners. Moazen et al. (2018) found high levels of tattooing reported in Europe and North America (14.7%), Asia Pacific (21.4%), and Latin America (45.4%) prisoners. Abiona et al. (2010) examined prisoners and found that 67% had tattoos, while 60% had body piercings. The prevalence of body piercing in prison was low (1.3%). Factors associated with tattooing in prison included incarceration for 1 year or longer, being 30-39 years old, and having been incarcerated 4 or more times. In another study in Quebec, tattooing in prison was frequent among men (37.2%). A study in Puerto Rico prisons, with a sample of 1,331 sentenced inmates, revealed that nearly 60% of inmates had acquired tattoos in prison (Peña-Orellana et al., 2011). In a large survey involving 4,425 participants across Canadian prisons, 13% had a tattoo done in prison (Robinson et al., 1996).

Tattooing during imprisonment is also a public health issue because the lack of proper equipment and unsterile body art practices among inmates have been implicated in the transmission of bloodborne viruses (Abiona et al., 2010; Poulin et al., 2018). The makeshift ink can also cause infections (Klügl et al., 2010). Prisoners with a history of drug injection are more likely to have tattoos and to acquire them in prison. HCV antibody-positive prisoners are also more likely to have acquired a tattoo in prison compared to HCV antibody-negative prisoners (Hellard, Aitken, Hocking, 2007).

In Greece, there are approximately 10,500 prisoners, with only a small percentage (about 3.48%) being sex offenders. The vast majority of these offenders have committed offenses against children (Hellenic Statistical Authority, 2010). These offenders exhibit many differences in their demographic and criminal profiles, and body modification and self-injury may be among these areas. The objectives of this study were to determine the prevalence of body modifications (tattoos and body piercing) and selfinjuries among child sex offenders, as well as to identify factors associated with having a tattoo or acquiring one while in prison. One secondary aim was to examine this population's main motives for body modifications and shed new light on their functions.

#### **Methods**

#### Survey participants

The sample consisted of incarcerated male child sex offenders. To be eligible to participate in the survey, inmates had to understand the Greek language. According to the eligibility criteria, 181 inmates participated in the study. Among those who reported having body modifications or selfTogas C, Alexias G, Tattoos and Other Body Modification Practices among Child Sex Offenders in Greece

injuries, an additional questionnaire was administered. Thus, a sub-sample of the study was composed of only the inmates who had received tattoos, body piercings, or self-injuries.

# Measures

The research instrument was a self-prepared questionnaire containing questions assessing sociodemographic, criminal, and health-related information, as well as an item asking participants if they had tattoos, body piercings, or self-injuries. The sociodemographic and criminal-related items included age, education level, number of siblings, country of birth, occupation, marital/ relationship status, age of first imprisonment (for any crime), victim's gender, and conviction for a violent crime. Regarding health-related information, participants were asked if they smoked, had ever used drugs or alcohol excessively, had ever attempted suicide, and if they were taking psychiatric medication.

The prevalence of tattooing, body piercing, and self-injury among inmates was obtained through a self-rated questionnaire. Participants indicated whether they had at least one tattoo, body piercing, or self-injury. Those who reported having body modifications were asked to complete an additional questionnaire, developed based on a previous literature review. Initially, they were asked to provide a brief description of each tattoo (if applicable) in one to two lines. Following this, they answered closed questions related to their body modification practices, experiences, and the meaning behind them. Regarding the motivations for tattooing, the participants could answer (apart from the given items) in their own words to obtain information about unanticipated motives.

# Design-procedure

A quantitative cross-sectional survey was conducted at Tripolis Prison, Greece, over six months (April to September 2023). The questionnaires were distributed and collected by an expert mental health practitioner employed at the facility. In cases where offenders were illiterate, the researcher assisted them in providing their answers and completing the questionnaire. Those who reported having at least one of these markings were also asked if they were willing to complete an additional page of questions concerning body modification practices.

# Data Analysis

Data analysis was conducted using SPSS, version 29.0. The Kolmogorov-Smirnov test was employed to assess the normality of continuous variables. Descriptive statistics and Pearson's correlation coefficients were used to examine linear correlations among the quantitative variables. T-tests for independent samples and one-way ANOVA were utilized to identify statistically significant differences between two or more groups. Furthermore, odds ratios (OR) were calculated to assess the relationship between body modification and self-injury status (having vs not having a tattoo, body piercing, or self-injury), as well as several other dichotomous variables (e.g., smoking and alcoholism). Additionally, logistic regression analysis was performed using the backward conditional method, with tattooing status as the dependent variable (having a tattoo vs not having a tattoo). The statistical significance level (p-value) was set at 0.05.

