

# THE BURDEN OF SENSITIVE SKIN QUESTIONNAIRE: FROM ASSESSMENT TO IDENTIFYING COUNTRY-SPECIFIC DIFFERENCES

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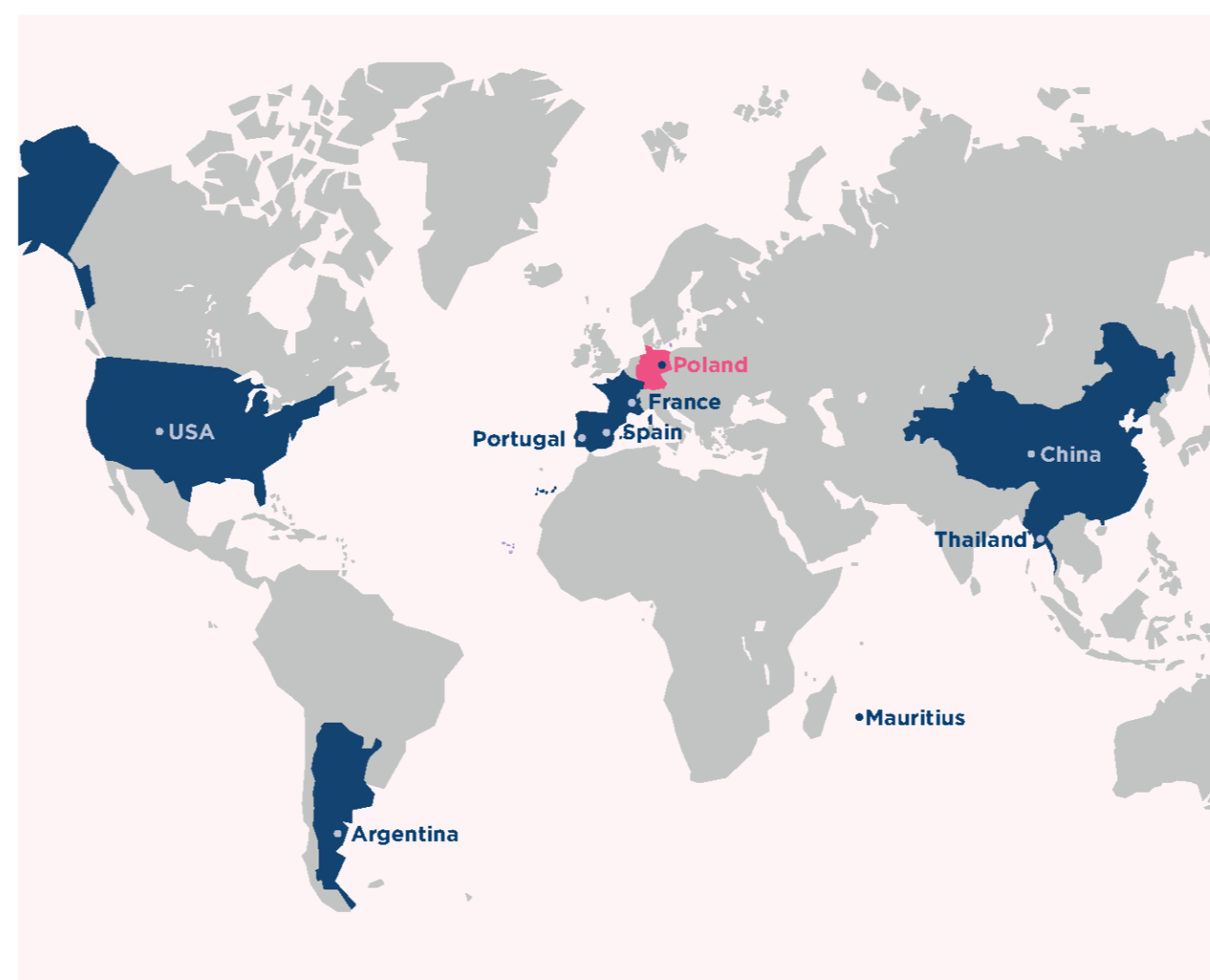
## SENSITIVE SKIN

**Sensitive skin (SS) is estimated to affect 70% of the population**, with prevalence appearing to rise over time. This syndrome is not necessarily associated with objective clinical signs. However, affected individuals report unpleasant sensations - burning, pain, pruritus, and/or tingling - triggered by lifestyle and environmental factors that should not normally elicit a reaction. Those affected tend to modify their behaviour, limit activities, and often suffer from sleep disturbance, stress, and psychological distress, all of which further impair their well-being and quality of life.

