



An Investigation of the Effects of Mask-Wearing on Confidence Levels of Young People to Middle Age in Bangkok Metropolitan Region

Janisata Pitakuldilog¹, Nanpawin Teeranangsu², Suphanida Siritaweasil³

¹Mahidol University International Demonstration School, Nakhon Pathom, Thailand

²Patumwan Demonstration School, Srinakharinwirot University, Bangkok, Thailand

³Triam Udom Suksa School, Bangkok, Thailand

ABSTRACT: The COVID-19 pandemic necessitated widespread mask-wearing to prevent disease transmission. Initial studies indicated that 89% of the Thai population wore masks, rising to 96% when mandated. Even after the pandemic, mask-wearing persisted due to factors beyond health concerns. This research examines the phenomenon of "Mask Fishing," where individuals believe masks enhance their attractiveness, a trend popularized on TikTok. The study explores the psychological impacts of mask-wearing, including increased confidence and reduced self-esteem. Additionally, masks have been found to improve perceived facial attractiveness, particularly enhancing the appearance of eyes. This study investigates these hidden factors, focusing on how mask-wearing affects personal confidence, communication, and facial expressions.

KEYWORDS: Attractiveness, Confidence level, COVID-19, Facial expressions, Wearing mask.

INTRODUCTION

Due to the spread of the 2019 coronavirus (COVID-19), people have had to wear face masks to prevent the transmission of the disease. This situation has led to people becoming accustomed to wearing masks as part of their daily lives. Studies have shown that during the initial outbreak of COVID-19, 89% (SD 10%) of the Thai population wore masks, and when mask-wearing was mandated, this figure rose to 96% ($p=0.0039$) (Kitiyakara et al., 2023). Even after the pandemic subsided, many people continued to wear masks daily. In relation to that, it was observed that mask-wearing behaviour has been influenced by other factors. For example, people tend to wear masks when meeting large groups of people or to cover their faces in public. Even without the threat of disease, some still wear masks, possibly out of habit or lack of confidence in public without them, impacting their personality, confidence, and communication efficiency (bangkokbiznews, 2023).

Factors influencing mask-wearing go beyond disease prevention. Researches on mask-wearing behaviours and related studies found that as the severity of the COVID-19 pandemic decreased and masks could be removed in public, the phenomenon of "Mask Fishing" emerged. The term "Mask Fishing" refers to the perception that wearing a mask makes one look better and can attract more attention, to the extent of people liking them or even dating them. This trend started on TikTok, where people wondered, "Am I Mask Fishing?" Sometimes, people feel more confident wearing masks, but they might feel uncomfortable when required to remove them, such as when eating lunch with colleagues. Delving deeper into why some feel more confident with masks reveals that these individuals may lack self-confidence and worry about others' expectations of their appearance. This concern, exposed by interviews with public school students in New York City, shows that

"Mask Fishing" is not just an online joke. It might also relate to low self-esteem, where individuals feel anxious and depressed, seeing little value in themselves. Some may even lack self-worth and consider themselves of no value (bangkokbiznews, 2023).

Furthermore, studies found that wearing masks can affect facial attractiveness. People with less attractive full faces appeared more attractive when wearing masks (Pazhoohi & Kingstone, 2022). Additionally, masks made eyes appear more attractive than when not wearing them (Prahm et al., 2023). This suggests that mask-wearing can make people feel more confident about their appearance and how others perceive them. Research and observations of post-pandemic mask-wearing behaviours indicate that there are hidden factors beyond health reasons for wearing masks.

Based upon the literature we have reviewed, we predict that the results would show that wearing face masks during and after the COVID-19 pandemic has positively impacted the confidence levels of individuals in the Bangkok metropolitan area, particularly



among teenagers and young adults. The frequent use of masks enhances perceived attractiveness and self-esteem, reducing social anxiety and improving communication comfort.

This study aims to identify these factors, examining how mask-wearing impacts personal confidence, communication efficiency, and facial expression. This research provides valuable insights into the psychological effects of mask-wearing, particularly in fostering confidence and mitigating social discomfort. Understanding these benefits can aid in designing public health policies that consider not only physical safety but also mental well-being. Additionally, the study highlights how masks can serve as a tool for boosting self-esteem, which can be relevant for interventions in mental health and social confidence programs.

