

# The Hairlessness Norm Extended: Reasons for and Predictors of Women's Body Hair Removal at Different Body Sites

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**Abstract** The study aimed to explore the motivations behind and predictors of the practice of body hair removal among women. A sample of 235 Australian female undergraduate students completed questionnaires asking about the frequency and reasons for body hair removal, as well as measures of media exposure. It was confirmed that the vast majority (approximately 96%) regularly remove their leg and underarm hair, most frequently by shaving, and attribute this to femininity and attractiveness reasons. A sizeable proportion (60%) also removed at least some of their pubic hair, with 48% removing most or all of it. Here the attributions were relatively more to sexual attractiveness and self-enhancement. Further, having a partner and exposure to particular forms of media predicted pubic hair removal. It was concluded that pubic hair removal is currently different in connotation from leg or underarm hair, but is likely to be on the increase. It can only further the belief that women's bodies are unacceptable the way they are.

**Keywords** Body hair · Hairlessness norm · Hair removal · Pubic hair

## Introduction

There is no doubt that current Western ideals of beauty for women promote a youthful appearance: a slim long-legged body, with firm high breasts, and smooth and perfect skin (e.g., Thompson et al. 1999; Wolf 1991). The impossibility of this

prescription renders many women not only perpetually dissatisfied with their bodies (Rodin et al. 1985), but also highly motivated to alter their bodies to match the ideal, as illustrated by the existence of multi-million dollar diet, exercise, cosmetic and cosmetic surgery industries.

One particular aspect of the ideal that has received relatively little research attention or theorizing is the prescription for smooth hairless skin. This is most likely because the practice of removing unwanted body hair is so normative in Western cultures as to go unremarked. By far the majority of women in the USA (Basow 1991), UK (Toerien et al. 2005) and Australia (Tiggemann and Kenyon 1998; Tiggemann and Lewis 2004) remove their leg and underarm hair. Indeed, shaving their legs or underarms is one concrete way in which women can act to bring their body closer to the ideal. Over time, these actions have come to be accepted as everyday and commonplace behaviours that form a "natural" part of good grooming and go unquestioned.

Challenging this conceptualisation, Hope (1982) has pointed out that, far from being trivial, it is the very behaviours that are most taken for granted within a culture that are the most revealing for understanding that culture. Body hair is in fact an indicator of sexual maturity for both men and women, and its removal is not universal across cultures. But for women in Western societies, "femininity" is somewhat paradoxically associated with a *lack* of body hair. Toerien and Wilkinson (2003) argue that such hairlessness serves to contrast the feminine with the masculine and thereby contributes to the social construction of a "tamed", and "less than fully adult", femininity, although it needs to be noted that there is an emerging trend for men to also engage in some body hair depilation (Boroughs et al. 2005). More generally, given its biological significance, the normative removal of body hair by women

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provides a compelling illustration that a woman's body is not acceptable the way it naturally is (Chapkis 1986; Ussher 1989).

Over the last decade and a half, there have only been four surveys and two experimental studies investigating the removal of women's body hair. This in itself probably reflects that researchers share the assumption that body hair removal is a trivial and unimportant behaviour. In her seminal work, Basow (1991) showed that more than 80% of her sample of professional women in the USA removed their leg and underarm hair at least occasionally. Although feminists and lesbians were less likely to do so, the majority still removed their body hair. Somewhat later, Tiggemann and Kenyon (1998) reported that 92% of their Australian university sample removed their leg and underarm hair. Those women who did not remove their body hair were characterized by higher global self-esteem. These high rates of body hair removal have been confirmed in more recent Australian (97%, Tiggemann and Lewis 2004) and UK samples (over 90%; Toerien et al. 2005).

In all of these studies (Basow 1991; Tiggemann and Kenyon 1998; Tiggemann and Lewis 2004), women identified reasons to do with femininity and attractiveness as the most important in their hair removal practice. This has been confirmed in the qualitative accounts of Toerien and Wilkinson (2004). However, social normative reasons were much more important in their initial starting (Basow 1991) and in their attributions for other women (Tiggemann and Lewis 2004). Tiggemann and Kenyon (1998) have argued that women can recognise the normative pressures on them in general to shave, but are unwilling to accept these as the rationale for their own specific behaviour. The available evidence indicates that the attitudes and practices surrounding body hair removal are very similar across the cultural contexts of the United States, United Kingdom and Australia.

In the first experimental study, Basow and Braman (1998) investigated US college students' perceptions of a woman with and without visible body hair as presented in two short videos. Consistent with the authors' predictions, both men and women reported that the woman with body hair was seen as less sexually attractive, sociable and intelligent, and more masculine, than the same woman without body hair. In a follow-up experiment, Basow and Willis (2001) replicated these findings regardless of the explanation for the body hair (feminism vs. medical condition). Thus having a hairless body carries positive social connotations, and conversely, not removing body hair carries negative social consequences.

