

Effects of Tactile Movement Speed on Tactile Feeling

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The correlation between tactile sensation and tactile movement during application of cosmetics is important because tactile sensation is induced only by active handling. The aim of this study is to evaluate application feeling of skin care products objectively using motion analysis of human finger during application. The effect of the application velocity on the sensory evaluation score was investigated. It was shown that the participants tends to apply the skin care products at the velocity which they feel the most comfortable. Based on this result, change in the application velocity by changing rheological property of the skin care product was studied. From these results, it was shown that motion analysis of application is useful to evaluate tactile feelings of the skin care products. In the similar method, to establish the evaluation method of tactile sensation of human hair, coincidence measurement of motion analysis and load measurements during hair brushing and finger combing were performed. Change in load profile from root to tip of hair by application of hair care products was examined. Change in the maximum load by hair damage and treatment and its correlation with sensory evaluation were also discussed. It was shown that the load during hair brushing which is considered to reflect the frictional property of human skin surface is useful to evaluate tactile feelings of human hair. The rheological properties of hair care products mainly effects on the brushing load, whereas that of skin care products mainly effects on the velocity of application movement.