

# Somatosensations experienced in male shavers after shaving the face and neck.

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## Background

Thirty percent of male shavers report they experience irritation upon shaving but the physiological mechanisms of shave irritation are not yet identified nor fully understood. In order to relate irritation experienced during and after shaving to physiological mechanisms, it is necessary to first identify the somatosensations experienced by shavers. A shave study was carried out using male shavers, aged 25-64. The shavers underwent a brief articulation screening to ensure they were able to describe the sensations they experienced. All the shavers who participated in the study indicated they experienced irritation from shaving and were of varying self-described levels of sensitivity.

## Candidate sensations and intensity scale

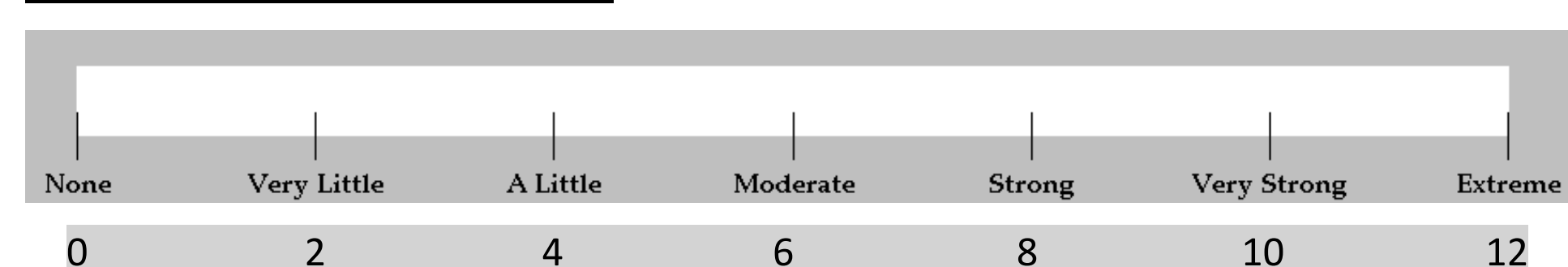
### Candidate somatosensations DURING -shave irritation only

Sensations	Descriptions
Tugging	Detected as a <u>brief interruption of glide or bump</u> from having to momentarily <u>apply extra force</u> to the razor for passing over hairs that are not instantaneously cut.
Pinching	A <u>painful and intense squeezing sensation</u> accompanied by a dull burning sensation detected in the confined area where the hair is being pulled by its roots or getting caught in the razor blades