The strength and power of the hairlessness norm is illustrated by the intense negative social reaction to any violation of this norm. The women in Toerien and Wilkinson's (2004) qualitative study report that others had

commented about their visible body hair, using words like "gross", "disgusting" and "repulsive". This level of intensity and vehemence of feelings about body hair implies that its connotations are anything but trivial and also suggests a good deal of emotional involvement. In support, Tiggemann and Lewis (2004) found that negative attitudes toward body hair and women's level of personal commitment to hair removal were linked to feelings of disgust.

The previous studies, with the exception of the most recent (Toerien et al. 2005), have been limited to the study of leg hair and underarm hair. Of the participants of Toerien et al. (2005), 86% also reported having ever depilated their groin area, particularly their "bikini line", 82% eyebrows, and 41% face, with smaller numbers for nipples/breast, stomach, arms and toes. Further, the previous studies investigating reasons for hair removal (Basow 1991; Tiggemann and Kenyon 1998; Tiggemann and Lewis 2004) have supplied only one list of possible reasons for leg and underarm hair combined, on the assumption that reasons would be shared. However, hair in different regions of the body likely signifies different meanings. In particular, underarm hair is a secondary sexual characteristic of all sexually mature women. In contrast, there is greater variability in texture and colour of leg hair, with some women having very little. Thus the 'need' to shave legs will differ between women, while all women will 'need' to shave their armpits. Conversely, no woman needs to pretend she has no hair under her arms, but women can pretend they have naturally hairless legs. "Bikini line" hair is similarly variable, and hence women may like to present themselves as having none.

In the years since the previous studies, anecdotal evidence suggests that the practice of removing some or all of the pubic hair has increased. In South Australia, a prominent beauty salon started television advertising for triple x (xxx) waxing (removal of all pubic hair) in 2000. Women's fashion magazines have run articles on various styles of pubic hair and removal (e.g., "Brazilian or boho?", Cleo, January 2003; "The smart girl's guide to grooming", Cleo, June 2005). Perhaps sadly, the topic has reached magazines targeted at younger girls (e.g., "Bald or bushy", Dolly, September 2004), and there exist a number of teenage websites where girls raise the plaintive question as to whether they are "supposed to" shave off their pubic hair. In addition to fashion magazines, discussions about pubic hair removal also feature in episodes of television programs like *Sex and the City*, and reality shows like *Big Brother*.

Historical analysis by Hope (1982) demonstrates a strong relationship between media advertising and women beginning to remove leg and underarm hair. Thus we would expect the demonstrated media interest in pubic hair and its removal to both reflect, and contribute to, increasing rates of hair removal. This is particularly likely among young

women who are the primary targets of these media. However, to the extent that the removal of pubic hair is not yet normative, this presents a very opportune time to investigate its predictors. In so doing, we have the rare opportunity to document and gain a deeper understanding of the development of yet another potential social norm to which women are subject.

Pubic hair, like underarm hair, is a secondary sexual characteristic. Its removal very much signifies a youthful pre-adolescent body. However, pubic hair has a definite biological purpose as a safety net to protect the vulva from bacterial infections. Hence the practice of pubic hair removal may carry greater health risk than is generally recognised. For example, medical complications include local irritation, contact dermatitis, inflammation of the vulva, bacterial infections (e.g., folliculitis), or the spread of viral (e.g., herpes) infections (Tragar 2006).

Given the different significance of leg and underarm hair, it is likely that the reasons for removal may differ in a way that previous studies have not been able to disentangle. Certainly, one would expect the reasons for the removal of pubic hair to differ. Although pubic hair is something that all women have from puberty, it differs from leg, underarm and bikini-line hair in a number of ways. First, pubic hair is not normally visible. Thus its removal is likely to be more self-oriented. Indeed, current advertising and social commentary present it as glamorous, sexy and liberating. In this, the views of a significant other (sexual partner, boyfriend, husband) are also likely to be more important. Second, its removal is not yet normative and so requires conscious decision-making and cognitive processing. Third, it requires more effort and results in more discomfort and often pain. All these suggest that different motivations may underlie the decision to remove pubic hair.

The first aim of the present study was to provide baseline data on the frequency, methods and reasons for specifically pubic hair removal, in addition to underarm and leg hair removal, in young University-aged women. Such a baseline would be useful for the further study of pubic hair removal in other age groups, and for the study of changes over time. The second aim was to investigate more fully the reasons women provide for hair removal at different body sites. Finally, a preliminary investigation of possible predictors of body hair removal was undertaken. Three major hypotheses were formulated to achieve these aims.

**Hypothesis 1** By far the majority of women will remove their underarm and leg hair. A substantial number will also remove their pubic hair.

**Hypothesis 2** Pubic hair will be removed more for sexual attractiveness and self-enhancement reasons, and less for normative and femininity reasons, than are underarm and leg hair.

