Behavioral factors to effective use of face coverings within retail consulting environments

Prepared for
The PROTECT COVID-19 National Core Study on transmission and environment

PROTECT- HSET3971 (2022)
National Core Study Report

Prepared 2022
First published 2022

The PROTECT COVID-19 National Core Study on transmission and environment is a UK-wide research programme improving our understanding of how SARS-CoV-2 (the virus that causes COVID-19) is transmitted from person to person, and how this varies in different settings and environments. This improved understanding is enabling more effective measures to reduce transmission – saving lives and getting society back towards 'normal'.

This report and the research it describes were funded by the PROTECT COVID-19 National Core Study on transmission and environment, which is managed by the Health and Safety Executive (HSE) on behalf of HM Government. Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect UK Government or HSE policy.

Behavioral factors to effective use of face coverings within retail consulting environments: research findings

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Abbreviations and definitions in project context

CEV	Clinically Extremely Vulnerable
COVID-19	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)
Donning	Putting on a face covering
Doffing	Taking off a face covering
Face covering	Something which securely covers the nose and mouth
FFP	Filtering Face Pieces of different classes (e.g. FFP2 or FFP3).
HEPA	High-efficiency particulate air – type of filter
IOM	Institute of Occupational Medicine
P	Public (used to denote stakeholder type for participant quotations)
PPE	Personal Protective Equipment
PROTECT	Partnership for Research in Occupational, Transport and Environmental COVID-19 Transmission
NHS	National Health Service
NCS	National Core Study
N95	A type of specialised filtering face mask
Type llR	A Fluid resistant Surgical Mask
W	Worker (used to denote stakeholder type for participant quotations)

1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The PROTECT ('Partnership for Research in Occupational, Transport and Environmental COVID Transmission') National Core Study (https://sites.manchester.ac.uk/covid19-national-project/) has conducted sector specific research (Theme 3) to understand and inform prevention of the 'SARS-CoV-2' (the virus that causes COVID-19). This report presents the scope, methods and findings of sector specific research conducted within close contact retail services to better understand the factors affecting individuals use of face coverings within retail consulting rooms. Knowledge, attitudes and behaviours are explored amongst both Public and Worker populations within the UK.

1.2 METHODS

A review of academic and grey literature was used to inform development of data collection tools (online survey and semi-structured interview schedules) with these mapped to the Theoretical Domains Framework (TDF) to address the following research question:

> *What are the influential factors impacting effective use of face coverings as a barrier to transmission of the COVID-19 virus, in a retail consulting environment?*

A variety of recruitment channels were used to raise awareness of the study and recruit participants. Ethical approval for study conduct was granted favourable opinion by the Reading Independent Ethics Committee. A total of 379 participants, 244 Workers and 135 members of the Public completed the online survey. Of these, 24 participants took part in a semi-structured interview and a further 12 individuals were recruited directly for interview. Interviewees comprised 18 members of the Public and 18 Workers comprised of pharmacy Workers, hair and beauty Workers and a holistic therapist and an optometrist. Quantitative survey data were analysed using descriptive statistics and cross-tabulations of responses to questions were produced where applicable to aid interpretation of the study findings. Qualitative survey responses and written interview transcripts were analysed thematically. Free-text comments provided in response to paid social media advertisements were also analysed thematically as an additional open source data set generated organically by the study recruitment approach.

Findings are presented for each of the TDF domains within the main report.

1.3 PROMINENT FINDINGS

The study findings reveal good levels of knowledge, amongst both Workers and members of the Public, regarding why face coverings are recommended within retail consulting rooms and recommended donning/doffing practices, with study participants confident in their ability to do so correctly. The wearing of face coverings was also considered to be an easy practice to perform and remember. Many individuals reported forming new habits through frequent practice, such as donning their face covering prior to entering the retail premises or adapting their physical placement/storage of face coverings to make their use easy and convenient. Workers also reported a plentiful supply provided by their employer.

Knowledge of recommended practices concerning washing/drying and storage of face coverings (where applicable) was less evident. Frequency and triggers for individuals changing their face covering varied across the type of covering being worn and type of respondent (e.g. Workers and Public), some of whom were guided by duration of use, whilst others responded to environmental/circumstantial triggers (e.g. each trip out of the home, between work breaks).

Face coverings were generally considered to be effective at reducing the transmission of COVID-19, though some acknowledged them to be part of a suite of protective measures required to mitigate viral transmission. Face coverings were considered to benefit the wearer and others around them within the retail consulting environment with other common benefits cited including positive judgement from others. Common negatives included communication challenges and, less prominent, feelings of discomfort.

People's intention to wear face coverings was self-reported to be high, even if Government no longer mandated the wearing of them. Amongst the study populations hair and beauty Workers were found to have the lowest intentions to wear face coverings if they were no longer mandated. Such interviewees cited commercial reasons linked to customer confidence for retaining the use of face coverings amongst their staff but not stipulating this as a customer requirement. Intention to visit retail consulting rooms remained largely unchanged amongst the majority of Public participants, regardless of whether the use of face coverings were to be mandated.

During the interviews both the Public and Worker respondents reported that the wearing of face coverings by others (e.g. Workers, customers and colleagues) reinforced their own behaviours. That said, participants were less likely to identify social influences as impacting their own behavior when explicitly asked about the impact of others attitudes and practices on their own.

Many Workers believed the wearing of face coverings had changed aspects of their work or identity, whilst perceived changes to personal identity was not a prominent finding amongst the Public. Hair and beauty Workers were the only participant group with substantial volumes of respondents to identify a negative impact on their mood as a result of wearing face coverings. Self-reported levels of anxiety differed between data collection measures, most commonly this was said to have no impact or reduce feelings of anxiety experienced by feeling safer and more protected from COVID-19.

Environmental influences, such as posters and signage, were identified to support the wearing of face coverings though little environmental context or resources were cited to support prompt disposal (where relevant) amongst members of the Public.

Frequently reported ineffective/poor practices that individuals were self-aware of doing included adjusting, touching and moving face coverings whilst wearing them and not feeling as though they change their face covering frequently enough. In addition, individuals reported that they could improve upon current storage practices in between the use of face coverings.

1.4 IMPLICATIONS FOR POLICY AND PRACTICE

Drawing on the study findings, 15 recommendations are presented for policy, 12 recommendations are presented for practice and six recommendations are presented for further research. Where applicable, consideration has been given to the relevance of these recommendations both now and in the context of future COVID-19 variants or subsequent pandemics.

2 INTRODUCTION

2.1 BACKGROUND AND CONTEXT

The COVID-19 virus can spread through aerosol droplets released from the mouth or nose of an infected person, for example, when they breathe, talk, cough or sneeze (Brooks and Butler, 2021). Exposure to such droplets is acknowledged to increase in highly populated areas, areas with poor ventilation and in confined spaces (Bazant et al, 2021). Scientists estimate that the wearing of face coverings by both infected and susceptible persons when indoors will reduce airborne transmission risk, with the extent of this impact being dependent on factors such as the type and composition of the face covering being worn (Bazant et al, 2021).

The retail sector is hugely diverse with respect to the industries, products and services available. In addition to physical retail spaces varying in size and layout, customer throughput can also rise and fall at different points in the day/week, with additional unpredictable fluctuations making it challenging to practice social distancing. In addition to supporting the sale of products and services, a number of retailers also offer personal services that require Workers to make unavoidable physical contact with customers or work in very close proximity to them in a small consulting room (e.g. hair and beauty salons, pharmacies, opticians etc.).

When considering the factors known to increase exposure to the COVID-19 virus (above) in the context of retailers offering personal services within small consulting rooms, the importance of Workers and customers effectively using a face covering becomes all the more important to prevent viral transmission. Moreover, whilst face coverings provide a physical barrier to transmission, both as source control to block exhaled virus as well as reducing the wearers exposure to infectious droplets, their effectiveness can be undermined by user behaviours.

A face covering is defined by UK Government (2022) as “something which securely covers the nose and mouth”. In the context of this research project, the term ‘face covering’ is used throughout this report to refer to any mask or covering used as a means of source control that covers the wearers nose and mouth (e.g. N95-type respirators, surgical masks, cloth face coverings, masks, bandanas and scarves).

It should be noted that the guidance from UK government changed during the period of data collection and was also different across each of the devolved nations.

- As of 27th January 2022 legal mandating of face coverings within indoor settings was removed in England.
- As of 26th January 2022 legal mandating of face coverings within indoor settings was removed in Northern Ireland.
- Regulation for the wearing of face coverings within shops remained in place for the period of data collection in Wales.
- Regulation for the wearing of face coverings within shops remained in place for the period of data collection in Scotland.

2.2 STUDY OBJECTIVES

The project seeks to provide evidence based insight in response to the following overarching research question:

> *What are the influential factors impacting effective use of face coverings as a barrier to transmission of the COVID-19 virus, in a retail consulting environment?*

It is therefore important to understand current practices and influential factors impacting on effective use of face coverings amongst both Worker and consumer populations, with specific focus on retail environments where personal services are provided to consumers in private consulting spaces[1] away from the busy ‘shop floor’, namely:

[1] Referred to thereafter as ‘retail consulting businesses’.

- Retailers offering personal health services (e.g. pharmaceutical, optometry or audiology) within one or more consulting rooms.
- Retail service businesses offering hair and beauty treatments within one or more consulting rooms.

2.3 STUDY APPROACH

The research project comprised a review of academic and grey literature used to inform development of data collection tools, namely an online survey and interview schedules to enable consultation with Worker and Public participants. A visual illustration of study approach is presented below in Figure 1.

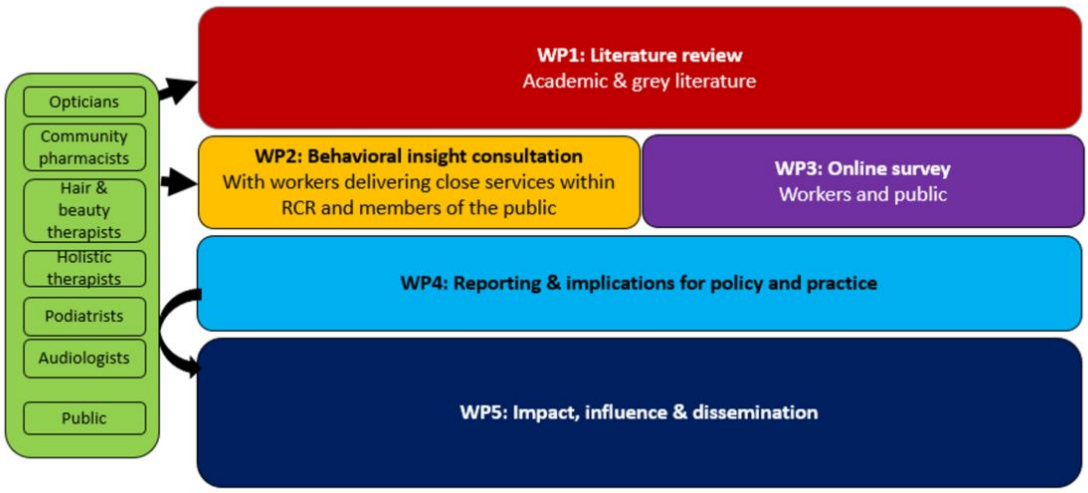


Figure 1: Project flow diagram

3 LITERATURE REVIEW

3.1 REVIEW OF ACADEMIC LITERATURE

3.1.1 Literature review aims and scope

The review of academic literature was focused on understanding "What behavioural factors affect the wearing (or not) of face coverings?". Table 1 summarises the criteria applied when searching and screening literature for inclusion.

Table 1: Literature review scope criteria

Criteria of interest	Description relevant to this review
Publication year	2020 - 2021
Publication language	English language (or translated into English language)
Geographical location of study conduct	UK and international
Population of interest	General population, Workers, members of the Public, consumers, adults
Relevant environments	Small premises, Confined spaces, Consulting rooms, Meeting rooms, Retail, Indoor
Behaviours of interest	Use of face coverings (wearing, donning, doffing, storage, disposal, washing)
Factors affecting behaviour	Relevant behaviour models, theories and constructs
Face covering	Facemask, surgical mask, cloth mask, respirator, bandana, face visor

3.1.2 Screening and quality appraisal

Following the screening of abstracts and full texts a total of 48 papers were included for data extraction and synthesis. 43 of the included papers were empirical studies, all of which were subject to critical appraisal using the criteria within the Mixed Method Appraisal Tool (MMAT, Hong et al, 2018). The majority of studies conducted were considered to be of moderate to high quality. Most commonly, empirical studies used quantitative descriptive methods (in the form of online surveys).

3.1.3 Paper characteristics

3.1.3.1 Country of study

The 43 empirical studies were conducted across 13 different countries. Only two empirical studies were conducted in the UK (Wright et al, 2021; Egan et al, 2021). The greatest volume of published research was conducted in America, followed by China. The geographic spread of included studies is highly relevant to note, as differences in political systems, structures and cultural practices are likely to impact behaviour in ways that are not applicable to the UK (country of focus for the current project).

3.1.3.2 Research setting/study environment

The research settings in which the studies were conducted varied across the evidence base; however, there were only two papers that explored the wearing of face coverings within a retail environment (Li et al, 2021; Fielmua et al, 2021). 28 papers did not specify the research setting that face coverings were being investigated under.

3.1.3.3 Time period of data collection

All of the 43 empirical studies included within the review conducted their data collection during 2020. This is perhaps unsurprising given the time taken to conduct, report and publish research findings. The implication of this, however, is that the evidence base is restricted to the early part of the COVID-19 pandemic, when understanding of the COVID-19 virus was relatively low amongst both the scientific community and wider Public; the accuracy of related communications was unassured and legal mandating of face-coverings was variably introduced at different times in different countries.

3.1.4 Academic literature findings and implications for primary data collection

A summary of findings emergent from the review of academic literature has been provided as a separate deliverable (D1 - PROTECT NCS Face coverings R1 V7 FA). The findings highlighted the diversity of literature exploring behavioral factors related to the wearing of face coverings during the COVID-19 pandemic. Huge diversity is apparent within the evidence base with respect to the population of focus and country of study (and subsequent cultural factors impacting upon research findings). The evidence base available at the time of review (October – November 2021) solely relates to research conducted during 2020 with great reliance on self-report survey data. Furthermore, data collection was generally non-specific with respect to contextual environment of interest to explore people's behaviors, and the underpinning factors, concerning the use of face coverings during COVID-19.

As a result of this review, it was identified that further research into people's behaviors concerning the use of face coverings within retail consulting environments was therefore needed within a UK context. As part of this, the findings from the international academic evidence were used to inform content and coverage of data collection tools. Prominent constructs identified as useful for exploration amongst a UK Worker and Public population included:

- Perceived social, subjective and personal **norms** with respect to the use of face coverings.
- **Barriers** to the wearing of face coverings in retail consulting rooms, including accessibility, discomfort, interpersonal communication, long term concerns over use and activity specific barriers relative to the purpose for visiting a retail consulting room.
- Levels of self-efficacy and response **efficacy** perceived relative to the wearing of face coverings within retail consulting rooms and to what do people attribute levels of perceived efficacy.
- Underpinning **motivations** for wearing a face covering, during and outside of mandated periods for their use, including empathy to those vulnerable to the virus, routines concerning the cycle of face covering usage (from storage, donning and doffing, cleaning and disposal/reuse) as well as prominence and drivers for engagement in undesirable practices.
- **Knowledge** of the COVID-19 virus and practices concerning the different stages in the cycle of face covering use (from storage, donning and doffing, cleaning and disposal/reuse).
- Prominent sources of mass media and social **media communications**, the format and relative characteristics of communications most trusted.
- **Environmental cues** and the extent to which these consciously influence peoples wearing of face coverings.
- **Risk perceptions** of the COVID-19 virus with respect to severity and susceptibility to both self and others.
- General **attitudes** towards the wearing of face coverings and the extent to which attitudes are mediated by other factors.

3.2 REVIEW OF GREY LITERATURE

3.2.1 Literature review aims and scope

The review of grey literature was focused on providing insight into six core research questions (RQ), presented within Table 2.

Table 2: Extent of grey literature per research question

Research Question (RQ)	Extent of grey literature evidence
RQ1. What are the risk perceptions concerning face covering use amongst Workers and members of the Public?	10 items
RQ2. What are the recommendations for practice concerning face covering usage within the different retail environments and within small spaces similar to retail consulting rooms?	65 items
RQ3. What factors affect the wearing (or not) of face coverings?	8 items
RQ4. What behaviours impact the effectiveness of face coverings in reducing viral transmission?	19 items
RQ5. What 'non-beneficial' practices are there with respect to the use of face coverings and in what contexts?	Six items
RQ6. What knowledge/understanding gaps are there regarding face coverings as a means of preventing viral transmission?	Eight items

A targeted search of key institutions/health agencies of relevance was conducted along with responsive searches to explore similarities and differences in findings for different occupations (e.g. British Retail Consortium, Royal Pharmaceutical Society, Federation of Small Businesses). Final searches were then conducted in Google as a cross check that relevant literature had been identified. The grey literature searches were conducted from 18th October 2021 to 17th December 2021.

A total of 104 grey literature items were identified to be relevant to one or more of the above research questions and hence were included for review and synthesis. Grey literature that addressed more than one research question was dual coded for analysis and synthesis. Most prominently (65 items), the identified literature contained recommendations relevant to the use of face coverings in retail consulting rooms in response to RQ2. Relatively small amounts of relevant grey literature were identified to address the remaining areas of interest, as illustrated within Table 2.

3.2.2 Grey literature findings and implications for primary data collection

A summary of findings from the grey literature has been provided in a separate deliverable (D1 - PROTECT NCS Face coverings R1 V7 FA).

As a result of the grey literature review gaps in research were identified in relation to the use of face coverings. Prominent findings for further consideration and used to inform the content and coverage of data collection tools in the current study amongst Worker and Public populations were as follows:

- Information on **pre-existing anxiety, health and clinical vulnerability** amongst both Public and Worker populations and whether this is a contributory factor amongst those individuals who do not wear a face covering.
- **Risk perceptions** of Workers and the Public concerning the use of face coverings.
- Awareness and understanding of **Government guidance** on the wearing of face coverings across the four nations of the UK.
- Understanding of **employer guidance** (for Workers) on the wearing of face coverings.
- **Availability and sourcing of guidance** by Workers and the Public.
- The **impact of mandates** (by Government and/or businesses) on face covering usage.
- **Ineffective behaviours** in relation to the wearing of face coverings by Workers and the Public.
- The impact of **perceived inconveniences** on the wearing of face coverings for Workers and the Public.

- **Availability and supply of face coverings** both within and outside of the workplace.
- Awareness of understanding and **current practices** on putting on (donning), wearing, removal (doffing), storage, washing/drying of reusable face coverings, disposal of disposable or damaged face coverings.
- Prevalence and awareness of **non-beneficial practices** (e.g. face visors, scarves, bandanas) with respect to the use of face coverings.
- **Gaps in knowledge and understanding** regarding face coverings as a means of preventing viral transmission.
- Awareness levels of what constitutes **good and bad practices** for effective use of face coverings.

4 METHODOLOGY

4.1 STAKEHOLDER CONSULTATION

4.1.1 Tool development

The stakeholder consultation tools for the survey and interview were informed by findings from the review of existing literature (summarised above) (a copy of the tools can be found in D2 - PROTECT NCS Face coverings R2 V2 AF). As a result of the literature findings and in order to support constructive recommendations for practice, the data collection tools followed constructs from the Theoretical Domains Framework (TDF, Cane, O'Connor & Michie, 2012) illustrated within Figure 2.

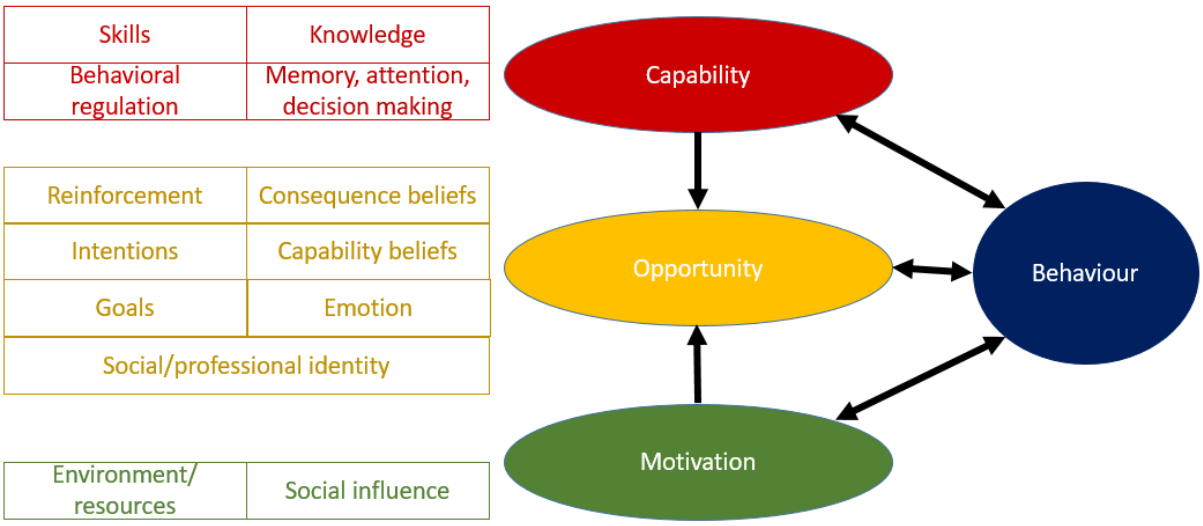


Figure 2: Theoretical Domains Framework (TDF)

4.1.2 Stakeholder outreach and participant recruitment

Figure 3 presents the process of completing the WP3 survey (purple highlight) and the WP2 interviews (yellow highlight), the findings of which are presented in this report. In summary, on completion of the online survey, participants were asked if they wished to opt in to an interview with a member of the project team. Participants were also recruited directly to the interviews, without needing to complete the online survey as a prerequisite to take part.

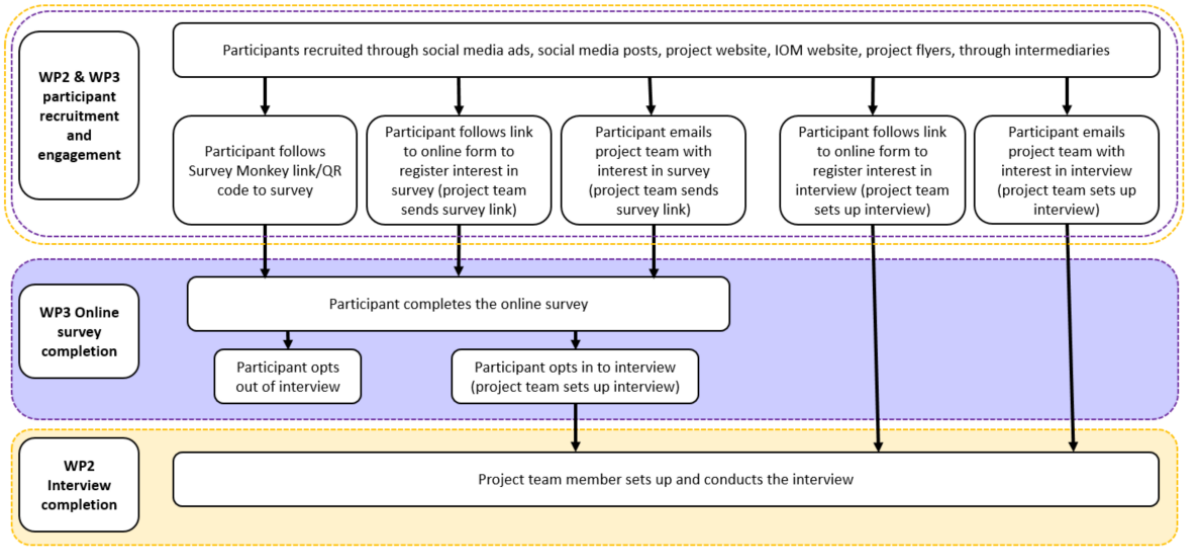


Figure 3: Participant recruitment and engagement

4.1.2.1 Inclusion criteria

The recruitment materials clearly stated the inclusion criteria for study participation: namely, that the respondent was over the age of 18; that they were either a Worker providing services within a retail consulting room in the UK or they were a member of the Public and have visited retail consulting premises within the last three years. In addition, if they were a Worker, there was a requirement for their retail premises to sell products as well as providing close contact services within a consulting room. The inclusion criteria were applied in the first few questions of the survey, online registration form and interviews to root out those not meeting the inclusion criteria.

