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Research Article

Post COVID-19: Analysis Of Reasons For Mask Wearing Intention

Prabhakaran Nagarajan^{1*}, Revwathy Subramanian², Vinitha Pandian³, Clitus Amalraj¹, Bharath Ragul Mathaiyan¹

¹Department of Microbiology, Trichy SRM Medical College Hospital and Research Centre (Affiliated to The Tamilnadu Dr. MGR Medical University, Chennai), Tiruchirappalli, India

²Department of Obstetrics and Gynecology, Trichy SRM Medical College Hospital and Research Centre (Affiliated to The Tamilnadu Dr. MGR Medical University, Chennai), Tiruchirappalli, India

³College of Physiotherapy, SRM Institute of Science and Technology, Tiruchirappalli, India

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ABSTRACT

Wearing face masks were very much mandated during the pandemic peak period, and slowly the usage is getting reduced. Today, very few are using the face masks regularly, not only for COVID fear but also for some other reasons. This study is aimed to assess the reasons for mask-wearing intention even after COVID fear is reduced. In this study, a total of 653 mask wearers were interviewed about their continuous usage of masks even after the COVID pandemic was over. Out of 653 individuals wearing masks, 216 were males and 437 were females. While analyzing the age groups, predominantly 26 to 35 wear masks (36.7%), followed by 36 to 45 (19.4%) and 15 to 25 (17.3%). College-going students (9.5%) and health care professionals (9.5%) wear masks the most followed by college teachers (8.6%) and school teachers (8%). The mask types are varied among the users, with the majority using cotton masks (57%), followed by medical masks (36%). There are a variety of reasons given for wearing a mask even after COVID fear is over, including preventing pre-symptomatic spread, reducing direct transmission, good hygiene in general, public transportation like buses and trains, mask addiction, being free from dust, style, not showing identity, etc. Overall, we provide the novel findings of varied reasons for wearing face masks with the intention of health, hygiene, addiction, and other mask attractiveness beliefs. From this study, it is advised to wear a face mask in public settings when social distancing is difficult to maintain.

INTRODUCTION

During the COVID pandemic, throughout the world, face mask usage was encouraged and even

mandated as one of the most protective health behaviors. Many of us thought the mask mandates would come to an end and show full faces in places

***Corresponding Author:** N. Prabhakaran

Address: Department of Microbiology, Trichy SRM Medical College Hospital and Research Centre, Tiruchirappalli, India

Email ✉: leptoprabhu@gmail.com

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again. However, as the post-COVID-19 era emerged and mask mandates were diluted, it seemed that some of us still had the intention of wearing masks. Many studies highlighted that the wearing a mask hinders the opportunities to show the identity and deliver a favorable impressions, (1) unattractive individuals are deemed more attractive with masks. (2,3)

Microbiologically, some studies pointed out that the moisture deposited in the mask could serve as a major breeding ground for the bacteria and further harbor viruses, so the usage of new and completed cleaned masks is recommended. (4) Eventhough lot of benefits and risks are observed while using face masks, the exact mechanism has been conflicting and confusing. (5) More studies have highlighted the importance of social distancing, (6) wearing face masks, (7) usage of hand sanitizers, (8) and vaccination related to COVID-19. (9) But this study is the first of its kind to assess the reason(s) for wearing a face mask even after COVID-19 fear is reduced. Various governing bodies and the administration of local, regional, state, national, and international committees requested and mandated the usage of face masks; certain levels of negative attitudes and hesitancy were also observed even during the pandemic period. (10) All types of stakeholders accepted that the use of face masks is cost-

effective compared to other types of pharmaceutical interventions. (11,12) Designed and colored masks matching to the dresses were also introduced in order to promote the mask wearing attitude among public. Mask usage remains low after the COVID-19 pandemic, and strategies to wear face masks even after fear is reduced remain unstudied. Few people are wearing masks in worshipping places, markets, shopping malls, cinema theatres and recreational centers, using public transport systems, attending meetings and family functions. This motivates us to assess the mask users about their factors contributing to behavioral intention.

MATERIALS AND METHODS

Even though variety of studies have been done to evaluate the benefits and risks of using face masks and other protective equipment for infection control and public health, the study about the usage of face masks after COVID fear is reduced are scarce. We recruited 717 participants from the Tiruchirappalli zone, including the districts of Karur, Perambalur, Pudukkottai, Thanjavur, and Tiruchirappalli. But only 660 were willing to give answers; thus, the response rate was 92%. This survey study has the following criteria to assess the validity of the responses, and a description of the survey is provided in Table 1.

