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### Authors

Ragmanauskaite, Laura  
Kim, Jin  
Zhang, Qi  
[et al.](#)

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# Self-reported tattoo prevalence and motivations in transgender adults: a cross-sectional survey

Laura Ragmanauskaite<sup>1</sup> BS, Jin Kim<sup>2</sup> MPH, Qi Zhang<sup>2</sup> MSPH, Kevin M Luk<sup>1</sup> MD MPH, Darios Getahun<sup>3</sup> MD PhD MPH, Michael J Silverberg<sup>4</sup> PhD MPH, Michael Goodman<sup>2</sup> MD MPH, Howa Yeung<sup>1,5</sup> MD MSc

Affiliations: <sup>1</sup>Department of Dermatology, Emory University School of Medicine, Atlanta, Georgia, USA, <sup>2</sup>Department of Epidemiology, Emory University Rollins School of Public Health, Atlanta, Georgia, USA, <sup>3</sup>Department of Research & Evaluation Kaiser Permanente Southern California, Pasadena, California, USA, <sup>4</sup>Division of Research, Kaiser Permanente, Northern California, Oakland, California, USA, <sup>5</sup>Regional Telehealth Service, Veterans Affairs Veterans Integrated Service Network 7 Southeast Network, Decatur, Georgia, USA

Corresponding Author: Howa Yeung MD MSc, Department of Dermatology, Emory University School of Medicine, 1525 Clifton Road NE, Atlanta, GA 30322, Tel: 404-727-9838, Fax: 404-712-4920. Email: [howa.yeung@emory.edu](mailto:howa.yeung@emory.edu)

## Abstract

**Purpose:** To assess the prevalence and motivations for obtaining tattoos among transgender persons.

**Methods:** A survey of 696 transgender persons recruited from the Study of Transition, Outcomes, and Gender (STRONG) cohort evaluated the prevalence of tattoos and motivations for acquiring tattoos.

**Results:** Transmasculine persons were more likely than transfeminine persons to have tattoos (66.5% versus 24.0%,  $P < 0.05$ ). Most commonly reported motivators were personal preference, aesthetics, and/or symbolism (61.8%). Scar coverage and replacement of anatomic features accounted for 10.2% of responses.

**Conclusion:** Future studies should look into the relationship between tattoos and health status in the transgender population.

*Keywords: transgender adults, tattoo prevalence, tattoo motivations, gender identity*

## Introduction

In 2015, approximately 29% of U.S. adults had at least one tattoo and a recent study reported the number to have increased to 31.5% in 2019 [1,2]. Tattoos have previously been shown to be more common among cisgender men. Although the prevalence is

increasing among both genders, gender-specific prevalence trends are changing with some studies finding cisgender women to be more likely to have tattoos [3]. Tattoos are most common among individuals between the ages of 25-34 [2]. Once seen as a symbol of belonging to marginalized and fringe social sub-groups, tattoos are now common among all parts of society [1,4].

Commonly reported motivations for tattoos tend to fall into common themes including beauty/art/fashion, individuality, personal narrative, group affiliations, resistance, sexuality, physical endurance, and spirituality [5]. The predominance of these reasons varies by culture, age, and gender. A qualitative analysis of Canadian "tattoo enthusiasts" found their motivations to include identity expression and "emotion work" or "desirable messaging" to self [6]. An Australian cohort of young adults with tattoos reported greater need for uniqueness as compared to those without and listed celebration of significant events/people and self-expression as their main motivations for obtaining tattoos [7]. Culture, sexuality, individuality, and rebelliousness were commonly reported reasons by men and body reclamation and fashion were commonly listed reasons by women [2,3,8].

It is important to note that the extant literature on frequency and predictors of tattoos has focused only on cisgender individuals. By contrast, no

corresponding data are available for transgender populations. We aimed to assess the prevalence of and motivations for getting tattoos in transmasculine (TM) and transfeminine (TF) persons.

The study protocol received approvals from the Institutional Review Boards of Emory University, Kaiser Permanente Northern (KPNC) and Southern (KPSC) California, and Kaiser Permanente Georgia (KPGA). We surveyed 696 transgender persons included in the Study of Transition, Outcomes, and Gender. Survey methods were described in detail elsewhere [9]. Cohort eligibility included current enrollment in one of the participating health plans in KPSC, KPSC, and KPGA. Study participants were confirmed transgender adults above 18 years old with at least one relevant International Classification of Diseases, Ninth Edition (ICD-9) code confirmed by manual review of de-identified free text excerpts obtained from clinical notes.