**Hypothesis 3** The removal of pubic hair will be related to having a partner, being younger, and to exposure to particular forms of popular media, namely fashion magazines and two television shows (*Sex and the City*, *Big Brother*).

## Method

### Participants

Participants were 235 female undergraduate students aged between 17 and 40 years ( $M=21.1$  years,  $SD=5.5$ ). They were recruited from psychology classes at Flinders University in South Australia and received course credit for their participation. Students at Flinders University come from a variety of socioeconomic backgrounds, are primarily local, and predominantly (>90%) Caucasian.

### Procedure

Participants completed questionnaires entitled “Women and grooming” during half-hour sessions run by the researchers. Questionnaires were completed anonymously and participants were assured of the confidentiality of their responses.

### Measure

#### *Body Hair and Removal Practices*

Participants first indicated (‘yes’/‘no’) whether they currently remove their leg, underarm, bikini line (where bikini line was defined as “hair at top of legs that sticks out of bathers”) and pubic hair, and whether they have ever done so. If yes, participants indicated the age when they had first done so, the major method, and the frequency of hair removal (‘daily’ to ‘never’). For pubic hair removal, participants were also asked to indicate how much pubic hair they removed beyond the bikini line [‘small amount (also known as x)’, ‘most (also known as xx)’, ‘all (also known as xxx)’].

#### *Reasons for Hair Removal*

Following Basow (1991), participants were asked to rate the importance of 18 potential reasons for their own removal of body hair on five-point Likert scales (1=‘not at all important’, to 5=‘extremely important’). In contrast to previous studies, this was done separately for three body sites: underarm hair, leg hair and pubic hair.

The reasons included the six most highly rated reasons for leg and underarm hair removal from previous studies, covering femininity/attractiveness and social normative factors (Basow 1991; Tiggemann and Kenyon 1998). However, additional reasons needed to be formulated for the removal of specifically pubic hair. These were based on reasons provided by women in informal group discussions held by the second author, and included fashion, confidence, self-expression, glamour, sexiness, excitement, being in control of their body, and to improve sexual experience.

A principal components analysis (followed by varimax rotation) of the reasons for underarm hair removal produced four clear factors (eigenvalues > 1). The resulting factor loadings are provided in Table 1. The first factor (eigenvalue = 5.97) accounted for 33.2% of the variance and contained four items clearly tapping social normative reasons (e.g., “It is expected these days”). The second factor (eigenvalue = 1.87, 10.4% of the variance) contained five items clearly related to sexual attractiveness (e.g., “It makes me feel attractive”). The third factor (eigenvalue = 1.46, 8.1% of the variance) contained four items that tapped femininity (e.g., “It makes me feel feminine”). Thus these well replicate Basow’s (1991) factor structure of normative and femininity/attractiveness reasons, with the latter here divided into two factors. The final factor (eigenvalue = 1.28, 7.1% of the variance) contained five items about the soft silky feeling, self-expression, being an exciting person, glamour and control, and was thus harder to describe succinctly. Here these items were subsumed under the label of “self-enhancement”. As can be seen from Table 1, only

one item “Men prefer women without body hair” loaded on more than one factor. This item loaded on the normative factor in addition to sexual attractiveness (although it was categorized as the latter due to the larger factor loading), as was the case in the original Basow (1991) study.

Accordingly, four corresponding scale scores were calculated by summing and averaging items that loaded on each factor. The resulting internal reliabilities (normative .77, sexual attractiveness .81, femininity .72, self-enhancement .70) were considered acceptable for scales with few items, as further indicated by the mean corrected item-total correlations (normative .58, sexual attractiveness .60, femininity .51, self-enhancement .47; Briggs and Cheek 1986).

### Media Exposure

Participants were first asked how often they read fashion magazines (e.g., Cosmo; 1 = ‘never’, 5 = ‘almost always’). They were then asked to approximate how many hours of television they watch each of the seven days of the week. These were summed to obtain a measure of total television viewing time. Some studies have shown that these simple measures of fashion magazine and television exposure predict other aspects of body image, for example, the desire to be thinner (see Tiggemann 2002, for a review). Last, participants were asked how often (1 = ‘never’, 5 = ‘nearly every time it was on’) they watched two specific programs: ‘Sex and the City’ and ‘Big Brother’. These were chosen as they represent, to our knowledge, the only two programs on television to explicitly discuss pubic hair removal.