Table 1: Survey description

Parameters	Value
Study period	Eight months (from May 2022 to January 2023)
Study area	Districts of Tiruchirappalli zone
Study population	General public who are wearing face mask
Sample size	717
No. of responders	660
No. of valid reasons	44

The criteria for obtaining the answers are

1. The exact content was explained thoroughly before answering
2. If they donot understand, repeatedly explained to the respondents
3. Multiple responses are allowed and recorded



The detailed sociodemographic details like age, gender, occupation, locality, mask make, and reason for continuously wearing face masks were collected. This study was approved by the Institutional Ethic Committee. After getting consent from the participants, two different types of questions were asked: one was a direct, open-ended question, and another was to understand the participant's behavioral intention.

1. What are the possible influencing factors that may encourage wearing face masks?
2. Which behavioral intention factor motivates you to wear masks?
 - a. Attitudes towards the behavior – individuals positive and negative evaluation of self performance of the particular behavior
 - b. Subjective norms – belief about the most of the people/ important person approve or disapprove the behavior
 - c. Perceived behavior control – degree of which a person believes to perform the behavior

It is a single open-ended question where options are not provided and the participants use a wide range of vocabulary, enable to collect more details, get new and missing answers, and understand different ways of thinking. Further, the collected sociodemographic data, contributing factors, and various reasons for wearing masks were assessed and presented. As this study interviewed the participants with single question, mostly narrative and tends to be longer data analysis cannot be possible; thus the authors felt that all the received data (answers) were further assessed in order to ensure the trustworthiness by the following strategies.

1. Credibility

- a. Prolonged Engagement – provide sufficient time to tell the fact/ real answer for the question
- b. Persistent observation – Read and re-read several times by the interviewer
- c. Triangulation
 - i. Data – collect data from different sources, multiple persons and interviewer
 - ii. Investigator – Involvement of two or more researchers
 - iii. Method – multiple method of data collection
- d. Member check – Look at the data by different eyes

2. Transferability:

easy to understand for the readers; not only stick to behavior and experiences, but understand about the attitude and practice.

3. Dependability and conformability:

mainly doing the audit trial where two or more team members assessed the data in different deceptive observations; as this study has only one question, auditing by two or more team members and one non-team member is must.

4. Reflexivity:

Explicit and implicit assumptions, preconceptions, and values of the data outcome in comparison with socioeconomic status and occupational pressure.

RESULTS AND DISCUSSION

While observing the people wearing face masks, females (65.9%) are wearing more than males (33.5%). The age group that wears face masks more is between 26 and 35 (36.7%), followed by 36 and 45 (19.2%). The age and genderwise distribution of the study population are depicted in Table 2.

Table 2: Age and gender wise distribution of the study subjects

Age Group (in Years)	Gender distribution			
	Males	Females	Transwomen	Total
15 - 25	49 (22.2)	70 (16.1)	1 (25)	120 (18.2)
26 - 35	84 (38)	156 (35.9)	2 (50)	242 (36.7)



36 - 45	34 (15.4)	92 (21.1)	1 (25)	127 (19.2)
46 - 55	26 (11.7)	51 (11.7)	-	77 (11.7)
56 - 65	15 (6.8)	38 (8.8)	-	53 (8)
Above 65	13 (5.9)	28 (6.4)	-	41 (6.2)
Total	221 (33.5)	435 (65.9)	4 (0.6)	660

[Figure in parenthesis denoted percentages; percentages calculated for genders] The occupational status of the participants was also included in this study, so it is very useful to compare and assess the role of occupation and behavioral attitudes, especially wearing masks. More participants were on daily wages (17.6%), followed by teachers (16.5%) and students (15.8%) (Table 3).