#### Ethics

All study protocols, informed consent processes, recruitment, and data collection procedures were approved by the Institutional Review Board (IRB) at the Psychology Department of Panteion University. Additionally, approval was obtained from Tripolis Prison and the Ministry of Citizen Protection, Greece, which was granted. Signed informed consent was obtained from all participants, who were fully informed about the purpose of the study and provided assurances of anonymity and confidentiality. They were also assured that the collected data would be used only for the study. All participants volunteered to take part without receiving any compensation.

#### Results

One hundred and ninety (190) questionnaires were distributed and one hundred and eighty-one (181) of them were given back. The response rate in this study was 95.26%.

## Prevalence of body modifications and self-injuries

Out of the 181 participants, 34 individuals reported having at least one tattoo, resulting in a prevalence of 18.8%. Additionally, three participants (1.66%) had a piercing in the past, while none reported a history of self-injury.

#### Demographic and criminal characteristics of the sample

The mean age of the participants in the total sample was approximately 49.5 years (M=49.45, SD=13.62), with ages ranging from 22 to 82 years. The mean age of first imprisonment was 47.5 years (M=47.43, SD=13.85), with ages at first imprisonment ranging from 16 to 82 years.

In the group of tattooed prisoners, the mean age was 41 years (M=41.24, SD=9.91), with ages ranging from 24 to 73 years. The mean age at first body modification was 21.5 years (M=21.67, SD=8.16), with ages at first tattoo ranging from 12 to 43 years. Additionally, the mean age at first imprisonment for

this group was 39 years (M=38.88, SD=11.03), with ages at first imprisonment ranging from 16 to 67 years.

In the group of non-tattooed prisoners, the mean age was approximately 51.5 years (M=51.35, SD=13.68), with ages ranging from 22 to 82 years. The mean age at first imprisonment was 49.5 years (M=49.4, SD=13.72), with ages at first imprisonment ranging from 22 to 82 years.

The remaining demographics and criminal characteristics of tattooed and non-tattooed offenders are presented in Table 1.

	Tattooed offenders		Non-tattooed offenders		Total	
	Frequency	Frequency Percentage Frequency		Percentage	Frequency	Percentage
		%		%		%
Country of birth						
Greece	29	85.3	106	72.1	135	74.6
Abroad	5	14.7	41	27.9	46	25.4
Age group						
21-30 years old	3	8.8	8	5.4	11	6.1
31-40 years old	13	38.2	23	15.6	36	19.9
41-50 years old	15	44.1	37	25.2	52	28.7
51-60 years old	2	5.9	37	25.2	39	21.5
61-70 years old	1	2.9	30	20.4	30	16.6
71-80 years old	3	8.8	11	7.5	12	6.6
>80 years old	0	0	1	0.7	1	0.6
Marital Status						
Single	9	26.5	32	21.8	41	22.7
Married/living with a	11	32.4	68	46.3	79	43.6
partner						
Separated	4	11.8	12	8.2	16	8.8
Divorced	10	29.4	30	20.4	40	22.1
Widower	0	0	5	3.4	5	2.8
Years of education						
0 years (illiterate)	4	11.8	3	2.1	7	3.9
1-6 years	7	20.6	43	29.5	50	27.8
7-9 years	5	14.7	20	13.7	25	13.9
10-12 years	13	38.2	39	26.7	52	28.9
13-14 years	3	8.8	19	13	22	12.2
15-16 years	2	5.9	19	13	21	11.7
More than 16 years	-	5.9	3	2.1	3	1.7
Religion			5	2.1	5	1.7
Atheist	0	0	2	1.4	2	1.1
Protestant	0	0	3	2.1	3	1.7
Muslim	1	2.9	28	19	29	16
Christian Catholic	0	0	20	1.4	2	1.1
Christian orthodox	32	94.2	111	75.6	144	79.56
Christian orthodox-	1	2.9	1	0.7	1	0.6
follower of the old	1	2.9	1	0.7	1	0.0
calendar						
Job related to children						
Yes	5	14.7	17	11.6	22	12.4
No	29	85.3	130	88.4	156	87.6
Having children	27	05.5	150	00.4	150	07.0
Yes	25	73.5	115	78.2	140	77.3
No	23	26.5	32	21.8	41	22.7
Having a child <18	7	20.5	52	21.0	71	44.1
years						
years Yes	23	67.6	68	46.3	91	50.3
No	23 11	32.4	68 79	40.3 53.7	91 90	30.3 49.7
110	11	32.4	/9	33.1	90	49./

 Table 1. Demographics of tattooed and not-tattooed offenders

The criminal and health-related characteristics of tattooed and not-tattooed offenders are presented in Table 2.

