A cross-sectional study of UK academics suggests Santa Claus might be a professor

By Sarah Carter and Kristina Åström

Abstract

Aim
To investigate trends of facial hair among academic staff in UK universities.

Design
Cross-sectional study.

Subjects and setting
1,795 academic staff members. Data recorded from the websites of 23 UK universities.

Outcome measures
Name of university, department, gender, job title and facial hair status.

Results
Male professors were significantly more likely to wear a beard than any other male academic personnel ($\chi^2=53.98$; $P<0.001$).

Conclusions
For men, wearing a beard is associated with higher status in UK academic careers. This highlights the influence of physical characteristics in job selection and may have implications for the promotion of women in academia.

There have been many famous academic beards: Hippocrates, Louis Pasteur, Charles Darwin and David Bellamy, to name but a few. This led to the question: do great achievers tend to grow beards, or are beards a cause of success? Or, are there more fundamental and persistent reasons why men indulge in face furniture?

Evolution of facial hair Man has been referred to as the naked ape. There are several hypotheses to explain why humans evolved with decreasing amounts of body hair.[1] A popular theory is that the loss of body hair may have been due to early hominids venturing from the shady forests out into the hotter savannahs to hunt. They would, therefore, need less hair. However, the counter argument to this is that bare skin would increase heat gain and risk of sun damage.

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Another hypothesis is that early humans were once aquatic or semi-aquatic mammals. Body hair was shed due to it being a poor thermal layer under water. However, this theory is criticised for failing to explain why hairlessness would have been retained after eons of evolutionary change. In addition, neither the body-cooling nor the aquatic-ape theories fully explain the difference in body hair in modern human males and females.

An alternative theory, proposed by Pagel and Bodmer,[1] is that hair was lost in order to reduce parasites, such as ticks and fleas, which may have transmitted disease. Hair in some areas of the body, such as the pubic and underarm areas, might have been retained because it aids pheromonal signalling between the sexes. Sexual selection has allowed females to evolve with less visible body hair than males.

The enduring facial hair trend in men, however, is thought to have the function of representing aggression and potential for reproductive success due to the role of testosterone in producing it.[2] A large or jutting jaw is seen as a threat display in both chimpanzees and humans. Facial hair increases the perceived size of the lower face and, therefore, could be seen as a signal of threat and dominance.[3] Recent experimental studies support this view. Muscarella and Cunningham[2] asked undergraduate students to rate photographs of men, with either a beard and moustache or no facial hair, using an adjective check list. They found that men with facial hair were rated as older and more aggressive.

Do beards make men more attractive? Several studies have found that women find beards attractive on men, although it depends on how the study is conducted. Studies in which photographs are rated seem to yield different results than studies that ask opinions directly. One study, conducted in the 1970s, found that both women and men rated bearded faces as more attractive, masculine, dominant, mature, industrious and creative.[4] This result is unlikely to reflect a fashionable period of facial hair, as later findings show. Male and female undergraduate students (n=114) were asked to rate pictures from recent yearbooks. Bearded men were rated significantly higher than non-bearded men on masculinity, aggression, dominance and strength.[5] However, when women were asked directly whether they find beards attractive they were less likely to be affirmative.[6] This seems to suggest that facial hair is more attractive on a subconscious level.

Are beards and career success related? If facial hair affects success in love, does it also affect career success? Evidence certainly suggests that facial hair provides some information about the personality of a prospective employee. Findings from one study indicated that wearing facial hair was deemed more acceptable in "liberal" occupations, such as lecturing or art, compared with "conservative" jobs, such as in the military, in banks or in the law courts.[7]

Facial hair has also been associated with perceptions of intelligence and education. Faces rated as likely to be of an educated and intelligent professional (such as a doctor, professor or psychologist) tended to have a beard, glasses and a bald head. The opposite features were attributed to salesmen, farmers and factory workers.[7]

This current study investigated facial hair trends among academic staff in medical schools, schools of pharmacy and other university departments in the UK. We asked the question: "Does the use of a beard promote academic progression?" Sixteen members of our 18 strong research group are female. Would we, and do we, face discrimination?