Table 3: Occupational description of the participants

Participants	Frequency
Students	104
Teachers	109
Daily wages	116
Police and security guards	70
Healthcare professionals	65
Drivers and Railway workers	57
Unemployed males	07
Homemakers - females	32
Site Engineers	12
Sanitary workers	39
Media professionals	17

The locality of the participants highlighted that urban participants were more prevalent (n=312; 47.2%), followed by semiurban residential participants. The type of mask used by the participants was also assessed, with the majority using cotton masks (56.4%), followed by medical masks (36.8%). Nearly 19 participants were classified as others indicated they were using their shawls, handkerchiefs, and other household materials as face masks. Attitude is considered the major tool for assessing the individuals' behavior; this attitude plays a vital role in the individuals wearing face masks. Various reasons for wearing face masks were recorded; thus, regular practice dominated with 83.2%, followed by good hygiene in general, fear of transmissible infections, getting rid of other infections, etc. The detailed description of behavioral and influencing factors in the public's practice of wearing face masks is interpreted in Table 4.

Table 4: Influencing and behavioural factors of public wearing face mask

No.	Reason	Frequency
1	Practice	543 (82.2)
2	Good Hygiene in general	516 (78.2)
3	Fear	362 (54.8)
4	Get rid from other infections	326 (49.4)
5	Reduce disease transmission	312 (47.3)
6	Free from dust	236 (35.8)
7	Prevent pre symptomatic spread	236 (35.8)
8	Avoid outside bad smell	212 (32.1)
9	Murmuring	152 (23.0)
10	Comfort	119 (18.0)



11	Administrative reasons	116 (17.6)
12	Speech control	116 (17.6)
13	Mask Addiction	112 (16.7)
14	Self-protection	98 (14.8)
15	Feel COVID cases may increase	97 (14.7)
16	Ornamental	95 (14.4)
17	Dress match mask	95 (14.4)
18	Avoid showing identity	95 (14.4)
19	Designed	90 (13.6)
20	Hospital code	72 (10.9)
21	Avoid passive smoking	64 (9.7)
22	Reduction of nail biting	63 (9.5)
23	Crowd management	63 (9.5)
24	Style	62 (9.4)
25	Biting of foreign materials	58 (8.8)
26	Face covering	58 (8.8)
27	I am feeling sick	58 (8.8)
28	Good appearance	50 (7.6)
29	Attention seeking	48 (7.3)
30	Singing with mask	46 (7.0)
31	Tooth clips	43 (6.5)
32	Public transportation	42 (6.4)
33	Salivary splash	41 (6.2)
34	Yawn free	36 (5.4)
35	Non-expressive smile	36 (5.4)
36	Snack eating	32 (4.8)
37	Feel of self arrest	32 (4.8)
38	Cover the ugliness	32 (4.8)
39	Non-expressive scolding	16 (2.4)
40	Parents compulsion	16 (2.4)
41	Bad mouth smell	15 (2.2)
42	Cover the wound	12 (1.8)
43	High level of humidity	12 (1.8)
44	Drooling while sleeping	11 (1.7)

[Figure in parenthesis denoted percentages] All the responses were further subjected to the factors that contribute to behavioral intention. Twenty one responses were correlated with the factor “attitudes towards the behavior”, five responses were correlated with “subjective norms” and seventeen responses were correlated with “perceived behavior control” (Table 5). This study highlighted that the behavior towards the practice (face masking) is good, but more people have perceived behavior control and thus follow the

instructions without interest. The variations among the non-restricted and full-metric invariance were also analyzed, with the restriction that in the full-metric invariance model, factor loadings, factor variances, and path regression coefficients were equivalent. Thus, this study data confined the importance of having the personal attitudes and motivation from the peer teams for the continuous practice of any good and need-based activities like wearing a face mask.

Table 5: Analysis of responses towards behavioral intention

Behavioral intention	No. of responses	Remarks
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Attitudes towards the behavior	21 (47.7%)	The individuals positive and negative evaluation of self-performance of the particular behavior is good
Subjective norms	5 (11.4%)	Blindly following what the other people/ important person tells or order the behavior
Perceived behavior control	18 (40.9%)	The degree of which a person believes to perform the behavior is good

Table 6: Qualitative validity

Parameter	Sub-dimensions	Tools applied	Outcome
Credibility	Prolonged engagement	Provide sufficient time for the interviewee to give reasonable and exact answers	Get reasonable single/ multiple answers
	Persistent observation	Read and re-read the collected data for relativeness and factual state	Some data are avoided due to irrelativeness
	Triangulation	Data: multiple data sources and multiple interviewees Investigator: Involvement of four interviewers in this study Method: multiple methods of data collection like in person, email, and WhatsApp	Visceral interviewees Four interviewers Data collected via email, WhatsApp and in person
	Member check	Review the data by the third person	Anonymous subjective person reviewed
Transferability	Thick description	Understand the attitude and practice	Get some exact and novel information's
Dependability & confirmability	Audit trial	Reviewed by two research team members other than the authors for data curation	Statistician included in the team for data verification
Reflexivity	Explicit and implicit assumptions	Data outcome in comparison with socioeconomic status and occupational pressure	Data were compared with necessary study elements

