Motivations for Seeking Laser Tattoo Removal and Perceived Outcomes as Reported by Justice Involved Adults

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Abstract
The goal of this study is to describe reasons for desiring removal of unwanted tattoos and self-reported outcomes among justice-involved adults (JIA) receiving free laser tattoo removal in Southern California. Between 2016 and 2021, JIA completed voluntary anonymous surveys at baseline (n=53) and follow-up (n=113) visits. Descriptive analyses were generated for quantitative items. Themes were identified from open-ended questions. Patients were predominantly male (74%) and most (81%) reported tattoo-related discrimination. Adjusted multivariate analyses showed that a higher number of domains in which patients reported tattoo-related discrimination was associated with having more tattoos to remove and citing reasons for removal related to employment and stigma by association (e.g., gang membership and police interactions). At follow-up, 48% of patients felt they were treated better in their community, and nearly a quarter of patients (25%) reported greater confidence and self-esteem. JIA seek tattoo removal due to stigma and discrimination. While JIA reported diverse benefits, tattoo removal should likely be considered as one element of comprehensive programming that addresses JIA’s diverse emotional, social, and economic needs. Longitudinal research is needed to clarify the long-term effects of tattoo removal for JIA.

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Introduction
Tattoos are a form of body modification and art which have been imprinted onto the human body by communities around the world for thousands of years (Phelan & Hunt, 1998; Sperry, 1991). Tattoos may be hand-drawn and more recently, they are also frequently etched onto the skin with mechanical devices. Tattoos have been used for a myriad of purposes, including to decorate the body, represent affiliation with cultural subgroups, as a form of personal expression and identity, during rites of passage, to communicate messages to others about the tattooed individual, or they may be used as a type of punishment (Palermo, 2004; Sperry, 1991). Tattooing practices transcend cultures, social classes, and professional groups (DeMello & Rubin, 2000; Lodder, 2015; Martin, 2018; Rees, 2016) and this study examines the experiences of justice involved tattooed adults, which constitutes a sub-set of the community of tattooed individuals.

Tattoos are often applied in jails or prisons carceral settings and motivations for acquiring these images may vary (Batricevic & Kubicek, 2020). For example, in carceral settings uniformity and conformity are required, yet, tattoos can serve as indelible evidence of an individual’s identity or group affiliation and may be indicators of autonomy (DeMello, 1993). Additionally, tattooing may provide artists with opportunities for artistic expression, prestige, or generate resources in an otherwise constrained environment (Bakir & Tod, 2008; Batricevic & Kubicek, 2020; DeMello, 1993; Martin, 2018; Phillips, 2001). However, tattoos which are obtained in or perceived to be obtained in carceral settings or to be affiliated with groups at high risk of justice system involvement are not always received favorably in the community: evidence of stigma toward tattoos or tattooed persons, including those who are justice involved, has also been documented (Adams, 2009; Armstrong et al., 2008; Atik, 2014; Dey et al., 2016).

Individuals may be judged because of their tattoos, resulting in stigma and discrimination (Boyle, 2011; Pinedo et al., 2015). Goffman’s (1963) seminal work regarding identity and stigma recognized this socially-produced and multidimensional concept. His work underscores the embeddedness of individuals within societal structures as well as how individuals are perceived and treated by others (Goffman, 1963). Per Goffman (1963), stigma involves having a visible or non-visible trait that changes an individual’s relationships with other members of society; negative perceptions of this trait may lower an individual’s position in society through stereotyping of the individual due to perceived or actual differences. More recently, Link and Phelan (2001) have noted that stigma is created when “labeling, stereotyping, separation, status loss, and discrimination co-occur” and importantly, they point out that these
conditions must be validated by socially created power structures that support the stigmatization and exclusion of individuals or groups of individuals.

Recent research further clarifies that stigma is a nuanced concept and may manifest in diverse ways; concepts which are particularly salient to the experiences of tattooed justice involved persons are described here. For example, public stigma and structural stigma may occur when the community’s emotional and social responses to the blighted outsider sub-groups (e.g., tattooed persons and justice involved persons) are ingrained within community institutions and their policies and actions. Stigma by association may be experienced by persons who interact with the stigmatized individual (e.g., family members of justice involved persons; Bos et al., 2013) and self-stigma can occur when individuals from the blighted group (e.g., justice involved persons) internalize the community’s negative beliefs and reactions and anticipate negative interactions with the larger community (Bos et al., 2013); self-stigma is an active process in which the individual has been socialized to adopt the stigmatized identity—this perspective may adversely impact the individual, including one’s sense of self-esteem and self-efficacy (Corrigan et al., 2006).