	Tattooed offenders		non-tattooed offenders		Total	
	Frequency Percentage		Frequency Percentage		Frequency	Percenta
		%		%		ge
						%
Victim's gender						
Boy	3	8.8	20	13.6	23	12.7
Girl	26	76.5	124	84.4	150	82.9
Both a girl and a boy	5	14.7	2	1.4	7	3.9
Both a girl and a woman	0	0	1	0.7	1	0.6
Victim with special						
needs						
Yes	4	11.8	10	6.8	14	7.7
No	30	88.2	137	93.2	167	92.3
<b>Offender's conviction</b>						
for a violent crime						
Yes	3	8.8	5	3.4	8	4.4
No	31	91.2	142	96.6	173	95.6
History of drug						
addiction						
Yes	7	20.6	8	5.4	15	8.3
No	27	79.4	139	94.6	166	91.7
Alcoholism						
Yes	0	0	7	4.8	7	3.9
No	34	100	140	95.2	174	96.1
Smoking						
Yes	27	87.1	69	47.3	96	54.2
No	4	12.9	77	52.7	81	45.8
<b>Psychiatric medication</b>						
Yes	6	17.6	14	9.5	20	11
No	28	82.4	133	90.5	161	89
Disability certification						
Yes	1	2.9	6	4.1	7	3.9
No	33	97.1	141	95.9	174	96.1
History of attempted						
suicide						
Yes	1	2.9	3	2	4	2.2
No	33	97.1	144	98	177	97.8

Table 2. Criminal and health-related characteristics of tattooed and not tattooed offenders

Regarding their parenting experiences, 29 of the offenders (16%) had experienced a separation or divorce of their parents during their childhood. In their family of origin, there were, on average, four children (M=4.11, SD=2.60), with the number of children ranging from 1 to 14.

#### Differences between tattooed and non-tattooed child sex offenders

Individuals with tattoos were significantly younger (mean age=41.24 years old) than those without tattoos (mean age=51.35 years old) (t=-4.962, df=179, p<0.001, Cohen's d=-0.774). Similarly, individuals with tattoos had been imprisoned at a younger age (mean age=38.88 years old) than those without tattoos (mean age=49.40 years old) (t=-4.7728, df=179, p<0.001, Cohen's d=-0.793).

	Odds Ratio for a tattoo (Yes/No)	95% Confidence Interval		р
		Lower	Upper	
Country of birth (Greece vs abroad)	2.243	0.813	6.192	0.11
Having children (Yes vs No)	0.773	0.328	1.821	0.555
Having a child <18 years (Yes vs No)	2.429	1.104	5.343	0.025
Conviction for a violent crime (Yes vs No)	2.748	0.624	12.112	0.166
History of drug-addiction (Yes vs No)	4.505	1.507	13.464	0.004
Alcoholism (Yes vs No)	1.050	1.013	1.089	0.194
Smoking (Yes vs No)	7.533	2.509	22.611	<0.001
Psychiatric medication (Yes vs No)	2.036	0.720	5.757	0.173
History of attempted suicide (Yes vs No)	1.455	0.147	14.429	0.748

## Table 3. Differences in tattooing status

To further examine possible differences between tattooed and non-tattooed child sex offenders, we performed a binary logistic regression analysis, with tattooing status as the dependent variable (having a tattoo versus not having a tattoo) (Table 4).

We employed the backward conditional method for the logistic regression analysis, with tattooing status as the dependent variable (having a tattoo versus not having a tattoo). The final regression model revealed that younger child sex offenders, alcoholics, and smokers were more likely to have a tattoo. Age and smoking were significant predictor variables at the 5% level. However, the Cox & Snell Pseudo-R2 test value was 0.169, indicating that the fit of the model to the data was poor. The accuracy of the model varied, with correct discrimination observed in 9.7% of cases for having a tattoo and in 97.9% of cases for not having a tattoo.

In the next step, 30 out of the 34 child sex offenders who had at least one tattoo completed an additional questionnaire concerning their body modification practices, experiences, and meanings. These offenders had 119 tattoos in total. The mean number of tattoos was four (M=3.97, SD=2.94), with the number of tattoos ranging from 1 to 13.