All the study participants knew that wearing a mask reduced the spread of various airborne and visceral infectious diseases, including COVID-19. The usage of masks among the public while traveling or attending the crowd was encouraged, but strict adherence to such practices was poorly recorded, even by the regulatory authorities. People who are not accepting the use of mask felt that the use of masks should not be forced because

it interfered with breathing, speaking and caused overheating. (10,13) In this study, we are not concentrating on the negative effects of mask usage, and only the reasons for mask acceptance are included. The attitudes towards the use of masks were also defined under perceived subjective norms, which are the perceived social pressures to wear a mask and the individual's belief in wearing mask continually. (14) The face

mask usage during the pandemic period is found effective to reduce the disease transmission and addressed to curtail the pandemic spread. (15) This study assessed mask usage as a personal protection technique even after COVID-19 fear reduced, and continuous usage of face masks is considered an attitude towards the behavior. Scientifically, it showed a noteworthy relationship between attitude and behavioral intention. Further, three more additional variables were also assessed with the inculcating aspects of perceived risk, social image, and its related pressure. (16) Perceived usefulness is considered as one of the belief towards the usage or follows the technique or system. This may be the first of its kind of investigating the perceived usefulness and its relativeness towards mask wearing among general public after COVID pandemic reduced. This phenomena has not much applicable to all and in all places, but some persons wearing masks in crowd, hospitals, malls etc. Comparatively, mild side effects and feels discomfort observed among the mask users. More studies relate the perceived usefulness of wearing face masks during pandemic period. (17) In general, there is a concept that increasing the age understands the adherence towards the preventable behaviors than the younger ones. Reversely, during the COVID pandemic and post pandemic periods, the older age groups are less likely to wear masks but likely to vaccinate. (18) From this study, we observed that the age groups between 15 and 45 wore masks more than the older age groups. While determining the gender and mask usage, comparably women are more fascinating than men in order to avoid the unwanted attention from men. During pandemic period, the attitude and perceptions towards wearing mask was common, no such gender variations, but post pandemic period, it becomes cosmetically and further the masks are blindly defined as an accessory item with different colors and designs. Most of the men having the negative perception that wearing mask

are threat and fallacy to their masculine image. (19) In this study also, we observed 66.3% of females wearing masks continuously than males. Mask wearing is predominantly an occupational behavior; thus, certain occupations and administration forced the employees to wear masks even after the COVID pandemic was reduced. Health care workers and sanitary workers are examples of occupational groups wearing masks. A study that compared the slum and non-slum groups who are wearing face masks revealed that there are no variations, while occupation is a major factor. (20) In India, after COVID-19 cases were reduced, various states removed mask mandates; majority of the public informed that people in their area either don't have a mask at all or are not wearing it properly. No such location discrepancy was found, but compared with urban areas, rural communities are very lethargic and not willing to wear masks even when they are coming out of their locality. (21) In this study, we noted 20.8% of rural community members wearing face masks while they are traveling or moving to other places for various reasons, including occupation. During pandemic time, the use of face masks was predominantly propagated for medical and public health reasons. Google searches found that N95 was predominantly used in India, whereas surgical masks were used in Russia, FFP2 in Spain, and cloth masks in France and the United Kingdom during the pandemic and immediate post-pandemic periods. (22) In post-pandemic time, the usage of face masks is determined for various purposes, not only for medical and public health reasons, and quality and types of masks vary; thus, this study recorded that cotton masks (57%) followed by medial masks (36.1%) are predominantly used in India. The usage of N94 masks is reduced now a days, and very few, like health care workers use them. Although the knowledge and attitude of using face masks were relatively good, practice and technique among the