Tattoos may be classified as being deposited on “public” skin (i.e., visible) versus “private” skin (i.e., not readily visible; Vail, 1999). Individuals with visible tattoos (e.g., on face, hands, and neck) may be particularly vulnerable to public and structural stigma and discrimination because of others’ assumptions regarding the tattoos’ source or content (Adams, 2009; DeMello, 1993; Jennings et al., 2014; Lane, 2014). For example, prison tattoos are often differentiated from other tattoos as they may include images related to the prison context (e.g., clocks and prison bars), gang affiliation, or other iconography or text that may be perceived as hostile to the community (Batricevic & Kubicek, 2020; Rozycki Lozano et al., 2011; Shoham, 2015). Prison tattoos may uniquely communicate power differentials, life history, geography, and social relationships among those wearing these images (Shoham, 2015). Thus, community members’ responses to justice-involved persons’ tattoos may play an important role in tattooed justice involved individuals’ well-being (e.g., self-esteem, mental health, experiences of interpersonal violence, encounters with law enforcement, and increased mortality or engagement in risky behaviors such as substance use; Carson, 2014; Foran et al., 2020). Consequently, tattooed individuals’ views of themselves or their tattoos may change over time and the images may become unwanted. This transformation in perspective, identity, and adoption of goals (e.g., personal relationships and employment) to fortify relationships with the community may be a component of desistance from crime trajectories and may have implications for the reentry process undertaken by justice involved individuals (Laub & Sampson, 2001).

Strategies to “pass” as part of the mainstream community and remove stigmatized and unwanted tattoos range from non-medical interventions (e.g., covering the tattoo with clothing or make-up) to procedural interventions such as laser tattoo removal (Atik, 2014; Goffman, 1963), which is also promoted by law enforcement agencies as one strategy for assisting justice-involved persons as they reconnect with their communities (Bakir & Tod, 2008). To-date, little is known about motivations for seeking tattoo removal among justice-involved adults (JIA); this study seeks to fill this gap.
The aforementioned stigma concepts and consideration of public versus private skin are particularly useful in understanding possible motivations for seeking tattoo removal and perceived impact of tattoo removal—these are also the focus of the present study. Findings have implications for communities or law enforcement agencies seeking to implement laser tattoo removal services for JIA at all stages of the reentry process.

**Methods**

**Laser Treatment Program Overview and Program Eligibility**

In brief, the free, voluntary tattoo removal program (i.e., UCSD Clean Slate Free Tattoo Removal Program; Ojeda et al., 2019) is housed in a Southern California Medical School and staffed by physicians from the Department of Dermatology. Community outreach activities are led by the first author who is based jointly in the School of Public Health and School of Medicine. A Q-switched laser for tattoo removal was purchased with grant funding (Syneron, 2018). Justice Involved Adults (JIA) can remove all unwanted tattoos, regardless of location or content, free of charge. The treatment typically requires monthly or bimonthly treatments spanning months to several years. JIA are registered in the clinic’s electronic medical record to receive personalized care (e.g., laser settings, anesthesia, relevant medical information, and pre- and post-treatment photos). All patients provide their informed consent at each visit. This study was approved by the University’s Human Subjects Research Protections Program.

Eligible persons are county residents ages 18+ who are voluntarily seeking services and not impaired (due to substance use or other conditions) and able to provide informed consent at time of treatment and have a history of current or prior justice system involvement (e.g., current probationer/parolee and ever incarcerated). JIA interested in tattoo removal may request this service as part of the reentry programing process and they may be referred to the program by a probation or parole officer. Probationers can request transportation to the clinic from the Probation Department if needed. At the first visit, JIA patients are invited to respond to a voluntary anonymous interviewer-administered program evaluation survey; patients can decline to participate without repercussion for their access to services, though this occurs infrequently.

**Quantitative Measures**

Table 1 shows the characteristics of JIA initiating laser tattoo removal in San Diego County between 2016 to 2021 ($n=53$). About two-fifths of patients were ages 18 to 26 (43%), the majority were male and Latino/Hispanic (74% and 72%, respectively), 26% had not graduated from high school, 38% were high-school graduates, and 31% had completed at least some college. Less than half (45%) of JIA were employed full-time and 36% were unemployed. Patients also identify the number, color, and location
of tattoos they wish to treat, reason for seeking tattoo removal, whether they have felt discrimination or differential treatment due to tattoos, life domain of discrimination, and any prior attempt at removing their tattoos (Table 2). Persons reporting differential treatment or perceived discrimination at baseline were asked to report which life domains were affected and participants could select all responses that applied to their situation.