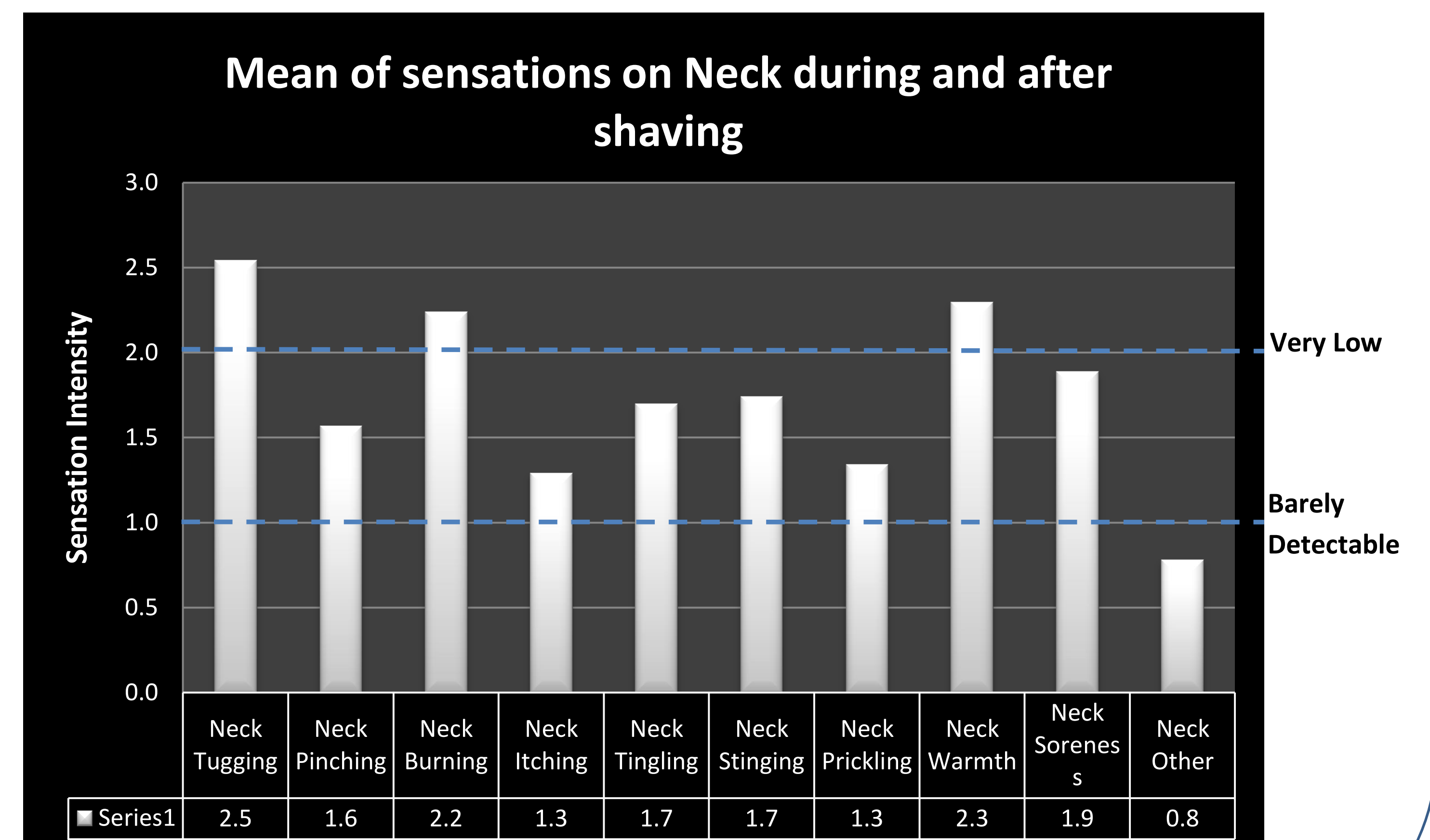
### Candidate somatosensations DURING AND POST-SHAVE irritation

Sensations	Descriptions
Burning	A sensation you feel <u>after you scald your skin with hot water</u>
Stinging	A brief, sharp, intense burning sensation, similar to what you feel when a <u>bee stings</u> you or <u>water wets a fresh cut on your finger</u>
Prickling	A transient sensation similar to if you were <u>stuck repeatedly with the tip of a pin or needle</u> , like the 'pins and needles' sensation you feel when your leg or arm falls asleep
Itching	The feeling that makes you <u>want to scratch</u> , like when you are bitten by an ant or mosquito and have a skin rash afterwards
Tingling	Similar to when you get goose bumps or feel static electricity against your skin (it is like <u>lower intensity of pins and needles</u> or many dull prickles)
Warmth	Like the sensation you feel on your skin when you <u>take a warm shower</u>
Soreness	A <u>dull aching pain or heaviness</u> along with heightened sensitivity to touch

