# Motivation for Contemporary Tattoo Removal

# A Shift in Identity

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**Objective:** To compare the results of a 1996 study of tattoo possession and motivation for tattoo removal with those of a 2006 study, in light of today's current strong mainstream tattoo procurement and societal support within the young adult population.

Design: Descriptive, exploratory study.

**Setting:** Four dermatology clinics in Arizona, Colorado, Massachusetts, and Texas.

**Participants:** The 2006 study included 196 tattooed patients (66 men and 130 women).

**Main Outcome Measures:** Incidence of purchase and possession risk, as measured by a 127-item survey and factor analysis.

**Results:** In contrast to the 1996 study, more women (69%) than men (31%) presented for tattoo removal in 2006. Women in the 2006 study were white, single, col-

lege educated, and between the ages of 24 and 39 years; they reported being risk takers, having stable family relationships, and moderate to strong religious beliefs (prayer and closeness to God). Commonly, tattoos were obtained at approximately 20 years of age, providing internal expectations of uniqueness and self-identity. Tattoo possession risks were significant, cited when the quest for uniqueness turned into stigmata (P < .001), negative comments (P < .003), and clothes problems (P < .004).

**Conclusions:** In both the 1996 and the 2006 studies, a shift in identity occurred, and removal centered around dissociating from the past. However, in the 2006 study, more women than men were notably affected by possession risks. Societal support for women with tattoos may not be as strong as for men. Rather than having visible tattoos, women may still want to choose self-controlled body site placement, even in our contemporary society.

Arch Dermatol. 2008;144(7):879-884

ATTOOS CONTINUE TO APpeal.<sup>1-6</sup> The incidence of tattoos among young adults aged 18 to 30 years is approximately 25%,<sup>1,4,7-13</sup> and it is estimated to approach 40% in the next few years.<sup>2</sup> In Texas, registered tattoo studios (>1300 in 2006) have increased 55% annually since 1996.<sup>14</sup>

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While a tattoo is often thought to be a masculine trait,<sup>9,15</sup> it has been reported that women make up 45% to 65% of the tattooed population.<sup>16,17</sup> Uniqueness and gender seem to be motivating factors in tattoo procurement. In one study involving career-oriented women with tattoos,<sup>17</sup> many of whom were counselors, nurses, physicians, lawyers, and business managers, deliberate decision making and self-

controlled body site placement were described as assistive for their tattoo satisfaction. The tattoos symbolized individuality and identity,<sup>17</sup> projecting both femininity and personal strength.<sup>18,19</sup> Tying in with gender, findings from multiple body art studies cite "it helped me feel unique"<sup>4,9-12,15,17,20</sup> as a major purpose for getting a tattoo. Risk taking is normal when pursuing their need for uniqueness and is viewed as a positive way to "build their personal distinctiveness."<sup>2,10,21,22</sup>

While the vast majority of individuals who are tattooed are pleased with their skin markings (up to 83%),<sup>4,7-13</sup> the popularity and prevalence of tattoos often mean that dermatologists are increasingly hearing stories of regrets and requests for tattoo removal.<sup>23</sup> Estimated prevalency rates of dissatisfied tattoo wearers hover around 20%,<sup>2,8</sup> with a smaller number who actually seek removal (6%).<sup>3</sup> In 2006, the American Society of Dermatologic Sur-

Author Affiliations: School of Nursing, Texas Tech University Health Sciences Center (Drs Armstrong, Saunders, and Owen), and Department of Sociology, Anthropology, and Social Work, Texas Tech University (Drs Roberts and Koch), Lubbock, Texas; and Harvard Medical School and Wellman Center for Photomedicine, Massachusetts General Hospital, Boston (Dr Anderson). gery reported a reduction in laser procedures for tattoo removal in 2005 (6%) compared with 2001 (8%) and 2003 (9%).<sup>2</sup> The reason for this reduction could be the transition of tattoo removal services from medical offices to "spa or clinic" environments (or even tattoo studios), creating an underreporting of removal activities. Tattoos, which have classically been considered as "socially marginal products," can create purchase and possession risks that could be strong motivators for removal.<sup>15,20,24</sup> Purchase risks center around procedural problems with the artist, product, expense, pain, and/or inexperience concerning decision making about the tattoo.<sup>24</sup> Possession risks include the dissonance between the purpose (or meaning) of the tattoo and the societal response to it.<sup>24</sup>

