

# Can shoe size predict penile length?

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**Objective** To establish if the 'myth' about whether the size of a man's penis can be estimated from his shoe size has any basis, in fact.

**Subjects and methods** Two urologists measured the stretched penile length of 104 men in a prospective study and related this to their shoe size.

**Results** The median stretched penile length for the sampled population was 13 cm and the median UK shoe

size was 9 (European 43). There was no statistically significant correlation between shoe size and stretched penile length.

**Conclusion** The supposed association of penile length and shoe size has no scientific basis.

**Keywords** penile length, correlation, shoe size, masculinity

## Introduction

The penis appears in virtually every aspect of life; medicine, arts and culture, religion, media and common folklore. Penile length is often a common denominator, with the well-held belief that a longer penis is a measure of increased masculinity. Many believe that the size of a man's penis can be estimated by assessing various other parts of his body, notoriously his shoe size [1]. Because there is uncertainty about the nature of the relationship between a man's shoe size and penile length, we conducted a prospective study to scientifically address the issue.

## Subjects and methods

The study comprised 104 men consulting for various urological reasons; no men had congenital or acquired abnormalities of the penis. The nature of the study was fully explained to the men and verbal consent was obtained. In the flaccid state the penis has no fixed length, which is known to vary in response to touch, temperature, bodily activity and other environmental influences. Thus measurements were made immediately after the men undressed, to minimize the effects of temperature.

The true physiological length of the penis can only be obtained when the penis is fully erect; it was not feasible for the present study to measure this variable and thus an indirect method was used. Two previous studies have

shown that stretched penile length is a valid estimate of erect length [2,3]. Thus the linear distance from the symphysis pubis to the tip of the glans along the dorsal aspect, under maximal extension of the phallus, was recorded using a measuring tape. All lengths were measured by two urologists and recorded to the nearest 0.5 cm. The age and shoe size (converted to the British scale) was documented for each subject and all data stored confidentially on a personal computer. The results were assessed statistically using a least-squares regression model, with the level of significance chosen as  $P < 0.05$ .

## Results

The mean (range) age of the 104 men was 54 (17–84) years; the age distribution was biphasic, with peaks in the fourth and eighth decades (Fig. 1a). The median (range) stretched penile length was 13 (6–18) cm and the UK shoe size 9 (5.5–13) (Fig. 1b). The linear regression statistic between the stretched penile length and shoe size gave an  $r^2$  of 0.012 ( $P = 0.28$ ) (Fig. 2), suggesting no statistically significant relationship between stretched penile length and shoe size.

## Discussion

To date there have only been two studies investigating the relationship between shoe size and penile length. In the largest study, comprising 3100 men, Edward [4] found no relationship between shoe size and erect penile length. Despite the large sample the validity of these data must be assessed knowing that all measurements were self-

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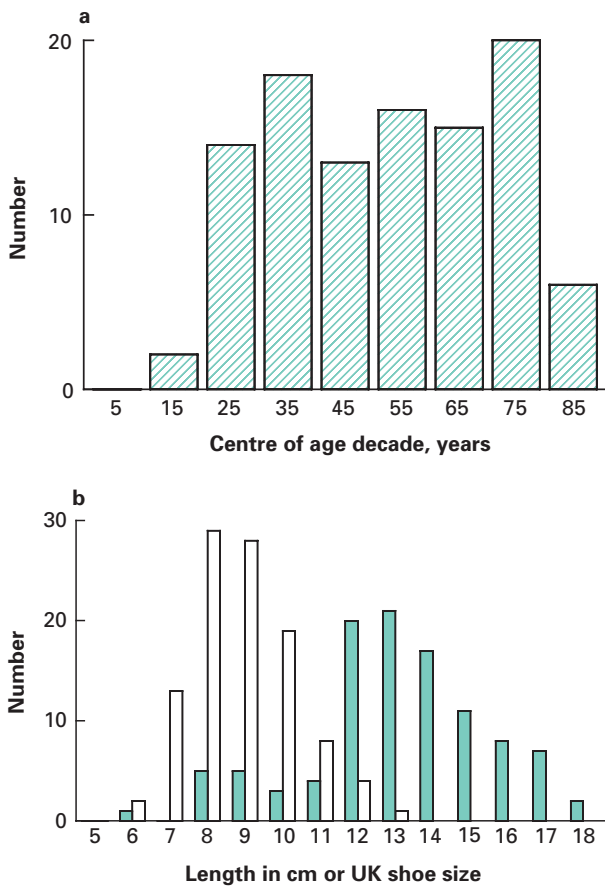


Fig. 1. Frequency distributions of a, the age and b, the penile length (green bars) and shoe size (open bars) of the sample.

recorded and therefore are subject to bias. Siminoski and Bain [5] converted shoe size to foot length and found a weak correlation between that and stretched penile length.

The stretched penile lengths in the present study compare favourably with results from other studies, suggesting that there was no intrinsic population bias. Schonfeld and Beebe [2] reported a mean stretched penile length of 13.02 cm and Wessels *et al.* [3] one of 12.45 cm. The present value differs considerably from that of 16.74 cm reported by Bondil *et al.* [6] but the method used by this group involved pulling the glans three times to obtain reliable measurements.

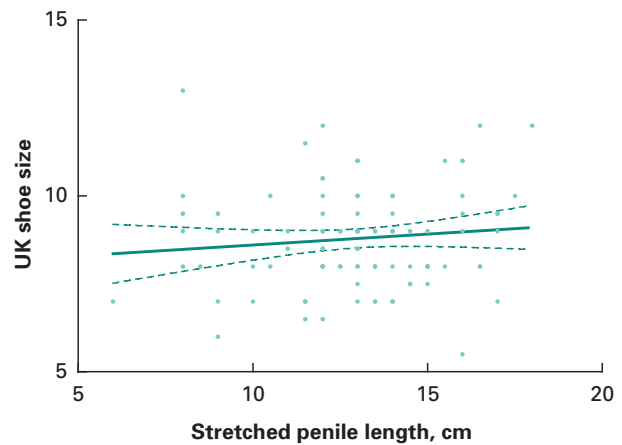


Fig. 2. A scatter plot of penile length against shoe size. The dotted lines show the 95% CI.

Thus the ability to predict the size of a man's penis by observing his shoe size is a common misconception; the present study shows that there is no scientific support for the relationship.

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