## BoSS QUESTIONNAIRE

As SS relates to sensations, objective evaluation may be unsuccessful, and subjective assessment remains a method of choice. Consequently, numerous questionnaires have been developed to assess SS, but few have undergone validation. We contributed to the development of the Burden of Sensitive Skin (BoSS) questionnaire.

After the phases of conception, development and validation, the 14-question BoSS questionnaire was structured around self-care (seven questions), daily life (four questions), and appearance (three questions), generating a score ranging from 0 (no impact) to 56 (maximal impact) (Misery et al., JEADV, 2018).



Beyond measuring the burden of SS, the BoSS questionnaire can also serve **diagnostic purposes**. Since the initial study conducted in France in 2018, the BoSS questionnaire has been translated and adapted into 7 languages, undergoing cultural and linguistic validation.

It has become a reference mentioned in review articles and has been employed in 16 studies, encompassing a total of 5,179 subjects worldwide.

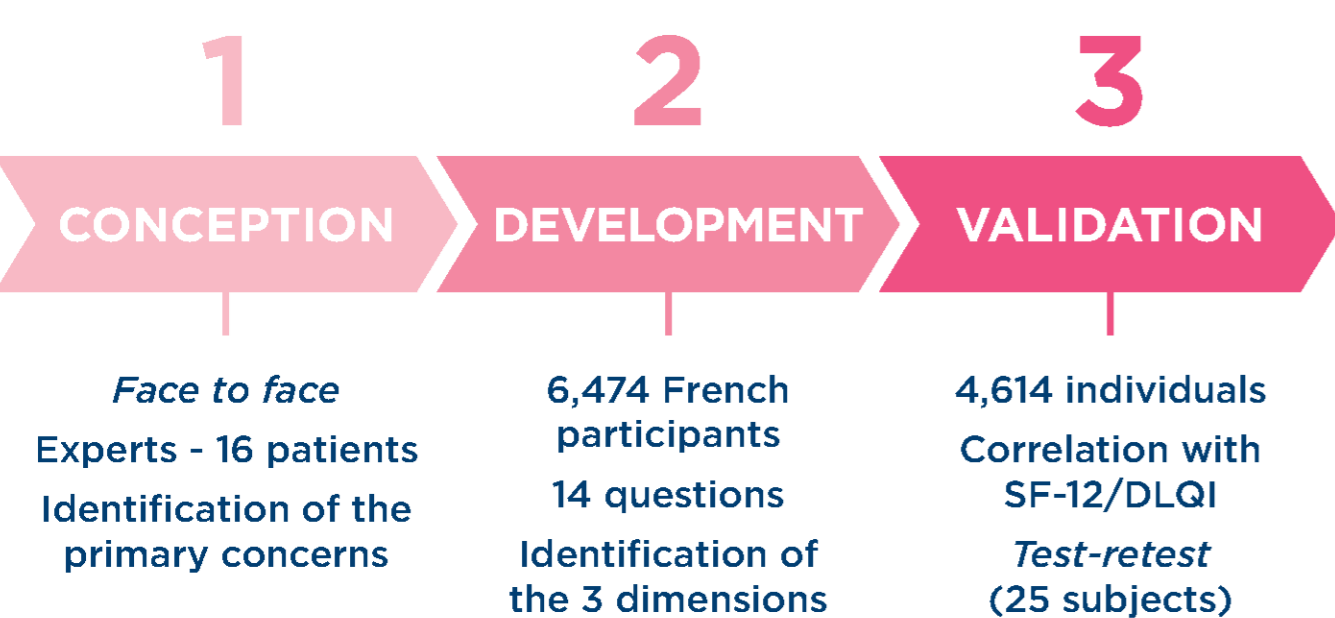
I have to consider my sensitive skin when I buy my clothes and underwears.					
I have to consider my sensitive skin when I buy cosmetics.					
Having sensitive skin stops me from eating certain foods.					
I have given up hobbies, outings and holidays because of my sensitive skin.					
I find it hard to tolerate air conditioning because of my sensitive skin.					
I find it hard to cope with urban pollution because of my sensitive skin.					
Blushing for no reason or after I become emotional embarrasses me when I am with other people.					
My face often looks very red in photographs so I avoid appearing in them.					
It is impossible for me to wear jewellery (bracelets, neck chains or chain bracelets) that is not made of gold.					
My face turns red when I exercise, walk quickly or climb stairs.					
Wearing woollen clothes close to my skin is unbearable.					
I have to consider my sensitive skin when I choose my clothes in the morning.					
I have to choose my own washing powder because some washing powders can cause a skin reaction.					
When I sleep away from home, I take my own soap and toiletries with me because I cannot use other people's.					
Rating of each question.	0	1	2	3	4