**Table 1** Factor loadings of reasons for hair removal.

Reason	Component			
	1	2	3	4
All my friends do it	<b>.71</b>	.14	.13	.12
It is the current fashion	<b>.64</b>	.19	-.17	.37
People would look at me funny if I didn’t	<b>.73</b>	.12	.33	-.00
It is expected these days	<b>.82</b>	.12	.12	-.03
My boyfriend wants me to	.27	<b>.67</b>	.11	-.08
It makes sexual experience better	-.03	<b>.75</b>	.10	.30
Men prefer women without body hair	<b>.51</b>	<b>.64</b>	.04	.05
It makes me feel attractive	.28	<b>.54</b>	.47	.23
It makes me sexy	.13	<b>.65</b>	.36	.33
It makes me feel feminine	.13	.46	<b>.56</b>	.16
It makes me feel cleaner	-.01	.05	<b>.72</b>	-.03
It makes me feel good about myself	.09	.24	<b>.69</b>	.25
It makes me feel confident	.26	.20	<b>.63</b>	.20
I like the soft silky feeling	-.07	.20	.15	<b>.53</b>
It is a form of self-expression	.01	.05	.16	<b>.69</b>
It makes me feel like an exciting person	.19	.09	-.05	<b>.79</b>
It makes me feel glamorous	.15	.40	.21	<b>.54</b>
It makes me feel like I am in control of my body	.26	-.15	.47	<b>.53</b>

Factor loadings >.5 are in bold

## Background Variables

There were just two demographic variables. Participants were first asked their age. The second question asked whether (yes/no) they “currently have a partner (e.g., boyfriend)”.

## Results

### Frequency of Hair Removal

As predicted in hypothesis 1, the vast majority of women in this sample currently removed both their underarm (97.9%) and leg hair (94.9%). Of the five women who did not currently remove their underarm hair, only one had never done so. Of the 12 women who did not currently remove their leg hair, seven had done so in the past. Women had commenced these practices at close to puberty (underarm  $M=13.1$  years,  $SD=1.5$ ; leg  $M=12.9$  years,  $SD=1.4$ ). By far the most common method of removal was by shaving (underarm hair, 89.7%; leg hair, 89.6%), followed by waxing (underarm hair, 4.3%; leg hair, 7.8%). The modal frequency category for both was approximately twice a week. In total, 89.4% removed their underarm hair and 74.9% removed their leg hair at least weekly.

Considerably fewer, although clearly still the majority (74.5%), removed hair from their bikini line (85.1% had ever done so). Mean age at first bikini line hair removal was 15.7 years ( $SD=1.9$ ). The major methods were shaving (48.2%) and waxing (37.7%). Here the modal frequency was monthly (18.4%), followed by fortnightly (17.5%), with 7.8% reporting in summer but not winter. Nevertheless, 23.5% removed their bikini line hair at least weekly.

Finally, supporting the second part of hypothesis 1, fully 60.9% reported currently removing their pubic hair (75.5% ever). Mean age of commencement was 17.4 years ( $SD=3.5$ ). Here there was a greater spread in frequency, but 15.0% removed their pubic hair at least weekly. Shaving and waxing were equally popular methods (both 44.4%). Of those who currently remove their pubic hair, 20.4% removed a little (x), 43.7% removed most of it (xx) and 35.9% removed all of it (xxx). Thus 48.0% of the total sample reported removing most or all of their pubic hair. Those women who removed all their pubic hair were more likely to do so by waxing (60.8%) than shaving (37.3%).

### Reasons for Hair Removal

Table 2 displays the means for each of the reasons given by those women who currently remove their body hair. It can be seen that “It makes me feel cleaner” was the most highly endorsed reason for the removal of underarm and pubic hair, and was the third most important reason for leg hair.

For underarm hair, this was followed by the “femininity” reasons of feeling feminine, confident and good about oneself, as well as feeling attractive. For leg hair, the most important reason was “I like the soft silky feeling”, followed by the femininity and attractive reasons. For pubic hair, on the other hand, the sexual attractiveness reasons received relatively greater endorsement.

There were a total of 141 women who provided reasons for currently removing underarm, leg and pubic hair. For these women, the reasons for depilation of the different body sites can be directly compared. Formal analysis by a 3 (body site: underarm, leg, pubic)  $\times$  4 (reason: sexual attractiveness, social norms, femininity, self-enhancement) repeated measures ANOVA confirmed a significant main effect for body site [ $F(2,266)=23.69$ ,  $p<.001$ ,  $\eta_p^2 = .15$ ], whereby legs were most highly endorsed, and a significant main effect for reason [ $F(3,399)=166.55$ ,  $p<.001$ ,  $\eta_p^2 = .56$ ], whereby the femininity factor was most highly rated. However, these were modified by a significant interaction [ $F(6,798)=65.53$ ,  $p<.001$ ,  $\eta_p^2 = .33$ ]. Follow-up univariate tests indicated that there was a significant difference between body sites for each of sexual attractiveness [ $F(2,268)=30.26$ ,  $p<.01$ ,  $\eta_p^2 = .18$ ], social norms [ $F(2,276)=93.93$ ,  $p<.001$ ,  $\eta_p^2 = .41$ ], femininity, [ $F(2,280)=24.52$ ,  $p<.001$ ,  $\eta_p^2 = .15$ ], and self-enhancement reasons [ $F(2,280)=33.26$ ,  $p<.001$ ,  $\eta_p^2 = .19$ ]. As can be seen in Table 3, in support of hypothesis 2, sexual attractiveness and self-enhancement were more important reasons for pubic and leg hair removal than for underarm hair removal. On the other hand, social norms and femininity were less important reasons for pubic hair removal than for the other body sites.