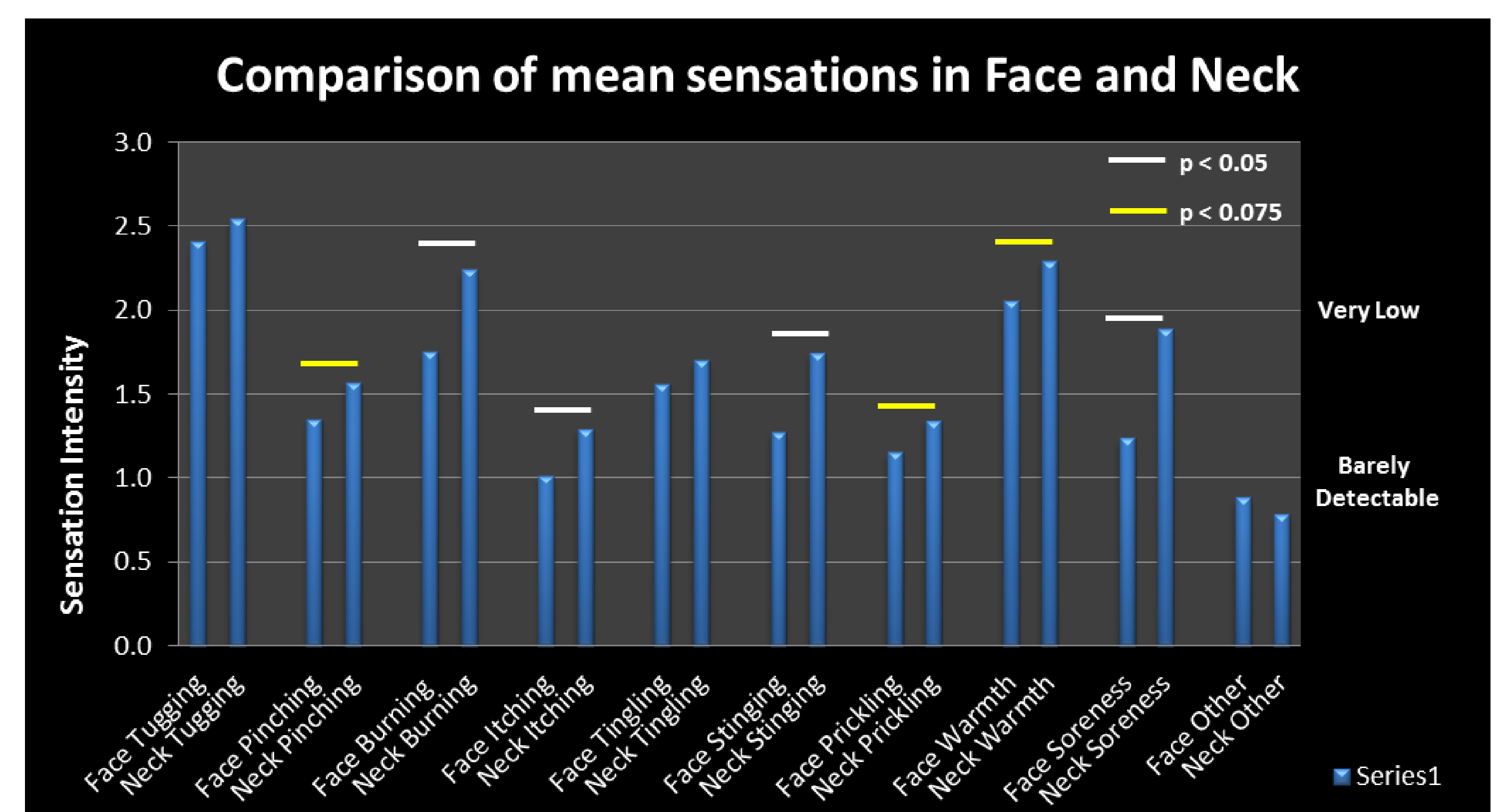
### Sensation Intensity anchor values:



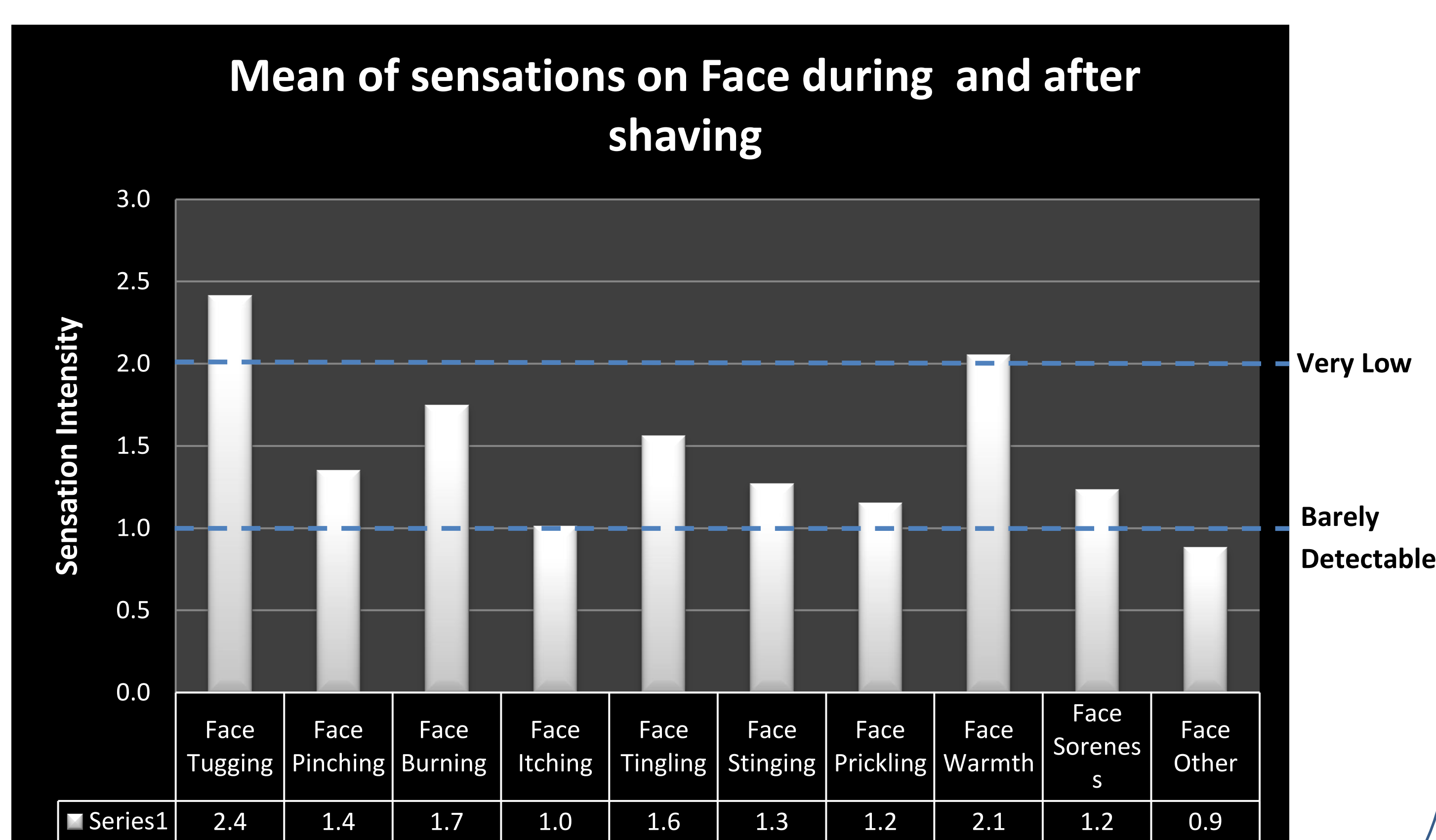
**Figure 2:** Tugging, warmth and burning are the most intense sensations on the neck followed by soreness, stinging, tingling and pinching.



**Figure 3:** Tugging and Tingling are felt with similar intensity on the Face and Neck but Burning, Warmth, Soreness, Stinging, Prickling, Pinching and Itching are experienced significantly stronger on the Neck than on the Face.



**Figure 1:** Tugging and warmth are the most intense sensations on the face followed by burning and tingling.



## Conclusions

- In this study all shavers experienced a wide variety of sensations during shaving.
- After a brief training session, shavers were able to identify and rate the intensity of shaving induced sensations using the descriptors and intensity scale provided.
- Significant differences were found between the intensity of some sensations experienced on the face compared to the neck.

Many of these sensations may be linked to physiological receptors such as TRPV1<sup>1</sup>.

### References:

Kueper, T., Krohn, M., Haustedt, L. O., Hatt, H., Schmaus, G., and G. Vielhaber. Inhibition of TRPV for the treatment of sensitive skin. *Experimental Dermatology* 2010, 19, 980-986.