Analyses of baseline data were limited to participants who answered the question about whether or not they had experienced tattoo-related discrimination. Per Vail (1999), the analyses also differentiated between the types of tattoos being removed per their location. Thus, “public” (i.e., usually visible and less easily concealed) skin tattoos were located on the head, neck, skull, collarbone, and extremities (i.e., lower

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**Table 1.** Baseline Sociodemographic Characteristics of Justice Involved Adults (JIA) Receiving Free Tattoo Removal, Southern California, 2016 to 2021 (*n*= 53).

| Baseline characteristics                              | Full baseline sample |
|--------------------------------------------------------|----------------------|
| Age groups                                             |                      |
| 18–26                                                  | 23 43                |
| 27–34                                                  | 17 32                |
| 35 or older                                            | 19 36                |
| Gender                                                 |                      |
| Male                                                   | 39 74                |
| Female                                                 | 14 26                |
| Race/ethnicity*                                        |                      |
| Latino/Hispanic                                        | 38 72                |
| White, non-Hispanic (NH)                               | 3 6                  |
| Black/African American, NH                             | 8 15                 |
| Other/not reported                                     | 4 8                  |
| Educational attainment                                 |                      |
| Less than high school                                  | 14 26                |
| High school graduate/GED                               | 20 38                |
| Some college, no degree/associates/technical degree     | 13 25                |
| Bachelor’s degree                                      | 2 4                  |
| Any postgraduate studies                               | 1 2                  |
| Refuse to answer/missing                               | 3 6                  |
| Current work status                                    |                      |
| Full time (35+ hours/week)                             | 24 45                |
| Part time (<25 hours/week)                             | 5 9                  |
| Not employed                                           | 19 36                |
| Other                                                  | 5 9                  |

Note. Items with an asterisk (*) may add up to more than 100% as patients could select more than one response.
Table 2. Baseline Tattoo Characteristics of Justice Involved Adults (JIA) Receiving Free Tattoo Removal, Southern California, 2016 to 2021 (n = 53).

| Baseline characteristics                                                                 | Full baseline sample |
|------------------------------------------------------------------------------------------|---------------------|
| Location of tattoo(s) to be removed*                                                     | n    | % |
| Hands/fingers                                                                            | 24   | 45 |
| Lower arm/wrist                                                                          | 22   | 42 |
| Face                                                                                    | 19   | 36 |
| Upper arm above elbow                                                                   | 19   | 36 |
| Chest/ribs/stomach                                                                      | 17   | 32 |
| Neck/skull                                                                              | 10   | 19 |
| Thigh                                                                                   | 6    | 11 |
| Calf/Shin                                                                               | 5    | 9  |
| Back                                                                                    | 3    | 6  |
| Collarbone                                                                               | 2    | 4  |
| Feet                                                                                    | 2    | 4  |
| **Location of tattoo(s) to be removed-private vs. public skin**                         |       |    |
| Private skin only: chest, back, stomach, thighs, or upper arms                          | 8    | 15 |
| Public skin on face, skull, neck, collarbone, hands, lower arms, calf/shin, or feet; may also have other tattoos on private skin | 45   | 85 |
| Color of ink                                                                            |       |    |
| Blue/black ink only                                                                    | 39   | 74 |
| Includes other colors besides blue/black                                                 | 14   | 26 |
| Reason for tattoo removal*                                                              |       |    |
| Present a better image*                                                                 | 44   | 83 |
| Labor market: Be treated better by potential employers or get a new job                 | 35   | 66 |
| Public/interpersonal                                                                   | 30   | 57 |
| Be a good role model for family/friends                                                  | 25   | 47 |
| Be treated better in the community                                                     | 21   | 40 |
| By association                                                                          | 26   | 49 |
| No longer identify with a group (such as a gang)                                       | 21   | 40 |
| Prevent problems with the police or law enforcement                                    | 12   | 23 |
| Self: Feel better about myself                                                          | 24   | 45 |
| Other reason (i.e., “to replace with new tattoos”)                                      | 1    | 2  |
| Previously attempted to remove tattoos                                                 |       |    |
| Yes                                                                                     | 7    | 13 |
| No                                                                                      | 46   | 87 |
| Ever discriminated against or treated differently because of tattoos                   |       |    |
| Yes                                                                                     | 43   | 81 |
| No                                                                                      | 10   | 19 |
| Life domains: If yes (n = 43), areas of discrimination or differential treatment due to tattoos (select all that apply)* |       |    |

(continued)
arms, hands/fingers, calves/shins, and feet), and “private” skin tattoos were situated (i.e., less visible or easily covered) on the upper arms, chest/ribs, back, stomach, or thighs. Prior research informed the construction of a categorical item to assess stigma-related reasons for seeking tattoo removal (Bos et al., 2013; Kremer et al., 2016; Kremer et al., 2020; Pinedo et al., 2015). The stigma subtypes were used to classify JIA’s self-reported reasons for seeking tattoo removal: (1) public or interpersonal stigma, (2) structural labor market stigma, (3) self-stigma, and (4) stigma by association (see Table 3; Bos et al., 2013).