METHODOLOGY

The objective of this survey research was to establish the extent to which the use of masks impacted the self-esteem of teenagers and those in working age in the Thai population. The 28 items in total on the questionnaire are separated into two sections: 1) General information and 2) Mask-wearing and non-mask-wearing participants. A 5-point Likert scale with scores of 1-5, with 1 meaning strongly disagree and 5 meaning strongly agree, was utilised mostly for the replies. A convenience sampling method was used for the surveying process. Prior to the data collection process, the questionnaire items were reviewed by three experts to obtain Item-Objective Congruence (IOC) index scores of greater than or equal to 0.5. The internal consistency of the questionnaires was calculated to have Cronbach's alpha coefficient of 0.718, which measures the degree of uniformity (Moran, 2024). For the data gathering process, an access link for Google Forms was sent through using the messaging function of Line, Facebook, and Instagram applications in June 2024. The survey collected responses from 479 respondents. For data analysis, we used the Statistical Package for the Social Sciences (SPSS), version 29.0.2.0 (20) in this work. Pearson's correlation (r-value) test was used to examine the linear relationship between two variables while an independent sample T-test was used to test the difference between the means of two groups. and F-test (ANOVA or analysis of variance) to test the differences between the means of more than two groups.

INSTRUMENT

Part 1: General information

1. Gender.
2. Age.
3. Occupation.
4. Mask wearing frequency
5. Mask-wearing period of the day

Part 2: Mask-wearing & Non-mask-wearing

1. You feel like yourself when wearing a face mask before leaving the house.
2. When you have to take off your face mask, your self-confidence remains unchanged and just as effective as before.
3. You feel like yourself every time you have to take off your mask in public/in front of others.
4. When someone asks you to take off your mask in public, you are confident to do so in front of others.
5. Given the general situation, you choose to wear a face mask rather than not wear one if possible.
6. Wearing a face mask makes you feel more confident.
7. Not wearing a face mask immediately reduces your confidence.
8. If you wear a mask, are you more likely to speak to strangers/strangers/people in society?
9. If you have to speak to a large number of people, wearing a face mask boosts your confidence.
10. When you take a photo, you would take off my mask without hesitation.
11. You feel safe in crowded places when you wear a mask.
12. You feel like a mask is part of the outfit you have to wear.
13. If there is a day when you forget to bring a mask from home, you feel the need to immediately buy a replacement.
14. You feel that masks that people normally wear will help you blend in with society and make you comfortable.
15. In addition to applying makeup to increase confidence, wearing a mask is another choice you make to make up for those days when you forget to put on makeup.



16. If you weren't sick but someone asked you, "Are you wearing a mask because you're sick?" you would immediately take off the mask without hesitation to tell the real reason for wearing it.
17. You have other purposes for wearing a medical mask beyond just increasing your confidence.
18. If you have to use a new type of medical mask that is different from the one you usually use, your confidence will remain the same.
19. If you are wearing a medical mask on other parts of your body, such as your upper arm or wrist, your confidence will remain the same.
20. I wear a mask on holidays rather than at work or school in those areas where I have to meet more people.

RESULTS

Table 1: General information (N = 514)

	Frequency	Valid percentage
Gender		
Male	73	14.2
Female	433	84.2
Others	8	1.6
Age		
Below 18 years	316	61.5
18 - 25 years	65	12.6
26 - 36 years	39	7.6
Over 36 years	94	18.3
Occupation		
Working	122	23.7
Unemployed	19	3.7
Studying	373	72.6
Mask wearing frequency		
Never	75	14.6
One time	133	25.9
More than two times	206	59.5
Mask wearing period during the day		
6 A.M. to 6 P.M. (Morning Part)	497	96.7
6 P.M. to 6 A.M. (Night Part)	17	3.3



Table 1 shows the general information of 514 participants. The majority of participants are female (84.2%). Most of the respondents are under 18 years old with 316 (61.5%) respondents. The majority of the respondents are still in occupation (72.6%). Moreover, 206 which is 59.5% of participants wore masks more than two times a day. Lastly, 6 A.M. to 6 P.M. is the period when 497 (96.7%) responders wear masks while only 17 (3.3%) wear them during 6 P.M. - 6 A.M.