As there may be a difference between those who shave a little of their pubic hair as opposed to those who wax the entire pubic area, these analyses were repeated for different amounts of pubic hair. It can be seen in Table 4 that those who removed the entire area endorsed many reasons more strongly. Specifically, they did so much more for sexual attractiveness [ $F(2,132)=7.59$ ,  $p<.001$ ,  $\eta_p^2 = .10$ ], femininity [ $F(2,138)=7.21$ ,  $p<.001$ ,  $\eta_p^2 = .10$ ] and self-enhancement reasons [ $F(12.97)$ ,  $p<.001$ ,  $\eta_p^2 = .16$ ], but not for normative reasons [ $F(2,136)=0.80$ ,  $p>.05$ ,  $\eta_p^2 = .01$ ].

### Relationship to Background and Media Exposure Variables

There were too few non-removers of underarm and leg hair to analyse group differences (minimal variance). However, for the background variables, those who removed their pubic hair were more likely to have a partner (64%) than those who did not [37%;  $\chi^2(1)=16.88$ ,  $p<.001$ ]. Overall, removers and non-removers did not differ on age [ $M_s=21.10$ , 21.04,  $t(233)=0.08$ ,  $p>.05$ ], but the subset of women who removed *all* their pubic hair were somewhat younger ( $M=19.96$  years) than those who removed some of their pubic hair [ $M=21.77$ ,  $t(140)=1.97$ ,  $p=.05$ ].

**Table 2** Mean ratings of reasons for hair removal at different body sites.

	Underarm ( <i>n</i> =223)	Leg ( <i>n</i> =229)	Pubic ( <i>n</i> =143)	All pubic ( <i>n</i> =51)
Normative				
All my friends do it	2.2	2.3	1.8	1.8
It is the current fashion	1.9	2.0	1.9	2.3
People would look at me funny if I didn't	<b>3.6</b>	<b>3.5</b>	1.9	1.8
It is expected these days	<b>3.5</b>	<b>3.6</b>	2.6	2.7
Sexual attractiveness				
My boyfriend wants me to	2.2	2.4	2.5	2.6
It makes sexual experience better	2.2	2.8	<b>3.7</b>	<b>4.2</b>
Men prefer women without body hair	<b>3.2</b>	<b>3.3</b>	<b>3.2</b>	<b>3.5</b>
It makes me feel attractive	<b>3.8</b>	<b>4.0</b>	<b>3.8</b>	<b>3.8</b>
It makes me sexy	<b>3.1</b>	<b>3.6</b>	<b>3.8</b>	<b>4.2</b>
Femininity				
It makes me feel feminine	<b>3.9</b>	<b>4.1</b>	<b>3.4</b>	<b>3.8</b>
It makes me feel cleaner	<b>4.4</b>	<b>4.0</b>	<b>4.2</b>	<b>4.4</b>
It makes me feel good about myself	<b>3.8</b>	<b>3.9</b>	<b>3.8</b>	<b>4.1</b>
It makes me feel confident	<b>3.8</b>	<b>3.9</b>	<b>3.6</b>	<b>4.0</b>
Self-enhancement				
I like the soft silky feeling	<b>3.0</b>	<b>4.2</b>	<b>3.5</b>	<b>3.8</b>
It is a form of self-expression	1.9	1.9	2.1	2.2
It makes me feel like an exciting person	1.4	1.5	2.1	2.7
It makes me feel glamorous	2.5	<b>3.0</b>	2.8	<b>3.1</b>
It makes me feel like I am in control of my body	2.6	2.7	2.8	<b>3.2</b>

Note: Reasons > 3 in bold

For media consumption, removers of pubic hair ( $M=2.89$ ) read more fashion magazines than non-removers [ $M=2.51$ ,  $t(228)=2.73$ ,  $p<.01$ ]. They were also more likely to watch the two specific programs of *Sex and the City* [ $M_s=2.87$ ,  $2.16$ ],  $t(233)=3.61$ ,  $p<.001$ ] and *Big Brother* [ $M_s=2.92$ ,  $2.32$ ],  $t(233)=3.32$ ,  $p<.001$ ], but not television in general ( $M_s=12.84$ ,  $11.94$ ,  $t=.89$ ,  $p>.05$ ).