All surveys are anonymous which prevents linking individuals’ responses between baseline and follow-up visits. Consequently, the number of follow-up surveys is greater than the number of baseline surveys as some patients may have completed more than one follow-up survey. The follow-up survey is also voluntary and anonymous it assesses demographic traits, labor market experiences (i.e., current work status, length of time working at current job, and receipt of a promotion or salary increase since receiving tattoo removal services), interactions with the court and perceived benefit of tattoo removal in court interactions (Table 4). At follow-up visits, patients also responded to open-ended questions regarding any perceived effects resulting from undergoing tattoo removal on their lives (Table 5).

Quantitative Data Analyses

We analyzed the quantitative baseline ($n = 53$) and follow up ($n = 113$) survey data collected between February, 2016 and May, 2021. We generated descriptive statistics including means and standard deviation for continuous variables and frequencies and percentages for categorical variables (Tables 1 and 2). For questions where patients
Table 3. Unadjusted and Adjusted Associations Between the Number of Domains of Reported Tattoo-Based Discrimination and Sociodemographics, Tattoo Characteristics, and Motivation to Remove Tattoos at Baseline Among Justice Involved Adults (JIA), 2016 to 2021.

| Number of areas of reported tattoo-related discrimination | Unadjusted univariate analysis | Adjusted multivariable analysis |
|-----------------------------------------------------------|-----------------------------|--------------------------------|
|                                                           | Coefficient (SE)            | Coefficient (SE)              |
| Age (continuous)                                          | .06** (.03)                 | .03 (0.02)                    |
| Female (vs. male)                                         | −.03 (0.49)                 |                               |
| Latino/Hispanic (vs. other race/ethnicity)                | −.35 (0.48)                 |                               |
| Completed high school (vs. did not complete)              | −.56 (0.49)                 |                               |
| Employed full or part time (vs. unemployed, student, and other) | .11 (0.44) |                               |
| Number of tattoos to remove                              | .27*** (.06)                | .18*** (.06)                  |
| Location of tattoos to remove is on public skin (i.e., hands, lower arms, face, skull, neck, or collarbone; vs. on private skin only) | 1.49** (.57) | .21 (0.46)                    |
| Tattoos to remove only include blue/black ink (no other color; vs. tattoos that have other colors) | .32 (0.49) |                               |
| Number of reasons to remove tattoos selected (continuous) | .43*** (.09) |                               |
| Reasons to remove tattoos                                |                             |                               |
| Public/interpersonal stigma                               | 1.42*** (.39)               | .59 (0.37)                    |
| “To be treated better in the community” selected (vs. did not select) | 1.15*** (.41) |                               |
| “To be a better role model for friends/family” selected (vs. did not select) | 1.48*** (.38) |                               |
| Labor market-related stigma: “To be treated better by potential employers” or “to get a new job” selected (vs. did not select) | 1.04** (.43) | .86** (0.39)                  |
| Self stigma: “To feel better about myself” selected (vs. did not select) | .50 (0.43) |                               |
| Stigma by association                                     | 1.32*** (.39)               | .85** (0.37)                  |
| “No longer affiliated with a group (such as a gang)” selected (vs. did not select) | 1.15*** (.41) |                               |
| “Avoid problems with law enforcement” selected (vs. did not select) | 1.38*** (.48) |                               |
| Attempted to remove tattoos before (vs. no previous attempt) | .14 (0.64) |                               |
| Constant                                                  | −1.26 (.76)                 |                               |

Note. Robust standard errors (SE) in parentheses.
**p < .05. ***p < .01.
Table 4. Characteristics at Follow-Up Among Justice Involved Adults (JIA) Receiving Free Tattoo Removal, Southern California, 2016 to 2021 ($n=113$).