Motivation for tattoo removal was initially studied in 1996 with 105 patients. The study included men (61%) and women (38%) between the ages of 17 and 62 years.<sup>25</sup> Many (75%) of them were single adolescents between 12 and 19 years of age at the time of their tattooing. The purposes cited for the tattoos included impulsive decision making, "to be part of a group," "just wanted one," and "for the heck of it." While the tattoos were acquired for internal expectations of self-identity at an early age, tattoo removal also seemed to be internally motivated to dissociate from the past and to improve self-identity. Similar findings were cited in a study involving 68 patients in Wales.<sup>26</sup> Waiting time for removal in both studies was at least 14 years.<sup>25,26</sup>

#### **METHODS**

### DESIGN

To compare the motivation for tattoo possession and removal in 1996 with today's contemporary acceptance and removal of tattoos, we conducted a descriptive, exploratory study at several locations. Exempt study status for this research was granted from the institutional review board of the Texas Tech University Health Sciences Center, Lubbock. Since 1999, the author team has collected and published data on tattooing and body piercing research (http://www2.tltc.ttu.edu/jkoch/Research /Tattoo%20Team.htm).

#### QUESTIONNAIRE

The study purpose and benefits were presented on the front page of the survey, and participants were told that completion of the survey indicated their voluntary participation. No names or clinics were asked to ensure candidness. Risks, other than those normally found in day-to-day activities, were not anticipated. Data were collected using a 127-item survey, which was written at a 7.7 grade level and based on current information in the medical literature as well as on applicable, reliable questions from previous body art studies. Two scales used in previous body art research were included in the survey<sup>4.9</sup>: the reliabilities-for-thepurpose scale was 0.86 and the risk scale was 0.84.

The 2006 survey included the following sections: (1) obtainment of the tattoo, 37 questions (Cronbach  $\alpha$ =0.73); (2) removal of the tattoo, 11 general questions, 13 questions regarding reason for removal (Cronbach  $\alpha$ =0.81), and 26 questions regarding contributing factors (Cronbach  $\alpha$ =0.92); and (3) general subject demographics, with 40 questions regarding risk taking, education, and religious perspectives. The questions were either multiple choice or Likert-type statements with scores ranging from 1 (strongly disagreed or unlikely) to 5 (strongly agreed or very likely). Ethnicity was included to note tattoo acquisition patterns; the ethnic categories were not defined and participants self-reported.

# DATA COLLECTION AND ANALYSIS

Letters of agreement for data collection were obtained from 4 clinics providing tattoo removal services in Arizona, Colorado, Massachusetts, and Texas. Clinic representatives estimated the survey tools that they thought might be completed, and a total of 750 surveys were sent. Data collection ran from May 2005 through January 2006. According to institutional review board stipulations to avoid coercion, a notice was posted in waiting areas of the respective clinic lobbies inviting clients who were there to request laser tattoo removal to complete a survey. No tabulation was kept on how many individuals either saw or reviewed the survey. If the clients completed the survey (20-30 minutes), they placed the survey within a provided envelope, which they then sealed and gave to the office staff; 196 (26%) usable surveys were returned. The surveys were kept in a secured drawer until it was time to send them to the statistician. A commercially available statistical software package (SPSS Version 14; SPSS Inc, Chicago, Illinois) was used for data analysis. Cross-tabulation and  $\chi^2$  analysis were performed.

#### RESULTS

The typical respondents in our 2006 study, which examined tattoo possession and motivation for removal, were female (69%), white, single, college educated, and between the ages of 24 and 39 years (**Table 1**); their religious beliefs (prayer and closeness to God) were moderate to strong. Hispanics, the second highest represented ethnic group, also had more tattooed women than men.

