

Effects of Surgical Mask on Perceived Facial Attractiveness

International Conference of Young Social Scientists 2020

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Introduction

Since the outbreak of COVID-19 pandemic in 2020, people worldwide have been wearing surgical masks. Not only does it affect our lives, but also our facial attractiveness as well. The purpose of this study is to explore whether surgical masks will have impact on people's facial attractiveness, and whether this impact is a positive or a negative one. Meanwhile, this study examines whether people with high and low facial attractiveness will be affected after wearing masks and whether the color of the mask can be a factor when rating facial attractiveness.

Research Methodology

Participants are asked to evaluate facial attractiveness of different volunteers in photos. Three photos of the volunteers are shown randomly: one not wearing a mask, one wearing a blue facial mask and one wearing a white mask. The difference is then calculated (the scores of not wearing masks minus the scores of wearing masks of the same volunteer). A negative result shows that the facial attractiveness of the model with the mask is higher than that without the mask; a positive result shows otherwise. The larger the difference is, the greater the influence of surgical mask on facial attractiveness is. A t-test is then performed to see if there is a significant difference.

Result and Analysis

The scores show that there is a significant difference in the facial attractiveness of most models when wearing white masks, blue masks and without masks, and the P values are less than or equal to 0.05. Blue and white masks are used to examine whether the color of the masks will affect facial attractiveness (these two colors are chosen as they are the most common colors with an abundant supply). The result shows that blue masks can better enhance facial attractiveness than white masks.

	All				All			
	white mask	No mask	D-value	P-value	blue mask	No mask	D-value	P-value
Model 1	6.5	5.5	-1	2E-29	6.4	5.1	-1.3	1.4E-45
Model 2	7.8	8.1	0.3	0.00059	7.9	8.2	0.3	0.0000092
Model 3	7.5	6.6	-0.9	1.21	7.3	6.5	-0.8	3.4E-19
Model 4	6.7	6	-0.7	1.8E-20	6.7	5.9	-0.8	5E-22
Model 5	6.1	5	-1.1	7.2E-30	6.2	5.3	-0.9	5.2E-31
Model 6	7.4	6.9	-0.5	3.7E-10	7.4	6.8	-0.6	1.95E-12
Model 7	6.9	6.1	-0.8	2.3E-14	6.9	6.3	-0.6	6.1E-13
Model 8	7	6.6	-0.4	2.1E-08	7.1	6.8	-0.3	0.0000047
Model 9	6.4	5.9	-0.5	1.5E-10	6.3	5.8	-0.5	1.67E-11
Model 10	6	6.1	0.1	0.29	6.1	6	-0.1	0.18

Table 1 - Influence on facial attractiveness with blue masks and white masks

Conclusion

The result shows that people's facial attractiveness may vary with surgical masks. Regardless of gender, age and occupations, people generally think that surgical masks will have a positive impact on their facial attractiveness. Surgical masks play a positive role in faces with lower-half of the faces less attractive, as the brain can perceive a more attractive face if the lower-half is covered. However, there are special cases when wearing masks will have a negative impact on facial attractiveness: the facial features are highly attractive as a whole; or the facial features of the lower half of the face are highly attractive with an average upper-half face. Facial attractiveness is affected by surgical masks due to a psychological phenomenon - Gestalt psychology, which is only applicable to people and things not seen before. In addition, a blue mask, compared with a white mask, is having more influence on one's facial attractiveness. Furthermore, the effect of Gestalt psychology on the elderly is not obvious.

Future Work

Volunteers and participants in this study are chosen from China, making Chinese as the subject target and analyzing data is based on facial features and aesthetics of Chinese. It is hoped that volunteers and participants from different continents can take part in future researches. With more data collected from different races and regions, future studies can further examine the global definition of beauty and whether wearing surgical masks can enhance facial attractiveness of people worldwide.

References

1. *Haoqi buoshi* (Dr Curious). (2020, April 3). *Wei shenme daishang kouzhao dou bian de haokan la?* (Why do you look better when you wear a surgical mask?). Retrieved from: <https://www.zhihu.com/question/378448376>.
2. *Qingge* (Love song). (2020, March 22). *Dai kouzhao chuli yufang chuanran, haiyou yige yixiang budao de haochu* (There is one unexpected benefit of wearing surgical masks in addition to preventing infection). Retrieved from: <https://mp.weixin.qq.com/s/niQgsPnEuPwY1BmZu hpIxQ>.