| Follow-up characteristics | Full follow-up sample |
|---------------------------|-----------------------|
|                           | $N$     | %     |
| Age groups                |         |       |
| 18–26                     | 18      | 16    |
| 27–34                     | 24      | 21    |
| 35 or older               | 71      | 63    |
| Gender                    |         |       |
| Male                      | 66      | 58    |
| Female                    | 47      | 42    |
| Current work status       |         |       |
| Full time (35+ hours/week)| 50      | 44    |
| Part time (<25 hours/week)| 12      | 11    |
| Not employed              | 15      | 13    |
| Other                     | 24      | 21    |
| Missing                   | 12      | 11    |
| If employed full or part time ($n=62$), length of time working at current job | | |
| New hire (less than 1 month) | 9      | 15    |
| 2–11 months               | 12      | 19    |
| 1–3 years                 | 24      | 39    |
| 4–10 years                | 1       | 2     |
| More than 10 years        | 4       | 6     |
| Missing                   | 12      | 20    |
| Among working patients ($n=78$), obtained a promotion/salary increase since starting the tattoo removal program | | |
| Yes, a promotion          | 21      | 27    |
| Yes, a salary increase    | 17      | 22    |
| None of the above         | 40      | 51    |
| Refuse to answer/missing  | 9       | 12    |
| Planning to have in the next 2 months, or had in the past 2 months, any interactions with the court? | | |
| Yes                       | 49      | 43    |
| No                        | 42      | 37    |
| Don’t know                | 3       | 3     |
| Refuse to answer/missing  | 19      | 17    |
| If yes ($n=49$), how do you think that participating in this program will affect your interactions with the court? | | |
| Will affect positively    | 37      | 75    |
| Will have no effect       | 10      | 20    |
| Will affect negatively    | 0       | 0     |
| Don’t know                | 1       | 2     |
| Missing                   | 1       | 2     |
| Theme, sub-theme, and prevalence of theme (%) | Example quotes |
|---------------------------------------------|----------------|
| **Interpersonal interactions** Viewed favorably and treated better in the community (48%) | “People approach me and actually say hello.”  
“Some encourage me to go on this way.”  
“They treat me with respect and they no longer make me feel unwelcomed.”  
“They respect me and my decision to change my life and my image.”  
“When I go to court, they notice that I’m making a change in my life due to getting my tattoos removed and also with my family and children—hey notice that I’m taking steps to change my life and that I’m consistently coming to the tattoo removal program.”  
“Now that I know the one on my neck is more faded and you can barely see it, I feel free to wear regular t-shirts and I can go more places I feel a lot better! I have less confrontations because I don’t have my neighborhood on my neck.”  
“Some say to me that I am a better model for my family. This is why I am doing this.”  
“Became role model for other people, for kids.”  
“Children visitation rights.” |
| **Improved relationships with friends and family (17%)** | “[Others] recognize effort for being better person.”  
“Everyone’s impressed that I’m getting my tattoos removed and my tattoos are gang related so it shows that I’m willing to change.”  
“I don’t go out with those people [gang members] anymore!”  
“My coworkers are commenting on the positive changes that they see in me because I’m making an effort to change.”  
“I feel like I have gained more confidence. People react better to me now that they know I am working on myself, not only on the inside, but on the outside too.” |
| **Self-image Willingness to change (8%)** | “Built my self-esteem up.”  
“People don’t judge me.”  
“I have gained more confidence in myself in the fact that I am making better choices and these are a memory of my past and not who I want to be.”  
“Feel better more confident; know I can go somewhere and can be in line and no one will say, hey you from [neighborhood].”  
“I have felt more comfortable wearing short-sleeve shirts, simply because I could truthfully say “I am having these removed” if anyone asked about my tattoos.”  
“My confidence and self-esteem have improved; I feel that I am changing internally but also externally.”  
“The tattoo clinic service is actually great—it’s giving me confidence at work—because the neck and head tattoos are fading away—I work with a lot of doctors (doing kitchen and bath remodels) and this makes me feel more trustworthy.” |
| **Increased confidence and self-esteem (25%)** | |

(continued)
Univariate unadjusted and adjusted linear regressions were estimated to identify significant relationships between demographic variables, tattoo traits, tattoo-related stigma sub-types, and the dependent variable: the number of life domains in which participants reported experiencing tattoo-related discrimination (e.g., employment, among family/friends, education, housing, interpersonal violence, with law enforcement, in public spaces, and in general). The dependent variable was continuous with a range from 0 to 8. Covariates significant at $p < .10$ were added to multivariable linear regression model to assess independent associations between independent variables and the dependent variable (Table 3). The numeric variable for “reasons for removing tattoos” was not used in the adjusted analysis due to collinearity with the other variables related to tattoo removal.