Table 5 presents the correlations between *frequency* of hair removal for underarm, leg and pubic hair (which can be calculated for all participants) and background and media exposure variables. It can be seen that frequency of underarm hair removal was associated with being younger and watching Big Brother. Frequency of leg hair removal was not associated with any background or media variable. Frequency of pubic hair removal was associated with having a partner and watching Sex and the City and Big Brother. It needs to be noted, however, that frequency is an imperfect measure of commitment to hairlessness for methods other than shaving. A different measure, amount of pubic hair removed, was similarly correlated with having a partner, watching Sex and the City and Big Brother, and the reading of fashion magazines. Thus hypothesis 3 was largely supported (with the exception of age) for both frequency and amount of pubic hair removal.

## Discussion

As expected, the vast majority (approximately 96%) of University women remove their leg and underarm hair. This rate is comparable to that found in previous samples over the last decade or so (Tiggemann and Kenyon 1998; Tiggemann and Lewis 2004; Toerien et al. 2005), and illustrates the persistence and the power of the hairlessness norm. Three quarters (75%) of the sample also currently remove bikini line hair, and close to two thirds (61%) currently remove pubic hair beyond the bikini line.

The first aim of the present study was to provide baseline data on the frequency, methods and reasons for specifically pubic hair removal in young University-aged women. Here more than three quarters (76%) of the sample reported that

**Table 3** Mean ratings (standard deviations in parentheses) for hair removal factors for women who removed their body hair at all body sites ( $N=141$ ).

	Underarm	Leg	Pubic
Sexual attractiveness	3.00 (.99)	3.33 (.95)	3.38 (.93)
Social norms	2.76 (.99)	2.75 (1.01)	2.07 (.86)
Femininity	4.10 (.81)	4.11 (.86)	3.76 (.91)
Self-enhancement	2.30 (.84)	2.67 (.84)	2.66 (.90)

**Table 4** Mean ratings (standard deviations in parentheses) for reasons for pubic hair removal by amount of hair removed.

	Amount removed		
	Small (x) (n=28)	Most (xx) (n=62)	All (xxx) (n=51)
Sexual attractiveness	2.96 (.89)	3.25 (.95)	3.73 (.80)
Social norms	2.08 (.92)	1.96 (.81)	2.17 (.89)
Femininity	3.29 (.92)	3.68 (.91)	4.06 (.80)
Self-enhancement	2.01 (.55)	2.67 (.92)	2.99 (.82)

they had ever removed pubic hair and approaching two thirds (61%) currently did so. Further, the majority of these reported removing most or all of their pubic hair (48% of the entire sample), with the most popular method being waxing. As a hair removal method, waxing is both costly and painful, and thus likely indicative of serious commitment to pubic hair removal. Although there are no directly comparable data over time, less than one third (32%) of the sample of Toerien et al. (2005) reported that they had *ever* removed more than their bikini line hair. Given that the removal of pubic hair was not even considered in the earlier studies, one can but assume that there has been an enormous and continuing increase in this behaviour over the last decade. The present data should provide a useful baseline for future studies of changes in hair removal practices over time.

The second aim of the present study was to investigate the reasons for hair removal at different body sites. The present factor structure of reasons confirms the earlier categorization by Basow (1991) of the importance of femininity and sexual attractiveness (here separated into two factors), plus a normative factor, replicating Basow (1991; as well as Tiggemann and Kenyon 1998; Tiggemann and Lewis 2004). Indeed, femininity and sexual attractiveness reasons were the most highly rated for the removal of all of underarm, leg and pubic hair. However, femininity was relatively less highly rated and sexual attractiveness more so for pubic hair removal. Self-enhancement was also more highly rated for the removal of pubic hair, especially for those who removed all their pubic hair. Future research might usefully elaborate the meaning of self-enhancement through modification of the body. Thus minimally, the study has demonstrated that the reasons behind hair removal differ for different parts of the body. The removal of pubic hair, in particular, is associated with glamour and sexiness to a much greater extent than the more ‘mundane’ removal of underarm or leg hair. Nevertheless, it is interesting that the most highly endorsed ‘feminine’ item was the newly created item “it makes me feel clean”. This is consistent with Tiggemann and Lewis’s (2004) finding of a positive correlation between negative attitudes to one’s

body hair and disgust, but goes counter to the demonstrated health risks of particularly pubic hair removal.

As expected given its lower incidence, normative reasons were rated as lower for removal of pubic hair than for underarm or leg hair. Nevertheless, it needs to be noted that these ratings were also *very* low for underarm and leg hair. Thus this provides a telling example of what Hornsey and Jetten (2004) refer to as the “invisibility of conformity”. As we have argued previously (Tiggemann and Lewis 2004), such rationalization or failure to acknowledge the effect of normative pressures on their own behaviour may carry negative implications for women. Attributing their own hair-removal behaviour to femininity and sexual attractiveness reasons is exactly the kind of rationale that serves to keep women insecure about their bodies. Certainly having the lack of body hair associated with spurious hygiene (cleanliness) is a very sure way to keep women continuously shaving or waxing their underarms, legs, bikini lines and increasingly pubic areas, and of course buying the necessary products. Not surprisingly, the hair removal business has grown into a multi-million dollar industry (Black 2004).