Method

Websites for all medical schools and schools of pharmacy in the UK were searched for publicly available staff information. Other departments within these universities together with a sample of other UK university departments were selected from the Universities and Colleges Admissions Services (UCAS) list[9] and searched. If the selected departments or universities did not

Figure 1: No facial hair (hospital chief pharmacist)

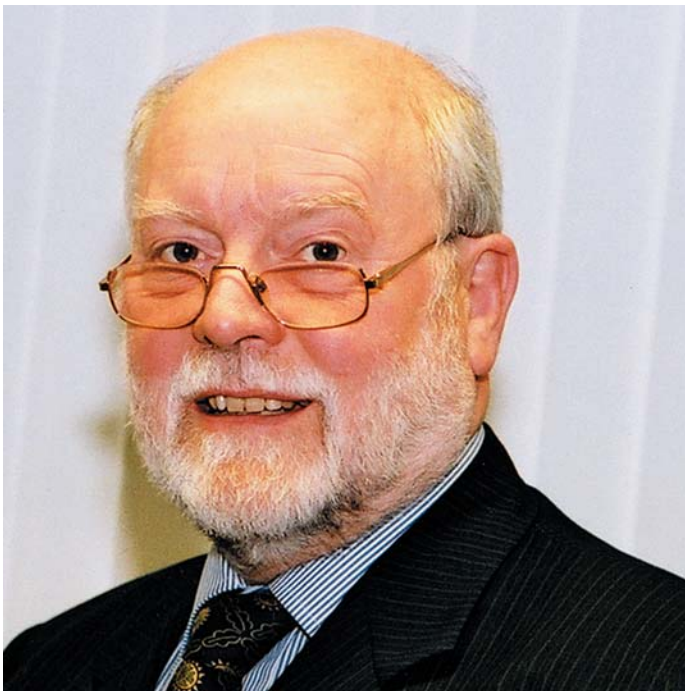

Figure 2: Full beard (professor)

Figure 3: Intermediate (goatee; superintendent pharmacist)

Figure 4: Intermediate (moustache; Council member)

have websites containing the required information, another was chosen at random from the UCAS list. One of the authors coordinated the sampling of universities to prevent repetition.

The following data were recorded: name of university, department, gender, job title and amount of facial hair. Only academic faculty members were included. PhD students and administrative staff were excluded. Categories of job titles were pre-defined as professor, reader, senior or principal lecturer, lecturer and research fellow. In addition, facial hair was categorised as full beard, intermediate (moustache or goatee) or no facial hair (see Figures 1–4, for examples from leading members of the pharmacy profession). Any unspecified or ambiguous information regarding gender, job title, or amount of facial hair was coded as missing.

Regular meetings of the research team were held to discuss categorisation issues and ensure quality and uniformity of data collection, coding and data entry. Data were entered into an SPSS v.12.0.1 database and analysed by the research team after normal office working hours.

Results

Data were collected from 23 universities (a total of 11 disciplines), resulting in 1,795 academics being rated. Cases whose job descriptions were initially coded as "doctor, but unspecified job title" were subsequently excluded from the analysis (n=50). The sample comprised professors (n=534; 31.3 per cent), readers (n=119; 7.0 per cent), senior lecturers (n=294; 17.2 per cent), lecturers (n=629; 36.9 per cent), and research fellows (n=130; 7.6 per cent). Table 1 shows the proportion of staff with facial hair in each discipline, in order of descending hairiness.

Facial hair and academic status The sample consisted of a majority of male academics (n=1,352; 75.3 per cent). Of these, 24.5 per cent had facial hair (n=331). No females had visible beards, moustaches or goatees from the photographs viewed. Subsequent

Table 1: Proportion of staff with facial hair (males only)

Academic department	Percentage of staff with facial hair	Total number of staff sampled
English	32.2	118
Pharmacy	29.1	127
Psychology	27.2	136
Sociology	26.9	108
Engineering	23.4	64
Humanities	22.6	31
Medicine	22.3	197
Chemistry	22.1	271
Physics	19.9	277

analysis was, therefore, performed only on males in the sample.

Of those with facial hair, a full beard was more common than intermediate facial hair; 62.8 per cent (n=208) had a full beard and 37.2 per cent (n=123) sported an intermediate beard.