A flow diagram for meeting these criteria was publicised as part of the project flyer (illustrated within Figure 4)

Figure 4: Flow diagram for eligibility

4.1.3 Routes of recruitment

A variety of routes were used to recruit participants to the survey and interview, including: Publication on the IOM website and the National PROTECT website; dissemination of project information through intermediaries; direct contact via phone or email to relevant retail premises; and through use of paid advertisements on social media. In addition to Facebook, Twitter and LinkedIn social media channels were used by IOM, the PROTECT study, intermediaries and members of the project team to advertise the research study (Figure 5). Further details on the stakeholder outreach and participant recruitment were provided as a separate deliverable (D2 - PROTECT NCS Face coverings R2 V2 AF).

Figure 5: Social media advertisement

4.1.4 Data collection & analysis

4.1.4.1 Online survey

The online survey was launched on the 12th January 2022 and closed to participants on 16th February 2022. The online survey contained a link to the participant information sheet so that prospective participants could make an informed decision on whether or not to take part. Participants who reported wearing face coverings were then routed to a series of survey questions mapped to 13 TDF constructs for Workers and members of the Public. Participants who reported not wearing a face covering were routed to a series of questions to explore their reasoning and influences for this behaviour. Mapping of survey questions to the TDF were provided as a separate deliverable (D2 - PROTECT NCS Face coverings R2 V2 AF). All participants who completed the online survey were offered the choice to be entered into a free prize draw and to take part in a follow up interview to further discuss their survey responses.

Quantitative survey data were analysed using descriptive statistics for the study group overall and for each of the four subgroups, namely, hair and beauty Workers, pharmacy Workers, other Workers and members of the Public. Where appropriate, analyses were restricted to Worker or Public respondents only (e.g. for questions specific to working within the consulting rooms). Cross-tabulations of responses to questions were produced where applicable to aid interpretation of the study findings. Qualitative survey data were analysed using thematic analysis within NVivo.

4.1.4.2 Semi-structured qualitative interviews

Thirty-six semi-structured interviews were conducted by telephone or via video conferencing (e.g. Zoom) between 18th January and 21st February 2022. Interview topic guides were mapped to the 13 TDF constructs for Workers and members of the Public. All 36 participants provided fully informed verbal consent. Interview recordings were transcribed verbatim and subject to independent quality checks. Interview transcripts were then analysed using thematic analysis (Braun & Clarke, 2006[2]) within NVivo. Direct quotes are used to illustrate findings, with brackets used to illustrate the type of stakeholder quoted whilst retaining participant anonymity (W = workers, P = public).

4.1.4.3 Social media

A total of 294 comments were received in response to the IOM social media post on Facebook expressing opinions on the use of face coverings generally. This Public and open source data was downloaded from Facebook and imported into NVivo for qualitative thematic analysis. IOM did not contribute to discussion but did respond to comments inviting individuals to share their views and

[2] Braun, V. and Clarke, V., (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), pp.77-101.

practices through participation in the study via the online survey or through interview. Project researchers were granted access to the paid social media posting in order to ensure a balanced response when inviting participation amongst those posting positively and negatively framed comments related to the use of face coverings. The comments made by IOM researchers were not subject to analysis.

5 RESULTS

5.1 ONLINE SURVEY

5.1.1 Participant characteristics

A total of 520 individuals participated in the online survey, of whom 369 (70%) were Workers in retail consulting room and 151 (30%) were members of the Public. Following exclusions, due to workplaces not selling products, occupation (both specified as an inclusion criteria – see section 4.1.2.1 and incomplete responses (Table 3), the statistical analysis dataset comprised 379 participants, 244 Workers and 135 members of the Public. Of these, 356 participants, 236 Workers and 120 members of the Public, reported wearing face coverings. Full survey results were provided within a separate deliverable (D2 - PROTECT NCS Face coverings R2 V2 AF).

Table 3: Study participants and exclusions

Survey participants	Workers	Public
Participated	369	151
Excl due to workplace did not sell retail products	*104*	
Excl due to occupation (e.g. GP, supermarket)	*5*	*0*
Excl due to incomplete survey response[3]	*16*	*16*
Final survey sample	**244**	**135**
Participants who wear face coverings	236	120
Participants who do not wear face coverings	*8*	*15*

Of the 236 Worker respondents, 122 (52%) provided hair and beauty treatments and/or services, 78 (33%) were pharmacists and 36 (15%) worked in other occupations, including audiology, podiatry, holistic therapies and opticians.

Of 356 participants that reported wearing a face covering within retail consulting rooms, the majority of survey respondents (294, 83%) were based in England, with 41 (12%) in Scotland, 15 (4%) in Wales and 6 (2%) in Northern Ireland, which is similar to the distribution of the total UK population (England 84%, Scotland 8%, Wales 5%, Northern Ireland 3% (Office for National Statistics, 2021)). Proportionally more pharmacists were based in England (N=76, 97%) with only two based elsewhere, one in Scotland and one in Wales.

Almost all survey respondents (N=346, 98%) were aged over 25 with the 7 individuals aged 25 or less all working in Hair and Beauty. Respondents from the general Public were on average older than the Workers with 91 (77%) aged 50 or over compared to 103 (44%) of the Workers.

Sixteen of the survey respondents (13 Workers and 3 members of the Public) considered themselves to be clinically extremely vulnerable and 62 (22%) had received a positive diagnosis of COVID-19. This was most frequent among hair and beauty Workers (N=28, 31%) and lowest among the general Public (N=14, 14%). More than half of respondents (N=169, 59%) had a close friend or family member who had received a positive diagnosis of COVID-19.

5.1.1.1 Description of work premises and practices

Around three-quarters of workplaces (N=164, 72%) were independent shops/retailers (Figure 6), most notably in Hair and Beauty where these comprised 107 (91%) respondents. Pharmacists were most likely to be from national chains (N= 28, 36%). Of the 25 participants who worked in other types of retail businesses, the most commonly cited types of retail businesses were smaller retail chains (N=4, 16%) such as local and independent chains, private practice (N=5, 20%), freelance and self-employed (N=3, 12%) and salon or barbershop (N=5, 20%). The remaining free-text responses, referred to

[3] Participants were only removed due to 'incomplete responses' if no response was received beyond demographic/context questions.

alternative premises, such as such as family owned chain (by isolated individuals). One Worker described the function of their retail business as both hair and beauty and holistic therapies.

"A local chain with 11 premises" (Worker survey respondent)

"Self employed" (Worker survey respondent)

Workers in Hair and Beauty and Other workplaces typically spent three or more hours a day delivering consulting services, with the majority of bookings made more than 24 hours in advance. In contrast, pharmacists tended to spend two or fewer hours delivering services with mainly walk-in appointments.

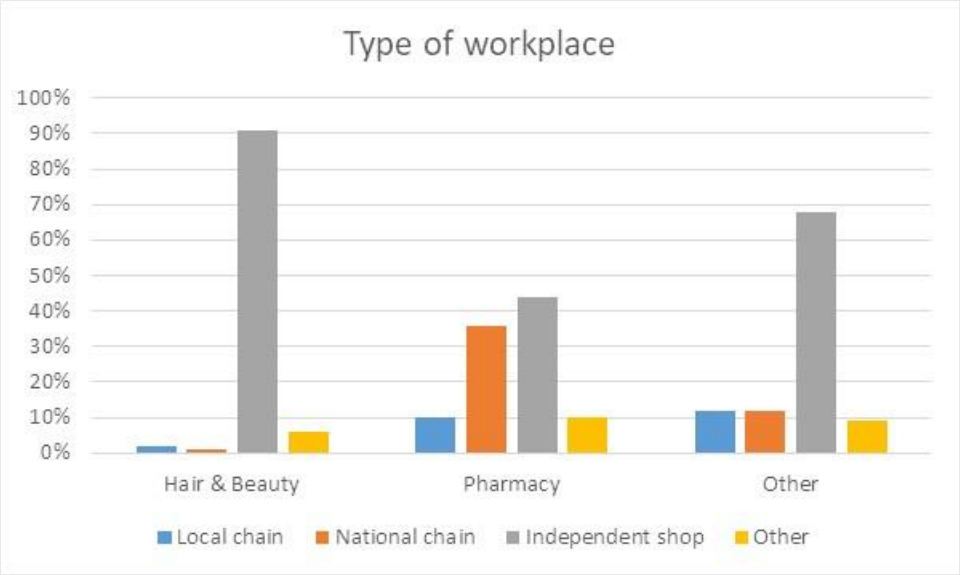


Figure 6: Type of workplace reported by survey respondents (N=229)

5.1.1.2 Type of workplace ventilation reported

Figure 7 shows the types of ventilation present in the different workplaces. Hair and Beauty premises most often (N=91, 67%) used natural ventilation (e.g. opening windows) while Other workplaces most frequently used mechanical ventilation (N=17, 40%). Pharmacists were more likely to report no ventilation present within their workplace (N=46, 52%).

Amongst Workers, 25 individuals provided free-text responses to identify the type of ventilation currently available within their retail consulting room. Most commonly individuals referred to opening doors, followed by use of a fan (specifically extractor fans and ceiling fans were identified). Other less frequently cited ventilation included "open roof" and use of an air purifier or high-efficiency particulate absorbing (HEPA) air filter etc.

"We only have the doors to open" (Worker survey respondent)

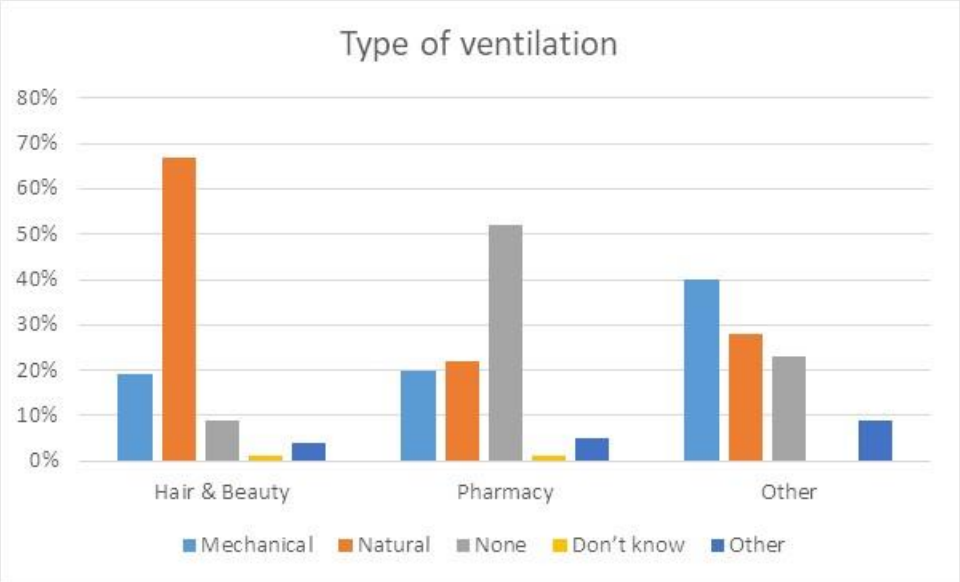


Figure 7: Type of workplace ventilation reported by survey respondents (N=234)

5.1.1.3 Type of face covering used

5.1.1.3.1 Coverings used by Workers

The respondents were asked about the type of face covering they wear, this question was presented along with the images in Figure 8.

Figure 8: Types of face coverings

Among the three Worker groups, 69-80% of participants (N= 184) wore only surgical/disposable face coverings, with 17 (14%) of hair and beauty Workers wearing multiple types of face coverings and 7 (19%) of Other Workers wearing only N95 masks. Of the 18 Workers who reported using Other types of face coverings, free-text included use of a visor, FFP2, FFP3, a particular brand name of covering used, goggles and a type IIR mask.

> *"Cambridge mask N classification" (Worker survey respondent)*
>
> *"Visor as only one ear impossible to hold a mask on face and remove safely" (Worker survey respondent)*

5.1.1.3.2 Coverings used by members of the Public

Among the general Public, 47 (39%) wore only surgical/disposable coverings and 28 (24%) wore only reusable cloth coverings. Of the 30 respondents who reported wearing N95 masks (16 who only wore N95, and 14 who wore both N95 and other types), only two reported having had face fit testing for it. Overall 25 (11%) Workers and 36 (30%) of the Public reported wearing more than one kind of face covering. Five members of the Public reported using Other types of face coverings some of whom referred to using an FFP2 filtered mask or an FFP3 mask within the free text.

"FFP3 bought privately" (Public survey respondent)

5.1.1.4 Provision of coverings used

With respect to who provides face coverings worn, around half of hair and beauty Workers provided their own face coverings (N=66, 52%), while for 20 (57%) of other Workers and 50 (79%) of pharmacists reported face coverings were provided by their employers. Surgical/disposable masks were more likely to be provided by employers than reusable face coverings. Among members of the Public, the vast majority (N=109, 92%) provided their own face coverings, with 10 (8%) reporting them to be provided by the retailer that they were visiting.

5.1.1.5 Individuals who did not wear a face covering

Eight Workers and fifteen members of the Public reported that they did not wear a face covering when working in, or visiting, a retail consulting room. All of these Workers were residents in England, with six (75%) aged 26-49 and two (25%) aged 50+. Among the general Public, eight (53%) of those who did not wear a face covering were resident in England, four (27%) in Scotland, two (13%) in Wales and one (7%) in Northern Ireland. Almost three-quarters (11 respondents; 73%) of the general Public who reported not wearing face coverings within retail consulting rooms were aged 50+, with three aged 26-49 and one aged 18-25.

5.1.2 D1 Knowledge

5.1.2.1 Self-reported knowledge of the pandemic

Self-reported level of knowledge of the pandemic was generally high (Figure 9) with half of respondents (N=159, 51%) reporting 'very good' knowledge and 125 (40%) reporting 'good' knowledge. Workers (N=126, 57%-63%) were more likely to report 'very good' knowledge than members of the general Public (N=33, 32%). Awareness of government guidelines was also high with 95% (N= 197) of Workers and 96% (N=98) of the general Public reporting that they were aware of current government guidance on face coverings.

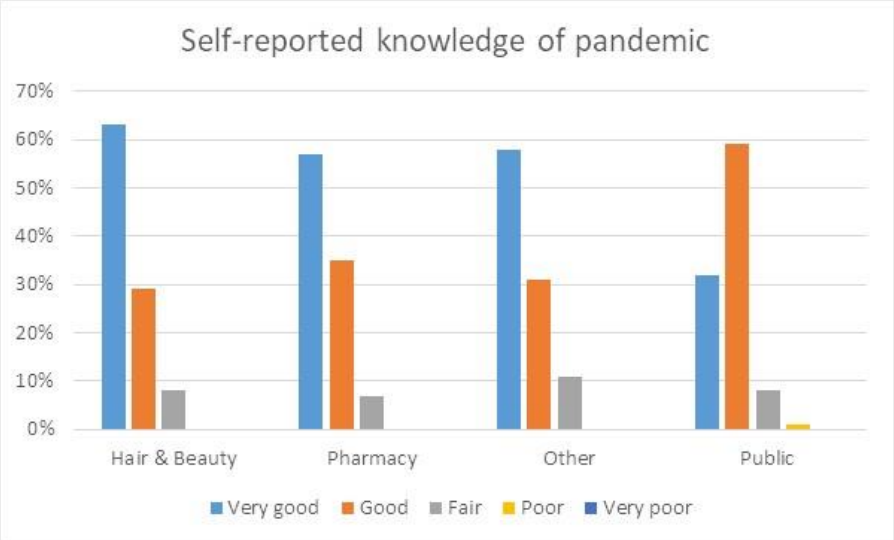


Figure 9: Level of self-reported knowledge related to the COVID-19 pandemic (N=310)

5.1.2.2 Knowledge of recommended usage practices

Knowledge of recommended practices for a range of face covering usage practices (e.g. donning/doffing, cleaning, etc.) was also high (Figure 10), with the highest levels of self-reported knowledge apparent for hair and beauty Workers across all practices and lowest self-reported knowledge amongst pharmacists concerning the storage and washing of face coverings.

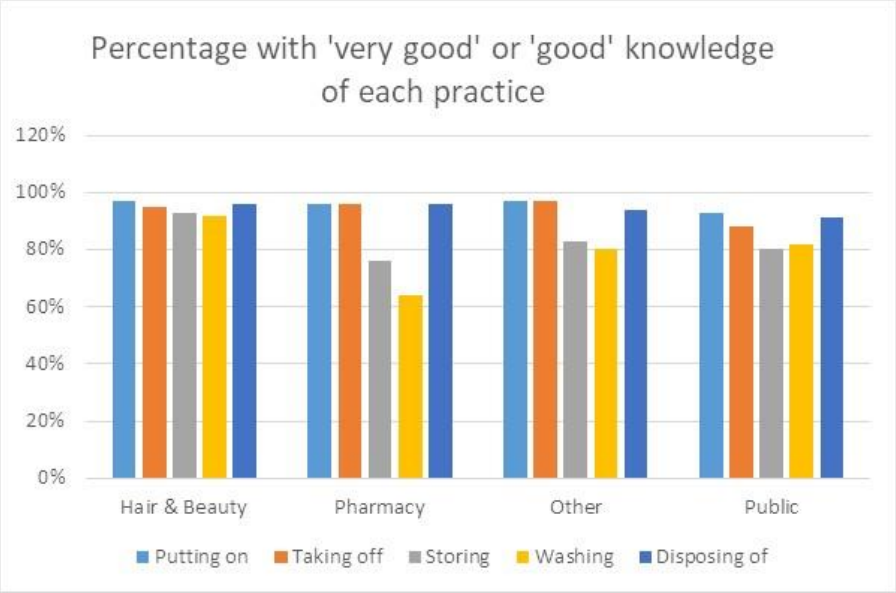


Figure 10: Knowledge of recomended usage practices (N=294)

5.1.2.3 Perceptions of why face coverings are recommended

5.1.2.3.1 Worker perceptions of why face coverings are recommended

Amongst Workers, many respondents provided free text describing why they believed face coverings are recommended when delivering services within a retail consulting room (Figure 11).

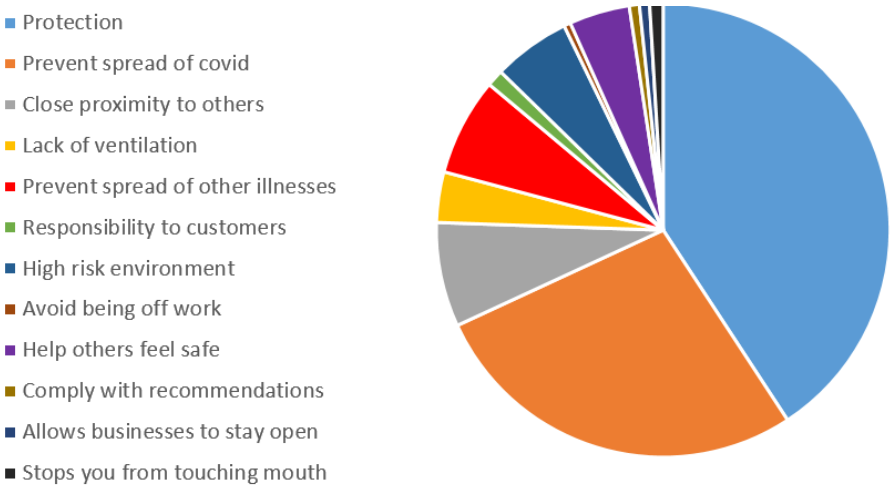


Figure 11: Reasons for face covering use in retail consulting environments cited by Workers (N=207)

The most commonly cited reason was related to the protection that face coverings provide. Some free text responses made reference to who is protected by the wearing of face coverings as a Worker within retail consulting rooms. Most commonly, respondents referred to protection for those around them (including customers and colleagues, vulnerable people, clinicians and the wider community). Less prominently (though still common practice) workers identified that face coverings protect themselves (the wearer).

"To protect yourself and vulnerable members of the Public" (Worker survey respondent)

"Protect my colleagues and customers" (Worker survey respondent)

The second most prominent reason cited amongst free text responses was to help prevent the spread of COVID-19, including face coverings acting as a barrier to droplet transmission though breath and reference to preventing new variants of the COVID-19 virus. Other less commonly cited reasons amongst Workers included the proximity required to provide 'close contact' services, in order to prevent the spread of other illnesses, retail consulting rooms being considered a high-risk environment for viral transmission, lack of ventilation within consulting rooms and responsibility to their customers.

5.1.2.3.2 Public perceptions of why face coverings are recommended

Amongst Public respondents, free text responses were provided for why face coverings were believed to be recommended within a retail consulting rooms (Figure 12). The most common reason related to the protection provided by face coverings - either to themselves (the wearer) or more commonly to others (including the consultant, the NHS, staff within the consulting room and the vulnerable).

> *"To protect myself" (Public survey respondent)*

> *"To reduce general spread of infection and help protect most vulnerable in society." (Public survey respondent)*

Many Public respondents identified that face coverings are recommended in order to help prevent the spread of COVID-19 within retail consulting rooms. Specifically this related to preventing transmission though inhalation/exhalation of airborne droplets and more generally to help bring an end to the pandemic. 5% of Public respondents believed that face coverings are recommended because Workers and customers are in close proximity (usually less than two metres) within the retail consulting room.

> *"To reduce transmission of the virus - it is an aerosol and is transmitted primarily in breath through the air." (Public survey respondent)*

> *"In a retail consulting room it is difficult to have distance between people as they are often small, so face mask offers at least some protection." (Public survey respondent)*

Other free-text responses given by Public respondents as for why face coverings are recommended within retail consulting rooms included: ventilation may be poor, government beliefs that face coverings are effective in helping to prevent the spread of COVID-19, to prevent unknowing spread amongst people who may be asymptomatic and preventing the spread of other illnesses, such as flu.