# TATTOO PROCUREMENT

More than half of the tattoos (Table 1) were obtained between the ages of 16 and 23 years (mean [SD] age, 20 [6.6] years). While both men and women obtained significantly more tattoos in high school and college, fewer women sought them in the elementary grades and military. Other nonsignificant gender differences included (1) having stable and/or positive family relationships, (2) more than half (60%) reporting pleasure with their tattoo, and (3) having a lifetime tattoo (men, 170 tattoos; women, 355 tattoos). More tattoos were placed in visible (arms or ankles, 49%) locations than in semivisible (chest or back, 39%) or intimate (groin or breasts, 20%) sites. Major purposes for getting a tattoo included "helped me feel unique" (n=82 [44%]), "helped me feel independent" (n=60 [33%]), and "made life experiences stand out for me" (n=52 [28%]). Factor loadings of the purpose scale indicated a strong associated underlying theme that the tattoo supported internal expectations of uniqueness and self-identity (eigen value, 5.2 [47% of variance]; range, 0.59-0.79).

#### TIME OF TATTOO REMOVAL

Respondents were between the ages of 14 and 73 years (mean [SD] age, 30 [ 8.6] years) and had waited an av-

Variable	No. (%)			
	Males (n=58 [31%]) <sup>a</sup>	Females (n=130 [69%]) <sup>a</sup>	$\chi^2$ Test, <i>P</i> Value	
Single	48 (84)	96 (81)	.61	
Ethnicity				
White	42 (73)	83 (63)		
Hispanic	11 (19)	25 (19)		
Religion			.40	
Very/moderately religious	34 (61)	71 (57)		
Pray, daily/more	25 (42)	43 (34)		
Pray, never	15 (27)	23 (18)		
Feel close to God	34 (63)	81 (65)		
Time of tattoo obtainment (150 respondents)	(	· · ·	$\chi_3^2 = 17.0, .001$	
Elementary	6 (13)	6 (6)	/6	
High school	21 (44)	52 (51)		
College	12 (25)	42 (41)		
Military	9 (19)	2 (2)		
Age at time of tattoo, y		( )	.29	
12-15	9 (16)	20 (16)		
16-18	23 (41)	58 (41)		
19-23	16 (29)	30 (23)		
≥24	8 (14)	21 (16)		
Age, current, y	0 (1.1)	()	.04	
≤17	3 (5)	2 (2)		
18-23	4 (7)	18 (14)		
24-29	19 (33)	54 (41)		
30-39	21 (37)	43 (33)		
$\geq 40$	10 (18)	13 (10)		
Education	10 (10)	10 (10)	.76	
≤High school	2 (3)	3 (3)		
High school graduate	16 (28)	27 (21)		
College	27 (47)	65 (50)		
Graduate school	13 (22)	35 (27)		
Parental relationships	10 (22)	00 (27)	.09	
Father, neither positive nor negative	20 (35)	39 (32)	.00	
Father, positive	26 (45)	49 (40)		
Mother, neither positive nor negative	20 (43)	26 (21)		
Mother, positive	31 (53)	65 (51)		

<sup>a</sup>Numbers will not always add up to 100 because of missing data.

erage of 10 years before seeking removal. Again, there were no significant gender differences regarding reasons for being at the removal clinics. The participants came (1) requesting tattoo removal for the first time (25%), (2) returning, as part of a removal series (55%), or (3) returning, this time for more tattoos to be removed (20%); some had already tried other removal methods, such as recoloring (n=43 [23%]) and retattooing (n=38 [20%]). More than half (66%) of the respondents were not interested in getting more tattoos, but one-third (34%) said they would seek them again.

Two methods were used to examine motivation for tattoo removal: (1) purchase and possessions risks<sup>25</sup> were reviewed and possession risks were evident; and (2) the conceptual integrity of the scales for tattoo removal reasons and contributing factors were evaluated to better understand the motivation for removal. The main reasons and contributing factors for tattoo removal are summarized in **Table 2**. The major themes (factor loadings) of the tattoo removal reason and contributing factor scales were highly associated with internal influences about their

unique product: "they were tired of it," "they just grew up," "it was embarrassing them," "they now had to hide their tattoo," and "they wanted to remove it." A "new job/ career" was another reason for tattoo removal.