TOTAL SCORE

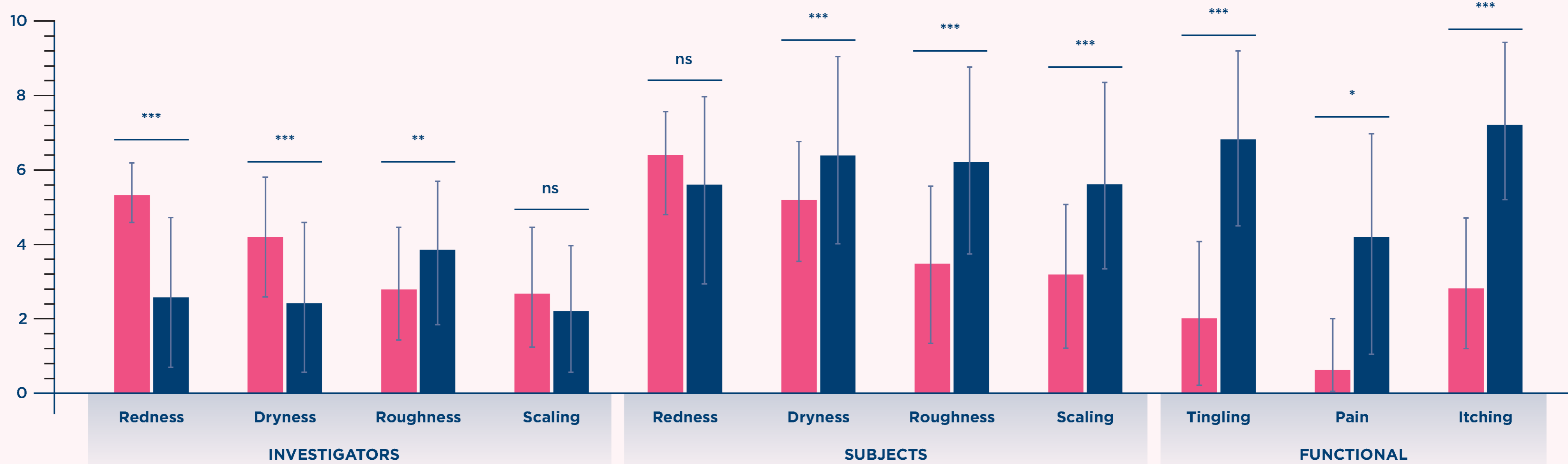
TOTAL SCORE: IMPACT OF SENSITIVE SKIN ON THE PATIENT'S DAILY LIFE.

0: NO IMPACT

56: MAXIMAL IMPACT



## UNDERSTANDING SENSITIVE SKIN WORLDWIDE



Recently, a comparative evaluation of SS in **Thai** and **Polish** subjects (40 and 50 subjects, respectively) revealed notable differences between these two populations. While all subjects had a BoSS score > 20, Polish participants exhibited higher levels of redness and dryness and reported a greater burden due to facial redness. Conversely, Thai subjects consistently rated clinical (dryness, roughness, and scaling) and functional signs (tingling, pain, and itching) more severely. In line with these observations, BoSS questions related to appearance were significantly higher in Polish subjects ( $p < 0.05$ ), where BoSS scores related to sensations were higher in Thai subjects ( $***, p < 0.001$ ). In both cases, the daily use of a specific cream led to improvement in the BoSS score, showing the benefit of dermo-cosmetics in supporting SS (data not shown).

## FURTHER INVESTIGATIONS

These differences observed between subjects may be attributed to variations in skin pigmentation, environmental exposure, and lifestyle. Cultural factors, though poorly understood, are also likely to have influenced subjective evaluations. Therefore, the BoSS questionnaire, with its robustness in assessing ethnic differences in the perception of SS may help improve our understanding of SS worldwide.