Among the offenders with tattoos, only six individuals (20%) reported having a prison-related tattoo, such as a depiction of a prison cell. Half of the offenders (15 out of 30, 50%) stated that they regretted having a tattoo, and twelve of them (40%) expressed intentions to remove their tattoos in the future. In contrast, nine offenders (30%) indicated that they plan to get more tattoos in the future.

The offenders reported having tattoos on various parts of the body. The most common locations were the bicep, with 34 tattoos, followed by the arm with 16 tattoos, and the chest with 15 tattoos. Other parts of the body that were tattooed included the upper back (7 tattoos), wrist (6 tattoos), hand (5 tattoos), neck (4 tattoos), hand phalanx (4 tattoos), palm (4 tattoos), shoulder (3 tattoos), calf (3 tattoos), ankle (2 tattoos), abdomen (2 tattoos), and leg (1 tattoo).

The tattoos depicted on the offenders' bodies included:

-An anchor, a sailing ship, a swallow, a panther's head, a spear, a message in a bottle, the name of a daughter, the sign of Panathinaikos (a football team), Leo (a Zodiac sign), a donkey, a clown with a woman (representing good and bad), roses, Mars, the Archangel Michael, the year of birth, the mother of offenders' child, a group name, a double-headed eagle (symbolizing AEK, a football team), "omerta" (meaning "I don't hear, I don't see, I don't speak").

-An Ancient Greek shield, a winged horse (Pegasus), names of the offender's daughters, first-name initials, a dolphin, the offender's wife, a face with a clock and sun on the head, names of the offender's children, the date of an important event, an AK-47 (a rifle called "Kalashnikov"), the symbol of Olympiacos (a football team), three stars symbolizing loved ones, a heart with an ex-girlfriend's name, an eagle, a band name, a Chinese holy mountain.

-The name of a girlfriend, a holy cross (a Christian symbol) with an ex-fiancée's name, an angel wing with a spear, the name of an ex-fiancée, and yin and yang (a Chinese symbol) representing good and evil, TAE-KWO-DO in Korean, the feet of the offender's son when he was born, the date of birth of the offender's son, angel wings with the dates of birth and death of the offender's father, a cross (a Christian symbol) that says "TAE-KWO-DO",

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-Kickboxing, the initials of the name of the offender's daughter, tribal Scorpio, outlaw, and four stars, a cardiogram with the initials of the mother's and father's names, a tribal eagle, a tribal joker (from the movie), a cross (a Christian symbol) with the names of the offender's nieces, an anarchy symbol, omertà, "fuck the police", and A.C.A.B. (which means "All Cops are Bastards").

Some other tattooing-related information is presented in Table 4.

	Frequency	Percentage %
Type of tattoo		
Colored	7	23.3
Black and white	17	56.7
Some colored and some black and white	6	20
Tattoo visible/non-visible		
(when he wears a short or a short-sleeve t-shirt)		
Visible	4	13.3
Non-visible	4	13.3
Some visible and some non-visible	22	73.3
Tattoos cover more than 1/3 of the body		
YES	0	0
NO	30	100
Having performed any of the tattoos during incarceration		
YES	6	20
NO	24	80
Individuals who performed the tattoo		
Professional	16	53,3
Amateur (e.g. friend)	9	30,0
Some professional and some amateur	3	10
By himself	2	6,7
Hygiene measures taken		
YES	21	70
NO	8	26,7
In some YES and some NO	1	3,3
Pain experienced while performing the tattoo		
No pain at all	6	20
Minimal pain	12	40
Moderate pain	4	13.3
A lot of pain	8	26.7
History of hepatitis		
YES	3	10
NO	27	90
At least one parent has a tattoo		
YES	4	13.3
NO	26	86.7
At least one close friend has a tattoo		
YES	26	86.7
NO	4	13.3

 Table 4. Tattooing-related information

The main motivations for body modifications and the meanings of tattoos are presented in Table 5.

**Table 5.** *Motivations for body modifications-meaning of tattoo (multiple response)* 

Remembrance of beloved persons/loved ones	20
Remembrance of personal history/experiences	9
Remembrance of criminal history	6
Expression of religiosity	8
Expression of ideology	2
Expression of athletic beliefs	5
Affiliation with specific groups/gangs	5
Representation of occupation/job	7
Representation of hobbies/interests	4
Representation of zodiac sign	4
Commemoration of significant dates	5
Artistic expression/band name	4
Expression of one's own name	4
No specific reason, aesthetic preference	9
Passion for collecting tattoos/piercings	0

# Discussion

This study aimed to determine the prevalence of body modifications and self-injuries among child sex offenders, identify factors associated with having a tattoo or acquiring one while in prison, and examine the main motives for body modifications in this population. To the best of our knowledge, it is the first study of its kind conducted in Greece, shedding new light on body modification practices and highlighting its novelty.