#### WOMEN SEEKING TATTOO REMOVAL

While the women had been pleased with their tattoos when they first got them, possession risks (**Table 3**) over the past 1 to 5 years had affected their present feelings about their tattoos. These women had experienced significantly more negative comments (P < .003) and stigma problems (P < .001) in public, workplace, or school settings than had the men with tattoos. Problems with clothes were also significant (P < .004) and led them to use cosmetics, creams, and adhesive bandages to cover their tattoos.

## SEEKING UNIQUENESS

Among those respondents who had answered that their tattoo had "helped me feel unique" (n=82 [44%]), gen-

Reason <sup>a</sup>	%	Contributing Factor <sup>b</sup>	%
Just decided to remove it	58	Got tired of it <sup>c</sup>	68
Suffered embarrassment	57	Just grew up <sup>c</sup>	66
Lowered body image	38	Having to hide the tattoo <sup>c</sup>	
New job/career	38 Negative comments from "significant other"		32
Problems with clothes		Lack of time for decision	
Experienced stigma	25 Negative parental comments		26
An occasion (eg, birthday, marriage, award, newly found independence)		Negative comments at work, in public, and at school <sup>c</sup>	24

<sup>a</sup> Tattoo removal reason scale: Cronbach  $\alpha$  = 0.80. Factor analysis: eigen value, 4.2 (32% of variance); range, 0.44-0.74.

<sup>b</sup> Contributing factors for removal scale: Cronbach  $\alpha$ = 0.92. Factor analysis: eigen value, 10.1 (38% of variance); range, 0.60-0.94.

<sup>c</sup> P<.05.

der differences were again evident (Table 3); more women than men were significantly worried about "going too far or becoming addicted" to tattoos; they also had significantly more piercings (average number, 1.9) and remained satisfied with the piercings. Also, this subset of women who had used their tattoos to help them feel unique reported significantly more "risk-taker" and "deviancy" feelings at the time of tattooing.

# COMMENT

The 2006 study provided a snapshot of those individuals who were dissatisfied with tattoos and who sought tattoo removal. It presented another opportunity to examine underlying motivations that had not been examined in sufficient depth in previous studies.<sup>25,26</sup> Yet, the study sample and the conclusions we can draw from the study results are constrained by (1) the use of selfreporting anonymous surveys, which can produce bias, inaccurate recall, or inflation; and (2) the small crosssectional sample of respondents who described their opinions regarding why they wanted their tattoos removed. This survey methodology did allow us to identify the key factors behind motivation for tattoo removal and enabled us to develop better scales to describe and monitor changes in body art trends more completely.

When the results of the 1996 study outcomes<sup>25</sup> were compared with those of the 2006 study, a different societal picture of tattooing was noted. Respondents in the 2006 study had more tattoos (2.8 vs almost 2.0), were older when they got the tattoo (16-23 years of age in high school and college vs 12-19 years of age in high school), and were younger when they presented for removal (average age, 30 years vs 33 years). Waiting time for removal was shorter (10 years vs 14 years). Tattoos in general, and especially those on women, were worn on more visible body locations (88%) than they were 10 years ago (82%).<sup>3-5</sup> Unfortunately, no relational questions were asked about body placement and specific tattoo removal sites. Also, even though the subjects were seeking tattoo removal, more than one-third of them were still interested in getting more tattoos, suggesting that further research should be conducted on whether the removal of the tattoo is more about an actual design problem than about the feelings and effects associated with the tattoo.

Tattoos can be obtained to demonstrate group affiliation,<sup>3,8,13</sup> which then puts them into a subculture of their

own. Yet, while tattoos can be used to establish group identity, they can also be used for individual differentiation.<sup>8,9,12</sup> More than 40% of the persons who had chosen the tattoo to help them feel unique or to seek uniqueness were disillusioned because their unique product had lost its luster and excitement.<sup>10</sup> In such cases, faster decisions of removal could be made, especially with readily available removal services, equipment, and personnel. Individual actions regarding removal were still about dissociating from the past,<sup>25</sup> as well as about shifting identity focus, to "move on," perhaps even to seek other products (or for some, another tattoo) that would again contribute to the need for uniqueness. Tiggemann and Golder<sup>22</sup> suggest that further research should be conducted in the tattooed population to examine whether seeking uniqueness is more important in the motivationfor-procurement phase or in the possession phase.