public were low, (23) and the same was found in India as well. While discussing with the mask users, 83.2% informed that wearing a mask is like a routine activity and has become one of the daily practices when coming out of the house. The regular usage of a face mask during outside travel is good and hygienic, thereby reducing visceral infections and other related diseases. The same was expressed by 79% of the participants in this study. The primary non-pharmaceutical interventions followed by the individuals, like wearing a face mask, improved personal hygiene and were also considered as the strong and positive predictors. (24) In this initial period of the pandemic, people are more lethargic to wear face masks; later, as per government instructions and awareness, people used the face mask. Further, the fear decreased with knowledge about the pandemic, education level, and age. (25) Still, some of the people have fear of such infections; in this study, 55.4% people have fear of such infections and wear mask continuously. Wearing masks plays a pivotal role in the prevention and control of infectious respiratory disease transmission; 49.9% of individuals also adhere to the same reason for wearing masks. (26) In general, mask usage is closely associated with low adherence, but adherent mask users are significantly protected against seasonal disease and also avoid spread their diseases to others; 47.8% of individuals are accepting the same. (27) Regular mask-wearing habits are considered commuting protection against dust, pollen and traffic particles, especially when traveling by motorbike. (28) In this study, 36.1% of people like to wear masks to get rid of dust; while traveling, most of the roadside dead animals were thrown as it without any covering, and the decay smell disturbed them; in such situations, wearing masks helps us to avoid external bad smell. Our observation emphasizes that limited social distancing and living along with pre-symptomatic

or suspected patients will render a high risk for disease transmission. The individuals informed that they lived along with their COVID-19 infected parents in the same house by wearing face masks, no disease spread; thus, masks prevent the presymptomatic spread. Nearly 23% of the individuals informed that murmuring (in a low quiet voice) or scolding in low voice when using mask, helps them escape from the situation. After wearing the mask, hot and humid raise, mean skin temperature and the heart rate increase; conversely, blood oxygen saturation level decreases, leading to a decline in health and comfort levels. (29) Even though a lot of discomfort was observed, 18.2% of people defined their comfort zone as well. During the pandemic, all the companies and institutions insisted their employees wear face masks. Academic institutions mandated their members of faculty, staff, and students to wear face masks. The CDC also recommended that anyone who is deemed to be an “essential employee” should wear face coverings in the workplace. (30) While speaking with a mask, some information are not clearly communicated to the listener. This may be good or bad for the speakers in certain situations. Studies highlighted that impairing speech recognition, radio communication and eliminating visual speech information affect the acoustic signal thereby mask speech are not much recognized. (31,32) Some of the interviewees (17.2%) informed that they have a mask addiction or dependence and cannot come out from the house without a mask. They also highlighted that if anybody comes close for communication; they automatically wear a mask or close their mouth and nose with a handkerchief. Some have studies highlighted that the mask-wearing behavior may have some adverse effects, including mask dependence and addiction. (33) Around 15% of the mask users felt that masking gave them a self protection, same was considered by a study that



defined it as a collective offsetting effect. (34) Some of the mask users informed that they are using designed, ornamental, and dress-matched color masks (13 to 14%). Studies on using disposable masks create environmental pollution; thus, the usage of designed and color-matched masks that are reusable is suggested. (35) Hospital code is one of the major reasons for wearing masks in the working environment in order to avoid cross-contamination and nosocomial and iatrogenic infections. Although mask wearing alone is not enough to provide safety and prevention control, there is a possibility of microbial particles not entering in the layers of the mask. (36) Nearly 11% of the participants felt that it was part of their professional lives. Girls in the age groups of 20 and 30 years felt that the use of a face mask hindered their identity, but the mask also saved them in most situations. No male participants were informed about the face-hindering and safety measures. A study revealed that donning face coverings has profound implications for face recognition in everyday situations. (37) Passive smoking causes more ill effects in smoke inhalers and is more serious and at risk for diseased patients. (38) Though the Government of India banned smoking in public places in 2008, the implementation of the rule is being smoked into thin air. In this study, 9.8% of participants expressed that wearing masks reduces inhalation of smoking and air pollutants. Onychophagia, nail biting, is a chronic condition that happens in repetitive and compulsive ways among all age groups, with multiple factors ranging from genetic to psychiatric. (39) More than 60 participants informed that their nail biting habit and other foreign materials like pens, pencils etc, get reduced after wearing the face masks. The flu-like illnesses are easily spread where people gather (in a crowd environment) in a places like schools, colleges, family functions and funerals, public functions like temples, competitions, and