The main finding is that the prevalence of tattooing among imprisoned child sex offenders is 18.8%. Additionally, these offenders show a low percentage of body piercing (1.66%), and none reported self-injuries. This prevalence of tattooing falls within the range reported in the general population (8%-24%) (Swami, Harris, 2012). Furthermore, it is slightly higher than that found in European and North American prisoners (14.7%) (Moazen et al., 2018), as well as Canadian prisoners (13%) (Robinson et al., 1996). Authors have reported higher prevalence rates of tattooing among prisoners in Asia Pacific (21.4%) and Latin America (45.4%) (Moazen et al., 2018), with some researchers finding even higher percentages (67%) (Abiona et al., 2010). Notably, there are no official data available regarding Greek prisoners.

The prevalence of body piercing at a site other than the earlobe, recorded at 1.66%, was notably lower compared to that reported for the general population in Western countries (10%-56%) (Swami, Harris, 2012). In contrast, Abiona et al. (2010) found a higher prevalence of body piercings in prisoners (60%) and a lower prevalence of body piercing while in prison (1.3%). However, it's important to note that body piercing is generally not permitted in prisons, and our data recorded its prevalence before imprisonment. Additionally, although there is an association between body modification and deviant or illegal activities (Deschesnes, Fines, Demers, 2006), other forms of body modification, such as self-cutting and self-injury, are considered psychopathological (Stirn, Hinz, 2008).

In this study, only 20% of the tattooed participants had performed a tattoo while in prison, particularly in another prison many years ago. This percentage is lower than that recorded in Quebec (37.2%) and Puerto Rico (60%) prisons (Robinson et al., 1996; Peña-Orellana et al., 2011). This finding is significant, as performing tattoos in prison poses a public health issue and increases the risk of transmitting diseases such as hepatitis (Abiona et al., 2010; Hellard, Aitken, Hocking, 2007; Klügl et al., 2010; Poulin et al., 2018). Moreover, in the majority of tattooed offenders, hygiene measures were taken while performing the tattoos.

An intriguing discovery is that none of the participants reported self-injuries. One possible explanation for this could be the low percentage of serious psychiatric problems, history of drug addiction, alcoholism, and attempted suicide among this population, as recorded in this study. It is hypothesized that the prevalence of self-injury might be higher in other prisons housing offenders convicted of violent crimes.

Individuals with tattoos were found to be significantly younger than those without tattoos. This finding is consistent with the increasing acceptance and popularity of tattooing as a mainstream practice in recent years (Cossio et al., 2012; De Mello, 2000; Nowosielski et al., 2012), making it a rather expected result.

Furthermore, child sex offenders with tattoos had been imprisoned at a younger age compared to those without tattoos. Generally, there exists an association between body modification and deviant or illegal activities (Deschesnes, Fines, Demers, 2006). This finding warrants further examination in future studies, assessing the moderating and mediating roles of various other variables, such as alcoholism, drug addiction, etc.

As expected, a diverse range of tattoo depictions was recorded, including names, animals, stars, etc. Only six tattooed individuals (20%) reported having a prison-related tattoo, such as a depiction of a prison cell. This finding could be explained by the fact that the majority of the tattoos were acquired before imprisonment. Additionally, child sex offenders exhibit significant differences (demographic, criminal, etc.) from prisoners convicted of other crimes.

Half of the tattooed offenders (50%) stated that they regretted getting a tattoo, with twelve of them (40%) expressing intentions to remove their tattoos in the future. Similar results have been found for the general population, where at least 50% of individuals regret their tattoos in later years (Burris, Kim, 2007).

The offenders reported having tattoos on various parts of the body, with the most common locations being the bicep, followed by the arm and the chest. Other parts of the body that were tattooed included the upper back, wrist, hand, neck, hand phalanx, palm, shoulder, calf, ankle, abdomen, and leg. Similarly, Patel and Cobbs (2015) argue that the arms, legs, shoulders, and upper back are the most common locations for tattoos.

In most cases (73.3%), the tattooed prisoners had both visible and non-visible tattoos. However, this study did not examine this topic, and the motivations for this practice should be further investigated.