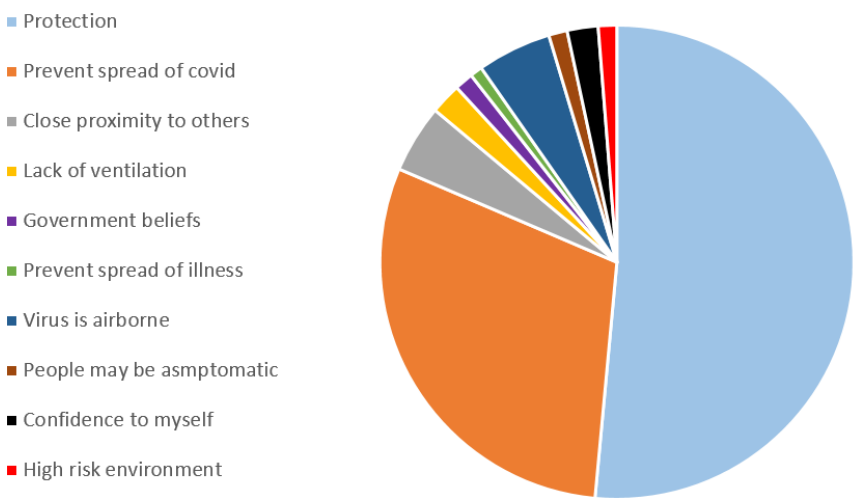


Figure 12: Reasons for wearing face coverings in retail consulting environments cited by Public respondents (N=102)

5.1.3 D2 Skills

5.1.3.1 Ease/difficulty of wearing a face covering

The majority of survey respondents found it 'easy' or 'very easy' to wear a face covering while working in or visiting a retail consulting room. This was least common among hair and beauty Workers where only 51 (49%) of respondents found wearing a face covering 'easy' or 'very easy' and around a third (N=32, 31%) found it 'difficult' or 'very difficult', compared to three to fifteen (8%-15%) among the other Worker groups and the general Public.

5.1.3.2 Sources of guidance accessed

Guidance was most frequently obtained from government sources, followed by professional associations, employers and industry. Written guidance was most frequently cited, followed by websites.

5.1.3.2.1 Sources of guidance accessed by Workers

With respect to the sources and format of this guidance, Workers (N=18) used free text responses to refer to guidance: published by research professionals (e.g. peer reviewed research papers, research professionals on twitter); local pharmaceutical committee guidance; guidance from family members; Cambridge face coverings instructions and Pharmaceutical Services Negotiating Committee and infection control training, guidance from email, the television and verbal guidance from others.

> *"Researchers, academics, professorial commentators on twitter and published, peer reviewed papers as signposted." (Worker survey respondent)*
>
> *"My daughter is an ICU Dr" (Worker survey respondent)*

5.1.3.2.2 Sources of guidance accessed by the Public

With respect to the sources and format of guidance accessed, free text responses amongst Public respondents (N=30) referred to media sources such as BBC news programmes, newspapers, television and websites, as well as scientific research articles, self-directed guidance, such as common sense and observation. Other examples of guidance specified NHS, job training, Independent SAGE, social media.

> *"General information on BBC news programmes" (Public survey respondent)*
>
> *"Medical media for the Public" (Public survey respondent)*
>
> *"Used to be a nurse so training" (Public survey respondent)*

5.1.4 D3 Identity

5.1.4.1 Impact on aspects of work and identity

Half of all Workers (N=101, 50%) reported that the wearing of face coverings changed aspects of their work in retail consulting rooms. This proportion was lower among pharmacy Workers (N=25, 37%) than hair and beauty (N=57, 58%) and other Workers (N=19, 54%). Almost half of hair and beauty Workers (N=43, 44%) felt that wearing a face covering changed their identity whilst at work compared to 13 (19%) of pharmacy Workers and 9 (26%) of other Workers - Table 4). Only 9 (9%) of the general Public felt that wearing a face covering changed their identity.

Table 4: Perceived changes in aspects of work and personal identity when wearing a face covering

Changes	*Hair & Beauty*	*Pharmacy*	*Other*	*Public*	*All*
Aspects of work	57 (58%)	25 (37%)	19 (54%)		101 (50%)
Personal identity	43 (44%)	13 (19%)	9 (26%)	9 (9%)	65 (32%)

5.1.4.2 Changes to aspects of work

Of the participants (N=87) who stated that the wearing of face coverings had changed aspects of their work within retail consulting rooms, many stated that face coverings have changed communication in the workplace. Free text described difficulties communicating with clients, hard-of-hearing clients being unable to hear, less chatting to customers and needing to speak louder. Many participants also

provided free text related to changes to services delivered, including reduced accuracy, changes to the order of treatment being given, working more slowly and decision making being harder. Other changes cited within the free text responses less frequently included reductions in the number of clients, discomfort at work, difficulties with clients, changes to equipment and facial expressions being hidden at work.

> *"Hair cutting is more difficult, around ears the clients has to remove elastic and hold on the mask. Communication is more difficult without facial expression. Hard of hearing clients cannot lip read or read your expressions." (Worker survey respondent)*
>
> *"It has affected people who struggle to hear (as your voice is muffled with mask on) & those who would rely on lip reading struggle more too. I have also had to turn away customers who refuse to wear them for my own safety & my family's too, and the customers can get quite nasty about it*." *(Worker survey respondent)*

5.1.4.2.1 Changes to Worker identity

Of the Workers who stated that the wearing of face coverings had changed their identity (N=49), many identified that face coverings had changed the way that they communicate with clients. Free text most commonly referred to facial expressions being hidden and difficulty hearing specifically. Many workers also identified that face coverings had an impact on their appearance, including wearing less make up, being more relaxed about their appearance, looking different and having more spots. Other les frequently cited changes as free text responses included reference to respondents face being hidden, negative feelings towards self, such as feeling self-conscious and like they have lost their sense of individuality and impact on job enjoyment.

> *"I feel less able to communicate well with client. Hairdressers are loud places and relying on face for communication is hindered." (Worker survey respondent)*
>
> *"I don't wear make up anymore I feel it pointless to make an effort anymore when the mask hides everything." (Worker survey respondent)*

5.1.4.2.2 Changes to personal identity

Amongst members of the Public who stated that the wearing of face coverings had changed their personal identity (N=7), some provided free-text stating that face coverings had changed the way that they communicate. Not being able to understand people, not being able to engage in conversation and being unable to express oneself were reasons given for the change in communication. a small number of public respondents identified through free text that face coverings made them feel more anxious, referred to changes in facial recognition (such as being unable to read others facial expressions) and not being recognised with a face covering on. The impact of face coverings on levels of anxiety and mood are explored within section 5.1.13 within the survey findings.

> *"I feel less relaxed and often am anxious" (Public survey respondent)*
>
> *"I have become even more withdrawn. I can't communicate properly as I find speech from others in a mask is muffled. I also find not being able to see other people's facial expressions very difficult. For that reason I seldom engage in conversation whilst wearing a mask." (Public survey respondent)*

5.1.5 D4 Capability beliefs confidence

Overall, 213 (71%) of respondents were extremely confident in their ability to wear a face covering correctly and 79 (26%) were somewhat confident; with similar results across Worker groups and the general Public.

5.1.5.1.1 Worker difficulties in wearing a face covering

Workers (N=44) provided free text specifying what makes it difficult for them to wear a face covering when performing their working role within a retail consulting room (many cited multiple factors within their response). Workers most commonly cited experiencing difficulties including; feeling hot, feeling uncomfortable, experiencing breathing difficulties, sore throat, headaches, chest pains and dehydration. Others reported face coverings make it difficult to communicate (e.g. not being able to establish rapport, not being able to hear people, not being able to lip read and difficulties interacting

with clients who have hearing problems). Other less frequently cited difficulties related to glasses steaming up, face coverings getting in the way of services and equipment and movement of face coverings when in situ.

> *"Hard to communicate with clients properly. Hard to cut peoples hair whilst they are wearing one..." (Worker survey respondent)*
>
> *"Lenses fogging during sight test reducing accuracy and compromising patient care." (Worker survey respondent)*

5.1.5.1.2 Public difficulties in wearing a face covering

Members of the Public (N=15) provided free text to specify what makes it difficult for them to wear a face covering when visiting a retail consulting room. Most commonly respondents reported them to be uncomfortable to wear, citing them to feel itchy and 'feeling abnormal' when wearing one. Respondents also noted impaired visibility due to their glasses steaming up. In some cases participants noted they had to remove their glasses whilst wearing a face covering, thereby limiting their vision. Other difficulties included perceptions of breathing difficulties (e.g. Breathlessness), and communication challenges.

> *"To be tight enough to be effective they're uncomfortable. Hate warm damp cloth / disposable mask against face this happens very quickly. Itchy disposable masks." (Public survey respondent)*
>
> *"Feels alien, glasses stream up and it is difficult to communicate with people and they are not comfortable." (Public survey respondent)*
>
> *"My glasses mist up and I cannot see properly. I have to take my glasses off." (Public survey respondent)*

5.1.6 D5 Consequence beliefs

5.1.6.1 Perceived effectiveness

Opinions regarding the effectiveness of face coverings were evenly spread between extremely effective (N=80, 27%), very effective (N=102, 34%) and moderately effective (N=80. 27%) (Figure 13). Hair and beauty Workers were most likely, and members of the Public least likely to report that face coverings were extremely effective, while both of these groups had the highest levels reporting that face coverings were not at all effective (N=9, 9% and N=6, 6% respectively).

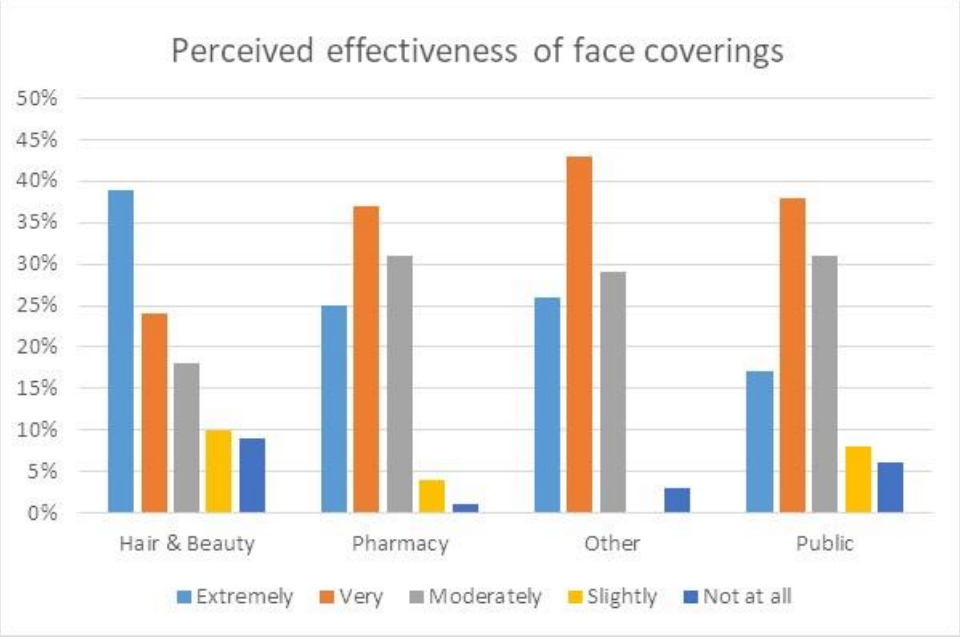


Figure 13: Perceived effectiveness of face coverings (N=300)

Opinions of the effectiveness of face coverings and perceptions of whether or not they reduced risks of contracting COVID-19 were correlated (
Table 5:) with 98% (N=76) of those who thought face coverings were very effective also reporting that they definitely or probably reduced their risk of contracting COVID-19. All 17 of those who thought that face coverings were not at all effective reported that they probably or definitely did not reduce COVID-19 risk.

Table 5: Perceived effectiveness of face coverings and perceptions of risk reduction

Impact on risk	***Effectiveness of face coverings***									
	Extremely		***Very***		***Moderately***		***Slightly***		***Not at all***	
Definitely reduces	66	85%	48	47%	14	18%	1	5%	0	0%
Probably reduces	10	13%	43	42%	30	38%	1	5%	0	0%
Possibly reduces	2	3%	10	10%	28	35%	9	45%	0	0%
Probably does not reduce	0	0%	1	1%	6	8%	9	45%	10	59%
Definitely does not reduce	0	0%	0	0%	1	1%	0	0%	7	41%

5.1.6.2 Who benefits from the wearing of face coverings

Almost all of the Workers thought that the wearing of face coverings benefitted customers (N=183, 94%), with a substantive proportion also reporting that wearing of face coverings benefited themselves (N=144, 73%) and work colleagues (N=138, 70%). Among the general Public 78 (66%) of respondents thought that the wearing of face coverings benefited themselves, 85 (71%) thought it benefited the Workers and 87 (73%) that it benefited other customers.

Around three-quarters of respondents (N=214, 72%) reported that wearing a face covering definitely or probably reduces their risk of contracting COVID-19. This proportion was lower in hair and beauty Workers (N=59, 62%) and the general Public (N=71, 70%) than in pharmacy Workers (N=55, 85%) and other Workers (N=29, 83%). Hair and beauty Workers (N=20, 21%) were also most likely to report that face coverings probably or definitely did not reduce their COVID-19 risk compared to 11 (11%) of the general Public and 2 (3%) of pharmacy and 1 (3%) of other Workers.

5.1.6.2.1 Who benefits from Workers wearing face coverings?

Workers (N=19) provided additional free text responses when asked who benefits from the wearing of face coverings. Some explicitly stated that no one benefits, whilst other respondents cited everyone benefits, the clients benefit, sellers/manufacturers of face coverings benefit, family and close contacts out of work. Isolated individuals also cited benefits to society and work colleagues.

> *"All of us if we all wearing it" (Worker survey respondent)*

> *"People who make the masks" (Worker survey respondent)*

5.1.6.2.2 Who benefits from members of the Public wearing face coverings?

Public respondents (N=7) most commonly referred to benefits for wider society, nobody benefits, and benefits to themselves within the free text responses provided. Isolated individuals also cited benefits to vulnerable people, retailers and face covering manufacturers.

> *"Society in general, including the most vulnerable people" (Public survey respondent)*

> *"Both retailer and customer (me)" (Public survey respondent)*

5.1.7 D6 Reinforcement

5.1.7.1 Benefits to wearing a face covering

The most frequently reported benefits of wearing face coverings in all groups were increasing others protection from COVID-19 (N=262, 88%), increasing own protection from COVID-19 (N=218, 73%) and positive judgement from others (N=112, 38%).

5.1.7.1.1 Perceived benefits amongst Workers

A small number of Workers (N=9) cited additional benefits as free text responses. This most frequently related to face coverings offering protection (specifically to family, staff and the business). Three respondents cited secondary benefits including protection from other illnesses, reduced allergies and hiding facial insecurities.

> *"Protects my business - lowers risk of me becoming ill. Protects my family - keep me healthy, stops risk of me taking infection home." (Worker survey respondent)*

> *"Reduced allergy/ hay fever, NO colds or flu 2 years." (Worker survey respondent)*

5.1.7.1.2 Perceived benefits amongst the Public

A small number (N=7) of members of the Public cited additional benefits as free text responses. This included respecting retail Workers, making others feel more comfortable and avoiding setting a bad example to others. Less frequently, respondents reported feeling that it is the right thing to do or annoying those who do not wear face coverings as additional benefits to their use.

> *"Respect for retail Workers" (Public survey respondent)*

> *"Doing the right thing" (Public survey respondent)*

5.1.7.2 Negatives to wearing a face covering

Most commonly reported negatives to wearing a face covering amongst Workers included impeding communication with customers (N=210, 75%), discomfort (N=157, 56%) and impeding of communications with Workers and colleagues (N=136, 49%).

5.1.7.2.1 Perceived negatives amongst Workers

27 Workers provided additional free text responses when asked about the negatives of wearing a face covering when working in retail consulting rooms. Of these, five cited the negative impact on health including causing chronic health problems, increasing carbon dioxide intake, nausea, and being light headed. 4 cited the negative impact to oneself, such as causing irritability, difficulty breathing, increased tiredness and panic attacks. Other negatives of wearing a face covering included them being a source of conflict with clients, facial expressions being hidden, not being environmentally friendly, impacts treatment provision (cited by three, three, two and two participants respectively).

> *"Suspect re breathing own air causes increased intake of CO2 resulting in increased tiredness" (Worker survey respondent)*

> *"…can lead to conflict with people who do not wear them and don't like people around them wearing them either" (Worker survey respondent)*

5.1.7.2.2 Perceived negatives amongst the Public

13 members of the Public provided additional free text responses to describe the negatives of wearing a face covering in retail consulting rooms. Of these, seven cited glasses steaming up. There were a number of people, who explicitly stated in the free text box, that there are no negatives of wearing a face covering. Isolated individuals highlighted other negatives of wearing a face covering which included environmental impacts, breeding germs, impacts breathing and causes feelings of nausea.

> *"My glasses fog up and I cannot see properly" (Public survey respondent)*

> *"The effect on the environment" (Public survey respondent)*

5.1.8 D7 Intentions

When asked to describe their current intent to wear a face covering, over half of respondents (N=168, 57%) said that they would definitely wear a face covering if it was not mandated by the retailer or by the government, with a further 60 (20%) stating that they would probably wear one. Hair and beauty Workers would be the least likely to wear a face covering in these circumstances with 25 (26%) who would probably or definitely not wear one, compared to 14 (14%) among the general Public and 5 (5%) among pharmacy and other Workers.

5.1.9 D8 Goals

Table 6 summarises the actions which would increase the likelihood of a respondent wearing a face covering if it were not mandated. Overall, the most likely actions are government guidance concerning use followed by customer behaviour (e.g. whether or not they wore a face covering), availability of face coverings and Worker/colleague behaviour.

Table 6: Which of the following would increase your likelihood of wearing a face covering if this was not mandated*

What would increase likelihood of wearing if not mandated	*Hair&Beauty*	*Pharmacy*	*Other*	*Public*	*All*
Government guidance	19	9	7	15	50
Customer behaviour	27	7	5	8	47
Availability of face coverings	11	11	6	14	42
Worker/colleague behaviour	10	6	6	17	39
None of the above	16	1	2	11	30
Reminders in retail premises	5	3	3	13	24
Reminders in consulting room	3	5	2	12	22
Means to safely dispose fc	1	4	4	8	17
Means of cleaning fc	1	2	1	1	5
Other	1	1	2	1	5

* number of participant responses tabulated

5.1.9.1.1 Influential factors identified by Workers

Workers (N=7) provided free text responses identifying factors that would influence their likelihood of wearing a face covering at work. Some responses involved not feeling judged by others, such as clients and colleagues, for continuing to wear a face covering at work, when no longer mandated by the employer or the government. Others cited by isolated individuals, included free provision of face coverings, level of COVID-19 transmission risk, advice from professional bodies and customer confidence.

> *"Not feeling judged that I have continued to wear one." (Worker survey respondent)*

> *"Level of risk" (Worker survey respondent)*

5.1.9.1.2 Influential factors identified by members of the Public

Only two free text responses were provided by members of the Public in relation to influential factors for face covering wearing. These respondents stated that being aware that someone was unwell and the wearing of contact lenses was said to increase their likelihood of wearing a face covering when in a retail consulting room, if this were not mandated.

> *"If I was aware that someone was unwell" (Public survey respondent)*

> *"Contact lenses, but I can't use them anymore." (Public survey respondent)*

5.1.10 D9 Memory, attention, decision processes

5.1.10.1 Remembering to wear a face covering

Over 90% of respondents reported that they always remembered to wear their face covering within a retail consulting room (N=272, 92%), with a further 17 (6%) often remembering to do so. Most Workers change their face covering once a day (N=72, 37%) or 2-5 times a day (N=69, 36%). A quarter of respondents (N=46, 24%) never changed their face covering and only 6 (3%) changed them 6 or more times per day.

5.1.10.2 Frequency of changing face coverings

Frequency of changing face coverings varies according to the type of face covering being worn (Table 8). Workers wearing reusable/cloth masks were less likely to change them during the day whereas Workers using surgical/disposable coverings or multiple types of covering were more likely to change them two or more times per day. Typically, face coverings are changed after rest/lunch breaks (Table 8). For a third of pharmacy Workers (N=21, 31%), 8 (23%) of other Workers and 17 (19%) of hair and beauty Workers, the frequency of changing of face coverings is mandated by their employer.

Among the general Public, 23 (23%) change their face covering multiple times a day, 50 (50%) once a day, 19 (19%) weekly and 9 (9%) less than once per week.

Table 7: How often do you change your face covering during the day?

Frequency of changing per day	***Type of face covering***									
	Surgical		***Reusable***		***N95***		***Multiple***		***All***	
Never	28	19%	4	67%	5	42%	6	32%	43	23%
Once	58	39%	0	0%	6	50%	4	21%	68	37%
2-5 times	57	39%	1	17%	1	8%	8	42%	67	36%
6-10 times	4	3%	1	17%	0	0%	1	5%	6	3%

Table 8: When do you change your face covering during the working day?

When changed at work	***Hair & Beauty***		***Pharmacy***		***Other***		***All***	
Change in customer	18	*21%*	2	*3%*	4	*15%*	24	13%
Whenever FC removed	17	*20%*	12	*17%*	5	*19%*	34	19%
After rest/lunch breaks	49	*56%*	51	*74%*	18	*67%*	118	64%
Between shop floor & consulting room	3	*3%*	4	*6%*	0	*0%*	7	4%

5.1.10.2.1 Prompts to change face coverings

Some Workers (N=12) and members of the Public (N=82) provided free text responses related to the frequency at which they change their face covering. Both workers and members of the public commonly referred to a duration of time with some workers citing every four hours whilst there was variation in public responses ranging from every two or three hours, every 5 hours or at the end of each day. Respondents also commonly referred to specific events that triggered them to change their face coverings. This included when entering or leaving the premises, amongst workers, whilst public respondents again were more varied in their responses, ranging from each trip out of the home, upon entry of every new retail premises and after every meal.

> *"Every 3-4 hours" (Worker survey respondent)*
>
> *"If it becomes moist" (Worker survey respondent)*
>
> *"Use a fresh clean mask for each trip out of home - e.g. wear one going shopping in morning, if I have to go out to shops again in afternoon, use a fresh one. Always use fresh mask entering nursing home and dispose on leaving. Use fresh one if pop into shop on way home." (Public survey respondent)*

Further reasons cited as free text for changing face coverings amongst workers included when coughing or sneezing, when there was moisture on the face covering and time of day. Many Public respondents referred to the visual appearance of the face covering as a prompt for when to change it. Further reasons entered as free text responses by small numbers of public responses included: how the face covering felt, if a face covering had been handled, after being in close proximity with others, automatic habit, and the need to feel as though they are wearing a clean face covering.

> *"When they look grubby" (Public survey respondent)*

"They should be changed every 5 hours" (Public survey respondent)

5.1.11 D10 Environmental context and resources

5.1.11.1 Availability of face covering provisions

Almost all (N=194, 90%) Workers participating in the survey reported that there was a plentiful supply of disposable face coverings available to them at work, ranging from 102 (88%) to 27 (93%) across the occupational groups. Responsibility for cleaning of the face coverings typically rests with the Worker (N=75, 75%).

No free text responses were provided to clarify who is reasonable for cleaning re-usable face coverings used by Workers. They did however provide free text to describe who provides the face coverings worn during their working day (N=29). Most commonly, respondents cited the NHS or NHS portal, with a small number stating that they provide the face coverings worn (as the salon owner).

"…ordered via PPE portal…" (Worker survey respondent)

5.1.11.2 Contribution of the physical environment to ease of use

Most respondents (N=188, 64%) felt that their place of work, or for the general Public the retail premises, made it very easy to wear face coverings (Figure 14). Workers in other occupations were most likely to report that their workplace made it very easy to wear face coverings (N=30, 86%), while 5 (8%) of pharmacy Workers reported that their workplace made it somewhat or very challenging.