Nearly one in five male professors had a full beard (n=100; 18.7 per cent). Professors were significantly more bearded than any other group (see Table 2; $\chi^2=53.98$; $P<0.001$). Lecturers and research fellows were the groups which contained the largest proportion of staff with no facial hair (n=550; 87.4 per cent and n=116; 89.2 per cent, respectively).

Discussion

Principal findings and implications The findings show that, for men, a beard is associated with higher status in UK academic careers.

Bearded men are often considered more attractive than those with no facial hair.[5] As attractive individuals are treated more positively than less attractive individuals in a variety of job-related outcomes, such as predicted success, promotion and hiring decisions,[10] are bearded men more likely than their non-bearded counterparts to be employed and promoted? If true, it is likely that these decisions may be made subconsciously. When women were asked directly whether they found beards on men attractive they tended to reply that they did not.[6] Yet both women and men rate bearded faces as more attractive than non-bearded faces.[4] It is thought that initially beards served as a threat signal during male-to-male confrontation; but do they persist today due to females selecting those successful males despite, rather than because of, their facial hair?[3] Thus, it may be that we do not find beards attractive per se, but that the qualities facial hair represent, such as masculinity and strength, are attractive.

Bearded men are also perceived as being more aggressive than non-bearded men.[2] This is thought to be due to the role of testosterone in producing facial hair. It is possible that increased aggression facilitates employment and success in promotion. In addition, individuals perceive beards to be associated with educated and intelligent men,[7] qualities deemed desirable for male university professors. Similar to perceptions of attractiveness discussed earlier, it is possible that these perceptions, and the decisions based on them, are also subconscious. One study gave participants the task of selecting a fictitious candidate for a job.[8] Although participants disagreed with statements such as "facial hair affects job performance" and "physical characteristics should play a role in the evaluation of job applicants", they tended to select full-bearded and clean-shaven hypothetical candidates over those with a moustache, even though all candidates were equally suitable for the job. Indeed, facial characteristics can be a deciding factor when faced with candidates who possess similar qualifications.[10]

Our study also showed that academic pharmacists were ranked second out of all disciplines in hairiness. Are they more aggressive, dominant or intellectual? There is currently no other evidence to explain this phenomenon and it is clearly an area for future research.

An alternative explanation for the association of academic status and facial hair is that when men reach the top of the academic career ladder they grow a beard. This may be because they are too busy to shave, or they may need to stroke the beard as an aid to intellectual thought. Or, they may (perhaps subconsciously) feel peer pressure to grow a beard to appear more professorial. Due to the research design we were unable to uncover any causal relationships and, therefore, we offer these hypotheses for further testing.

The results of the present study have profound implications for the way in which academic positions are filled in UK university departments.

First, if bearded men are more likely to achieve higher positions, whether or not due to the perception that they are more intelligent, where does that leave women? Previous research shows that women are significantly under-represented in high status jobs in UK universities.[11] Second, it seems highly likely that employees' physical characteristics can influence an employer's decision over employment or promotion, even subconsciously. There is evidence to suggest that when we first meet someone we categorise them on the basis of physical indicators such as age and attractiveness[10] and judge them against our own intrinsic stereotype of that category. We may, therefore, equate physical signals with qualities such as fitness as a mate or employee.[2] In an age of anti-discrimination, this type of evaluation is unwelcome yet inevitable. If facial features are a source of such subliminal cues others are also likely to be influential, such as hair colour, body weight or race.

"The literature on beardedness stands as just one line of empirical testimony to the potency of evaluative judgement . . . in interpersonal encounters."[12]

Limitations Data depended on the quality of the university or department website. Many departments did not have photographs of staff, or other required information. In addition, although a strict coding frame was established, data were collected by several researchers and could, therefore, have been subject to coding error.

Future research A larger data set would allow investigation into whether the facial hair trend exists in each discipline. In addition, it is not known if beards cause success in academia or if facial hair grows as a consequence of academic accomplishment. A longitudinal study is needed to explore this further.

Table 2: Percentage of male academic staff with facial hair within academic grade

	Professor	Reader	Senior Lecturer	Lecturer	Research Fellow
Beard	21.4	16.7	13.6	10.5	12.8
Intermediate	8.8	5.2	12.4	8.4	5.1

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