In this study, the most common motivation for tattooing was to commemorate beloved persons or loved ones, as well as personal history or experiences. Commemoration of significant dates was also prevalent. Similarly, Sundberg and Kjellman (2018) argue that tattoos function as a repository of memories and evidence of a living body, serving as an archive or document that immortalizes and symbolizes the events and relationships an individual has experienced throughout their life.

Moreover, for many individuals, body modification serves as a form of artistic or creative expression, offering long-term enjoyment, and thus can be viewed as a recreational pursuit (Patel, Cobbs, 2015). In this study, nine tattooed child sex offenders reported "no specific reason, aesthetic preference" as a motivation for tattooing.

As argued by Frank (1995) and Kosut (2000), tattoos could also be regarded as a form of visual communication, suggesting that the tattooed body is inherently communicative. Tattoos convey not only the identity of the wearer but also insights into the culture in which they reside. This concept was confirmed in this study, where common motivations for tattooing included the expression of one's own name, religiosity, ideology, and athletic beliefs, as well as the representation of occupation or job, hobbies or interests, the zodiac sign, and affiliation with specific groups or gangs.

Religious tattoos remain prevalent within the prison community, as supported by Perju-Dumbrava et al. (2016), and this was further confirmed in this study. Specifically, many tattooed child sex offenders cited the expression of religiosity as a primary motivation for tattooing, with numerous tattoos depicting religious symbols such as the cross (a Christian symbol), the Archangel Michael, angels, and so forth.

The motivations for tattooing found in this study also align with most of the categories presented by Wohlrab et al. (2007).

One limitation of the study is the small sample size. However, it's important to note that child sex offenders in Greece are primarily imprisoned in only two facilities, one of which is the Tripolis prison where the study was conducted. Therefore, the number of participants can be considered representative of this specific group of offenders in Greece. Another limitation is that the study was conducted by a mental health practitioner who works within the prison, which may have influenced the responses provided by the participants.

Despite the aforementioned limitations, this study provides valuable insights into the prevalence and practices of body modification among child sex offenders, representing the first study of its kind in Greece. Clinicians working with these offenders should consider including questions about body modifications and their motives in their interviews. Engaging in discussions about their tattoos can offer a valuable window into their psyche, thereby informing clinical practice (Roggenkamp, Nicholls, Pierre, 2017).

Future research is recommended to address the limitations of this study and to enhance our understanding of the prevalence and practices of body modification among child sex offenders. Conducting a qualitative study utilizing in-depth interviews or focus group discussions could provide deeper insights into the topic. Additionally, comparative studies could be conducted, comparing samples of offenders of other crimes (e.g., robbers) as well as perpetrators of other types of sex offenses (e.g., rapists), to further elucidate differences in body modification practices across offender groups.

# References

- Abiona, T.C., Balogun, J.A., Adefuye, A.S., Sloan, P.E. (2010) Body art practices among inmates: implications for transmission of bloodborne infections. *American Journal of Infection Control*, 38(2), pp.121-129. https://doi.org/ 10.1016/j.ajic.2009.06.006
- Awofeso, N. (2002) Jaggers in the pokey: understanding tattooing in prisons and reacting rationally to it. *Australian Health Review*, 25, pp.162-169. https://doi.org/10.1071/ah020162.
- Awofeso, N. (2004) Prison argot and penal discipline. *Journal of Mundane Behavior*, 5(1), N/A.
- Awofeso, N., Williams, C. (2000) Branded tattooing in prisons. *Tropical Doctor*, 30, pp.186-187. https://doi.org/10.1177/004947550003000331.
- Batrićević, A., Kubiček, A. (2020) The role of tattoos in prison community. *Journal of Criminology and Criminal Law*, 58 (3), pp.7-22. https://doi. org/10.47152/rkkp.58.3.1
- Braithwaite, R., Robillard, A., Woodring, T., Stephens, T., Arriola, K.J. (2001) Tattooing and body piercing among adolescent detainees: relationship to alcohol and other drug use. Journal of Substance Abuse, 13(1-2), pp.5-16. https://doi.org/10.1016/S0899-3289(01)00061-X.
- Braverman, P.K. (2006) Body art: piercing, tattooing, and scarification. *Adolescent Medicine Clinics*, 17(3), pp.505-519, abstract ix.https://doi. org/10.1016/j.admecli.2006.06.007.
- Brooks, T.L., Woods, E.R., Knight, J.R., Shrier, L.A. (2003) Body modification and substance use in adolescents: is there a link? Journal of Adolescent Health, 32(1), pp. 44-49. https://doi.org/10.1016/s1054-139x(02)00446-9.
- Bui, E., Rodgers, R., Cailhol, L., Birmes, P., Chabrol, H., Schmitt, L. (2010) Body piercing and psychopathology: a review of the literature. *Psychotherapy and psychosomatics*, 79(2), pp. 125-129. https://doi. org/10.1159/000276376.
- Burris, K., Kim, K. (2007) Tattoo removal. *Clinics in Dermatology*, 25 (4), pp. 388-392. https://doi.org/ 10.1016/j.clindermatol.2007.05.011.
- Choudhary, S., Elsaie, M.L., Leiva, A., Mouri, K. (2010) Lasers for tattoo removal: a review. *Lasers in Medical Science*, 25(5), pp. 619-627. https://doi.org/10.1007/s10103-010-0800-2
- Cossio, M.L., Giesen, L.F., Araya, G., Pérez-Cotapos, M.L. (2012) Association between tattoos, piercings and risk behaviors in adolescents. *Revista médica de Chile*, 140(2), pp.198-206. https://doi.org/ 10.4067/S0034-98872012000200008.