We limited the survey to participants who reported sex recorded at birth that differed from their current gender identity and categorized them as TF or TM persons. During survey administration, participants were asked if they currently had tattoos and then asked to choose or write in "for what reason" they had them. Two investigators (LR, KML) independently reviewed free text responses identifying emerging themes. Responses were then categorized according to emerging themes or re-assigned to the reasons already listed in the survey; any disagreements in the categorization of responses were adjudicated by the third investigator (HY). Prevalence of and reasons for tattoos were compared between TM and TF persons using  $\chi^2$  tests in SAS version 9.4 (SAS Institute, Cary, NC), with  $P < 0.05$  considered significant in 2-sided tests. The Mantel-Haenszel method was used to control for age differences when calculating prevalence ratios.

The survey response rate was 696 out of 2136 (33%), and included 346 TM and 350 TF participants [9]. Transmasculine participants were significantly younger, with 72.9% of TM and 34.6% of TF participants being under the age of 40 at the time of the survey completion (**Table 1**). There were no significant differences regarding the race and/or ethnicities between the TM and TF participants. The

majority of the participants (56.3%) identified their race and/or ethnicity as non-Hispanic whites. The cohort also included 2.9% of participants who identified as non-Hispanic black, 6.9% who identified as Asian/Pacific Islander, 19.1% who identified as Hispanic, and 14.8% who identified as mixed, other, or declined to answer.

The proportion of participants reporting at least one tattoo was 45%; TM persons were more likely to have tattoos than TF persons (66.5% versus 23.7%;  $P < 0.05$ ). The crude prevalence ratio of tattoos for TM versus TF was 2.80 (95%CI: 2.29, 3.43). After controlling for age categories, the adjusted prevalence ratio was 2.53 (95%CI: 2.03, 3.15). The most common reasons for getting a tattoo for both TM and TF persons were preference, aesthetics, and symbolism (61.8%). Transmasculine persons had significantly more responses in this category as compared to TF persons (167 versus 45;  $P < 0.05$ ). Gender affirmation and identity expression accounted for 14.3% and 7.3% of the responses, respectively. Scar coverage and replacement of anatomic features represented 10.2% of the responses. Transmasculine persons were more likely to report identity expression, scar coverage, and body ownership as motivations for their tattoo(s) than TF persons (19 versus 6, 27 versus 6, 10 versus 2, respectively;  $P < 0.05$ ).

## Discussion

Our data indicate that a significantly greater proportion of TM participants had tattoos compared to TF participants. The most recent data from the United States, revealed more cisgender women reporting tattoos as compared to cisgender men [2]. More TM as compared to TF participants were in the age group most likely to have tattoos, though that alone does not explain the difference in prevalence [2]. Future studies may examine potential predictors in the number, location, or visibility of the tattoos among transgender people.

Motivations for getting a tattoo vary in both individual and sociodemographic groups [10,11]. Some of the commonly reported themes include beauty, remembrance, and fun [3,10,11]. In the U.S.,

**Table 1.** Participant demographics and tattoo use and reasons in transmasculine and transfeminine persons.

N (%)	All	Transmasculine	Transfeminine	P
<b>Total</b>	<b>696 (100.0)</b>	<b>346 (49.7)</b>	<b>350 (50.3)</b>	
<b>Age at time of survey (years)</b>				<0.05
18-29	217 (31.2)	148 (42.8)	69 (19.7)	
30-39	156 (22.4)	104 (30.1)	52 (14.9)	
40-54	168 (24.1)	69 (19.9)	99 (28.3)	
≥55	155 (22.3)	25 (7.2)	130 (37.1)	
<b>Race/ethnicity</b>				0.66
Non-Hispanic White	392 (56.3)	191 (55.2)	201 (57.4)	
Non-Hispanic Black	20 (2.9)	13 (3.8)	7 (2.0)	
Asian/Pacific Islander	48 (6.9)	25 (7.2)	23 (6.6)	
Hispanic	133 (19.1)	68 (19.7)	65 (18.6)	
Other / Mixed / Declined	103 (14.8)	49 (14.2)	54 (15.4)	
<b>Current tattoo status</b>				
No	343 (49.3)	100 (28.9)	243 (69.4)	<0.05
Yes	313 (45.0)	230 (66.5)	83 (23.7)	
Missing information	40 (5.7)	16 (4.6)	24 (6.9)	
<b>Reason for tattoo<sup>a</sup></b>				
Cover scars	33 (9.6)	27 (11.7)	6 (7.2)	<0.05
Replace anatomic feature	2(0.6)	2(0.9)	0 (0.0)	0.25
Gender identity affirmation	49 (14.3)	29 (12.6)	20 (23.8)	0.17
Identity expression (other than gender)	25 (7.3)	19 (8.2)	6 (7.2)	<0.05
Mistake or Regret	10 (2.9)	3 (1.3)	7 (8.3)	0.34
Body ownership	12 (3.5)	10 (4.3)	2 (2.4)	<0.05
Preferences, aesthetics & symbolism	212 (61.8)	167 (72.6)	45 (53.6)	<0.05

<sup>a</sup>Totals from the themes may not add up to the total number of participants as responses may have contained multiple themes.

the two most commonly reported reasons for getting a tattoo include embellishment and commemorating milestones [2]. Similarly, our study found that personal and aesthetic preferences were strong motivators, especially for TM persons.