A new job or career was also a motivation for tattoo removal. Negative attitudes toward tattoos in the workplace could revert to "negative overt behavior," with perceived interference for a tattooed individual's achievement.<sup>27-30</sup> Findings of perceived lowered credibility,<sup>28</sup> competence, and sociability<sup>30</sup> still continue to surface and to diminish the image of tattoo wearers in the workplace. While some employers (eg, Boeing, Wal-Mart, Wells-Fargo, Yahoo, and Ford Motors) support the perceived distinctiveness (uniqueness) of nonoffensive tattoos in the workplace, others do not (eg, Tenet Healthcare, Starbucks, and White & Case).<sup>31</sup>

Historically, getting a tattoo has been a male-dominant activity, but now women have more than half of the tattoos. For women, their tattoo procurement may be a way to break out of the gender norms and take some social risk by visually displaying their assertive identity. Yet, there still may be many members of society who consider tattoos on women to be a "transgression of gender boundaries."<sup>25,27</sup>

In the 2006 study, a shift in gender presentation for tattoo removal was observed; in the 1996 study, more men than women requested tattoo removal, but in the 2006 study, more women (including Hispanics)<sup>9</sup> did. While men also reported some of these same tattoo problems leading to removal, there seemed to be more societal fallout for women with tattoos, as the tattoos began to cause embarrassment, negative comments, and clothes problems and no longer satisfied the need for uniqueness.

## Table 3. Factors That Significantly Affected Tattooed Women to Request Tattoo Removal

	No. (%)			
Factors (No. of Respondents)	Males	Females	$\chi^2$ Test, <i>P</i> Value	
More tattoos in high school and college (n=150)			$\chi_3^2 = 17.1, .001$	
Elementary	6 (13)	6 (6)	//0	
High school	21 (44)	52 (51)		
College	12 (25)	42 (41)		
Military	9 (19)	2 (2)		
Time needed for removal decision (n=187)	· · /	( )	$\chi^2_4 = 11.10, .03$	
A few min	13 (22)	25 (19)		
Waited awhile, then a few min	18 (31)	38 (30)		
1-2 wk	9 (16)	13 (10)		
A few mo	11 (19)	19 (15)		
>1 y	7 (12)	34 (37)		
If unique, worried more about "going too far or becoming addicted" to tattoos (n=81)	· · /	· · · ·	$\chi_1^2 = 4.02, .04$	
Yes	1 (5)	15 (25)		
No	20 (95)	45 (75)		
If unique, had more piercings (n=81)	· · /	· · /	$\chi^2_2 = 8.86, .01$	
No	17 (81)	26 (43)	·· ·	
1-2 piercings	3 (14)	24 (40)		
$\geq 3$	1 (5)	10 (17)		
If unique, still liked piercings (n=69)	· · /	· · /	$\chi^2_2 = 11.7, .003$	
No piercings	10 (67)	16 (30)		
Yes, liked them	2 (13)	34 (63)		
No, did not like them	3 (20)	4 (7)		
Removed, clothes problems (n=184)	· · /	( )	$\chi^2_4$ = 30.0, <.001	
Strongly disagreed	32 (57)	46 (36)		
Disagreed	16 (29)	14 (11)		
Uncertain	4 (7)	5 (4)		
Agreed	1 (5)	25 (20)		
Strongly agreed	1 (2)	38 (30)		
Removed, stigma problems (n=184)	· · /	· · /	$\chi^2_4 = 10.9, .03$	
Strongly disagreed	29 (52)	63 (49)		
Disagreed	14 (25)	19 (15)		
Uncertain	1 (2)	12 (9)		
Agreed	4 (7)	15 (12)		
Strongly agreed	1 (2)	19 (15)		
Removed, hiding the tattoo (n=183)	. ,	. ,	$\chi^2_4$ =23.9, <.001	
Strongly disagreed	17 (30)	16 (13)		
Disagreed	13 (23)	12 (9)		
Uncertain	6 (11)	6 (5)		
Agreed	10 (18)	35 (28)		
Strongly agreed	10 (18)	58 (45)		
Removed, "tired of it" (n=182)	· · /	· · /	$\chi_4^2 = 12.9, .01$	
Strongly disagreed	16 (29)	18 (14)		
Disagreed	6 (11)	7 (6)		
Uncertain	4 (7)	7 (6)		
Agreed	19 (34)	37 (29)		
Strongly agreed	11 (20)	57 (45)		
Removed, "grew up" (n=183)	· · /	· · /	$\chi^2_4 = 17.1, .002$	
Strongly disagreed	17 (30)	21 (17)		
Disagreed	9 (16)	8 (6)		
Uncertain	4 (7)	3 (2)		
Agreed	14 (25)	33 (26)		
Strongly agreed	12 (2)	62 (49)		
Removed, negative comments in public, workplace, and school (n=183)	· /	· · /	$\chi^2_4 = 15.1, .004$	
Strongly disagreed	30 (54)	57 (45)	<i>x</i> . <i>y y y y y y y y y y</i>	
Disagreed	18 (32)	21 (17)		
Uncertain	3 (5)	10 (8)		
Agreed	5 (9)	20 (16)		
Strongly agreed	None	19 (15)		
		()		