celebrations, (40,41) and public transportation. (42) People thought it was very tough to reduce the crowd on various occasions, but 8.6% of mask wearers felt that it may reduce some sort of infection. Some participants (8.1%) felt that they should not spread their respiratory infections to others. Respiratory droplets are exhaled from infected patients when they breathe, talk, cough, sneeze, or sing; thereby, masks prevent infected persons from exposing others by stopping the exhalation of virus-containing droplets into the air. (43) Interestingly, some participants (n=50; 7.7%) expressed that they are looking good in appearance while wearing masks. Studies revealed some research outcomes, including that medical face masks reduced attractiveness because they were associated with disease or illness; (44) wearing a cloth mask was significantly more attractive; (3) and images of men wearing a blue medical face mask were perceived as being the most attractive. (45) Some of the student participants (7%) informed that they were singing and scolding in the classroom (if they felt bore) in a very mild voice, for that face mask helps them to protect themselves from the teachers. Around 6% revealed that the mask usage helps them to cover their tooth clips, wounds, and scars on the face. Conversely, various side effects regarding oral health were recorded, including sour breath, dry mouth due to mouth breathing, bleeding gums, receding gums, and tooth decay. (46) A few participants informed that wearing a mask is reducing some social stigmas like salivary splash (6.3%), yawning (5.5%), bad smell in the mouth (2.3%), drooling, and opening (1.7%) of the mouth while traveling on the public transport.

CONCLUSION

Through this study, we can understand the importance of wearing a mask when exposed to crowds, suspicious infectious groups, and confirmed patients. Looks and thoughts are deceptive; based on this line, our study also



exhibited the different reasons for using masks even in pandemic cases and reduced fear. This study also determined the analysis of perceived social pressures to wear a mask and the individual's belief in wearing a mask continually, and which was considered an attitude towards the behavior. Further, perceived usefulness and its relativeness towards mask wearing are reduced. This study further recommends to all wearing face masks of their interest whenever they are coming out of the house, exposed to air currents and crowds.

REFERENCES

1. Cha SE, Ku X and Choi I: Post COVID- 19, still wear a face mask? Self-perceived facial attractiveness reduces mask-wearing intention. *Frontiers in Psychology* (2023), 14: 1084941.
2. Patel V, Mazzaferro DM, Sarwer DB and Bartlett SP: Beauty and the mask. *Plastic and Reconstructive Surgery Global Open* (2020), 8: e3048.
3. Pazhoohi F and Kingstone A: Unattractive faces are more attractive when the bottom-half is masked, an effect that reverses when the top-half is concealed. *Cognitive Research* (2022), 7: 6.
4. Schneider AB and Leonard B: From anxiety to control: Mask-wearing, perceived marketplace influence, and emotional well-being during the COVID-19 pandemic. *Journal of Consumer Affairs* (2022), 56: 97-119.
5. Peeples L: Face masks: what the data say. *Nature* (2020), 586: 186-189.
6. Madan A, Bindal S and Gupta AK: Social distancing as risk reduction strategy during COVID-19 pandemic: A study of Delhi-NCT, India. *International Journal of Disaster Risk and Reduction* (2021), 63: 102468.
7. Balram B, Samiran P, Harkiran K and Lalit D: Face mask – an essential armour in the fight in India against COVID-19. *Indian Journal of Medical Research* (2021), 153: 233-238.
8. Prajapati P, Desai H and Chandarana C: Hand sanitizers as a preventive measure in COVID-19 pandemic, its characteristics, and harmful effects: a review. *Journal of Egypt Public Health Association* (2022), 97: 6.
9. Dhalaria P, Arora H, Singh AK, Mathur M and Ajai KS: COVID-19 Vaccine hesitancy and vaccination coverage in India: an exploratory analysis. *Vaccines (Basel)* (2022), 10: 739.
10. Taylor S and Asmundson GJG: Negative attitudes about facemasks during the COVID-19 pandemic: the dual importance of perceived ineffectiveness and psychological reactance. *PLoS ONE* (2021), 16: 1-15.
11. Ngonghala CN, Iboi E, Eikenberry S, Scotch M, MacIntyre CA, Bonds MH and Gumel AB: Mathematical assessment of the impact of non-pharmaceutical interventions on curtailing the 2019 novel Coronavirus. *Mathematical Biosciences* (2020), 325: 108364.
12. Irfan M, Akhtar N, Ahmad M, Shahzad F, Elavarasan RM, Wu H and Yang C: Assessing public willingness to wear face masks during the covid-19 pandemic: fresh insights from the theory of planned behavior. *International Journal of Environmental Research and Public Health* (2021), 18: 4577.
13. Jagadeesan M, Rubeshkumar P, Raju M, Sakthivel M, Murali S, Ramya N, Muthappan S, Irene S, Kumaravel I, Dineshkumar H, Vettrichelvan V, Parasuram G, Madhusudhan R and Prabhdeep K: Surveillance for face mask compliance, Chennai, Tamil Nadu, India, October- December, 2020. *PLoS ONE* (2021), 16: 1-10.
14. Earle RG, Nestor C, Fisher KA, Rieza HS, Renee MC, Yee D, Criag C, Reese P and Prue CE: Attitudes, Beliefs, and Perceptions