The final aim was to begin the investigation of predictors of hair removal. In line with the notion that the removal of underarm and leg hair is unthinking, habitual, and normative behaviour, there was little prediction of these behaviours by the demographic and media variables (although frequency of underarm hair removal was associated with being younger and watching Big Brother). In contrast, both frequency and amount of pubic hair removal were related to having a partner. This is not surprising given that pubic hair (or its lack) is not normally visible outside a sexual relationship. Future research might investigate whether or not women feel pressured to remove their pubic hair by their partners. On the other hand, over one third of women who removed their pubic hair did not currently have a partner, although a more detailed question on sexual experience and number of sexual partners may have produced a stronger correlation. The anticipation of having

**Table 5** Correlations between frequency of hair removal at different body sites and background and media variables ( $N=235$ ).

	Underarm (freq)	Leg (freq)	Pubic (freq)	Pubic (amount)
Age	-.17*	-.10	-.02	-.04
Partner	.03	.09	.28**	.23**
Fashion mags	.09	.09	.11	.18**
Total TV	.05	-.08	.01	.04
Sex & the City	.10	.06	.17*	.25**
Big Brother	.16*	.13	.19**	.22**

\* $p < .05$ \*\* $p < .01$

a sexual partner may also play a bigger role. More interestingly, the frequency and amount of pubic hair removal was related to the reading of fashion magazines and watching of particular television programs, viz., *Sex and the City*, *Big Brother*. This is consistent with other research that shows a link between body image and the internalisation of the thin beauty ideal on the one hand, and media exposure in the form of fashion magazines and the watching of particular genres of television, but not total television viewing time, on the other (Tiggemann 2003, 2005). It is also consistent with Hope's (1982) conjecture that behaviour follows from advertising and media exposure.

Like all studies, the present results need to be interpreted within a number of limitations. First, the sample was one of convenience consisting of undergraduate students and hence was somewhat restricted in age and education level. Further, we did not obtain information on a number of demographic variables that might relate to hair removal, including sexual orientation, ethnicity, religious background, and extent of sexual experience. Second, there is some confounding between frequency and method of hair removal. Some methods (e.g., waxing) last longer and are thus less frequent than other methods (e.g., shaving). Future studies should disentangle these aspects in more detail. Third, as a first pass, the measurement of media exposure was relatively crude, although this perhaps renders the obtained positive correlations the more convincing. In addition, exposure to pornography (often depicting a hairless pubis) should also be assessed. Fourth, although the study has begun the task of identifying some predictors of hair removal, it needs to be acknowledged that there may be many other predictors of pubic hair removal than those few measured here. Finally, given its correlational design, the present study cannot unambiguously distinguish between whether media exposure leads to the uptake of a behaviour, or whether those women most dedicated to removing their body hair seek out particular forms of media. Most likely the causal sequence is complex and reciprocal.

At a general level, we have demonstrated that the removal of pubic hair is carried out for different reasons and has different predictors than the removal of underarm or leg hair. As its removal is not yet fully normative, future research has the opportunity to trace the development of this behaviour, although we are clearly a fair way along the process, with currently more than 60% of women removing at least some of their pubic hair (and the majority of these most of their pubic hair). Pubic hair differs importantly from underarm and leg (and unwanted facial hair) in that it is not normally visible to others in normal social interaction, hence its importance in sexual situations and as a means of self-enhancement as demonstrated here. Currently

pubic hair removal is still depicted as modern and liberating and glamorous, just as the removal of leg hair was in the 1940s (Hope 1982). Future studies might investigate its depiction over time, as well as any change in predictors, to see if its course will indeed mirror that of underarm and leg hair removal to become a banal everyday behaviour.

One can speculate, however, that the removal of pubic hair has a darker side. The increased popularity of "the Brazilian" (the complete denuding of the pubic area) signals a growing equation of hairlessness and sexiness, an equation that is entirely artificial, as sexual maturity is signalled by the presence, not absence, of pubic hair. This is consistent with a greater societal emphasis on sexiness in general. But here the connotations are particularly troubling. The complete removal of pubic hair is also removing a key marker of adult female sexuality. The result is a pre-pubescent-like body that is highly sexualised. Thus it is another practice that may contribute to the increasing objectification and sexualisation of young girls. Further, when young teenage girls question whether they "are supposed to" remove their pubic hair, we have yet another source of insecurity about the body. While the age of commencing this behaviour is somewhat older in the present study than that for underarm or leg hair removal, we believe it is likely to decrease over time. Thus it is important that future studies investigate this behaviour in younger samples of teenagers who are more likely to feel both anxious about their bodies and subject to peer and media pressures. Anecdotal accounts indicate that some young girls think about shaving their pubic hair almost immediately it grows (TeenHealthFX 2007). The broader social and psychological implications of teenage girls negating their womanhood in this way are yet to be seen.