**Qualitative data.** The follow-up surveys included two open-ended questions in which the interviewer noted patients’ responses verbatim or patients’ written responses to
questions exploring whether and how tattoo removal affected their lives; these were asked at each follow-up visit. The text data were analyzed using a grounded theory approach and were coded using a matrix method in an Excel spreadsheet (Meyer & Avery, 2009; Miles et al., 2014). Co-authors (CM, VO) read the responses for each question and developed a set of categorical themes. Each response was marked with the corresponding themes it represented, and frequencies were calculated to determine the prevalence of each sub-theme. We limited this analysis to respondents who answered the open-ended questions \( n = 100 \), resulting in the exclusion of participants \( n = 13 \) with missing text data. Illustrative quotes are provided to contextualize the themes identified in our analysis.

**Results**

**Characteristics of JIA Patients’ Tattoos**

Table 2 summarizes the traits of JIA patients’ tattoos at their first visit. On average, patients sought to remove 4.5 tattoos (SD: 3.2; range: 1–12 tattoos, data not shown). Tattoos targeted for removal were frequently located in visible sites such as hands and fingers (45%), lower arms/wrist (42%), face (36%), and neck or skull (19%). However, tattoos in less visible locations were also commonly reported, such as the upper arm (36%), chest/ribs/stomach (32%), thighs (11%), and calves/shins (9%). Overall, 85% of patients sought to remove tattoos located on public skin and 15% of patients targeted tattoos in private skin for removal. Most participants’ tattoos were comprised of blue/black ink only (74%), while one-quarter included other ink colors.

**Reasons for Seeking Tattoo Removal**

Table 2 also presents JIA patients’ reasons for seeking tattoo removal; on average, JIA selected 3.5 reasons for removing tattoos (SD: 1.8, range: 1–7; data not shown). Most JIA sought to present a better image (83%), while 66% selected reasons related to labor market stigma (e.g., treated better by potential employers and get a new job). Over half selected reasons related to public or interpersonal stigma (57%), including to be treated better within the community (47%) to be good role models for friends and family (40%). Nearly half (49%) selected reasons related to stigma by association; 40% sought to distance themselves from prior group affiliations (e.g., gang), and 23% sought to prevent negative interactions with law enforcement. Nearly half indicated that they wanted to remove their tattoos for a reason related to self-stigma: to feel better about themselves (45%). A minority of patients (13%) had previously tried to remove their tattoos (12%).

Most JIA felt that they had been discriminated against because of their tattoos (81%). Discrimination was perceived to occur at work or during the hiring process for a new job (56%), during interactions with law enforcement (51%), when interacting with friends and family (42%), or being harassed when visiting public locations (40%). Some JIA reported being unable to visit some communities due to fear of violence
Correlates of Tattoo Related Discrimination

Table 3 shows results from unadjusted and adjusted multivariable linear regressions estimated for the number of life domains of tattoo-related discrimination identified by JIA and sociodemographics, tattoo characteristics, and motivations for removing unwanted tattoos. The unadjusted analysis showed that older age and having tattoos located on public skin were associated with reporting a greater number of life domains affected by tattoo-related discrimination. In the multivariable analysis, reporting a greater number of unwanted tattoos was associated with more experiences of discrimination: for each additional unwanted tattoo, the number of tattoo-related discrimination life domains increased by .2 ($p < .01$). Additionally, JIA who expressed labor market stigma and stigma by association experienced a similar increase (0.8–0.9) in their number of tattoo-related discrimination life domains ($p < .05$). No other variables were statistically significantly associated with the number of tattoo-related discrimination items.

Patient Status at Follow-Up and Perceived Effect of Tattoo Removal

At follow-up, the majority of JIA who completed surveys were age 35+ (63%) and 58% were male, 44% reported working full time, and 11% were employed part-time while 13% were unemployed. Among those working full or part-time, 34% reported working at their jobs for <1 year. Among working patients, 27% reported a promotion and 22% reported a salary increase since starting tattoo removal, and 51% reported not receiving a promotion or salary increase. JIA (43%) reported a recent interaction with the court or an upcoming court visit and 75% felt that participating in the tattoo removal program had or would have a positive effect on these interactions while 20% felt that it would have no effect.

Self-Reported Impacts of Tattoo Removal

Patients also reported on the impact of the tattoo removal on their lives at each follow-up visit; Table 5 presents illustrative quotes for the four emergent themes and their sub-themes. Interpersonal interactions reportedly improved following tattoo removal and some JIA felt that they were treated better in the community (48%) or reported improvement in their relationships with friends and family (17%), some of whom supported the tattoo removal. JIA’s responses indicated a shift in some JIA’s self-image: nearly a quarter of reported more confidence and an improved self-esteem (25%), while 8% acknowledged that other persons observed JIA’s willingness to change and
engage in prosocial activities. Tattoo removal was connected to positive outcomes among JIA in the labor market (18%), including greater responsibilities and trust at work, salary increases, and new employment opportunities. Overall, 20% of JIA reported fading of their tattoos, and 33% of JIA reported few changes in their lives and attributed this outcome to the lengthy treatment process and time needed for tattoo fading.