These negative internal and external outcomes contributed to the possession risks and to the subsequent identity shift for tattoo removal.<sup>16,17,25</sup>

Negative responses were also documented among career-oriented women with tattoos.<sup>25</sup> Strong tattoo support from their significant others and friends was

counterbalanced by negative remarks about the tattoos from their fathers, physicians, and the public. It is evident, then, that negative societal connotations still exist for women with tattoos. Therefore, for women to avoid the possession risks of their tattoos, as in the past, they may still need to deliberately think about controlling the body placement of their tattoos to reduce cognitive dissonance and to increase their psychological comfort.

In summary, tattooing is ancient, but popularity, social acceptance, tattoo inks, and laser technology are rapidly changing. How these changes will affect tattooing and tattoo removal is unknown. In the 2006 study, there was a prevalence of women seeking tattoo removal; their motivations for obtaining tattoos were often a desire for uniqueness, whereas self-reported embarrassment, negative comments, and clothes problems were motivations for tattoo removal, diminishing their feelings of uniqueness associated with the tattoo.

Accepted for Publication: September 20, 2007.

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Author Contributions: Dr Armstrong takes responsibility for the accuracy of the data analysis. Dr Roberts had full access to all the data in the study and takes responsibility for the integrity of the data. *Study concept and design*: Armstrong, Roberts, Koch, Saunders, Owen, and Anderson. *Acquisition of data*: Armstrong, Roberts, and Koch. *Analysis and interpretation of data*: Roberts. *Drafting of the manuscript*: Armstrong, Roberts, Saunders, Owen, and Anderson. *Critical revision of the manuscript for important intellectual content*: Armstrong, Roberts, Koch, Saunders, and Owen. *Statistical analysis*: Roberts. *Obtained funding*: Armstrong. *Administrative, technical, and material support*: Armstrong and Owen. *Study supervision*: Armstrong, Roberts, Koch, and Saunders.

Financial Disclosure: Dr Armstrong is an education consultant for Freedom2Ink. Dr Anderson is a cofounder and a consultant for Freedom-2, LLC; he also conducts research with laser equipment under sponsored research agreements with his employing institution.

**Funding/Support**: This work was supported in part by the Research and Practice Committee of the School of Nursing, Texas Tech University Health Sciences Center.

**Role of Sponsor:** The funding sponsor had no role in the design or conduct of the study; in the collection, analysis, or interpretation of the data; or in the preparation, review, or approval of the manuscript.

Additional Contributions: Pam Gandy, School of Nursing, Texas Tech University Health Sciences Center, and the office staff and physicians in Arizona, Colorado, Massachusetts, and Texas assisted with data collection.

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