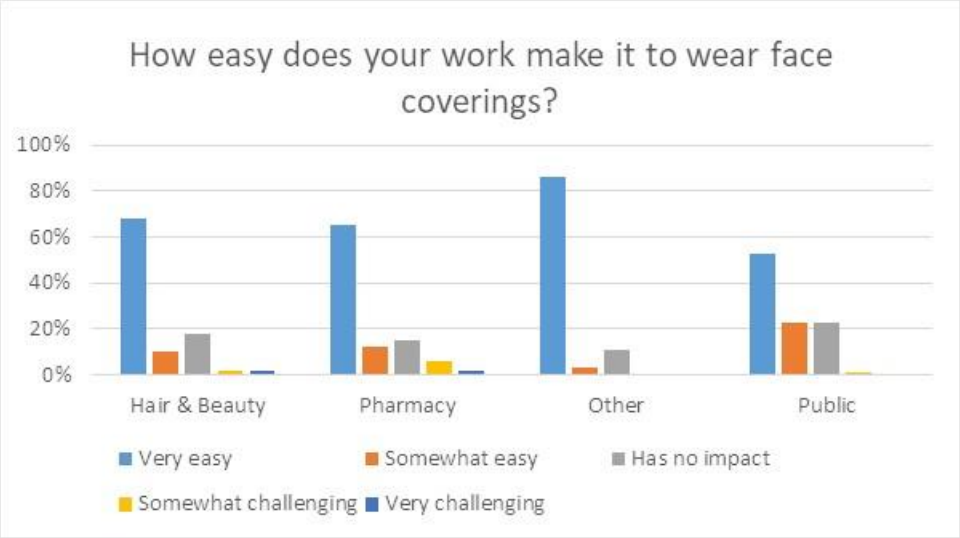


Figure 14: How easy does your place of work make it to wear face coverings? (N=292)

5.1.12 D11 Social Influence

5.1.12.1 Impact of others attitudes and practices

Just under half of respondents (N=139, 48%) reported that attitudes of others made it very easy to wear face coverings; this proportion was higher in Workers (N=109, 57%) than in the general Public (N=30, 30%) (Figure 15). Members of the Public were more likely to report that the attitudes of others had no impact (N=43, 43%). 14% (N=13) of hair and beauty Workers reported that attitudes of others made it somewhat or very challenging to wear face coverings compared to 12 (6%) in the other subgroups.

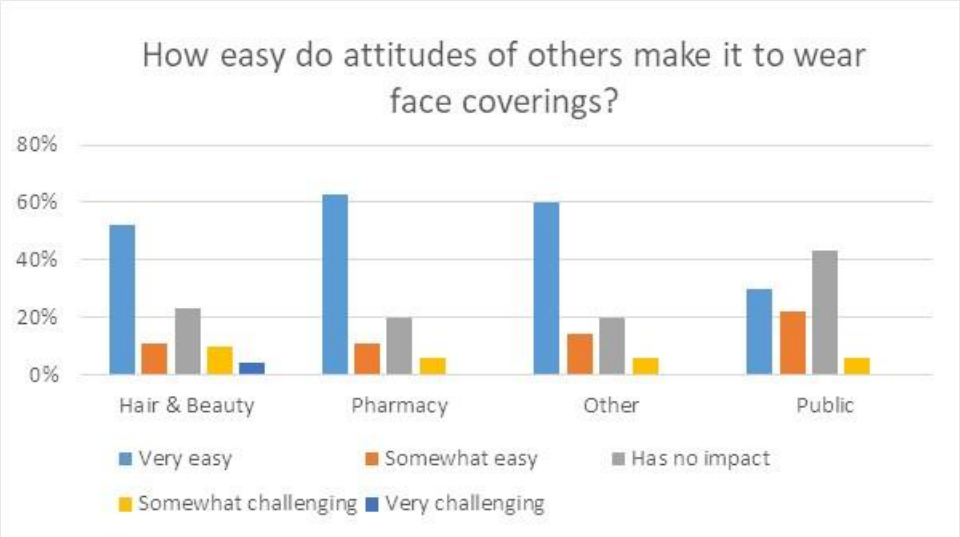


Figure 15: To what extent do attitudes of others make it easy/challenging for you to wear face coverings? (N=292)

Survey participants were asked to what extent, since the beginning of January 2022, was the wearing of face coverings common practice among Workers and members of the Public within retail environments. Across the three occupational groups 80%-90% (N=26-82) of respondents reported that Workers always wore face coverings whereas only 27 (28%) of members of the Public thought this was the case. Members of the Public were more likely to report (n=52, 54%) that Workers usually wore face coverings.

On the extent to which face coverings were worn by members of the Public, the most common response was 'usually' with levels of reporting this option ranging from 36 (41%) among hair and beauty Workers to 39 (61%) among pharmacy Workers. Hair and beauty Workers were most likely to report that members of the Public always wore face coverings (n=47, 53%) compared to 11 (11%), 12 (19%) and 12 (34%) among the other three subgroups.

5.1.13 D12 Emotion

5.1.13.1 Impact of face coverings on mood

The majority of respondents (N=182, 62%) felt that wearing a face covering in retail consulting rooms had no noticeable impact on their mood (Figure 16). However, almost half (N=42, 46%) of hair and beauty Workers felt that wearing a face covering lowered their mood a little or a lot, compared to 7 (20%), 24 (24%) and 19 (29%) among the other subgroups. Very few respondents reported that wearing of a face covering enhanced their mood.

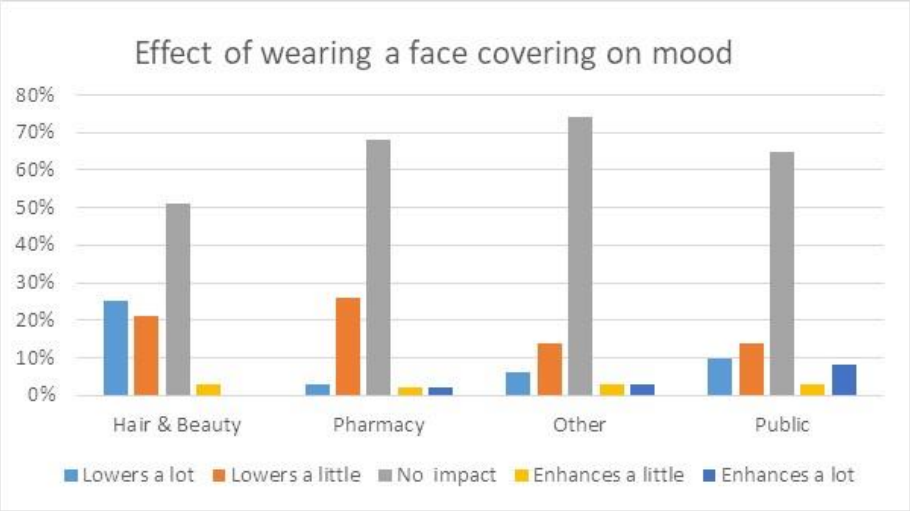


Figure 16: Effect of wearing a face covering on mood (N=292)

5.1.13.2 Impact of face coverings on levels of anxiety

The most common response when asked about the effect of wearing a face covering on levels of anxiety was also that it had no noticeable impact, but for a lower proportion of respondents than for the effect on mood (overall proportion 42%, N=123 compared to 62%, N=182). 47% (N=137) of respondents felt that wearing of a face covering lowered their anxiety either a little or a lot, while 31 (11%) felt that it increased their anxiety either a little or a lot.

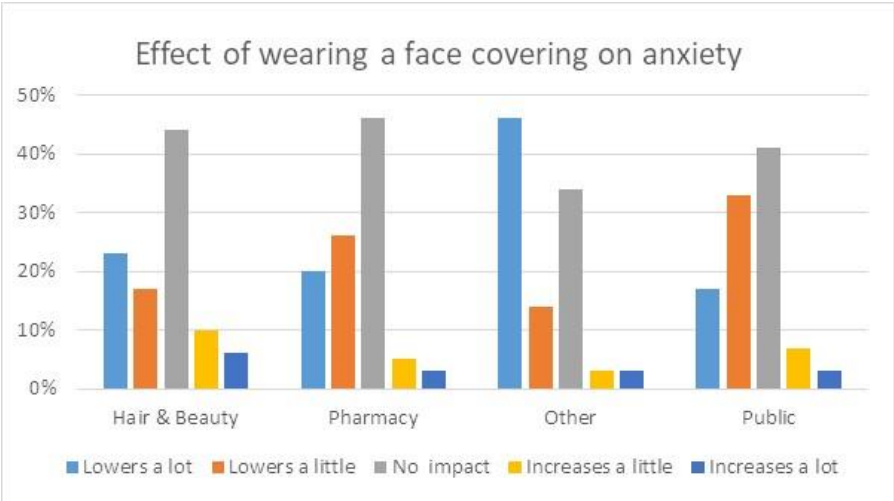


Figure 17: Effect of wearing a face covering on levels of anxiety (N=291)

5.1.14 D13 Behavioural Regulation

Respondents were asked which of a range of practices they were aware of doing when wearing a face covering within retail consulting rooms. The list provided contained both good and bad practice examples in relation to the wearing of face coverings. The most frequently reported practices across all subgroups were recommended activities such as ensuring a good fit of the face covering and washing hands before and after handling (Table 9), although a large proportion of respondents (N=165) reported adjusting the positioning of the face covering whilst in situ.

Table 9: What practices are you aware of doing when wearing a face covering in retail consulting rooms?*

Usage practices:	***Hair & Beauty***	***Pharmacy***	***Other***	***Public***	***All***
Ensuring mouth/nose are covered	75	54	30	86	245
Ensuring close fit/seal	61	44	27	66	198
Washing hands after handling	57	41	20	55	173
Washing hands before handling	60	40	21	48	169
Adjusting positioning of FC	59	37	18	51	165
Holding FC by ties to put on/take off	53	34	20	56	163
Ensuring availability of dry/clean FC	49	28	19	48	144
Disposing single use FC in normal waste	51	27	13	46	137
Storing FC in sealable container	40	21	12	39	112
Wearing on forehead/under chin	18	5	9	15	47
Moving FC down to expose nose/mouth	11	14	5	7	37
Reusing disposable FC	9	0	2	23	34
Putting FC on contaminated surfaces	4	3	1	7	15
Wearing damaged FC	3	1	0	2	6
Sharing FC with others	3	0	0	1	4
Other	1	0	1	2	4

* number of participant responses tabulated

5.1.15 Reasons provided for not wearing face coverings

5.1.15.1 Reasons for not wearing face coverings cited by Workers

Eight Workers reported that they do not wear a face covering whilst working within a retail consulting room, some of whom provided multiple reasons. Some respondents (N=4) said this is because they do not believe face coverings are effective whilst others (N=3) stated they are bad for health (specifically causing bacterial pneumonia, affecting breathing and causes the wearer to breathe in carbon dioxide). Other reasons cited included being exempt and not liking them.

> *"There is insufficient data to suggest a "face covering" stems the infection rate of COVID and other viruses. I don't want to put myself or staff at risk of bacterial pneumonia." (Worker survey respondent)*
>
> *"I absolutely hate them & I have exemption" (Worker survey respondent)*

5.1.15.2 Reasons for not wearing face coverings cited by the pubic

All 15 members of the Public provided who reported not wearing a face covering when receiving a service within a retail consulting room provided their reasons for doing so. Some (N=6) alluded to face coverings being ineffective, some of whom cited evidence to support their judgement. Others (N=8) stated that they were exempt from wearing a face covering. Other less frequently cited reasons for not wearing a face covering included they are bad for health, reference to underlying health conditions (although not said to result in exemption from use) and phobia/anxiety.

> *"I've never wore a mask throughout the last two years simply because they do not work, the science has proved that." (Public survey respondent)*
>
> *"I'm exempt due to my health condition" (Public survey respondent)*

5.2 QUALITATIVE SEMI-STRUCTURED INTERVIEWS

The following sections provide a summary of both the Worker and Public interviews, separate analyses of these are presented in the appendix (Appendix 3: Findings From Worker Interviews; Appendix 4: Findings From Public Interviews). 24 participants took part in an interview as a follow up to the survey and 12 were direct interviews.

5.2.1 Interview respondent characteristics

18 participants were members of the Public and 18 participants were Workers. Amongst the Workers, 12 were pharmacy Workers, four were hair and beauty Workers, one was a holistic therapist and one worked in optometry. The vast majority of the Worker respondents worked in England, with two in Scotland and one in Wales. All of the Worker respondents identified that they wear a face covering when working within a retail consulting environment. Of the Worker respondents six identified they had received a positive result for COVID-19 and 11 had a close family member or friend that had tested positive. Almost all the Worker respondents identified that they would not describe themselves as Clinically Extremely Vulnerable (CEV) (unknown for 1 respondent).

The vast majority of Public respondents were residents in England, with one participant residing in Scotland and one in Northern Ireland. When asked whether they wore a face covering within retail consulting rooms, 14 out of 18 Public respondents answered ‘yes’ and a further two respondents stated that they ‘sometimes’ wore a face covering. Two respondents answered ‘no’ to this question. The majority of Public respondents stated that they or a close family member had tested positive for the COVID-19 virus (four and 10 respondents respectively). Only three respondents described themselves as CEV, with a further respondent being unsure of their CEV status.

Many of the Public and Worker respondents reported wearing disposable face coverings (or surgical masks). In addition Public respondents also commonly reported using reusable cloth coverings, whereas only one Worker respondent reported using these. There were two Public and Worker respondents that wore N95 masks, and two Workers identified that they use type2R masks.

Whilst none of the Public respondents reported wearing a visor, a couple of the Worker respondents did wear these. The Workers reported wearing these either in addition to face coverings (e.g. wearing a visor/face shield and a surgical/disposable mask, N95 or a reusable cloth mask) to offer greater protection (e.g. during throat examinations or peaks in COVID-19 transmission), or instead of a face covering with deaf customers to allow for lip reading. However, there were comments from the Public respondents on their frustrations when people use visors due to the belief that these are ineffective as a barrier to COVID-19 transmission.

The Public respondents identified that their main reason for wearing their face covering of choice focused around the protection offered, the fit of the face covering, comfort (e.g. space around mouth), or specific functionality suited to their occupation (e.g. splash resistant).

> *“My confidence in the cloth mask, I think was massively diminished. Particularly when Omicron came in and everyone was like, you know, don't use the cloth masks. They're good, but they're not that good. So it's a step up and try and go medical grade, if you possibly can.” (P4)*
>
> *“We have visors for deaf patients.” (W15)*
>
> *“And if I was examining someone's throat, then I would, where they take their mask off, then I'd wear visor as well.” (W8)*

5.2.1.1 Participant perspective of Public respondents

During the interviews, many Public respondents shared information about themselves, their family or their occupation that may consciously or subconsciously impact their views and practices concerning face coverings. A number of respondents described having close friends or family considered Clinically Extremely Vulnerable whilst others mentioned friends or relatives with respiratory difficulties (e.g. asthma or emphysema) or learning difficulties (autism or ADHD).

"I was looking after my very vulnerable elderly father. I wanted to be as safe as possible. He lived in sheltered accommodation, which is like an apartment block. I didn't want to be putting other people at risk."(P14)

Many respondents provided context related to their occupation or the occupation of their partner, namely working in frontline roles for the NHS (e.g. within doctor surgery or hospital); roles requiring close contact within others (e.g. makeup artist/nail artist); roles where scientific knowledge of transmission was cited (e.g. industrial respiratory specialist, science teacher); role where use of face coverings or PPE is required for long periods (e.g. construction industry, supermarket). One respondent also spoke about their experience of living in another country (Japan) for a period of time prior to the COVID-19 pandemic, where the use of face coverings is commonplace.

"…my husband's NHS, he works in a hospital. And I don't want to be a vector of transmission to extremely ill people that one of his colleagues might go and visit."(P2)

"So I work at Tesco so I'm wearing them for eight hours a day." (P11)

"I've lived in Japan where it's a bit more normalized. […] I've been a nail artist as well. So you always wear a mask, there was nail dust. I've always worn a mask as a makeup artist because you're right up in people's faces…" (P6)

5.2.2 D1 Knowledge

5.2.2.1 Why are face coverings recommended in consulting rooms?

The majority of Public and Worker respondents believed that face coverings are recommended within retail consulting rooms in order to prevent the spread of COVID-19, in particular due to the nature of services being delivered within an enclosed environment with Workers and service users in close proximity.

"Because you can never maintain even one metre social distancing let alone two […] or often, will you look at my daughter's sore throat, you know, you can't do anything, but wear a mask really." (W2)

"…it's an intimate space. And therefore you are in a closer proximity than you would be say, picking up a tin of baked beans in supermarkets." (P16)

Smaller numbers of Worker and Public respondents also acknowledged the throughput of people seen in retail consulting rooms, with some Public respondents acknowledging the general lack of ventilation in such premises to remove infectious airborne particles.

"Because of the close proximity of people within the room. So those of us working in retail pharmacy, obviously can come into contact with any number of people carrying any number of lovely infections. This [face coverings] I believe helps us from spreading it to other people who come in our consulting rooms, should we pick anything up from somebody else." (W5)

5.2.2.2 Current Government guidance

Many Workers and members of the Public acknowledged the imminent/recent change (dependent on the date of interview and country of participant residence) no longer mandating the use of face coverings within shops. A number of respondents across both population groups reported being unsure of what was stipulated with current government guidance and whether their use within retail consulting environments was a legal requirement or advisory. Indeed, some Workers believed this to be a trivial detail, either because they would follow recommended practice as if it were legislation or on the contrary, because they choose to follow industry guidance for their profession over government guidance. A small number of Workers cited the frequently changing guidance as a contributing factor to their lack of clarity surrounding current government guidance.

"I think it's a legal recommendation to wear in health and social care settings, especially when you're seeing patients. […] but it doesn't really make any difference to me [pharmacist] […] professionally, you should have be able to have a very, very good reason why you're not following guidelines." (W8)

"We don't really follow the government guidelines. We follow the College of Optometry, wherever they publish out. I don't even know if it follows, because optometry is such a weird retail healthcare. We are more healthcare but people see us as retail so we just went to the College of Optometry and think they've kept us on the amber phase, whatever that is. And I don't know, I don't know government guidelines are I've no idea." (W12)

"I can't describe it today, no because it changes consistently. But our manager just keeps us informed of what's actually happening at the time and how we have to comply." (W9)

5.2.2.3 Workplace guidance

When Workers were asked about the workplace guidance surrounding use of face coverings within their retail consulting rooms, responses were seen to differ slightly between professional groups/retail settings. Those working within community pharmacy settings were keen to emphasise that as a healthcare setting, they were required to follow government guidance that continued to mandate the use of face coverings amongst both Workers and customers (at the time of interviews). This guidance was generally considered to apply to the consulting room as well as the wider retail premises and sales counter. One respondent however perceived a "grey area" between the consulting room and wider retail space within a community pharmacy, citing different guidance for retail and healthcare. This individual reported that this distinction can sometimes interrupt discussion during a consultation that might start at the retail counter but move into a consultation room if it becomes sensitive in nature and the customer is not wearing a face covering. In this instance, the Worker would need to pause or interrupt discussion to retrieve a face covering or prompt the customer wear one.

"So basically, we have to wear masks pretty much from the beginning of our shift. Before we've entered the building, everyone has to have masks on. And then in the consultation rooms, we would expect our patients to wear their masks." (W1)

"We're a healthcare setting. So face coverings are still required." (W13)

"… we sort of read the guidance for retail, we read the guidance for the NHS, for health care, and we tried to adapt to sort of a hybrid model […] you can come to the pharmacy without a face covering but you can't come into the consultation room without a face covering." (W16)

Conversely, those working within Hair and beauty salons described how their workplace guidance surrounding the use of face coverings had now relaxed for members of the Public visiting their premises, though their workplace still required Workers to continue wearing them.

"So we've continued and we've just now made it for customers to be, it's their choice, what they want to do so. New guidelines came in last week, I think we've had about five or six people have chosen not to wear, everybody else has continued." (W4)

"Well I am the business salon owner. So, we have agreed amongst all the staff that we will, we will wear them, but clients don't have to, because they felt more confident because they were in close contact with people. And we've got quite a lot of people that are still very nervous. It's almost a business decision that you might lose, you know, 10 or 20% of people if they came in and you weren't wearing one. […] everyone agreed that they would have clients that probably wouldn't like it if we didn't wear a mask at the moment." (W18)

5.2.2.4 Self-reported practices

5.2.2.4.1 Donning/Doffing

Commonly cited practices when donning/doffing face coverings reported amongst Workers and Public respondents included washing/sanitising hands (though more prominent amongst Workers), holding the face covering by the elastic loops, securing a good fit over the bridge of the nose and avoiding touching the rest of the covering.

"…my hands are always washed. I won't touch the part that had to touch my face I'd hold it by the strings." (W1)

"I use the hoops, the bits at the side to put it on and bend the little wire thing over my nose, and then pull it down under my chin." (P3)

Workers also reported trying to ensure that the covering is positioned under their chin whilst Public respondents referred to ensuring a closely fitted face covering in general and ensuring that their mouth and/or nose is covered.

5.2.2.4.2 Storage

The vast majority of Worker respondents stated that they wear disposable face coverings and dispose of these immediately after use when at work, hence very few Workers discussed storage practices. One respondent however reported storing additional clean cloth coverings in a plastic bag, whilst another reported placing their disposable face covering on the work surface in between uses. In contrast, Public respondents most commonly cited storing face coverings within their handbag or pocket, within the next most prominent locations reported to be within a storage bag or inside their car (e.g. door pocket, glove compartment).

> *"I take it off and shove it in my handbag or my nearest pocket. I would probably, if I was out, and it went into my bag, and I needed it again, I'd probably get the same one out of my bag." (P9)*

> *"I normally just pop it on the worktop I'm not gonna lie. I keep my mask on all the time the salon when obviously with clients. Obviously if we go in the back room, if I was looking to have lunch, have a break something like that, I literally go, okay, and I pop it on the work surface in the salon […] we've all got our own little workspace, it's fairly rare that we tend to mix workspaces really." (W4)*

5.2.2.4.3 Washing and drying

Whilst a small number of Workers reported using reusable face coverings, no detail was provided related to their washing or drying practices. Less than half of all Public respondents discussed their washing and drying practices concerning re-useable face coverings. Amongst these respondents, the majority reported washing their face coverings in the washing machine. In many cases, this was with the rest of their laundry, whilst some acknowledged taking specific precautions to washing coverings on a high temperature (e.g. 60 degree wash cycle) or with laundry cleansing products. Very few Public respondents commented on their practices for drying face coverings. Those that did reported placing them on the washing line, airer or radiator to dry.

> *"…just put them in with my normal washing darks and like, depending on the colour of the mask." (P9)*

> *"So they get washed at 60 degrees, and then they are air dried." (P2)*

5.2.2.4.4 Disposal

Workers generally reported disposing of their face coverings immediately after use whilst at work. Some Workers described disposing of used face coverings within the general waste bin, or in the clinical/medical waste bin. Less frequently, Workers reported disposing of their face coverings within a specific PPE bin, or separate waste bag specifically for used face coverings. The majority of Public respondents said that they dispose of their face coverings within a standard rubbish bin or with their usual household waste. A small number of Public respondents also said that they continued to wear their face covering until returning home when it was then disposed of.

> *"I would keep my mask on when I'm out and about, if I've been shopping, I would keep the mask on when I come back in the house and unpack my shopping, and then put it in the bin after that." (P14)*

A small number of Worker and Public respondents cited breaking the loops when disposing of their face coverings to protect animals from becoming trapped in them or citing this to be better for the environment.