Discussion

The removal of unwanted tattoos has largely been studied in community samples (Madfis & Arford, 2013) and less is known about this topic as it applies to justice-involved adults (JIA). Despite the lack of data as it pertains to JIA, tattoo removal is supported as one reentry strategy by law enforcement agencies (Bakir & Tod, 2008). This mixed-methods study advances our understanding of reasons for seeking and perceived benefits of tattoo removal as experienced by a diverse group of JIA. These data are critical for reentry services and implications of this research are described below.

Interest in tattoo removal may stem from a changing identity, separation from a group, pressure to remove the tattoo, and labor market and emotional health factors (Heimlich, 2010; Klein et al., 2014; Liszewski et al., 2015; Madfis & Arford, 2013; McIlwee & Alster, 2018; Shelton & Peters, 2008; Varma & Lanigan, 1999). This study found that JIA share these experiences and these data align with the Good Lives Model of Offender Rehabilitation which suggests that JIA, like other persons, are often seeking to fulfill their personal purpose (Vandevelde et al., 2017). In this way, tattoo removal can help JIA align their outward appearance with changes in identity and their current status, personal goals, or roles in the community (Foran et al., 2020).

Public and structural stigma, stigma by association and self-stigma were experienced by JIA in this study and motivated their interest in tattoo removal; these internally and externally motivated conditions have been identified elsewhere (Bos et al., 2013; Link & Phelan, 2001). In particular, JIA in this study often sought to present a better image and receive better treatment in the workplace. However, the perceived effects of tattoo removal were mixed. For example, some JIA reported improved interpersonal interactions and self-esteem while undergoing tattoo removal and others noted that initiating tattoo removal signaled to themselves and others, a commitment to change and personal growth. In contrast, several JIA reported fewer benefits due to the slow fading of their tattoos. These findings reflect some of the constraints of the tattoo removal process: it is time-consuming and results can vary depending on numerous factors (e.g., age and size of tattoo, amount and type of ink used, layering of tattoo, depth of tattoo ink, and skin pigmentation; Kabir Sardana & Ghunawat, 2015); these were unmeasured in this study but will be assessed in future research.

Our results suggest that tattoo removal may enhance mental well-being, however, removing or attempting to remove the visible marks [tattoos] may be insufficient for reducing stigma and facilitating external identity change. Prior studies have found that JIA experience multiple stigmatized identities which may also negatively impact the
reentry experience (LeBel, 2012a, 2012b). Longitudinal research is needed to further clarify the mental health effects of tattoo removal for JIA.

Labor market participation among JIA is tenuous and national studies find that unemployment among formerly incarcerated persons is at least 27% (vs. ~5.2% for the general population; Couloute & Kopf, 2018). This study found that at baseline, 36% of participants were unemployed and 54% were employed full or part time; potentially, working JIA may be especially motivated to seek tattoo removal. Foran et al., found that providing tattoo removal facilitated achievement of employment goals among JIA (Foran et al., 2020).

This study’s qualitative data revealed that tattoo removal benefits included greater trust by employers and customers and for some, increased economic compensation; these outcomes may directly affect JIA and their families due to increased resources to support the social determinants of health associated with well-being (e.g., food insecurity, housing, transportation, and health insurance coverage; Nowotny & Kuptsevych Timmer, 2018; Testa & Jackson, 2019). However, studies conducted with general populations examining the effects of tattoos on wages and employment are inconsistent (French et al., 2016). The follow-up quantitative data revealed that about one-half of JIA did not report changes in pay rate or employment status. Several factors may account for these outcomes. For example, tattoo fading is a slow process and JIA often have multiple tattoos, not all of which are targeted by JIA for removal, thus it may not be possible to fully address all sources of tattoo-related stigma. Additionally, some JIA were lost to follow up, including those who left the program because they perceived success in the removal process or made other strides in their reentry trajectory. Additional research is needed to identify the direct and indirect benefits (e.g., recidivism, employment, mortality, and violence) of tattoo removal. In particular, research that employs a longitudinal cohort approach is needed. As noted by LeBel, JIA experience multiple barriers to labor market engagement, including a low educational attainment, racial/ethnic minority status, and the stigma of being justice-involved (LeBel, 2012a).