In conclusion, the results of the present study support the argument that the removal of body hair is not a trivial and inconsequential behaviour as is often assumed. Its very universality illustrates the strength of the norm. To describe the feminine body ideal as a social construction is thus not to say it lacks power. As Toerien and Wilkinson (2003) point out, social constructions have concrete effects on our lives. The present study has extended previous research by investigating the reasons for hair removal from different parts of the body. In so doing, it has confirmed the normativeness of underarm and leg hair removal and its ascription to femininity and sexual attractiveness reasons. However, it has also documented a high level of pubic hair removal, as well as identifying a different set of reasons for the removal of pubic hair. Finally, the present study is the first to demonstrate a link between exposure to particular forms of media and hair removal.



## References

- Basow, S. A. (1991). The hairless ideal: Women and their body hair. *Psychology of Women Quarterly*, 15, 83–96.
- Basow, S. A., & Braman, A. C. (1998). Women and body hair: Social perceptions and attitudes. *Psychology of Women Quarterly*, 22, 637–645.
- Basow, S. A., & Willis, J. (2001). Perceptions of body hair on white women: Effects of labeling. *Psychological Reports*, 89, 571–576.
- Black, P. (2004). *The beauty industry: Gender, culture, pleasure*. New York: Routledge.
- Boroughs, M., Caffri, G., & Thompson, J. K. (2005). Male body depilation: Prevalence and associated features of body hair removal. *Sex Roles*, 52, 637–644.
- Briggs, S. R., & Cheeks, J. M. (1986). The role of factor analysis in the development and evaluation of personality scales. *Journal of Personality*, 54, 106–148.
- Chapkin, W. (1986). *Beauty secrets: Women and the politics of appearance*. Boston: South End Press.
- Cleo Magazine (2003). Brazilian or boho? *Cleo Magazine*, 363, 94.
- Cleo Magazine (2005). The smart girl's guide to grooming. *Cleo Magazine*, 392, 97.
- Dolly Magazine (2004). Bald or bushy. *Dolly*, 407, 80–81.
- Hope, C. (1982). Caucasian female body hair and American culture. *Journal of American Culture*, 5, 93–99.
- Hornsey, M. J., & Jetten, J. (2004). The individual within the group: Balancing the need to belong with the need to be different. *Personality and Social Psychology Review*, 8, 248–264.
- Rodin, J., Silberstein, L., & Striegel-Moore, R. (1985). Women and weight: A normative discontent. In T. B. Sondregger (Ed.), *Psychology and gender* (pp. 267–307). Lincoln: University of Nebraska Press.
- Teen Health, F.X. Retrieved June 2007 from <http://www.teenhealthfx.com/answers/Sexuality/subcategory.php?subsection=51>.
- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. Washington: American Psychological Association.
- Tiggemann, M. (2002). Media influences on body image development. In T. F. Cash, & T. Pruzinsky (Eds.), *Body Image: A handbook of theory, research, and clinical practice*. New York: Guilford.
- Tiggemann, M. (2003). Media exposure, body dissatisfaction and disordered eating: Television and magazines are not the same!. *European Eating Disorders Review*, 11, 418–430.
- Tiggemann, M. (2005). Television and adolescent body image: The role of program content and viewing motivation. *Journal of Social and Clinical Psychology*, 24, 341–361.
- Tiggemann, M., & Kenyon, S. J. (1998). The hairlessness norm: The removal of body hair in women. *Sex Roles*, 39, 873–885.
- Tiggemann, M., & Lewis, C. (2004). Attitudes towards women with body hair: Relationship with disgust sensitivity. *Psychology of Women Quarterly*, 28, 381–387.
- Toerien, M., & Wilkinson, S. (2003). Gender and body hair: Constructing the feminine woman. *Women's Studies International Forum*, 26, 333–344.
- Toerien, M., & Wilkinson, S. (2004). Exploring the depilation norm: A qualitative questionnaire study of women's body hair removal. *Qualitative Research in Psychology*, 1, 69–92.
- Toerien, M., Wilkinson, S., & Choi, P. Y. L. (2005). Body hair removal: The 'mundane' production of normative femininity. *Sex Roles*, 52, 399–406.
- Tragar, J. D. K. (2006). Pubic hair removal—Pearls and pitfalls. *Journal of Pediatric & Adolescent Gynecology*, 19, 117–123.
- Ussher, J. (1989). *The psychology of the female body*. New York: Routledge.
- Wolf, N. (1991). *The beauty myth*. New York: William Morrow and Company.