> *"I heard about all the poor little sort of creatures and hedgehogs who were getting all caught up in them. I do snap the elastic, so the elastic is no longer in a loop." (W3)*

5.2.2.5 General population knowledge

Both Worker and Public respondents identified the science behind how face coverings are effective as a barrier to transmission as a gap in the knowledge of the general Public. Other prominent themes cited by Workers were how to wear them correctly and the benefits of wearing them, with less prominent reference to mixed messages and differing guidance within the UK, which then adds to the gaps and misunderstanding as people are confused in relation to the rule changes that have happened at different times. Other prominent themes cited by Public respondents included requests for simpler language in general within guidance and communications surrounding use (e.g. requests for the use of more familiar terminology 'face masks' as opposed to face coverings).

> *"Yeah, because nobody knows how to wear one properly. They wear it around the chin, or they just wear it over their mouth. So yeah, I think there's a lot of misunderstanding how to wear the mask properly…" (W4)*
>
> *"I think generally, if there were more studies and more science around how masks protected you because as a nation, we are quite selfish" (P6)*
>
> *"The amount of people I see wearing dirty reusable masks, and even dirty disposable masks, I just don't understand. And they pull a disposable one out of their pocket. And they just don't understand that you need to put a clean mask on to be safe. It just, I'm gobsmacked, sometimes I really am. But that some of them are filthy, absolutely filthy and they also don't understand that the reusable ones only really, you can only wash them about 30 times. I think they're now saying, before we need to get rid of them and buy new ones. So I think there's a huge lack of knowledge and compliance with them, unfortunately…" (W11)*
>
> *"I don't think there's been any clarity or proper explanation that like, say the government website, still talks about face coverings, it doesn't talk about masks." (P8)*

Over three quarters of Public respondents cited frustrations with other people's practices concerning face coverings in general, with some Public and one Worker respondent questioning whether these perceived poor practices were the result of knowledge gaps or conscious choice on the part of the wearer. Most commonly, members of the Public cited frustrations with other people only covering their mouths (and wearing the face covering underneath their nose), pulling the face covering down to rest it underneath their chin. In addition, some cited frustration at others not wearing face coverings at all, in particular when in closed environments.

> *"… people around me don't wear face masks correctly. I get so frustrated when they were under their nose." (P12)*
>
> *"I definitely don't put it under my chin. That drives me bananas." (P10)*
>
> *"…do you see people going along with them? Definitely not over their nose. People routinely go along with them tucked around the ears with the face covering bit tucked under their chin. Well, so I seen can't remember. But that that's the that's the main. Yeah, the main one. So I suppose I don't know whether it's really a gap in knowledge, or whether it's just a choosing? To wear it in that in that manner? Because that's what a what everyone else around you is doing? Or be because you don't know. Or see, because, you know, I've got to have it on." (W3)*

A small number of Public respondents acknowledged that some individuals may be exempt from wearing a face covering (e.g. for medical reasons). However, they acknowledged feelings of frustration towards all persons not wearing face coverings either because they were not wearing a visible badge or lanyard informing others of their exemption or relative to their own continued usage practices, despite suffering physical or psychological ill-health that means they would be exempt.

> *"…it does irritate me somewhat that other people don't wear them. However, I understand there are medical reasons why some people don't wear them […] you do feel for them, but personally, I found myself doing it, you think why aren't you wearing a mask?" (P3)*

“I do get quite frustrated at the moment when I see members of the Public not wearing masks in enclosed environments, given all the guidance we've had previously and all, as far as I can tell all that very clear evidence that they work.” (P1)

“I have had asthma in the past. And some people said, say, Oh, I can't breathe with a mask. But it's, it's no big deal.” (P12)

5.2.3 D2 Skills

5.2.3.1 Ease or difficulty of wearing a face covering

The majority of Workers and many Public respondents identified the main reason they find it easy to wear a face covering is due to it being the norm and a habitual behaviour. Other prominent reasons cited by members of the Public included only needing to wear a face covering for relatively short periods of time and the ease/simplicity of the practice. A small number of Public respondents also reported feeling positive about the wearing of face coverings, and hence personally found it easy to continue wearing them.

“I guess it's become the norm now, isn't it? It's almost like, I feel naked if I don't wear that mask anymore.” (W1)

“Well, I don't really think you can get it very wrong […] it just sort of more or less becomes a habit after a while, you know, we've been so long doing this now.” (P3)

“Sometimes it can be a little bit difficult to breathe, but I'm not in a mask all day. I think it would be different if I was in a mask all day, but I know it's only for a limited amount of time. And then I'm coming back out of that environment.” (P2)

“I suppose it's my own perspective, my own perspective or experience you know, my own belief that I want to wear it you know, to me that makes it easier for me.” (P15)

A small number of Public participants made reference to their wearing of face coverings or facemasks prior to the COVID-19 pandemic, either as a requirement for their daily work or from living overseas where the use of face coverings was already commonplace. Hence, these respondents reported the wearing of face covering to be easy for these reasons.

“I wear PPE in my day to day job. So wearing a mask is not something not alien to me.” (P16)

“I've lived in Japan where it's a bit more normalized […] And, you know, I've been a nail artist as well. So you always wear a mask, as there was nail dust…” (P6)

Where Worker respondents identified it is difficult to wear, the main reason for this was due to the impact on communication with those that they are providing a treatment/service to or with colleagues in the workplace. No substantial difficulties were identified in the wearing of face coverings amongst Public respondents, although some individuals identified that their glasses fogged over when wearing a face covering.

“I think we've got used to it. It used to be very difficult, trying to learn to communicate with patients through plastic screens and masks because it was just new to us and we're used to reading people's lips for what they're trying to say to us and their emotions as well. So it has been difficult, but I think we have got used to it now and it's just what we do every day.” (W11)

“…wear glasses and it is annoying. You put a mask on and you put your glasses on, you can't see for five minutes. It does steam up your glasses because it pushes the air straight up through your glasses.” (P3)

5.2.3.2 Sources of guidance

In the Worker interviews, the respondents were asked about the sources of guidance that they have accessed and found helpful for using face coverings correctly in the workplace. The majority of the respondents identified that the main source of guidance was sub-sector or profession specific guidance. This was Government guidance that had been translated for the intended sub-sector audience. In terms of ensuring the guidance was helpful and useful many of the respondents

identified having the guidance displayed in the workplace facilitated the use of face coverings. The types of guidance identified as being most useful were videos and pictorial guidance.

> *"You know, generally turn towards [sub-sector association], because they were sort of guys that seem to have the time to sort of review what the government had said pretty quickly, and then tell them about, tell us about, you know, when and how to use them. So that's pretty much where I went to knowing, trusting that they got the right information from central government in the first place." (W18)*

> *"There were videos for us to watch. So we could learn. We'd never wore masks before, so it was totally new concept to us. So there were videos released for us to help us learn how to put masks on in the first place." (W11)*

Public respondents cited accessing a variety of guidance to support them in wearing a face covering correctly. Government guidance was cited by approximately half of all interview respondents, followed by health agency sources (such as NHS guidance or World Health Organisation) and published scientific research. Individual participants reported accessing industry guidance related to their profession or looking at guidance provided within countries further ahead in the Pandemic. Speaking about how this guidance had supported correct use of face coverings, Public respondents made reference to understanding recommended practices for performing, what was for them, a new behaviour at the start of the pandemic. This included understanding what to do as well as the relative benefit/impact of different practices (e.g. securing a good fit) and reflecting on personal practices in light of new evidence and evolving recommendations.

> *"They [health agency] were just quite explicit about it, they don't just tell you "you must wear this", they say "you should wear this, and the reason why its beneficial is because of the fibres within the mask that they help trap things. And it's important that it fits well." So they explained it." (P10)*

> *"…just at first, when we were asked to wear face masks, I just went on the site [Government guidance] and watched the video? And it's, it was useful, because people around me don't wear face masks correctly…" (12)*

> *"…when it first came out, I wanted to find out what the scientific experts suggested we should do. So I should follow that..." (P15)*

5.2.4 D3 Identity

5.2.4.1 Changed aspects of work

Of the Worker respondents that identified that the wearing of face coverings had changed aspects of their work, the main impacts were focused around changes in treatments/services, change in communication methods and changes in the use of the consulting rooms.

Examples of the changes to treatments and services included massages being limited to no more than 30 minutes, stopping any treatments that involved the use of heat (use of facial steamer) and when premises first opened up not offering treatments to the face. However, it was identified that whilst treatments to the face were not allowed at first for women (e.g. lip and chin wax) it was reported that barber shops could still trim beards.

In the pharmacy environment, it was mentioned that changes to services included the use of sending photos of issues such as rashes to bring in to the pharmacy and the use of triage services and pre-assessments over the phone to assess patients before they visit the pharmacy and therefore reducing time spent in the consultation rooms.

> *"And we can then do sort of preliminary, preliminary conversations with them. And then if they need to come in and spend time with us in the consultation, like for the morning after pill, we'll do the consultation on the phone, and then they can come in and take it face to face. And it just means we're in that small room for less time together." (W11)*

> *"…we will try and get picked people to take pictures and bring them in. So you don't necessarily have to sit in a room so that they can undress in a private environment. So we*

can we can we could sort of sit in a couple of chairs at the corner of a of the pharmacy with by the by the front door, you know, with fresh air with nobody else around so it's still private, but its more ventilated atmosphere." (W14)

The use of some consulting rooms also changed during COVID-19, for example, some of the Worker respondents identified that the rooms became a refuge for anyone that was escaping domestic violence and became vaccination rooms for the COVID-19 vaccine.

5.2.4.2 Professional/personal identity

None of the Public respondents believed that the wearing of face coverings had changed or impacted upon their personal identity. Conversely, many Worker respondents identified that the wearing of face coverings in the workplace had changed or impacted upon their professional identity. The main reasons for this were related to how they communicated with their service users and their professional responsibility as part of their role.

"Patients and customers don't see our full faces. So communication is reduced and rapport is reduced." (W13)

"... yeah, because basically hair and beauty obviously is a visual thing. […] And it's I think people we've been doing for a long time, it's fine but new clients we've never seen their faces and they have never seen ours…" (W15)

"I think it gives quite a professional appearance, you know, to people, people think they're taking this seriously everything else like that. So I think there's that kind of element to it." (W5)

5.2.5 D4 Capability beliefs confidence

5.2.5.1 Confidence in using a face covering

All Workers and most Public respondents reported feeling confident in their ability to use a face covering correctly whilst visiting or delivering professional services within a retail consulting environment. Many of the Workers, and a small number of Public respondents, described being in the habit of now wearing face coverings, perceiving this practice as both easy and normalised. Public respondents most commonly attributed feelings of confidence to being able to see and feel the close fit of their covering, seen as confirmation that they are performing the practice correctly.

"…it's just become a habit […] wear it for the whole pandemic." (W1)

"…it's not that hard…" (W13)

"…because there's three layers in the mask, I can feel it, or I can see it coming in and out as I'm breathing through. So I know if it's not moving, it's not working as well as it should be. Yeah, there's not as good a seal." (P1)

Other less frequent responses related to feelings of confidence concerning correct use of face coverings included Public respondents feeling that their own practices reflect those recommended within guidance and Workers referring to the level of training and guidance received on wearing face coverings correctly.

"Because I've read the guidelines. And I, I follow what it says." (P14)

"Just with the training given and the length of time that we've been wearing the masks now." (W10)

5.2.6 D5 Consequence beliefs

5.2.6.1 Face covering effectiveness

All Public respondents who reported wearing face coverings within retail consulting rooms felt that they were either very or moderately effective. Most commonly cited reason amongst Public respondents, along with some Workers were that they believed that face coverings had contributed to

a reduction in rates of the COVID-19 virus and/or other illnesses (e.g. cold, flu), either for themselves personally, amongst colleagues in the workplace or amongst the wider population. Many Worker respondents believed that face coverings stop the individual breathing on others and vice versa, therefore reducing the transmission of COVID-19.

> *"Well, it's a two way process, isn't it? Mine protects you, and yours protects me. So if we both wear them, we've both got a good degree of protection. […] I think you get maximum protection when you're both wearing them." (W2)*

> *"It [avoidance of contracting COVID-19] can only be through wearing the face masks and the PPE. […] So I can only assume it's due to the measures, which include the face masks that have helped that." (W5)*

Many of the Worker and Public respondents also felt that the risk of COVID-19 transmission was reduced by wearing face coverings due to it preventing airborne transmission. For example wearing face coverings prevents breathing in the air others had breathed out and acts like a physical barrier. Some Public respondents cited a level of protection offered in the event that someone may be unknowingly asymptomatic, as well as face coverings offering some form of protection and preferable to nothing.

> *"…reduces personal risk because you're not breathing in. So much of other people's breathed out air." (W13)*

> *"Just sort of like a kind of protective barrier, you're wearing as opposed to nothing at all?" (W10)*

> *"I just think you better with them than without frankly." (P4)*

Public and Worker respondents cited the quality of the face covering being worn as a determinant of their effectiveness as a barrier to viral transmission, with Worker respondents also citing how it is worn and cleanliness of face coverings as other factors influencing effectiveness that are determined by the wearer. A couple of the Worker and Public respondents also referred to statements and articles about the effectiveness of face coverings in the media/news or wider Publications.

> *"Oh, just following news articles, I mean, obviously, I'm not a scientist, and I don't have any of those search results. But we are constantly informed that this is beneficial, and is restricting." (W9)*

> *"I think if you're wearing a proper face covering that fits well and has the right fibres in it to filter out the virus. You're safe, you know, you're protecting yourself." (P10)*

> *"… virtually everyone who comes into a face into a consultation, either has like a cloth covering, which I think is probably, you know, not very effective, Or […] they look grubby, you know, like they've been carrying it around for like weeks or months or something. So you think well, how effective is that? Probably not very, so I think the risk of me is probably quite, quite great. But the risk from me to them is probably a lot less." (W16)*

Many of the Worker and Public respondents felt that the wearing of face coverings within consulting rooms reduced their risk of contracting COVID-19. It was identified that this is largely due to being in such close proximity to service users and therefore the face covering provides protection from transmission. However, it was acknowledged that face coverings are one of a number of protective practices that contributes to transmission prevention (e.g. hygiene measures, sanitising, social distancing and vaccines).

> *"I think it does reduce the risk. I'm not sure it eliminates it because obviously COVID spreads through other ways than just using the facemask, but I think it helps reduce it and keep us as safe as we can be." (W11)*

"So I think in all of this, you know, I'm vaccinated I wear a mask, I, you know, socially distance as much as I can, I think all of these little things that we can do, then none of them are 100%." (P8)

Amongst those who perceived face coverings to be moderately effective, Public respondents reported movement of the face covering when speaking; and a tendency to touch or reposition coverings whilst they are in situ – all of which were perceived to impact effectiveness of face coverings. Others acknowledged wider factors that can contribute to transmission of the COVID-19 virus, such as touching surfaces inside or outside of the retail consulting room or handling and storage of people's coats whilst undergoing their consultation within the consulting room.

"…it did fleetingly cross my mind last time I was in the hairdresser that my coat was being taken and put in a cupboard beside somebody else's. And I don't know, you know, how careful they've been […] there's other aspects to it, it's not just the service and the person that you're taking service from. It's all the other interactions that go on around and about that." (P2)

Both Public respondents who believed face coverings to be ineffective reported that they do not wear a face covering when visiting retail consulting rooms. One reported that they do not wear face coverings within retail consulting environments because they believed them to be ineffective as a barrier to virus transmission. This individual felt as though face coverings (both reusable and disposable) offered little protection to the wearer and others around them. The other attributed the poor handling of face coverings (e.g. improper disposal and people not keeping their coverings sterile) as a reason for them being considered ineffective.

"A surgical mask is a completely and utterly pointless piece of protection for the person that's wearing it, because it's not going to provide them with any protection from any airborne contaminants, or very minimal. […] A surgical mask is designed purely and simply to stop large droplets being emitted from somebody in a surgical environment into an open wound. […] surgical mask is, marginally better than the vast majority of cloth masks out there, which are entirely pointless." (P7)

"…they're not keeping their masks sterile. I mean, I went for a walk this morning, and I found five abandoned masks just within the walk to the cash point and back. And people throwing them on the floor, and it's disgusting. So I think really, the reasons to stop the spread of disease, but they're not being handled properly. So it's a total waste of time." (P18)

5.2.7 D6 Reinforcement

5.2.7.1 Benefits of wearing face coverings

When discussing the benefits of wearing face coverings, many of the Workers and some Public respondents mentioned the nature of providing close contact services within the confined space of the retail consulting room, where they are subsequently unable to socially distance. The most common benefits of wearing a face covering mentioned by the Worker respondents included protecting service users and the face covering wearer from COVID-19 as well as protection beyond COVID-19 (e.g. coughs, colds). Another prominent benefit cited amongst Public respondents related to positive social judgement/acceptance from others (cited by approximately one third of Public respondents). Multiple respondents spoke of receiving negative social judgement or even abuse early on in the pandemic, before the wearing of face coverings became an accepted common practice.

"The larger benefit is actually from me transmitting, so protecting others, but I understand there is some protection for me, but the most protection is me passing anything on to anyone else." (W6)

"I don't think they're 100% effective. But I think any little thing you can do to help stop the spread of it. You need to do for your own protection and others."(P3)

"I actually started wearing them before it was mandatory to wear them. Which was an interesting experience because I felt incredibly self-conscious. […] I don't feel self-conscious anymore." (P9)

"…if everyone's wearing them, who the hell cares? You know?" (P13)

Other perceived benefits to wearing face coverings cited amongst small numbers of Public respondents included: reducing droplets dispelled into the air when individuals cough or sneeze; trapping airborne particles when breathing and speaking in close proximity to others; protection against general viruses and illnesses beyond COVID-19 (e.g. colds and flu); increased feelings of confidence and safety when wearing; avoidance of fines; and not having to wear makeup. A few Worker respondents identified the benefit and importance of protecting co-Workers and family from COVID-19.

"I would say that it's underpinned by the fact that I've been wearing a face covering for the last, I don't know, 18 months, well maybe not that long, at least 12 months, and I've been lucky enough not to even get a cold, so." (P10)

"…it may be better than it was, but it's not gone. So I am happier keeping that barrier there. It just makes me feel more confident when I go somewhere. Yeah, now I wear it purely and simply because it makes me feel happier and may feel safer." (P3)

"Yeah, I want to keep myself safe. I want to still be able to do my job and look after my customers and keep my colleagues safe. And my husband as well. That's really important." (W11)

5.2.7.2 Negatives of wear face coverings

Interview respondents cited a range of negatives to wearing face coverings. The most commonly reported negative amongst Workers and members of the Public was communication challenges. Difficulties in communication were identified to be more pronounced when there was a service user or Worker who was deaf or within noisy environments such as hair and beauty salons as individuals are no longer able to lip read. In some instances, Worker respondents identified that where there is a deaf service user they would adapt and use a visor or remove their face covering so the service user could lip-read.

"I didn't realize how much I was lip reading in noisy environments until it's taken away." (P2)

"I am able to project so my customers can hear what I'm saying. If we've had anybody who's hard of hearing, I will take it off and I'll wear a visor so that they can lip read if they need to." (W5)

"…a few of my friends wear hearing aids, and they struggle with communication." (P12)

"Patients and customers don't see our full faces. So communication is reduced and rapport is reduced." (W13)

"Some people mutter, as it is anyway. And when they mutter behind the mask, it's almost impossible. And I find that quite often I've gone sorry, can you say that again." (P3)

The majority of the Worker respondents and many Public respondents also referred to the loss of non-verbal communication and difficulty interpreting emotion, with face coverings obscuring the ability to read facial expressions of others (both service users and colleagues).

"It's a shame you lose facial expressions. Which when you're working in very close contact with people? No, I do think it's sometimes it's a lot more difficult to judge. You know exactly how they're feeling. particularly when you're doing something like say, a massage or foot massage, or reflexology?" (W3)

"…as a human being, we interact with other human beings in subtle ways. And when you have got a covering on your face, you lose a huge part of that visual interaction that you don't realize, although you hear people you can't, you can't see the subtleties in how they're pursing their lips, how the holding the jaw." (P16)

Some Workers and Public respondents described feelings of discomfort when wearing a face covering, reporting feeling itchy and uncomfortable behind the ears, though this was more commonly (though not exclusively) reported relative to use of disposable/surgical face coverings. A small number of respondents reported the use of adaptations to ease the discomfort experienced. A few Workers and Public respondents also said they felt hot when wearing a face covering.

> *"…because I use the disposable ones, they're a bit scratchy, they're not particularly the most comfortable." (P3)*

> *"I tend to get a bit sore round my ears. So I've got a I've got a little sheet of fabric with some buttons on the I loop the end of the loops through so it pulls it a bit tighter. Yep, but also takes the pressure of my ears." (P1)*

Financial cost was a negative cited by both Worker and Public respondents. This included cost to purchase or clean face coverings (more commonly speculated as a negative for other people amongst public respondents rather than the something they directly experienced). Indirect costs incurred were cited by one participant who lost a hearing aid in the process of removing their face covering.

> *"My daughter bought a box of masks at the local pharmacy. And it was shockingly expensive. Compared to what I was getting them for on Amazon. And, you know, if you're on benefits, you don't get free masks. That might have been a barrier for some people." (P14)*

> *"…one time I managed to lose my one of my hearing aids and it only cost me 3000 quid to get another lot." (P13)*

Other negatives to the use of face coverings cited by interview respondents included the impact that face coverings can have on the skin, the impact of their use on wildlife and the environment and experiencing glasses fogging over.

> *"I was gathering up carrier bags full of litter every time I went up to the reservoir in the morning. And a lot of that was masks." (P18)*

> *"…I wear glasses and it is annoying. You put a mask on and you put your glasses on, you can't see for five minutes. It does steam up your glasses because it pushes the air straight up through your glasses." (P3)*

5.2.8 D7 Intentions

5.2.8.1 Intention to wear a face covering

The vast majority of Public respondents and all Workers said that they intend to continue wearing a face covering within retail consulting rooms, regardless of whether this were to be mandated. In many cases, this was in order to protect themselves and keep other people (e.g. Workers/colleagues, service users and family) safe. Workers acknowledged the nature of their job involves them seeing lots of service users during the day and in close proximity, thought to increase their exposure to COVID-19 and other viruses.

> *"…one of my manicurist said she's had COVID twice because of her occupation. So, Yeah, I'm just very aware of that. It's just not fair on the people working in the environments that they choose to work in." (P12)*

> *"I'd still wear it. […]I don't want to catch other people's colds or chest infections. So I mean, it's not just COVID that I want to be protected from. I mean, I see 15 people a day. God knows what they're bringing in. I'd rather not be ill, if I can avoid it." (W15)*

> *"I would choose to anyway, even if they didn't mandate it, because I just think it's safer. And I know, the new variants not as severe, but, you know, unless we all try and reduce the transmission of it is never going to go away." (W2)*

A pharmacy Worker shared their expectation for continued mandated use of face coverings, due to them working as health professionals. Other Workers said that they intend to continue wearing face coverings, even if they were not mandated, as this was felt to be protecting them from other particles and pollution in the air, such as nail dust in a beauty salon.

> *"In a way, it depends on a number of aspects now, what's going to be expected in a healthcare setting, such as pharmacy, and I think the expectation will be to wear a face covering probably from healthcare professional." (W7)*

> *"…I do quite a lot, a lot of nail treatments. And that does create quite a lot of nail dust. And even though I have I have an extraction system […] I have noticed I don't get quite so many sore throats. And I think that was because I was inhaling the nail dust, so from a from a non-COVID point of view as well, it's I think, you know, it helps with my, my physical wellness as well." (W3)*

Some members of the Public emphasised using their own personal judgement on whether to wear face coverings based on the information available to them, rather than needing to follow instruction or copying other people's behaviour. Other Public respondents chose to reflect the practices of those around them and hence acknowledged that their intention to wear a face covering would be context dependent.