- de Almeida, A. (2009). Inked women: narratives at the intersection of tattoos, childhood sexual abuse, gender and the tattoo renaissance. Master Thesis, University of Victoria, School of Child and Youth Care, Faculty of Human and Social Development.
- De Mello, M. (2000) Bodies of Inscription. A Cultural History of the Modern Tattoo Community. Durham, London: Duke University Press.
- Deschesnes, M., Fines, P., Demers, S. (2006) Are tattooing and piercing indicators of risk taking behaviors among high school students? *Journal of Adolescence*, 29, pp.379-393. https://doi.org/ 10.1016/j. adolescence.2005.06.001.
- Frank, A. (1995) *The Wounded Storyteller: Body, Illness and Ethics*. Chicago and London: The University of Chicago Press.
- Hellard, M.E., Aitken, C.K., Hocking, J.S. (2007) Tattooing in prisons not such a pretty picture. *American Journal of Infection Control*, 35(7), pp. 477-480. https://doi.org/ 10.1016/j.ajic.2006.08.002.
- Hellenic Statistical Authority (2010) Retrieved 05-11-2023 from: www. statistics.gr
- Hewitt, K. (1997) *Mutilating the Body: Identity in Blood and Ink.* Bowling Green, OH: Bowling Green State University Popular Press.
- Klügl, I., Hiller, K.A., Landthaler, M., Bäumler, W. (2010) Incidence of health problems associated with tattooed skin: A nation-wide survey in German-speaking countries. Dermatology, 221, pp. 43-50. https://doi. org/ 10.1159/000292627.
- Kosut, M. (2000) Tattoo Narratives: The intersection of the body, selfidentity and society. *Visual Sociology*, 15(1), pp. 79-100. https://doi. org/10.1080/14725860008583817
- Lane, D. (2014) Tat's all folks: an analysis of tattoo literature. *Sociology Compass*, 8(4), pp. 398-410. https://doi.org/10.1111/soc4.12142
- Mafong, E.A., Kauvar, A.N., Geronemus, R.G. (2003) Surgical pearl: Removal of cosmetic lip-liner tattoo with the pulsed carbon dioxide laser. *Journal of the American Academy of Dermatology*, 48(2), pp. 271-272. https://doi.org/10.1067/mjd.2003.29.
- McCarron, K. (2008). Skin and Self-Indictment: Prison Tattoos, Race, and Heroin Addiction. *English Studies in Canada*, 34(1), pp. 85-102.
- Moazen, B., Saeedi Moghaddam, S., Silbernagl, M.A., Lotfizadeh, M., Bosworth, R.J., Alammehrjerdi, Z., Kinner, S.A., Wirtz, A.L., Bärnighausen, T.W., Stöver, H.J., Dolan, K.A. (2018) Prevalence of Drug Injection, Sexual Activity, Tattooing, and Piercing Among Prison Inmates. *Epidemiol Rev*, 40(1), pp.58-69. https://doi.org/10.1093/ epirev/mxy002.
- Nowosielski, K., Sipiński, A., Kuczerawy, I., Kozłowska-Rup, D., Skrzypulec-Plinta, V. (2012) Tattoos, Piercing, and Sexual Behaviors

in Young Adults. *The Journal of Sexual Medicine*, 9(9), pp. 2307-2314. https://doi.org/10.1111/j.1743-6109.2012.02791.x

