# A Study on Development of Personal Color Design System

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The currently used personal color analysis is mostly based on Westerners' skin colors. As a result, the suggested colors are often not suitable for Korean people's skin colors. Accordingly, the purpose of this study is to develop 'Personal Color Design System(PCDS)' that can suggest fashionable colors suitable for Korean skin colors and personal color types. For this, the system was verified by customers testing and questionnaires, while the system modification and complementary measures were conducted.

The personal color design system consists of two sections: 1) 'color pieces' that analyze personal skin color types and personal color types according to brightness of skin colors and combinations of hair colors, and 2) 'manual' that contains glossaries and descriptions on personal color types. The color pieces are the color analyzing instrument, which can be compared focusing on the face. They consist of 50 colors: two colors of gold and silver, three colors of red, yellow and blue, four colors of white, bright gray, dark gray and black, 40 colors with 4 types of 10 colors, and a gray gown of Munsell brightness 6-7.

First, color pieces of golden and silver colors, and red, yellow and blue analyze the harmonization of colors. These colors were selected according to the theory of similar color harmonization and contrastive color harmonization based on color types of traditional Korean representative woman skin colors identified by analyzing previous studies. The yellow skin color is classified into amber type, red one to ruby type and combined color to sapphire type.

Next, the brightness of personal skins and

hair colors are analyzed to classify personal color types. The brightness of personal skin colors is grouped into the average brightness (bright gray and dark gray), the bright skin (white) and the dark skin(black). Hair colors are divided into four colors: bright brown, dark brown, black and fashionable dying hair colors. Depending on the contrast of skin colors and hair colors, personal color types are divided into the star light type(brightest), the sun light type(bright and strong contrast), the moon light type(middle brightness, weak contrast) and the sunset light type(darkest and most contrastive).

Accordingly, a specific person can have one of 12 color types, as the three skin types of amber, sapphire and ruby can combine with the four types of star, sun, moon and sunset light types.

After personal color types are identified, the color palette of the same color and the same tone is suggested when a personal color image is naturally expressed in each skin color type. Each type of 10 colors composed color palettes with pale, light and bright tones(the star light type), with vivid and strong tone(the sun light type), with light grayish, grayish, soft and dull tone(the moon light type), and with deep, dark and dark grayish tone(the sunset light type).

Lastly, the fashion image of personal color types are largely divided into the fashionable style, the natural style and the classic style, and basic make-up and fashion colors are proposed.

The importance of this study lies in the facts that the personal color analysis based on Korean skin colors is useful for services using colors such as educational or beauty care sectors.