> *"I will still wear them in confined areas. I think rather than the government telling me what I should do, I've learned what I should do. […] because of my perceived additional safety to both me and people around me. That's why I will continue to wear face coverings next week." (P15)*

> *"I did wear one at the opticians when I went for my test, and then my hair and beauty, they both relaxed their rules now. So I've kind of gone with them. Like follow followed their lead on that."(P9)*

5.2.8.2 Intention to visit retail consulting rooms

The vast majority of Public respondents asserted that they would still visit retail consulting rooms should the wearing of face coverings no longer be mandated (either by the government or retail premises themselves). A small proportion of Public respondents reported being selective over when and where they choose to visit, both at the time of the interview as well as being conscious of this looking ahead into the future.

> *"I also am a bit choosy about where I go. So if I went somewhere and, and they, and nobody was wearing a face mask, or nobody was, you know, was bothered, I think I might opt to go somewhere else." (P8)*

One respondent, who reported not wearing face coverings for reasons of heightened anxiety. This individual described how they felt unwilling to visit retail consulting rooms or even medical settings at the time of interview due to the anxiety experienced by having to wear, or be in close proximity to others wearing face coverings. As a result, they reported suffering considerable pain at the time of interview.

> *"I'd rather put up with the pain and the illnesses than be surrounded by people wearing masks."(P18)*

5.2.9 D8 Goals

5.2.9.1 Increasing likelihood of wearing a face covering

The majority of Worker and Public respondents stated that they 'definitely would wear' a face covering within retail consulting environments if it were not mandated, and hence few participants were asked about what might increase their intentions in this regard during interview. Amongst those that were, some Worker and Public respondents cited increasing case numbers and/or hospitalisation in the

local area would increase their likelihood of wearing a face covering. Furthermore, the behaviours of others were also said to impact individuals likelihood of wearing a face covering. As other people not wearing face coverings was said to increase the likelihood of some Public and Workers respondents wearing a face covering themselves, whilst other Workers said that this may decrease the likelihood of them wearing a covering themselves (further exploration of social influences are explored within section 5.2.12).

> *"Increased numbers in COVID cases or increased hospitalization or just general cleanliness and luck of the retail place […] Yeah, like if I walked in and there was no one wearing face coverings, I'd be more inclined to put one on." (P11)*

> *"…some are still showing the 'please wear a faced mask' [poster] […] I was in a conversation with her [beauty therapist] and she said that she would like everyone to continue to wear them, but they can't insist on it." (P12)*

Other responses amongst Workers included continued access to free PPE and advice from their employer or Government to do so. Public respondents also said that the perceived cleanliness of the retail premises along with visual reminders within the retail premises would influence their willingness to wear a face covering.

5.2.10 D9 Memory, attention, decision processes

5.2.10.1 Changing a face covering

Of the Worker respondents that identified that they change their face covering during their working day, the majority described that this would be after their lunch break. Others also mentioned other frequencies of changing their face covering, for example; between service users/patients, between particular treatments (e.g. if examining someone's throat), if they coughed or sneezed in the mask or if the inside of the mask had become damp.

> *"So I change it per session. So, morning session, so that's, or if it's got damp inside, and I get rid of it. […] Whatever comes first damp, or if the morning session is finished, then I get rid, have lunch, put a new one on." (W12)*

> *"At least once at lunchtime. […] That was the government advice so we you know, we have we have one per shift. So we have a morning shift and you have an afternoon shift. And if you do both shifts you swap, or if you sneeze into it or similar and it gets moist and you need to change it?" (W13)*

Public respondents cited varying durations raging from daily (most commonly cited), to every four hours and weekly (cited by isolated individuals). Some individuals made reference to wearing a face covering for relatively short periods of time in order to access retail consulting services and hence were not concerned about the need to change their covering at particular intervals. More commonly however, Public respondents cited environmental, experiential and triggers that would prompt them to change their face covering, including visible soiling, amount of contact with others, level of moistness or discomfort experienced during use. Generally, these individuals felt comfortable continuing to wear a face covering within retail consulting premises that had been donned to visit friends or family at home but not the other way around.

> *"So I feel that with a limited amount of contact I'm having with people in the building and the shorter period of time I'm wearing the cloth face mask. It's not getting a soil, shall we say? So I feel if I have a new clean one, at the start of each week. That's sufficient, in my opinion, anyway." (P1)*

> *"I'm fortunate that I'm not having to wear it all day. I go to the hairdresser and it's just a cut. So I'm not having to wear it long […] they're not being worn long enough for it to be a situation where I need to set a reminder on my phone or anything like that to change it." (P2)*

> *"…if I'm going to see my sister, I put the mask on when I get to her house. […] after I've been to her house, I would just keep the mask on and pop around to the shop with the same mask, but I wouldn't go to the shop and then go into her house will out putting on a fresh mask." (P14)*

Some Public respondents reported that they would re-use a pre-worn face covering, a more commonly reported practice with disposable face coverings. In contrast, similar numbers of respondents specifically articulated that they would don a clean/fresh face covering each time and never reuse a disposable covering after removal.

> *"…probably once every two weeks, I'll chuck them out. I'll probably wear like six, seven or eight times before." (P11)*
>
> *"…once I've taken it off, I would never put the same one on, basically, I'm then touching or what might be on the outside of it, which I'm not particularly happy about. And I would rather put a clean one on." (P3)*

5.2.10.2 Why would you stop wearing?

Public respondents were asked what would prompt their decision to stop wearing a face covering within a retail consulting environment in future. Most responses related to cases of transmission being low within the community. Other triggers cited by multiple respondents, though less prominent, included the health impact of the COVID-19 virus being much less severe and this no longer posing substantial risk to the vulnerable.

> *"I think I would have to know that the case levels are low in my area." (P8)*
>
> *"When COVID is no longer a threat to our communities and the vulnerable around about us." (P2)*

5.2.10.3 What helps to remember to wear a face covering

Interview respondents were asked about what helps them to remember to wear a face covering in the workplace. The most prominent response amongst Workers and members of the Public was that wearing a face covering is habit now and therefore it is just usual practice to wear one with some Workers identifying that it is now part of their uniform. Product placement was identified by many Public respondents as a common practice that supports the maintenance of face covering use consistently over time. For example, citing placement of clean face coverings by the front door or keeping a spare in their handbag, pocket or car to ensure their ready availability for use when needed. One Public respondent however acknowledged the changing guidance with respect to when and where face coverings were required to be counter-productive relative to building consistent practices over time.

> *"No, it's just part of my uniform. Yeah, I go into work, I wash my hands. And I'll sort of hook my mask on ready for my client. And then you just set up for the day. So it has just become pretty much second nature." (W4)*
>
> *"…it's an automatic thing. Protection is in my brain. I need to put the face covering on." (P15)*
>
> *"It's become a habit now. I mean, we've been doing this for two, two years, I guess. So. Yeah, it's part of going out now, make sure you've got your mask in your bag. And I always have the box in the car as well." (P8)*
>
> *"It does take a while to get used to wearing it. But unfortunately, if we now kind of been very sporadic where we wear it, people won't be used to it." (P6)*

Approximately half of all Public respondents reported to be already wearing their face covering prior to entering the retail premises where their close contact consultation would take place and similarly many Worker respondents referred to wearing a face covering all day. This was acknowledged by some to remove the conscious requirement to don their face covering before entering the retail consulting room. Workers also said they find it helpful having face coverings or signage by the door as they enter the workplace and seeing others wearing face coverings (something discussed amongst members of the Public relative to environmental context and resources within section 5.1.11).

> *"I'm always wearing it when I go to go to the shops anyway […] So it's not even a conscious decision of having to wear it, you know, to don it before you're going in there. You're already wearing the mask." (P1)*

"I would keep my mask on when I'm out and about, if I've been shopping, I would keep the mask on when I come back in the house and unpack my shopping, and then put it in the bin after that." (P14)

5.2.11 D10 Environmental context and resources

5.2.11.1 Supply of face coverings

When asked about the supply of face coverings in the workplace, all Workers identified that they have a plentiful supply provided by their employer/within their place of work. The majority reported ordering supply of face coverings as and when they are required from sources including the NHS online ordering portal, health board, from their head office and Amazon. Overall, Workers described a readily available supply of face coverings to allow them to be changed throughout the day, where appropriate, and for service users to access them if they have forgotten to bring theirs along.

"There's boxes open all over the place. Yeah. They're not difficult, you won't struggle to find one. […] Nobody's ever asked me how many ever used? I'll just use any. And when I need a new one, I have a new." (W5)

"No, there's no limit on how many you can have, we always have a stock of I think we try to keep 10 boxes of 100 in stock. When they drop down, there's couple of boxes we replenish. They come via our head office." (W8)

"They're all over, there is one in each test room, and there's one at the front for patients that come in and don't have a mask. They're all over, there's a box everywhere." (W15)

5.2.11.2 Environmental facilitators and barriers

The respondents were asked about the facilitators and barriers for the wearing of face coverings in retail consulting environments.

The Public respondents identified that visual reminders (e.g. signage and posters) or verbal reminders by retail Workers facilitated their face covering behaviours. In addition, Public respondents identified that the provision of hand sanitiser and disposable face coverings at the entrance/exit of the premises facilitated them wearing face coverings. A small number of respondents acknowledged that these supportive provisions could be improved, with specific reference made to the sometimes poor visual cleanliness of these provisions or provision of facilities to enable prompt disposal of face coverings when exiting retail premises.

"I think a lot of them still have visual reminders some of them often offer free masks as you walk in as well sometimes like a gentle reminder from staff before you come in." (P11)

Similarly to the provision of face coverings facilitating the wearing of face coverings for the Public, many of the Worker respondents identified that their work environment facilitates them to wear a face covering due to there being a supply of them available (see section on supply of face coverings) and there being an expectation to wear them whilst in the workplace. Others also mentioned that the wearing of face coverings is facilitated by the workplace being persistent about the behaviour and there being rules in place to ensure they are worn.

"…it's availability, it's the fact that everybody else is doing it, it's the expectation that you should be wearing one." (W5)

5.2.12 D11 Social influence

5.2.12.1 Social influences to the wearing of face coverings

The respondents were asked about social influences that impact their wearing of face coverings. Many of the Public respondents referred to the face coverings practices in other countries as an influence on their behaviours in the UK. Whilst Public and Worker respondents reported that the wearing of face coverings by others (e.g. Workers, customers, colleagues) in the retail consulting environments reinforced their own behaviours.

"I actually started wearing them before it was mandatory to wear them. […] I just decided I would because other countries were." (P9)

"So he's [hairdresser] in his mask, I'm in my mask, and you know that you're trying to keep each other safe." (P2)

"So I think it's just a general, overall social responsibility for one another." (W3)

Some of the Public respondents also reported on the influence their own face coverings behaviours have on others, for example through discussions on social media, manufacture and provision of face coverings for others, or correcting others practices where these were perceived to be ineffective.

"So I helped people understand, definitely on my Facebook feed about the benefit of masks […] because people panic a lot when they put a mask on, and it doesn't actually, you know, it doesn't restrict your breathing […] So I helped a lot of and influenced a lot of people with different designs of masks to make sure they tried out the different ones to see which one actually worked for them." (P6)

"People around me don't wear face masks correctly. I get so frustrated when they wear them under their nose. And yeah, and sometimes in shops, I say to people, excuse me your face mask has slipped." (P12)

5.2.13 D12 Emotion

5.2.13.1 Anxiety

The respondents were asked about the impact that wearing a face covering in a retail consulting room had on their feeling of anxiety. Amongst those that did feel that face coverings impacted their anxiety it was more commonly reported to be a reduction in anxiety. This was reported to be due to feeling more protected from COVID-19 transmission when wearing the face covering and therefore feeling safer in an environment where they are typically in close proximity to others (e.g. customer/Worker). In addition to feeling safer themselves, it was also reported that they felt reduced anxiety around transmitting COVID-19 to others.

"It definitely lowers my anxiety if I feel that I'm protecting myself. You know, I feel that I'm doing everything that I can then I feel fine. That is reassuring." (P8)

"I think it's great for anxiety, it's better to have the mask on because any anxiety I might feel about catching something or spreading something is greatly reduced when you've got a mask on, you just feel a lot safer." (W17)

"...because I have a lot of elderly clients, all of whom either have other comorbidities, or who are probably a little bit more vulnerable. My, my worry about catching COVID and transmitting it on to somebody who is more vulnerable. You know, that was that did cause us a huge amount of anxiety. Again, particularly more in the early days. So, the face covering made me feel just more responsible for them, like I was caring a little bit more for them." (W3)

A small proportion of Public respondents also reported feelings of increased anxiety, either due to the small size of the retail consulting rooms and close proximity to Workers or in relation to a concern over the accuracy of communicating important and private information during their consultation whilst wearing a face covering.

"The main feeling of anxiety, especially with the pharmacist, was whether communication was as good? Okay, I'm trying to explain something very sensitive and important and I wanted to make sure the pharmacist understood exactly what I was saying. And if the face covering is preventing that happening, that was a concern." (P15)

5.2.13.2 Mood

The respondents were asked about whether the wearing of face coverings has an impact on their mood, a small number of Worker and Public respondents described the impact of this. Those that felt face coverings had a negative impact on their mood reported the breathing difficulties, frustration

when wearing and difficulty with reading the facial expressions of others. In particular, Worker respondents identified that they felt that they could not conduct consultations in the way they would want due to the impact that face coverings have on the ability to read body language and non-verbal communication. Public respondents also identified the positive impacts that wearing a face covering has on their mood through their ability to relax and focus on their consultation appointment knowing that they and their consultant are wearing a face covering.

> *"…it's more that if I'm wearing it, and I know and the consultants wearing it. I'm not getting frustrated." (P1)*

> *"I suppose it's just a little bit because I know, I'm going to find it hard to breath. And that makes me feel a bit down." (P5)*

> *"My mood? Yes. Yes. Yes. I, I think because mainly because I'm not able to have the consultation that I want. i.e., lots of empathy, lots of body language, lots of sort of supportive eye contact with body language and mouth and expression. So, I find that I that is masked, and I think that's does affect my mood, because I'm unable to deliver the consultation the way I want to do it." (W6)*

5.2.14 D13 Behavioural regulation

5.2.14.1 Ineffective practices

Very few members of the Public and Worker respondents identified themselves to be performing practices which they considered to be ineffective. Where respondents identified that they do feel they practice some ineffective behaviours these focused around touching and moving their face coverings (e.g. due to glasses steaming up), removing their face covering (e.g. to sneeze, blow their nose, read something with their glasses on) and not changing their face covering frequently enough.

> *"…the only thing is my glasses when they get steamed up. Yeah. I'm having to sort of put that on the edge of my mouth." (P5)*

> *"Sometimes if I need to sneeze or blow my nose, I pull it down and put it back again straight away. Yeah. Or as I say, if I'm putting my glasses on to read a label in the shop, I'll take it down, put my glasses on, take my glasses off and put it back again." (P15)*

> *"I don't change it. I'm going to be honest with you can't change it. Unless I've made a mess of it. Then then then No, I just won't just wear it all day and I think that's wrong." (W17)*

5.2.14.2 Practices that could be improved

Respondents were asked whether there were any practices surrounding the use of face coverings that they could improve upon. Both Public and Worker respondents identified that they could improve their behaviours surrounding the storage of face coverings, reporting that they would often store them in their pockets. In addition, behaviours for improvement included aspects of the wearing of face coverings, including hanging the face covering from one ear, pulling it down below the nose or mouth and general donning and doffing behaviours. Some of both groups of respondents identified that they felt they could improve upon the frequency of the changing of their face coverings.

> *"Storing definitely. [I'm] just sticking it in my jacket pocket and that goes in and out and if I change [coverings], it's still going in and out of the same jacket pocket which isn't cleaned." (P15)*

> *"I do that, I have done that. You stick it under your chin or you dangle it off one ear." (P16)*

> *"…putting on and changing them […] Just sometimes we don't handle them as well as we should do" (W13)*

> *"I could probably improve on the amount of times I change them during the day. There's probably other times when I possibly should have changed it and I didn't." (W5)*

5.3 SOCIAL MEDIA COMMENTS

5.3.1 Social media respondents

Given the context of where and how this data set was gathered, the demographic information, and use of consulting rooms, if at all (as a Worker, member of the Public) and whether individuals wear a face covering remains unknown. Furthermore, the posts are not bound to retail consulting environments as the comments reflect naturally occurring discussion which arose in response to the paid for social media advertisement.

When considering the balance of comments provided, there were almost twice as many comments expressing negativity towards the use of face coverings than those in favour. A small number of mixed comments were also expressed regarding the use of face coverings.

5.3.2 Comments against the use of face coverings

A large proportion of posts provided unfavorable opinions regarding the use of face coverings, which in some cases offered no further context for this opinion.

5.3.2.1 Reasons for not wearing

Some posts provided insight into why individuals do not wear a face covering. The most commonly cited reason was the belief that face coverings do not prevent the transmission of COVID-19. This often stemmed from personal experiences of catching COVID-19 despite the individual wearing a face covering or related to such experiences amongst somebody they know. Isolated comments made reference to face coverings not being seen as effective at preventing COVID-19 in other countries.

> *"…yes I agree my sister has been wearing one from day one had all her vaccines but still got COVID bad so waste of time my opinion." (Facebook Respondent)*
>
> *"I'm one of them not wearing a mask [...] didn't stop me getting COVID so as far as I'm concerned." (Facebook Respondent)*
>
> *"Countries where masks have been mandatory throughout still have high cases." (Facebook Respondent)*

Another commonly cited reason for not wearing a face covering included feeling that they were no longer necessary and that greater reliance should be placed on individual's immune system instead of face coverings.

> *"Don't need them anymore. Done wearing them." (Facebook Respondent)*
>
> *"Time we got our immune system back." (Facebook Respondent)*

Wider reasons for not wearing a face covering expressed by a small numbers of individuals included difficulty breathing whilst wearing a face covering, difficulty hearing people with a face covering on, lost personal possessions in the process of donning/doffing a face covering, and feelings of discomfort.

> *"…yes definitely I don't wear one outside but I do in the shops then take it off when I come out can't stand them on can't breathe properly." (Facebook Respondent)*
>
> *"Would never wear one. I can't hear people wearing one so have to get closer. Counter productive." (Facebook Respondent)*
>
> *"Lost my hearing aid taking mask off won't be wearing mask again." (Facebook Respondent)*

Negative perceptions relative to health

A large proportion of posts expressed the general viewpoint that the wearing of face coverings is bad for an individual's health (though this was not explicitly linked to their personal usage practices). This included specific reference to face coverings being bad for children's health, as well as a small number of posts that expressed face coverings cause the wearer to breathe in germs or more generally that they cause illness.

"…really bad for children if you look on boxes of disposable masks it tells you they don't protect from any viruses." (Facebook Respondent)

"They cannot be good for you breathing in your own germs." (Facebook Respondent)

"Face masks can cause bacterial lung diseases very easily." (Facebook Respondent)

5.3.2.2 Perceived efficacy of masks- negative affect

A small proportion of comments were related to the perceived efficacy of face coverings. A few comments expressed that they believed cloth face coverings are ineffective in preventing the spread of the COVID-19 virus, with some explicitly referring to gaps in the fabric of face coverings. A couple of comments explained that there is no point in wearing a visor to protect oneself against COVID-19.

"…the cloth ones you might as well where a tennis racquet over your face." (Facebook Respondent)

"Like trying to stop mosquitos with chicken wire." (Facebook Respondent)

"Face masks are unhealthy. I do not wear one and the visors are even more of a waste of time." (Facebook Respondent)

5.3.2.3 Undermining factors to the effectiveness of face coverings

A small proportion of comments referred to having witnessed members of the Public performing ineffective usage practices which undermine their effectiveness in preventing COVID-19 transmission. Examples include reusing, wearing below the chin and not washing or storing face coverings hygienically.

"Observed too many wearing masks under the nose or below chin. Also masks not being changed enough and a lot of people touching their masks whilst worn. Some masks must be riddled with germs." (Facebook Respondent)

A couple of comments mentioned requirements to improve the disposal of face coverings, as they are often left lying on the floor, which may potentially increase the risk of COVID-19 transmission.

5.3.2.4 Face coverings perceived to be government propaganda

Several comments expressed the viewpoint that face coverings are only implemented as government propaganda. This included the belief that face coverings enable the government to profit; decisions regarding face covering use being made to distract the Public from the mistakes that the government have made and a few comments stated that the wearing of face coverings is a sign of complying with the government rules without full understanding of the rationale.

"This is one of the diversions to take the mind off the parties. Phoney."(Facebook Respondent)

"…these face covering give very little protection and are just another coin in the government's buddy club fat cats wallet???" (Facebook Respondent)

"It's a sign of complying nothing more and people wearing them outside beggars belief" (Face Respondent)

5.3.3 Comments in favour of face covering use

A smaller proportion of comments provided favorable opinion regarding the use of face coverings relative to unfavorable comments. Not all respondents provided further context for their positive support for the use of face coverings.

5.3.3.1 Continuation of use

Several posts expressed intent to continue to wear face coverings in Public spaces, such as shops and on Public transport. Of these, a few posts provided no justification for this behavioural intent; a couple of posts used science to justify their belief in continued use of face coverings.

"I will wear mine when in Public." (Facebook Respondent)

"I think facemasks should stay. The science shows they protect others from infection." (Facebook Respondent)

5.3.3.2 Reasons for wearing

Some posts provided insight into why the individual chose to wear a face covering. Amongst these posts, the most commonly cited reason was to offer protection against transmission of the COVID-19 virus, either to other people around them, and/or to themselves.

"The masks are meant to protect other people I wear them on bus and shops still." (Facebook Respondent)

"Always wear in enclosed places helps protect myself and others!!" (Facebook Respondent)

Wider reasons expressed for wearing a face covering included **feeling safer.**

"I wear my mask always because I feel safer wearing it." (Facebook Respondent)

5.3.3.3 Secondary benefits

Several comments were related to secondary benefits of wearing a face covering, including: being less likely to catch other illnesses; keeping the wearers face warm and hiding worn off lipstick.

"Support mask wearing- to protect others- and I haven't had a bad cold for two years!" (Facebook Respondent)

"I find my mask very useful when shopping - it saves me worrying that my lipstick might have worn off." (Facebook Respondent)

5.3.3.4 Wider social influences

A couple of posts made reference to other counties, such as Japan, where the use of face coverings is more widely accepted and common practice, and the positive impact they were believed to have had in preventing COVID-19.

"…been wearing them for decades in Asian countries that helped a lot with COVID." (Facebook Respondent)

5.3.4 Mixed comments about the use of face coverings

A small number of comments were neither in favour of nor against the use of face coverings. Several comments made reference to face covering use being a personal choice and that individuals should wear a face covering, or not, depending on personal preference.

"Simple....wear a mask for the rest of your life if you feel they keep you safe..... but they should never be mandatory (which isn't law anyway)!" (Facebook Respondent)

"Wear one if you want to .Don't if you don't want to." (Facebook Respondent)

6 CONSOLIDATED FINDINGS

The following summarises, compares and contrasts findings across the qualitative and quantitative data gathered and considers the implications of these findings for policy, practice and further research.

