



## A comparison of domestic and self -nail tip sizes

Haeun Kim, Namsoon Kim, and Wolhee Do  
Chonnam National University, South Korea.

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Nail care has grown as a way to express one's individuality and self-identity. Recently, artificial nails that consumers attach on their own became popular due to their cost-effectiveness and ease of use. However, due to the lack of detailed size information, customers have difficulty choosing the right products for their nail size (An & Kim, 2017).

Therefore, this study aims to provide basic data for developing a nail tip size system for Korean consumers by measuring and analyzing home nail products available in the market. To analyze the sizes of home nail tips, the authors examined the nail tip products available online. The authors measure the size directly on 11 points, including vertical length, horizontal width, side angle, thickness, and weight. This study used 7 home nail products: 2 from the US, 2 from China, and 3 from South Korea.

The results are as follows. First, there was a difference between countries or product manufacturers. In terms of attachment method, the US products used stickers while Chinese and Korean products were designed to be attached using a tip pad and dedicated glue. Next, the product size system is as follows. The US product size varied from 0 to 11, whereas the Chinese products' size ranged from 0 to 9 with an addition of 5.5 and 6.5, for 12 sizes in total. The Korean products were also, available in 12 sizes, from 0 to 9 with addition of 5.5 and 6.5. However, some products added a size 10, making 13 sizes available. Comparing the sizes among the home nail tips measured in this study showed that the vertical length was longest among Korean products followed by Chinese and US products, and the Korean products showed the largest deviation between the different sizes. The horizontal nail width was the widest in the mid-nail compared to the upper nail and lower nail. Regarding the nail tip types, Korean products were available in natural and square Chinese products in honey-bloom and premium, and US products in Asian, square, square long, stiletto, and oval long. A comparison of the size charts presented on the websites selling the products in this study showed that, among the US products, the vertical length was the longest for the stiletto type, followed by oval long, square long, square, and Asian, and the horizontal width was widest for stiletto, square, square long, Asian, and oval long. Among the Korean products, the size 0, natural type products had the same vertical length and horizontal width and showed the lowest deviation factor, of 0.2mm. For size 4, the natural type had the same vertical length but the horizontal width showed the highest deviation factor of 1.4mm. By contrast, for size 8, the natural type had a larger vertical length and horizontal width, by 0.4mm and 0.2mm, respectively. Among the Chinese products, the honey bloom type had a longer vertical length and narrower horizontal width than the premium type, which was similar among Korean products. Size 7 had the lowest deviation factor related to the vertical length and horizontal width, while size 5.5 had the highest deviation factor. Comparing the standard measurement size presented on the websites and the actual measurement

of the home nail tips suggests that, although it is difficult to determine whether the sizes are similar simply based on vertical length and horizontal width, compared to the Korean products, the US and Chinese branded products had smaller differences and the size suitability was highest among the US product followed by Chinese and Korean products.

Korean consumers are increasingly using self-applied nail tips based on low cost and ease of use. On the other hand, consumers show high dissatisfaction with size suitability. This study suggests the development of a size system for self-applied nail tips products suitable for Korean nail sizes.

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### **Reference**

An, E. J., & Kim, J. H. (2017). A Study on the Suitability of Nail Type for Adult Women by Comparison of Domestic and Foreign Artificial Nail Tip Sizes *Journal of the Korean Society of Cosmetology*, 23(3), 498-505