- Associated with Mask Wearing within Four Racial and Ethnic Groups Early in the COVID-19 Pandemic. *Journal of Racial Ethnicity and Health Disparities* (2023), 31: 1-15.
15. Cheng Y, Ma N, Witt C, Rapp S, Philipp SW, Meinrat QA, Ulrich P and Hang S: Face masks effectively limit the probability of SARS-CoV-2 transmission. *Science* (2021), 372: 1439-1443.
 16. Zhang B, Li Z and Jiang L: The Intentions to wear face masks and the differences in preventive behaviors between urban and rural areas during COVID-19: an analysis based on the technology acceptance model. *International Journal of Environmental Research and Public Health* (2021), 18: 9988.
 17. Priska A, Agne U, Saraj RH, Milo AP, Susi K and Thomas R: Perceptions towards mask use in school children during the SARS-CoV-2 pandemic; descriptive results from the longitudinal Ciao Corona cohort study. *Swiss Medical Weekly* (2022), 152: w30165.
 18. Howard MC: The relations between age, face mask perceptions and face mask wearing. *Journal of Public Health (Oxford)* (2022), 44: 447-449.
 19. Looi KH: Explicating gender disparity in wearing face masks during the COVID-19 pandemic. *BMC Public Health* (2022), 22: 2273.
 20. Nagarajan R, Rubeshkumar P, Jagadeesan M, Raju M, Sakthivel M, Murali S, Muthappan S, Kumaravel I, Dineshkumar H, Vetrichevan V, Parasuraman G and Prabhdeep K: Knowledge, attitude, and practice towards face mask use among residents of Greater Chennai Corporation, India, March 2021. *Frontiers in Public Health* (2022), 10: 938642.
 21. Pamela SS, Laura AM, Jean MF, Michella TS, Paul AD, Philip W, Young JJ, Chung IW, Mary G and Christi AP: Factors associated with willingness to wear a mask to prevent the spread of COVID-19 in a Midwestern community. *Preventive Medicine Reports* (2021), 24: 101543.
 22. Yeung AWK, Parvanov ED, Horbanczuk JO, Pulker MK, Kimberger O, Harald W and Atanas GA: Public interest in different types of masks and its relationship with pandemic and policy measures during the COVID-19 pandemic: a study using Google Trends data. *Frontiers in Public Health* (2023), 11: 234-238.
 23. Itimad IA, Rehana K, Ishag A and Osama AW: Face mask practice and technique during the COVID-19 pandemic: a non-representative cross sectional study in Sudan. *Patient Preference Adherence* (2022), 14: 1163-1176.
 24. Eikenberry SE, Mancuso M, Iboi E, Phan T, Keenan E, Yang K, Eric K and Abba BG: To mask or not to mask: Modeling the potential for face mask use by the general public to curtail the COVID-19 pandemic. *Infectious Disease Model* (2020), 5: 156-163.
 25. Arcadio AC and Leidy YG: Factors explaining the fear of being infected with COVID-19. *Health Expectations* (2022), 25: 506-512.
 26. Sim SW, Moey KS and Tan NC: The use of facemasks to prevent respiratory infection: a literature review in the context of the Health belief model. *Singapore Medical Journal* (2014), 55: 160-167.
 27. MacIntyre CR, Cauchemez S, Dwyer DE, Seale H, Cheung P, Browne G, Fasher M, Wood J, Gao Z, Booy R and Ferguson N: Face mask use and control of respiratory virus transmission in households. *Emerging Infectious Disease* 2009, 15: 233-241.
 28. Eric V, Hoang HA, Anh DP and Soheil R: Effectiveness of wearing face masks against traffic particles on the streets of Ho Chi Minh