The participants in our study reported body ownership as a motivator at a similar rate to the most current research in cisgender persons [2]. Although cisgender women are more likely to report body reclamation or embellishment as reasons for obtaining tattoos, our study found that similar themes were more common among TM persons. Unique to this study's transgender person cohort was the theme of gender affirmation, which was reported at similar rates among TM and TF persons.

Tattoos have been associated with a higher prevalence of mental health disorders, high-risk behaviors, and lower quality of life scores in

cisgender persons [12]. Nevertheless, tattoos may have important benefits, particularly for scar camouflage or replacement of anatomic features (i.e. nipple regimentation), and may be considered as part of scar treatment. Tattoos also serve as a way to express or communicate one's identity, including gender identity. Future studies should investigate mental health and the quality-of-life impact of tattoos in the transgender community, particularly in the context of gender affirmation.

The present study relied on self-reported information regarding current tattoos and the responses were not validated by examination. Although unlikely, a possibility for reporting inaccuracies may exist. The free text option in the survey allowed participants to provide specific reasons for obtaining tattoos. Care was taken to accurately categorize the themes of the responses.

Nevertheless, varying levels of nuance and ambiguity in free text responses may impact both the specificity and the generalizability of the reported themes.

Only 33% of the eligible participants responded to the survey, limiting generalizability of the findings [9]. Furthermore, the participants in the study had insurance and may not be representative of the general transgender population in the US [13].

## Conclusion

Our study found a higher prevalence of tattoos in TM persons compared to TF persons. Significant motivators for obtaining tattoos among transgender persons were scar coverage and body modification,

suggesting that tattoos may be part of gender affirmation.

## Potential conflicts of interest

Dr. Yeung has received honoraria from Syneos Health.

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## References

1. Shannon-Missal L. Tattoo takeover: Three in ten Americans have tattoos, and most don't stop at just one. April 26, 2016. Available from: <https://theharrispoll.com/tattoos-can-take-any-number-of-forms-from-animals-to-quotes-to-cryptic-symbols-and-appear-in-all-sorts-of-spots-on-our-bodies-some-visible-in-everyday-life-others-not-so-much-but-one-thi/>. Accessed on July 2, 2020.
2. Kluger N, Seite S, Taieb C. The prevalence of tattooing and motivations in five major countries over the world. *J Eur Acad Dermatol Venereol*. 2019;33:e484-e486. [PMID: 31310367].
3. Kluger N, Misery L, Seite S, Taieb C. Tattooing: A national survey in the general population of France. *J Am Acad Dermatol*. 2019;81:607-610. [PMID: 30395921].
4. Koch JR, Roberts, A.E., Armstrong, M.L., Owen, D.C. Body Art, deviance, and American college students. *Social Science Journal*. 2010;47:151-61 [DOI: 10.1016/j.soscij.2009.10.001]
5. Wohlrab S, Stahl J, Kappeler PM. Modifying the body: motivations for getting tattooed and pierced. *Body Image*. 2007;4:87-95. [PMID: 18089255].
6. Atkinson M. Tattooing and civilizing processes: body modification as self-control. *Can Rev Sociol Anthropol*. 2004;41:125-46. [PMID: 15290832].
7. Tiggemann M, Hopkins LA. Tattoos and piercings: bodily expressions of uniqueness? *Body Image*. 2011;8:245-50. [PMID: 21561820].
8. Swami V. Marked for life? A prospective study of tattoos on appearance anxiety and dissatisfaction, perceptions of uniqueness, and self-esteem. *Body Image*. 2011;8:237-44. [PMID: 21641893].
9. Owen-Smith AA, Gerth J, Sineath RC, et al. Association Between Gender Confirmation Treatments and Perceived Gender Congruence, Body Image Satisfaction, and Mental Health in a Cohort of Transgender Individuals. *J Sex Med*. 2018;15:591-600. [PMID: 29463478].
10. Kluger N. Tattooing and psoriasis: demographics, motivations and attitudes, complications, and impact on body image in a series of 90 Finnish patients. *Acta Dermatovenerol Alp Pannonica Adriat*. 2017;26:29-32. [PMID: 28632882].
11. Dimitropoulos V, Brown CW, Jr., Ressa NA, Newman M. Reasons behind the ink. *Cutis*. 2016;98:320-2. [PMID: 28040806].
12. Mortensen K, French MT, Timming AR. Are tattoos associated with negative health-related outcomes and risky behaviors? *Int J Dermatol*. 2019;58:816-24. [PMID: 30677140].
13. Koebnick C, Langer-Gould AM, Gould MK, et al. Sociodemographic characteristics of members of a large, integrated health care system: comparison with US Census Bureau data. *Perm J*. 2012;16:37-41. [PMID: 23012597].