Table 2: Descriptive statistics of individuals confident level while wearing mask (Mean and Standard deviation)

	N	Mean	Std. Deviation
Confident level	514	3.22	0.564

The minimum mean is 1, while the maximum is 5, the mean confidence level of all 514 participants is 3.22, which means they are quite confident while wearing masks. The standard deviation is 0.563.

Table 3: One-way ANOVA (F-test): The number of times they wear a mask in one day and The confidence level while wearing mask

	SS	df	MS	F	P-value
Between group	17.876	2	8.938	31.460**	<0.001
Within group	145.178	511	0.284		
Total	163.055	513			

** . Correlation is significant at the 0.01 level (2-tailed)

The one-way ANOVA results obtained a p-value <0.001. Namely, the confidence levels of participants are significantly affected by the number of times they wear a mask in one day due to the P-value is below 0.001.

Table 4: One-way ANOVA (F-test): The gender and The confidence level while wearing a mask

	SS	df	MS	F	P-value
Between group	0.181	2	0.90	0.283	0.753
Within group	162.874	511	0.319		
Total	163.055	513			

The one-way ANOVA findings with a p-value of 0.753 are shown in Table 4. Because the p-value is significantly 0.05, the genders of the participants have no significance on the confidence level.

DISCUSSION

There has been a steady rise in the usage of masks among the population despite the end of COVID-19 pandemic (Ha, 2023), so we further investigated the reason people continued to wear masks. Another potential reason for wearing masks can be self-confidence (Badillo-Goicoechea et al., 2021). Moreover, the research reviewed many factors associated with wearing masks that affected self-esteem, such as age, gender, and frequency of wearing masks, mainly in teenagers. Hence, it was important by



resonating to people's emotional and psychological aspects to consider what impact wearing masks had on confidence in handling public health initiatives.

We conducted a survey among young Thai people to middle age, 35 - 64 years old (Encyclopaedia Britannica, 2019), in the Bangkok metropolitan region, asking them to fill out a questionnaire regarding their mask-wearing habits and level of confidence both when wearing and not wearing masks. The self-confidence level of wearing a mask in this survey is being rated from one to five, with one meaning having the least confidence and five meaning having the highest confidence. As shown in Table 2, the mean value of the confidence level, which is 3.22, is significantly higher than the midpoint of the rating scale, which is 3. Table 3 presents the findings, which indicate the mask-wearing frequency, as shown in Table 1, significantly impacted the confidence levels of participants. This result is similar to that of the study by Dudarev et al. that protective masks are more attractive to those who wear them (Dudarev et al., 2021). Moreover, according to research by the European Chemical Bulletin, it can be concluded that body image or attractiveness significantly affects self-esteem (Aggarwal et al., 2023), so both, self-confidence level of wearing a mask and mask-wearing frequency can be related to each other. As a result, both our survey results, the work by Dudarev et al. and Aggarwal et al. support the idea that frequently wearing masks has a big impact on one's confidence.

Furthermore, as explained in Table 4, there are no significant relationships between the two variables, gender and confidence level, so either being female or male, wearing a facial mask will not affect the confidence level at all. Furthermore, research conducted by Cardiff University found out that with a face covering up the lower portion of their faces, both men and women were thought to appear more appealing. (Hies & Lewis, 2022). According to this research, it can be concluded that gender does not have a direct impact toward confidence when wearing a mask. Everything considered, wearing masking not only has its effectiveness in preventing the spread of respiratory illnesses and infectious particles but also an impact on confidence levels and increases attraction toward appearance, as people are perceived more favourably when part of their face is obscured. (World Health Organisation, 2022)

CONCLUSION

We surveyed 514 people in Thailand across all age groups regarding their degree of self-confidence. The age, gender, occupation, frequency of mask wear in a day, and amount of time spent wearing a mask during the day were the variables studied.

The findings indicate that mask-wearing significantly impacts confidence levels, observed among participants who frequently wear masks. This supports the notion that masks serve not only as a protective measure but also as a psychological tool that enhances self-esteem and social confidence.