- City, Vietnam. *Environmental Science: Atmosphere* (2023), 2: 1450-1468.
29. Cong L, Guojian L, Yuhand H, Zixuan Z and Yujian D: Effects of wearing masks on human health and comfort during the COVID-19 pandemic. *Earth Environmental Sciences* (2020), 531: 012034.
30. Andrejko KL, Pry JM, Myers JF, Fukui N, Jennifer LD, John O, James PW, Joseph AL, Seema J and California COVID-19 Case-Control study team: Effectiveness of Face Mask or Respirator Use in Indoor Public Settings for Prevention of SARS-CoV-2 Infection - California, February–December 2021. *Morbidity and Mortality Weekly Reports* (2022), 71: 212-216.
31. Thomas F, Allen C, Butts W, Rhoades C, Brandon C and Diana LH: Does wearing a surgical facemask or N95-respirator impair radio communication? *Air Medical Journal* (2011), 30: 97-102.
32. Crinnion AM, Toscano JC and Toscano CM: Effects of experience on recognition of speech produced with a face mask. *Cognitive Research* (2022), 7: 46.
33. Pan X, Li X, Kong P, Wang L, Deng R, Wen B, Xiao L, Honglin S, Yi S, Hongmei Z, Jiang L, Yang W, Qiuzhe G, Lin D and Chengye S: Assessment of use and fit of face masks among individuals in public during the COVID-19 pandemic in China. *JAMA Network Open* (2021), 4: e212574.
34. Salanie F and Treich N: Public and private incentives for self-protection. *Geneva Risk Insurance Reviews* (2020), 45: 104-113.
35. Ipaki B, Merrikhpour Z, Taheri RMS and Saman T: A study on usability and design parameters in face mask: Concept design of UVW face mask for COVID-19 protection. *Human factors Ergonomics in Manufacturing* (2021), 31: 664-678.
36. Dargahi A, Jeddi F, Ghobadi H, Vosoughi M, Chimani K, Mehdi S, Aidin H, Ahamad M, Somayeh BH, Hadi S and Morteza A: Evaluation of masks' internal and external surfaces used by health care workers and patients in coronavirus-2 (SARS-CoV-2) wards. *Environmental Research* (2021), 196: 110948.
37. Manley KD, Chan JCK and Wells GL: Improving face identification of mask-wearing individuals. *Cognitive Research* (2022), 7: 27.
38. Avila TE, Al-Delaimy WK, Ashley DL, Benowitz N, Bernert JT, Sungroul K, Jonathan MS and Hecht SS: Assessing secondhand smoke using biological markers. *Tobacco Control* (2013), 22: 164-171.
39. Mohsen B, Janice LP and Sharon EJ: Art of prevention: the importance of tackling the nail bite habit. *International Journal of Women Dermatology* (2021), 7: 309-313.
40. Liu C, Huang J, Chen S, Wang D, Li Z, Xiaoue L and Xinbo L: The impact of crowd gatherings on the spread of COVID-19. *Environmental Research* (2022), 213: 113604.
41. Tulchinsky TH and Varavikova EA: A History of Public Health. *New Public Health* (2014), 17: 1-42.
42. Gosce L and Johansson A: Analyzing the link between public transport use and airborne transmission: mobility and contagion in the London underground. *Environmental Health* (2018), 17: 84.
43. Brooks JT and Butler JC: Effectiveness of mask wearing to control community spread of SARS-CoV-2. *JAMA* (2021), 325: 998-999.
44. Hies O and Lewis MB: Beyond the beauty of occlusion: medical masks increase facial attractiveness more than other face coverings. *Cognitive Research: Principles and Implications* (2022), 7: 1-12.

45. Bassiri TB, Nguyen A, Choudhary A, Guart J, Chiaro BD and Purnell CA: The Effect of Wearing a Mask on Facial Attractiveness. *Aesthetic Surgery Journal: Open Forum* (2022), 4: ojac070.
46. Bhattacharya S: Mask Mouth Syndrome - an emerging oral health threat during the COVID-19 pandemic. *Journal of Family Medicine and Primary Care* (2022), 11: 4869-4870.

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