Exploring the optimal structure of the tattoo removal program is also needed as some programs restrict removal to visible or gang tattoos. Yet, JIA may face stigma or discrimination in situations private skin becomes visible (e.g., beach, pool where torsos/backs/upper arms are exposed; for women, if wearing clothes with lower necklines; Bakir & Tod, 2008; Funk & Todorov, 2013; Bekhor et al., 1995). Our clinical experience and the present data show that having unwanted tattoos may affect mental well-being, identity, and self-confidence. Consequently, the tattoo removal program described in this study does not restrict the number, content, or location of tattoos being removed nor length of participation in the program. Longitudinal mixed methods research is needed to determine the range of health and social outcomes that may be derived from receiving laser tattoo removal.

U.S. federal law enforcement agencies have identified tattoo removal as helpful to the reentry process (Bakir & Tod, 2008). However, barriers to accessing this service include the high out-of-pocket cost of treatment (e.g., $400/session, possibly >$2,800 for large tattoos; Ho & Goh, 2015; Huang et al., 2022). In the U.S., some communities
have offered tattoo removal to reentrants yet, these services may be suspended due to lack of funding (Spooner et al., 2017; Whetzel & McGrath Jr, 2019). Since tattoo removal is a time-consuming process, these findings point to a clear need for institutionalization of tattoo removal programs with protected funding and staffing. For example, the program which underlies this study is sustainable due to its integration within a medical school’s dermatology residency program; by training dermatologists in laser medicine through a service learning opportunity, the program is able to provide free tattoo removal services to JIA (Ojeda et al., 2019) while also building awareness among medical professionals regarding the dermatological needs of JIA (Humphrey & James, 2021). Technological improvements are also needed to shorten treatment period in order to better support clinical engagement (Kent & Graber, 2012).

**Limitations**

This study has limitations; findings may not reflect the experiences of all JIA in the community or incarcerated individuals since patients self-select into the program. A larger sample with a longitudinal design is needed to confirm findings. Data are based on self-report and may be subject to under or over-reporting or recall bias. The base-line survey did not ask about the source of tattoos (e.g., prison/non-prison, professional vs. amateur) nor did it distinguish between blue and black ink; these are areas for further inquiry. Patients’ clinical traits (e.g., skin color, tanning, and treatment for other conditions) and tattoo characteristics (e.g., amount, color, type and depth of pigment, and tattoo size and age) can also affect the duration of the removal and fading processes (Kent & Graber, 2012) and satisfaction with the treatment. A small number of women participated in this program, thus future research studies should recruit a larger sample of JIA women to determine whether tattoo removal motivations and outcomes vary by gender. Nevertheless, this novel study fills a gap in the literature vis-à-vis unwanted tattoos among JIA and perceived outcomes among receiving laser tattoo removal.

**Conclusions**

Findings from this demonstrate that tattoo removal is desired by some JIA and can aid in redefining one’s identity after experiences of stigmatization (Phelan & Hunt, 1998). This behavior is consistent with Goffman’s assertion that stigmatized individuals may seek to modify the devalued traits in order to prevent or eliminate negative responses that transform the individual from “normal” to a “non-person” (Goffman, 1963). The investigators’ experience indicates that eliminating financial barriers and providing services outside of standard working hours can support access to this service which is perceived to aid in reducing stigma resulting from having visible and discrediting tattoos. Importantly, however, tattoo removal should be considered as one element of comprehensive programing that addresses JIA’s emotional, social, and economic needs (e.g., educational support, job readiness, access to physical and behavioral health care, housing, executive function, and soft skill building; Bunn, 2019; LeBel, 2012b). Finally, nearly three-quarters of this sample included JIA
from racial/ethnic minority groups reflecting over-policing in the U.S. of African American, Black, and Latino communities (Finkeldey & Demuth, 2019; Gase et al., 2016). JIA experience overlapping social identities due to membership in diverse social groups (e.g., justice system involvement, gender, racial/ethnic group membership, and low socioeconomic status; LeBel, 2012a; Moradi & Grzanka, 2017; Nowotny & Kuptsevych Timmer, 2018). The stigmatization and discrimination of these intersecting identities may adversely affect the well-being of JIA not only through direct and observable outcomes but also through opportunities that become unavailable due to stigma and policies enacted in public and private spheres (Sheppard & Ricciardelli, 2020). Extant research points to the clear need to develop robust structural, community-level, and client-level interventions that address the various sources of stigma for JIA in order to support their reentry. Additionally, systemic efforts are needed to transform public and private institutions so they are anti-racist and do not discriminate against JIA (e.g., California Assembly Bill 1008) (California Legislative Information, 2017; Greene, 2007; Kendi, 2019).

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