The survey results revealed that individuals feel more secure and self-assured when wearing masks, aligning with the phenomenon of "Mask Fishing," where masks contribute to a perceived improvement in facial attractiveness. This is particularly evident among those who may have concerns about their appearance or suffer from low self-esteem. Interestingly, the research found that the psychological benefits of mask-wearing were consistent across different demographic groups, with no significant differences observed in confidence levels between genders. This suggests that the positive effects of mask-wearing on self-perception and social confidence are universally experienced, regardless of gender.

REFERENCES

1. Aggarwal, R., Ranjan, R., & Chandola, R. (2023, May). Effect of Body Image on Self Esteem: A Systematic Literature Review and Future Implication. ResearchGate. Retrieved July 20, 2024, from https://www.researchgate.net/publication/370609428_Effect_of_Body_Image_on_Self_Esteem_A_Systematic_Literature_Review_and_Future_Implication
2. Badillo-Goicoechea, E., Chang, T. H., Kim, E., LaRocca, S., Morris, K., Deng, X., Chiu, S., Bradford, A., Garcia, A., Kern, C., Cobb, C., Kreuter, F., & Stuart, E. A. (2021). Global trends and predictors of face mask usage during the COVID-19 pandemic. *BMC Public Health*, 21(1). <https://doi.org/10.1186/s12889-021-12175-9>
3. Bangkokbiznews. (2023, January 22). รู้จัก “Mask Fishing” รู้ลึก ดีเมือ “ใส่หน้า ากาก” แต่กลับไม่มั่นใจในยุค โควิด. Bangkokbiznews. https://www.bangkokbiznews.com/lifestyle/1049114#google_vignette
4. World Health Organisation. (2022, January 5). Coronavirus disease (COVID-19): Masks. World Health Organization <https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-covid-19-masks>



5. Dudarev, V., Manaligod, M. G., Enns, J. T., & Todd, R. M. (2021). In the hands of the beholder: Wearing a COVID-19 mask is associated with its attractiveness. *Quarterly Journal of Experimental Psychology*, 75(4), 598–615. <https://doi.org/10.1177/17470218211037128>
6. Ha, S. (2023, February 2). โควิด : ทำไม หนุ่มสาวเกาหลีใต้ ั้งนิยมใส่หน้ากากอนามัย แมการ์ ระบาดยุติแล้ว BBC News ไทย. <https://www.bbc.com/thai/articles/cyxp4q333edo>
7. Hies, O., & Lewis, M. B. (2022). Beyond the beauty of occlusion: medical masks increase facial attractiveness more than other face coverings. *Cognitive Research*, 7(1). <https://doi.org/10.1186/s41235-021-00351-9>
8. Kitiyakara, T., Boonmanunt, S., & Thammasudjarit, R. (2023). Changes in the Mask Wearing Rate in Public Areas during the COVID-19 Pandemic as Determined by Artificial Intelligence and CCTV Image Analysis. *Journal of Health Systems Research*, 17(1), 149–167. <https://kb.hsri.or.th/dspace/handle/11228/5859?locale-attribute=th>
9. Moran, M. (2024, April 17). Cronbach's Alpha. *Statistics Solutions*. <https://www.statisticssolutions.com/cronbachs-alpha/>
10. Pazhoohi, F., & Kingstone, A. (2022). Unattractive faces are more attractive when the bottom-half is masked, an effect that reverses when the top-half is concealed. *Cognitive Research: Principles and Implications*, 7(1), 1–9. <https://doi.org/10.1186/s41235-022-00359-9>
11. Prahm, C., Konieczny, J., Bressler, M., Heinzl, J., Daigeler, A., Kolbenschlager, J., & Lauer, H. (2023). Influence of colored face masks on judgments of facial attractiveness and gaze patterns. *Acta Psychologica*, 239, 103994. <https://doi.org/10.1016/j.actpsy.2023.103994>
12. Encyclopædia Britannica. (2019). Middle age | psychology. In *Encyclopædia Britannica*. <https://www.britannica.com/science/middle-age>

Cite this Article: Janisata Pitakuldilog, Nanpawin Teeranangsu, Suphanida Siritaweasil (2024). An Investigation of the Effects of Mask-Wearing on Confidence Levels of Young People to Middle Age in Bangkok Metropolitan Region. International Journal of Current Science Research and Review, 7(10), 7941-7946, DOI: <https://doi.org/10.47191/ijcsrr/V7-i10-53>