6.1 D1: Knowledge

6.1.1 Why face coverings are recommended

Survey respondents most commonly cited protection, preventing the spread of the COVID-19 virus, proximity to others and preventing the spread of other illness as the reasons why use of face coverings is recommended within retail consulting rooms. Similarly, within the interviews, many Workers and Public respondents acknowledged close proximity, confined spaces and airborne droplets as increased risks for transmission and hence the rationale for recommending use of face coverings. This suggests reasonable understanding of the reasons why face coverings are recommended within a retail consulting room.

6.1.2 Knowledge of recommended practices

Generally, self-reported knowledge about the COVID-19 pandemic as well as recommended practices for donning/doffing face coverings (discussed further below) was good. Pharmacy Workers generally reported that they follow guidance for healthcare settings as opposed to guidance for retail environments which was less stringent. However, one pharmacy Worker perceived that the guidance for healthcare settings only applies to the consulting room and hence general retail guidance was considered to be applicable for the retail space and counter. This was said to interrupt discussion between Workers and Public that may start at the retail counter and move into a consulting room. Given the small sample interviewed, it is feasible that further individuals (Workers or indeed members of the Public) may also be unclear of relevant guidance applicable within retail premises that also offer health-related services (e.g. community pharmacy).

6.1.2.1 Donning and doffing face coverings

Interviewees commonly cited washing/sanitizing hands, holding the face covering by elastic loops, avoiding touching the rest of their covering and securing a good fit over the bridge of their nose when donning/doffing face coverings. Amongst survey respondents, knowledge of doffing face coverings was found to be lower than knowledge concerning donning a face covering amongst both Public and hair and beauty Workers. When considered in relation to expressed frustrations towards other people's practices commonly observed (e.g. not covering mouth and/or nose), this suggests that knowledge of donning and doffing practices may be inconsistent across Worker and Public populations.

6.1.2.2 Washing/drying and storage of face coverings

The present study data offered minimal insight into washing and drying practices. Very few respondents were specific about the temperature or frequency of washing/drying practices. Storage of face coverings was generally grounded in convenience for transporting and re-use (e.g. commonly stored inside a pocket or handbag). Some Workers reported that the Public use dirty masks when visiting their retail premises. Both storage and washing practices received the lowest self-reported knowledge rating amongst survey respondents. The search of grey literature identified recommendations to wash face coverings in line with manufacturer's instructions. The present study did not seek data regarding the various face coverings available on the market or the coverage, detail and consistency of such product guidance.

6.1.2.3 Disposal of face coverings

Where applicable, in the interviews Workers commonly reported immediate disposal of their face coverings after use, with some referring to multiple bins through which they could dispose of their face coverings whilst at work. Conversely, some Public respondents reported a tendency to reuse even disposable coverings, during a given day when in different settings or in some cases over multiple

days. Across the interviews, members of the Public made reference to improper disposal, reports of visible littering of face coverings on the ground and lack of disposal facilities.

6.1.3 Gaps in knowledge identified

Interview participants were generally unsure of whether the use of face coverings was a legally mandated requirement or a recommendation for practice. Some Worker populations, specifically pharmacy Workers, did not believe this distinction to be important as, being a health professional, equal weight would be given to recommendations provided to their profession as though it were a legal requirement. Public interview respondents requested the use of simpler and more familiar language (i.e. face masks as opposed to face coverings) within communications about the COVID-19 virus in general. The findings from the review of academic and grey literature also revealed considerable variation in terminology used to refer to face coverings across different settings and countries. Some respondents referred to the different guidance in place across the devolved nations said to add to levels of confusion regarding recommended practices. Further gaps in knowledge amongst Public respondents most commonly related to the science behind face coverings as an effective barrier to transmission, as well as what usage practices are most important to ensure the effective use of face coverings.

6.2 D2: Skills

6.2.1 Perceived ease of wearing face coverings

The practice of wearing face coverings was generally said to be easy, with members of the Public in particular reporting to have formed new habits for wearing face coverings over time through consistent use. Amongst those reporting difficulties in wearing face coverings, communication challenges were common amongst Workers (hair and beauty therapists in particular) and glasses fogging over amongst the Public. That said, some interview respondents spoke of techniques or products available to prevent glasses from fogging over such as ensuring a close seal of the face covering over the bridge of the nose or use of a demisting spray.

6.2.2 Guidance to support effective use

Guidance was most frequently obtained from government sources, followed by professional associations, employers and industry and scientific research. Workers interviewed cited Government guidance that had been translated for the intended sub-sector or profession specific audience to be useful, with videos and pictorial guidance considered most useful. Public interviewees also made reference to accessing industry specific guidance from their current or previous employer and applying this guidance to their own personal usage practices outside of work. Workplace guidance was said to differ between professional groups/retail settings. Community pharmacy Workers described their workplace as a healthcare setting and hence most (though not all Workers) believed that they were subject to healthcare guidance rather than retail guidance with respect to the continued mandated use of face coverings. Some, though not all Workers, saw an unclear distinction between the consulting room and wider premises and hence were unclear of where different recommendations applied.

6.3 D3: Identity

6.3.1 Changes to aspects of work

Half of Worker respondents to the online survey felt that the wearing of face coverings had changed aspects of their work (most commonly amongst hair and beauty Workers). Prominent changes reported by Workers included: changes to communication (e.g. sending/bringing pictures to the community pharmacist to reduce time spent within the consulting room), duration/order of treatments offered, restrictions on what services were available (linked to Government restrictions (e.g. beard trim permitted for men but not women's chin wax due to no facial treatments allowed)).

6.3.2 Changes to identity

Only a small proportion of Public respondents (less than 10%, though none of those interviewed) and approximately 32% of Workers felt that the wearing of face coverings had changed their identity. This

was largely attributed to communication challenges, said to impact rapport and role enjoyment, or demonstrating professional responsibility to keep customers safe as part of their role.

6.4 D4: Capability Beliefs

In general study participants (over 70% of survey sample) reported feeling confident in their ability to correctly use a face covering whilst delivering/receiving professional services within a retail consulting environment (similar levels of Workers and Public). Individual's self-described practices given regarding donning, doffing and disposal gives confidence in these high levels of self-reported confidence. Underpinning reasons for Worker and some Public respondent's confidence focused on being in the habit of now wearing face coverings and perceiving this practice as both easy and normalised. Public respondents also referred to seeing and feeling the close fit of their face covering giving them confidence that they were wearing it correctly.

6.5 D5: Consequence Beliefs

6.5.1 Perceived effectiveness

Survey data shows that opinions regarding the effectiveness of face coverings were evenly spread between extremely effective, very effective and moderately effective. All Public and most Workers interviewed believed face coverings to be either very or moderately effective. This was largely attributed to reductions in illness rates experienced (e.g. the COVID-19 virus or colds and flu) personally or by contacts; preventing the wearer breathing on others and vice versa, therefore reducing viral transmission and providing a physical barrier from airborne droplets. Reasons given for perceptions of moderate effectiveness of face coverings included movement of the face covering experienced when speaking, feeling the need to touch or reposition the face covering whilst in situ and the wearing of face coverings being one of a suite of protective measures required to mitigate viral transmission.

Hair and beauty and Public respondents were most likely to report that face coverings were not at all effective, although this accounted for less than 10% or respondents in these groups. Both Public interview respondents who reported that they do not wear a face covering when visiting retail consulting rooms believed face coverings to be ineffective either as a barrier to virus transmission or as a result of improper Public handling and disposal (said to undermine any protective function they may offer).

6.5.2 Who benefits from the use of face coverings

Similar proportions of Workers (73%), and Public respondents (65%), believed that they themselves benefit from their wearing of face coverings within retail consulting rooms. Almost all Workers (94%) perceived benefit to customers) compared to 71% of Public respondents perceiving benefits to Workers delivering services. Free text responses suggest that many respondents (Workers and members of the Public) believe that many people benefit either directly or indirectly (e.g. family, close contacts, wider society) from the wearing of face coverings within retail consulting rooms.

6.6 D6: Reinforcement

6.6.1 Benefits and negatives to wearing face coverings

Frequently cited benefits to wearing face coverings across study participants were increasing others protection from COVID-19, increasing own protection from COVID-19 and positive judgement from others. Some individuals reported experiencing negative social judgement or even abuse early on in the pandemic, before the wearing of face coverings became an accepted common practice.

Commonly reported negatives to wearing a face covering were impeding communication, including difficulty hearing, lip reading and loss of non-verbal communication, as well as feelings of discomfort, in particular behind the ears from the loops of the covering or relative to feeling hot. Financial cost was also cited by both Worker and Public respondents relative to the direct costs to buy and wash coverings, or less commonly the indirect cost incurred (e.g. loss of hearing aid whilst removing face covering). Direct costs were more commonly speculated for other people (rather than something experienced first-hand).

6.7 D7: Intentions

6.7.1 Intention to wear a face covering

Across both the survey and the interviews the vast majority reported that they would intend to continue to wear a face covering within retail consulting rooms, regardless of whether this was mandated by the retailer or the Government. Of all the occupational groups, hair and beauty Workers would be the least likely to wear a face covering in these circumstances.

In the interviews, it was detailed that this intention to continue wearing a face covering was to protect themselves and other people (e.g. Workers/colleagues, service users and family) from COVID-19 and other viruses. For Workers they reported that the nature of their jobs being in such close proximity to others would have an impact on the intention to wear a face covering.

Some members of the Public emphasised that they would use their own personal judgement on whether to wear a face covering based on the information available and the context in which they are in, rather than following instruction or being influenced by the behaviour of others.

6.7.2 Intention to visit retail consulting rooms

In the interviews, the vast majority of Public respondents reported that they would still visit retail consulting rooms should the wearing of face coverings no longer be mandated either by the government or retail premises themselves. A small proportion of these respondents reported that they are selective over when and where they choose to visit.

6.8 D8: Goals

6.8.1 Increasing likelihood of wearing a face covering

In the interviews, the majority of Worker and Public respondents stated that they definitely would wear a face covering within a retail consulting environment if it were not mandated. Where respondents did not identify they would definitely wear a face covering they were asked what might increase their intentions. The responses to the interviews reflect those in the survey in terms of what would increase the likelihood of wearing a face covering, such as government guidance, behaviour of others (customer/colleagues), availability of face coverings and reminders. Interestingly in the interviews, the behaviour of others was reported both in terms of other people not wearing a face covering increasing the intention of the respondent to wear a face covering themselves, and on the other hand it was reported that others not wearing a face covering would decrease their likelihood of wearing a face covering themselves. In addition, it was reported by some of the Worker and Public respondents that case numbers and/or hospitalisations in the local area would increase their likelihood of wearing a face covering.

6.9 D9: Memory, Attention, Decision Processes

6.9.1 Remembering to wear a face covering

The study data suggests that the vast majority of individuals have no issue with remembering to wear a face covering within a retail consulting room, with over 90% of survey respondents reporting that they always remember. Workers and Public respondents said that wearing a face covering is habit now, with some Workers identifying that it is now part of their uniform. Both Workers and the Public commented on their placement of face coverings and referred to triggers that prompt them to don a face covering, such as when leaving home, getting out of their car or just prior to entering retail premises thus avoiding reliance on recall at the point of entering the retail consulting room specifically. Workers also felt that signage and other's practices around them served as visual reminders.

6.9.2 Frequency of changing face coverings

Perhaps unsurprisingly, the frequency of changing face coverings varies according to the type of face covering being worn, with reusable coverings most commonly reported to never be changed during the day (67% of survey respondents using this type of covering), whilst surgical coverings were reported to be changed once or 2-5 times per day in equal measure (both 39% of respondents using this type). Typically, Workers reported changing face coverings after rest/lunch breaks, with one third or less across professions reporting the frequency of this change being mandated by their employer. Public respondents most commonly reported changing their face covering once per day (42%), although 16% and 8% respectively reported changing them weekly or less than once per week. Public respondents most commonly described specific events (such as each trip out of the home or entering each new premises), the duration of time in situ, and the visual appearance of the covering as prompts to change their face covering.

6.9.3 Why would you stop wearing?

When asked what would prompt their decision to stop wearing a face covering within a retail consulting environment in future most responses related to cases of transmission being low within the community.

6.10 D10: Environmental Context and Resources

6.10.1 Availability of face covering provisions

When asked about the supply of face coverings in the workplace, almost all Workers in the survey and all Workers in the interviews identified that they have a plentiful supply provided by their employer/within their place of work. The sources of face coverings reported by Workers included the NHS online ordering portal, health board, from their head office and Amazon.

6.10.2 Contribution of the physical environment to ease of use

In the survey most respondents felt that their place of work, or for the general Public the retail premises, made it very easy to wear face coverings. The interview respondents were asked detailed questions about the facilitators and barriers for the wearing of face coverings in retail consulting environments. The Public respondents identified that visual reminders (e.g. signage and posters), verbal reminders by retail Workers and the provision of hand sanitiser and disposable face coverings at the entrance/exit of the premises facilitated them wearing face coverings. A small number of respondents acknowledged that these supportive provisions could be improved (e.g. poor visual cleanliness of provisions, prompts for face covering disposal). Worker respondents identified that their work environment facilitates them to wear a face covering due to there being a supply of them available, there being an expectation to wear them whilst in the workplace and the workplace being persistent about the behaviour and there being rules in place to ensure they are worn.

6.11 D11: Social Influence

6.11.1 Impact of others attitudes and practices

Just under half of the survey respondents reported that the attitudes of others made it very easy to wear face coverings; this proportion was higher in Workers than in the general Public. Members of the Public were more likely to report that the attitudes of others had no impact; however, there were also comments in the interviews from members of the Public that the face covering practices in other countries has had an influence on their behaviours in the UK.

Across the three occupational groups in the survey, the majority of respondents reported that Workers always wore face coverings whereas only 28% of members of the Public thought this was the case. On the extent to which face coverings were worn by members of the Public, the most common response was ‘usually’, with hair and beauty Workers being the most likely to report that members of the Public always wore face coverings. Interestingly, in the interviews both the Public and Worker respondents reported that the wearing of face coverings by others (e.g. Workers, customers, and colleagues) in the retail consulting environments reinforced their own behaviours.

6.12 D12: Emotion

6.12.1 Impact of face coverings on mood

The majority of the survey respondents felt that wearing a face covering in retail consulting rooms had no impact on their mood. However, almost half of hair and beauty Workers felt that wearing one lowered their mood a little or a lot. In the interviews, those that reported that face coverings lowered their mood reported that it was due to the face covering causing breathing difficulties, frustration when wearing and difficulty with reading the facial expressions of others. In particular, Worker respondents identified that they felt that they could not conduct consultations in the way they would want due to the impact that face coverings have on the ability to read body language and non-verbal communication.

Interestingly, very few survey respondents reported that wearing a face covering enhanced their mood, in the interviews some of the Public respondents identified the positive impact that wearing a face covering has on their mood through their ability to relax and focus on their consultation appointment knowing that wearing a face covering ensures greater safety and reduced transmission of COVID-19.

6.12.2 Impact of face coverings on levels of anxiety

Most commonly the survey respondents identified that wearing a face covering had no noticeable impact on their anxiety, however, nearly half did feel that wearing one lowered their anxiety either a little or a lot and a few felt that it increased their anxiety either a little or a lot.

Similarly in the interviews, the respondents most commonly reported that wearing a face covering reduced feelings of anxiety due to feeling more protected from COVID-19 transmission, safer in close proximity to others and reduced anxiety around transmitting COVID-19 to others.

A small proportion of Public interview respondents also reported feelings of increased anxiety, either due to the small size of the retail consulting rooms and close proximity to Workers or in relation to a concern over the accuracy of communicating important and private information during their consultation whilst wearing a face covering.

6.13 D13: Behavioural Regulation

In the survey, the most commonly reported usage practices across all sectors/groups focused on recommended activities. These activities focused on how to ensure there is a good fit (mouth/nose being covered, close fit/seal), hygiene practices (washing hands before/after handling, holding ties to put on/take off, using dry/clean coverings) and disposal and storage (e.g. in a sealable container). In addition, a frequently reported ineffective practice in the survey was the adjustment of the face coverings whilst being worn. This was reflected in the interviews, whilst very few reported that they practice ineffective behaviours, where they did, this focused on adjusting, touching and moving the face coverings whilst they are being worn (e.g. when glasses steam up, sneezing, blowing nose). In addition, in the interviews it was reported by some of the respondents that they feel they do not change their face covering frequently enough and that this is something they are aware they could improve upon. In addition, the interview respondents also reported that they could improve upon their behaviours surrounding the storage of face coverings (e.g. avoiding storing in pockets) and aspects of wearing face coverings (e.g. avoiding hanging face covering from one ear and pulling down below the nose/mouth).

7 RECOMMENDATIONS

Drawing on the study findings, 15 recommendations are presented for policy, 12 recommendations are presented for practice and six recommendations are presented for further research (below). Where applicable, consideration has been given for the relevance of these recommendations both now and in the context of future COVID-19 variants or subsequent pandemics. It is also worth noting that at the time of writing, (on Monday 18th April 2022) the Scottish government revised their guidance to lift the requirement for individuals to wear a face covering within retail premises,[4] in Wales this was revised on the 28th March 2022.[5]

7.1 RECOMMENDATIONS FOR POLICY

1. Policy makers should **continue to communicate, in a clear and timely manner, the reasoning behind behavioural recommendations/requirements.** This is relevant both now and in the event of new variants of the COVID-19 virus or future pandemics to maintain individual insight into why practices are recommended.
2. It would be valuable to **retain reminders related to the fit, handling and hand sanitising** regarding use of face coverings for the duration that the practice is recommended and for this messaging to be repeated in simple form, relative to the most commonly used face coverings (these were identified as reusable/cloth and disposable/surgical by the present study).
3. Provide Public health campaigns including **visual prompts of effective versus ineffective face covering practices** (e.g. storage, wearing, disposal, frequency of changing) for the duration that the practice is recommended. This may help to enhance consistency of practices which are safe and hygienic.
4. Seek to **use simple and familiar terminology** within all communications to help ensure clarity, ease of understanding and consistency thereby avoiding confusion and ensuring information remains accessible to the general UK population.
5. Those responsible for publishing and disseminating guidance and research might usefully **adopt a shared code of conduct with respect to clear and consistent terminology used**, along with the use of tags to dual code materials so that they can be easily identified if searching with related, yet not exact terminology. This would support the lay Public to easily access reliable scientific recommendations and research when they may lack knowledge of scientific terminology.
6. **Maintain consistent recommendations for use of face coverings within relevant close contact settings** (such as the consulting room) for as long as this is perceived to be beneficial and necessary to help prevent viral transmission as opposed to updating recommendations/requirements as transmission and hospitalisation rates peak and reduce.
7. Policy guidance/requirements must **clearly define boundaries for the wearing of face coverings within different settings** (within consulting room versus wider retail space) both now and in the event of new variants of the COVID-19 virus or future pandemics. This should be made explicit within communication/dissemination of policy so clear to all stakeholders.
8. **Raise awareness amongst Workers, now and in the future, of the impact that wearing a face covering can have on service user's mood and anxiety** during retail consultation appointments. Acknowledgement that individuals may feel uncomfortable communicating personal and sensitive information whilst wearing a face covering due to the impact that wearing a face covering has on communication (both verbal and non-verbal).

[4] BBC News (2022). Covid: Law on wearing face masks in Scotland is lifted. Retrieved April 2022 from https://www.bbc.co.uk/news/uk-scotland-61139581

[5] BBC News (2022). Covid: What are the latest rules for Wales? Retrieved April 2022 from https://www.bbc.co.uk/news/uk-wales-55333756

9. **Illustrate diverse target audiences within Public health campaigns, to make messaging relatable and encourage perseverance when adopting new practices** (such as the wearing of face coverings).
10. **Consider inclusion of emotive triggers within Public health campaigns** related to the use of face coverings in order to convey the underpinning reason for wearing them (e.g. to protect self, to protect family, to protect community).
11. Given many individuals perceive a protective benefit to themselves from their wearing face coverings, this suggests that **Public health messaging and encouragement for the wearing of face coverings should tap into this self-motivation** in addition to emphasising the protection afforded to others as a result of face covering use. This may encourage uptake and continuation of a practice that may otherwise be stopped if only thought to benefit other people.
12. **Consider representation of 'trusted' experts to deliver Public health campaigns** such as doctors, as opposed to politicians.
13. **Consideration for how and when to communicate changing COVID-19 rates** (including rates of hospitalisation) will be important both at national and local levels. Communication of such data could have implications for people's willingness to continue performing protective practices such as use of face coverings.
14. **Public health campaigns, both now and in future, should position personal protective practices relative to the wider suite of protective measures** that prevent viral transmission (e.g. face coverings relative to cleaning/sanitising, social distancing, vaccines, etc.).
15. It may be constructive to **provide hair and beauty Workers with access to a portal though which to obtain face coverings** in the event of future pandemics to ensure free and easy access to prompt use. This Worker population had the highest rate of individuals required to source their own face coverings within the present study.

7.2 RECOMMENDATIONS FOR PRACTICE

1. **Provision of a storage bag/pouch along with purchased reusable face coverings** may support easy and hygienic storage of reusable face coverings and avoid the need for unsanitary storage in bags or coat pockets which was reported to be commonplace. The Importance of convenient yet sanitary storage of face coverings would need to be clearly stipulated within the product packaging. Supporting guidance/education will then be important to ensure knowledge and awareness of the benefits of effective storage practices and encourage production or use of equivalent storage approaches amongst those using homemade reusable coverings.
2. **Consider the disposal provisions made available to the Public within retail environments** with consulting rooms, in order to encourage members of the Public to promptly dispose of surgical face coverings (as was reported by Workers). The visible placement of disposal provisions at the point individuals would be likely to remove their covering may encourage use of a new covering when needed and dissuade reuse of disposable face coverings. Furthermore, this may deter unsanitary storage of disposable coverings within handbags and coat pockets in between use, also reported to be a common occurrence. This is likely to require consultation with the retail premises themselves to identify an acceptable solution.
3. It would be beneficial to **collate and publicise practices that help those wearing glasses to overcome challenges with them fogging up** when wearing a face covering. Potential routes for dissemination would include via opticians/ vision specialists within both healthcare and retail settings along with charities and support groups that provide support and advice to those with visual impairment.
4. **Careful monitoring to ensure no adverse impact arises from changes made to aspects of work** conducted within retail consulting rooms. This is particularly important within

community pharmacy settings that may retain adaptations to practices made during the pandemic, for example the use of photos to support diagnosis/treatment.

5. **Increasing information related to the different types/styles of face covering and related products** available may also support informed choice and increase likelihood of usage by ensuring that the face covering meets individual's specific requirements (e.g. as a wearer of glasses, those suffering sensitivity behind the ears, dislike for having material directly in contact with their mouth, etc..).
6. Individuals should be encouraged to **try different types and styles of face coverings** in order to find one that they are confident and comfortable wearing, so as to improve fit and reduce barriers associated with discomfort or reduce movement of the covering when speaking.
7. **Employers continuing to encourage use of face coverings amongst their staff** may prompt members of the Public to don face coverings within their premises through normalising practices for those around them.
8. **Employers/retailers could most usefully maintain emphasis on the protective benefits of face coverings within a retail consulting room at the point of entering this space.** Such recommendations align to the primary benefits to wearing face coverings perceived by study participants (namely protection for self and others and social acceptance) and would emphasise that Workers and service users are likely to be in close contact.
9. It may be of use for the **UK Government to provide a trusted gateway to accessible research.** This would support and facilitate easy Public access to trusted robust evidence.
10. Emphasise the value gained from **trade unions, federations, professional bodies** and **charities translating generic Government recommendations into specific guidance** to ensure relevance, practicality and usefulness to different Worker and professional groups. This practice should be strongly encouraged in future.
11. **Provision of infographics should be encouraged in addition to text based guidance,** as infographics were identified to have greater trustworthiness than text only guidance.
12. **Maintain the supply of available face coverings for Workers** to encourage easy and free access for continued usage for the duration that the practice is recommended.