- Patel, M., Cobbs, G. (2015) Infections from Body Piercing and Tattoos. Microbiology Spectrum, 3(6), pp. 1-13. https://doi.org/10.1128/ microbiolspec.iol5-0016-2015
- Peña-Orellana, M., Hernández-Viver, A., Caraballo-Correa, G., Albizu-García, C.E. (2011) Prevalence of HCV risk behaviors among prison inmates: tattooing and injection drug use. *Journal of Health Care for the Poor and Underserved*, 22(3), pp.962-982.https://doi.org/10.1353/hpu.2011.0084.
- Perju-Dumbrava, D., Ureche, D., Gherman, C., Chiroban, O., Bonea, L.S., Radu, C.C. (2016) Biblically inspired tattoos in forensic examinations made on inmates? bodies in prisons territorially assigned to the Forensic Institute of Medicine from Cluj. *Journal for the Study of Religions and Ideologies*, 15 (45), pp.338-356.
- Poulin, C., Courtemanche, Y., Serhir, B., Alary, M.(2018) Tattooing in prison: a risk factor for HCV infection among inmates in the Quebec's provincial correctional system. *Annals of Epidemiology*, 28(4), pp.231-235. https://doi.org/0.1016/j.annepidem.2018.02.002.
- Rabinerson, D., Horowitz, E. (2005) Genital piercing. Harefuah, 144 (10), pp. 736-738.
- Robinson, Mirabelli, L. (1996)Summary findings D., of of 1995 CSC national Correctional the inmate survey. In: Canada, Correctional Research Service and Development.
- Roggenkamp, H., Nicholls, A., Pierre, J.M. (2017) Tattoos as a window to the psyche: How talking about skin art can inform psychiatric practice. *World Journal of Psychiatry*, 7(3), pp. 148-158 https://doi.org/10.5498/ wjp.v7.i3.148]
- Sarnecki, J. (2001) Trauma and tattoo. American Association of Anthropologists Journal of Consciousness, 12, pp. 35-42. https://doi. org/10.1525/ac.2001.12.2.35
- Sindoni, A., Valeriani, F., Protano, C., Liguori, G., Romano Spica, V., Vitali, M., Gallè, F. (2022) Health risks for body pierced community: a systematic review. *Public Health*, 205, pp.202-215. https://doi. org/10.1016/j.puhe.2022.01.035. Epub 2022 Mar 24.
- Stirn, A. (2003). Body piercing: medical consequences and psychological motivations. *Lancet*, 361(9364), pp. 1205-15. https://doi.org/10.1016/S0140-6736(03)12955-8.
- Stirn, A., Hinz, A. (2008) Tattoos, body piercings, and self-injury: is there a connection? Investigations on a core group of participants

practicing body modification. *Psychotherapy research: journal of the Society for Psychotherapy Research*, 18(3), pp. 326-33. https://doi.org/10.1080/10503300701506938.

- Stirn, A., Oddo, S., Peregrinova, L., Philipp, S., Hinz, A. (2011) Motivations for body piercings and tattoos - the role of sexual abuse and the frequency of body modifications. *Psychiatry Research*,190 (2-3), pp. 359-63. https://doi.org/10.1016/j. psychres.2011.06.001.
- Sundberg, K., Kjellman, U. (2018) Tattoo as a document. Journal of Documentation, 74(1), 18-35. https://doi.org/10.1108/JD-03-2017-0043
- Swami. V., Harris. A.S. (2012)Body Art: Tattooing Piercing. and In Thomas Cash (Ed). Encyclopedia of Body Image and Human Appearance, Academic Press, p.p. 58-65. https://doi.org/10.1016/B978-0-12-384925-0.00012-2.
- Tran, N., Dubost, C., Baggio, S., Gétaz, L., Wolff, H. (2018). Safer tattooing interventions in prisons: a systematic review and call to action. BMC Public Health, 18, pp.1015. https://doi.org/10.1186/s12889-018-5867-x
- Wacquant, L. (2001) Deadly Symbiosis: When Ghetto and Prison Meet and Mesh.
- *Punishment and Society,* 3(1), pp.95-133. https://doi. org/10.1177/14624740122228276.
- Wohlrab, S., Stahl, J., Kappeler, P.M. (2007) Modifying the body: motivations for getting tattooed and pierced. *Body Image*, 4(1), 87-95. https://doi. org/10.1016/j.bodyim.2006.12.001.

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