7.3 RECOMMENDATIONS FOR FURTHER RESEARCH

1. Further research could usefully attempt to **explore the extent to which poor practices are the result of knowledge deficit or wider factors** (e.g. conscious choice), though care would need to be taken to explicitly target those demonstrating the poor practices of interest in order to overcome the self-selection biases present in the present sample.
2. Further **information may be needed to support effective and hygienic storage and washing of reusable face coverings** amongst both Public and Workers. Further research could usefully explore the coverage detail and consistency of such guidance across a variety of commonly used face coverings, as well as exploring the ease and practicality of implementation amongst different consumer audiences.
3. Further research could usefully seek to understand the **impact of re-using disposable face coverings on their effectiveness and risk of viral transmission**. This would help inform guidance on safe and hygienic use of face coverings and support understanding of the rationale underpinning recommended practices.
4. There may be value in **consulting further with hair and beauty Workers and their customers** in order to understand whether the communication challenges described by Workers are indeed experienced by their customers. Tailored consultation with this target audience may also support identification of potential solutions for how to overcome these challenges in this setting, where close contact is required within often noisy environments.
5. Further **research on when to change face coverings may be needed to inform Worker and Public behaviours, to ensure the protection offered is maximised**. This could usefully encompass time intervals, event/setting triggers and different types of coverings.

6. **Look to draw lessons learned from relevant industries where the use of face coverings was established prior to the COVID-19 pandemic** (e.g. how were barriers/issues to use mitigated?).

7.4 DISCUSSION

7.4.1 Future focus

Relative to the TDF framework, eight domains appear to be **positively influential** to the wearing of face coverings within retail consulting rooms at the time of data collection (circled within Figure 18 in green). These include: knowledge (D1); skills (D2) with respect to donning and doffing practices; beliefs about capabilities (D4); beliefs about consequences (D5); reinforcement (D6) concerning pros of wearing face coverings; intentions (D7) amongst members of the Public, pharmacy Workers and 'other' Workers; memory, attention and decision processes (D9) concerning remembering to wear face coverings; and environmental context and resources (D10) with respect to visual reminders to don face coverings.

Conversely, the study findings also suggest that **further consideration** of eight TDF domains could positively impact attitudes and behaviors concerning face coverings within retail consulting rooms (circled within Figure 18 in orange). These include: knowledge and skills (D1 & D2) with respect to storage washing/drying practices; social/professional role and identity (D3) amongst Workers specifically; reinforcement (D6) concerning communication challenges and discomfort when wearing face coverings; memory, attention and decision processes (D9) with respect to frequency of changing face coverings; environmental context and resources (D10) with respect to face covering disposal; emotion (D12) specifically amongst hair and beauty Workers; and behavioural regulation (D13) concerning ineffective personal practices identified.

Further insight is needed to better understand the impact of three TDF domains on people's use of face coverings, including: social influence (D11) on people's attitudes and behaviors concerning the use of face coverings within retail consulting environments; intentions (D7) amongst hair and beauty Workers specifically, and Goals (D8) all of which are circled within Figure 18 in red.

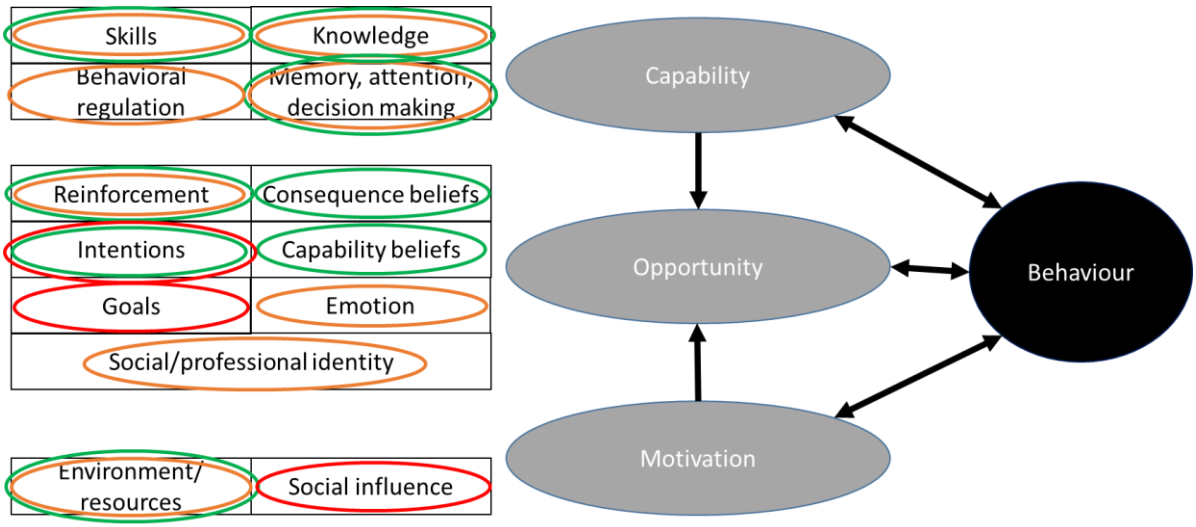


Figure 18: Study findings relative to TDF constructs

From this mapping, it is evident that most of the capability domains and approximately half of domains that relate to motivation and opportunity were strong amongst study participants drawn from across the UK. Looking forward, greater focus on opportunity and motivation domains may support enhancements attitudes and behaviours concerning the use of face coverings within retail consulting rooms amongst UK residents. Recommendations to this effect are provided above within section 7.

7.4.2 Similarities in findings amongst participant groups

The survey findings amongst hair and beauty Workers are in many cases aligned with those of Public respondents. Those working in 'other' occupations in the main worked within health related retail settings including audiology, podiatry, holistic therapies and opticians, which may account for similarities evident in survey responses amongst this group and pharmacy Workers.

7.4.3 Study limitations

At the time of study commencement (September 2021), the wearing of face coverings was mandated by the UK Government across all four nations. At the time of study reporting (April 2022), however, the use of face coverings is no longer mandated in any devolved countries (England, Northern Ireland, Wales and Scotland). In some countries, this guidance changed during the data collection phase of this project and hence this may have impacted project findings.

Despite a diverse recruitment strategy, the majority of study participants who volunteered to take part, in either the online survey or semi-structured interviews reported that they wear face coverings within retail consulting rooms. As a result the study findings largely reflect knowledge, attitudes and practices of individuals said to report consistently wearing face coverings within retail consulting rooms.

The online survey gathered data on participant occupation, function and type of retail business in which they work (e.g. independent shop, national chain etc.) and ventilation available. Little data was gathered regarding the volume, size, and throughput of the retail consulting room itself and the means of separating this space from the wider shop floor (e.g. partition walls, curtain or purpose built room within the building). Such details may impact actual and perceived risks to Workers and members of the Public and subsequently impact practices. Vaccination status was not explored during data collection for this study. These aspects could be useful to explore within future research on this subject.

It is likely that the findings of this study may be applicable to close contact retail consulting environments beyond the retail premises and Worker customer populations studied, such as lingerie shops offering bra fittings, physiotherapy and osteopathy practices. It is recommended that this study be considered relative to wider literature and research specific to such settings and population groups to this effect.

8 REFERENCES

Bazant, M. & Bush, J. (2021). A guideline to limit indoor airborne transmission of COVID-19. PNAS, 118 (17).

BBC News (2022). Covid: Law on wearing face masks in Scotland is lifted. Retrieved April 2022 from https://www.bbc.co.uk/news/uk-scotland-61139581.

Braun, V. and Clarke, V., (2006). Using thematic analysis in psychology. Qualitative research in psychology, 3(2), pp.77-101

Brooks J. & Butler, J. (2021). Effectiveness of Mask Wearing to Control Community Spread of SARS-CoV-2. JAMA. ;325(10):998–999

Cane, J., O'Connor, D. & Michie, S. (2012) Validation of the theoretical domains framework for use in behaviour change and implementation research. Implementation Science 7, 37

Centre for Disease Control (2021) Science Brief: Community Use of Masks to Control the Spread of SARS-CoV-2, retrieved December 2021 from https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/masking-science-sars-cov2.html

Egan, M., Acharya, A., Sounderajah, V., Xu, Y., Mottershaw, A., Phillips, R., Ashrafian, H. and Darzi, A. (2021) Evaluating the effect of infographics on public recall, sentiment and willingness to use face masks during the COVID-19 pandemic: a randomised internet-based questionnaire study. *BMC Public Health,* 21(1).

Fielmua, N. Guba, B.Y. and Mwingyine, D.T. (2021) Hand hygiene and safety behaviours at shopping centres in COVID-19: an observation in Wa township in Ghana. *Journal of Water, Sanitation and Hygiene for Development, 11*(3), pp.442-452.

GOV.UK (2022). Guidance - Face coverings: when to wear one, exemptions and what makes a good one. Retrieved January 2022 from https://www.gov.uk/government/Publications/face-coverings-when-to-wear-one-and-how-to-make-your-own/face-coverings-when-to-wear-one-and-how-to-make-your-own

Hong, Q.N., Pluye, P., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.C. and Vedel, I. (2018) *Mixed Methods Appraisal Tool (MMAT), version 2018.* Registration of Copyright (#1148552), Canadian Intellectual Property Office, Industry Canada.

Li, J., Verteramo Chiu, L.J., Gómez, M.I. and Bills, N.L. (2021) Strategies to reduce risk perception among grocery shoppers in the US: A survey study. *Plos one,* 16(4).

Office for National Statistics. (2021). Population estimates for the UK, England and Wales, Scotland and Northern Ireland: mid-2020. Retrieved February 2022 from https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2020

Wright, L., Steptoe, A. and Fancourt, D. (2021) Patterns of compliance with COVID-19 preventive behaviours: a latent class analysis of 20,000 UK adults. *Journal of Epidemiol Community Health*

APPENDIX 1: GREY LITERATURE FINDINGS

A1.1 RESEARCH QUESTION 1: WHAT ARE THE RISK PERCEPTIONS CONCERNING FACE COVERING USE AMONGST WORKERS AND MEMBERS OF THE PUBLIC?

A small volume of the grey literature (ten references) discussed risk perceptions concerning the use of face coverings amongst members of the Public. Nine items focused on the perceived risks to themselves as a result of them wearing face coverings, whilst two items focused on the perceived risks to wider society as a result of wearing face coverings. The grey literature sources identified in response to RQ1 consisted primarily of news articles from websites such as; Forbes, Inews Wellbeing and BBC News. The grey literature suggested that generally members of the Public felt more confident to visit retail premises when wearing a face covering. Only one grey literature item was relevant to Workers risk perceptions concerning the use of face coverings, which demonstrated that shop Workers generally felt more confident at work when wearing a face covering. Detailed findings from the grey literature related to RQ1 are presented below.

A1.1.1 Perceived risks to the individual when wearing face coverings

On an individual level, the grey literature suggests that, members of the Public with pre-existing anxiety, mental health difficulties or breathing conditions, such as asthma, have experienced negative sensations when wearing a face covering within indoor Public spaces. Specifically, news articles from Forbes, Intermountain Healthcare, Mind and Salon and a discursive blog post from INews report that individuals with anxiety amongst the general population, feeling as though their breathing is restricted, feeling dizzy, sick and claustrophobic (Forbes, 2020b; INews, 2020, & Salon, 2021) that can result in feelings of panic and anxiety (Intermountain Healthcare, 2020 & Salon, 2021).

A poll conducted amongst the general Public conducted by Redfield and Wilton Strategies, (2020) found that 39% of individuals believed that wearing a face covering leads to a false sense of security for those wearing them (Redfield and Wilton Strategies, 2020). This could potentially result in individuals being less likely to engage in further protective behaviours, such as social distancing, as they are already protected from contracting the COVID-19 virus by wearing a face covering.

A1.1.2 Perceived risks of wearing face coverings to wider society

The grey literature suggests that some members of the population perceive there to be an increased risk to wider society as a result of their wearing a face covering. For example, an article from The Conversation (2021) and findings from a consumer poll from Redfield and Wilton Strategies (2020) report members of the general Public not wanting to wear face coverings due to fear that this would diminish the supply of face coverings for the hospitals and healthcare settings.

It is worth noting that the above grey literature items were conducted at the beginning of the pandemic (the poll published by Redfield and Wilton Strategies (2020) was conducted in July 2020 and the findings from The Conversation (2021) were found between February to April 2020) when supplies of face coverings for healthcare Workers were challenged. It is therefore likely that this perception may have changed. It would be useful to clarify whether these changes in risk perceptions are evident in the data collected by the current research during January and February of 2022.

A1.1.3 Increased confidence as a result of face covering usage

There is no evidence within the grey literature to suggest that individuals may feel at increased risk of contracting the COVID-19 virus as a result of wearing a face covering. However, there is evidence to suggest that members of the general Public feel more confident to visit retail premises when wearing a

face covering, because they believe that they are less likely to catch COVID-19 (Federation of Small Businesses, 2020; UK Parliament, 2020 & Retail Week, 2020).

Only one grey literature source was found to provide evidence related to the risk perceptions of retail Workers relative to the use of face coverings. In an article published by Retail Week, BRC chief executive Helen Dickson reported that the use of face coverings in retail environments helps Workers to feel more confident when at work by providing them with protection from contracting COVID-19 (Retail Week, 2020).

A1.1.4 Implications for the current research project

These findings suggest that it may be useful to capture information on pre-existing anxiety, health and clinical vulnerability amongst both Public and Worker populations and whether this is a contributory factor amongst those individuals who do not wear a face coverings at the current time.

As highlighted previously, there is a gap in the evidence base with respect to risk perceptions of retail Workers concerning the use of face coverings, as all but one grey literature source relevant to RQ 1 explored this from a Public perspective. This would include exploration of whether Workers within retail consulting rooms perceive their risk of contracting the COVID-19 virus to increase or decrease as a result of them wearing a face covering.

As the only risk perceptions to wider society shown in the grey literature was the possible detrimental effect to NHS supplies, other potential risk perceptions to wider society held amongst Workers and consumers should be explored in the project. Furthermore, based on the methodology employed, there was no grey literature which explored risk perceptions of wearing a face covering to protect clinically vulnerable people from the virus, this could also be explored in the project.

A1.2 RESEARCH QUESTION 2: WHAT ARE THE RECOMMENDATIONS FOR PRACTICE CONCERNING FACEMASK USAGE WITHIN RETAIL CONSULTING ROOMS AND SIMILAR ENVIRONMENTS?

The majority of items (66 items) identified during the search of grey literature referred back to research question two. The items took a variety of different forms, such as posters, videos, infographics etc. A substantial volume of these grey literature items referred back to central government guidance for Workers and the Public in regards to wearing a face covering within indoor close contact settings. Details of this central government guidance can be seen below.

A1.2.1 Face covering guidance for Workers

The guidance from the government in England in November 2021 suggested that Type II face coverings[6], should be worn by professionals delivering close contact services to clients and should cover the individual's nose and mouth (GOV UK, 2021a). The guidance from the four nations were provided at a time that face coverings were mandatory. This guidance states that employers should support Workers by encouraging them to wash their hands before putting the face covering on, avoid touching face when wearing face covering, change face covering if it becomes damp, continue to wash hands regularly, change or wash face coverings daily and wash face covering in line with manufacturer's instructions or dispose of it in usual waste. The government guidance for Wales from April 2021 encouraged the use of fluid resistant surgical face coverings (Type IIR)[7] for practitioners

[6] A type II face covering is a medical face covering made up of a protective 3 ply construction which prevents large particles from reaching other people or surfaces (ref 101).

[7] A type IIR face covering is a medical face covering made up of a 4 ply protective construction which prevents large particles from reaching other people or surfaces. It is splash resistant to protect against bodily fluids (ref 101).

delivering close contact services (Welsh Government, 2021). Guidance from the Scottish Government in August 2021 (Gov Scot, 2021a) has recommended that practitioners should wear a fluid resistant surgical face covering, as well as goggles or a full face visor as eye protection, when carrying out a treatment which requires the temporary removal of a client's face covering in Scotland. For Northern Ireland, the government stated that individuals working in close proximity for an extended period of time must wear a visor or goggles and a Type II face mask (NI Direct, n.d.).

Professional groups for different occupations refer back to central government guidance (Gov UK, 2021a).Certain articles expand on the government guidelines and have provided more clarity for Workers in the industry, for example the National Hair and Beauty Federation (2021d) provided further detail for beauticians in regards to the usage of face covering. Hairdressing governing bodies such as the National Hair and Beauty Federation are referring back to the government guidance (Gov UK, 2021a) and asking hairdressers and beauticians to wear Type II face coverings when delivering close contact services (National Hair and Beauty Federation, 2021b & National Hair & Beauty Federation, 2021c).The professional groups have provided links to the central government guidance for England, Wales, Scotland and Northern Ireland so an individual can refer to whichever part of the UK they are from. Based on the grey literature items, it appeared that advice for pharmacists, produced by professional groups such as Pharmaceutical Services Negotiating Committee, (2021) and The National Pharmacy Association, (n.d.) referred to Public Health England (n.d.) (PHE) guidance for the use of face coverings in a pharmacy retail consulting room. This guidance was broadly aligned with the government guidance for pharmacists to wear a Type II face covering when in close proximity with a client. Pharmacy based articles also referred to PHE guidance (Community Pharmacy News, 2020). It appears from the grey literature that opticians received guidance from the Association of Optometrists (2021). The association guidance seems to align with Scottish government guidance as it states that opticians should wear a fluid resistant surgical mask (FRSM) when treating a patient.

A1.2.2 Face covering guidance for customers

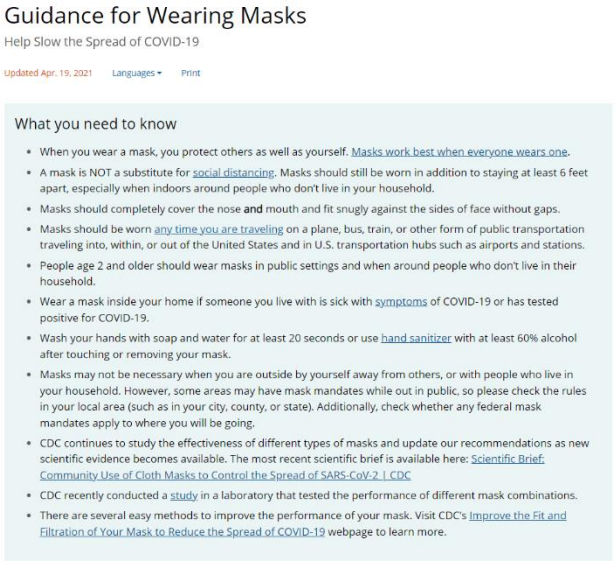
There was no published guidance for face covering wearing specifically in a retail consulting room for customers, instead guidance was produced for the use of face coverings more generally within indoor environments.

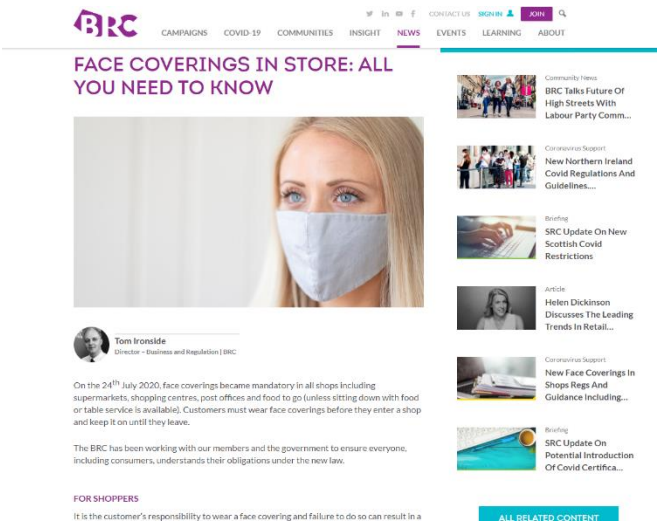
Advice for the Public regarding face covering wearing, washing, disposal, putting on (donning) and off (doffing) in Public places, consisted in many different formats such as:

- Posters (Centers for Disease Control and Prevention, 2020e)
- Videos (European Centre for Disease Prevention and Control, 2021a; European Centre for Disease Prevention and Control. (2020b) & European Centre for Disease Prevention and Control. (2020c)
- Articles, for example (British Retail Consortium, 2020a).
- Infographics (European Centre for Disease Prevention and Control, 2020a & World Health Organisation, 2021).
- Faqs (British Retail Consortium, 2020b; European Centre for Disease Prevention and Control, 2021b ; National Hair & Beauty Federation, 2021b; College of Opticians of Ontario, 2020).
- Purchased materials guidance (instructions from the packaging from face covering purchase, H and M, 2021).
- Freely available written guidance, for example (Centers for Disease Control and Prevention, 2021a).
- A letter (The BMJ, 2020 & National Hair and Beauty federation, 2021a)
- A Public opinion study (Stoutonia, 2021).

Screenshots of some examples of published guidance can be seen below:

Video (European Centre for Disease Prevention and Control, 2021a) Infographic (ECDC, 2020a)





Guidance (ref 14) Article (ref 3)

Guidance for customers in a confined Public area from the European Centre for Disease Prevention and Control (ECDC) includes, wearing face coverings alongside other preventive measures such as social distancing, good hand hygiene and good ventilation practices (European Centre for Disease Prevention and Control, 2021a). Further guidance from the Centres of Disease Control and Prevention (CDC) includes;

- Making sure nose and mouth are covered with face covering
- Taking off face covering by untying strings from behind ears and folding the outside corners together, not touching eyes and nose when removing face covering
- Choosing a face covering with two layers or breathable material,
- Face covering should fit snugly across face with no gaps and should have a nose wire to prevent air from leaking out the top.
- Individuals should wash their hands before and after face covering use and should not touch their covering when wearing it (centers for disease control and prevention, 2021a).

- Additional guidance from who advises the Public not to share a face covering with anyone else (world health organisation, 2020).

The guidance on face covering use for the general Public is not specific to retail consulting rooms, rather indoor settings more generally. The current project will help to understand whether individuals are aware of these more general recommendations; and whether they themselves implement such practices when visiting a retail consulting room. Furthermore whether members of the Public are aware of performing practices which contravene these general recommendations.

A1.3 RESEARCH QUESTION 3: WHAT FACTORS AFFECT THE WEARING (OR NOT) OF FACEMASK?

There were five factors that were identified across eight grey literature items which affect the wearing of face coverings amongst the general Public. These include whether face coverings are mandatory or advised (five items), having a more in-depth knowledge of COVID-19 (one item), the inconvenience of wearing a face covering (two items), not enough access to face coverings (one item) and political stance (one item). These eight items consisted of three surveys, four articles and one Public opinion study.

A1.3.1 Face coverings mandatory/advised

The grey literature suggests that that various factors affect the wearing (or not) of face coverings. The most frequently cited factor which was cited within the findings from two surveys (published by the British Retail Consortium (2020c) and Redfield and Wilton Strategies (2020) and one Consumer News and Business Channel (2021) news article showed that when face coverings were mandatory in Public settings, the general Public were more likely to wear them. However some members of the Public reported that they would be less likely to wear a face covering if it was mandatory due to feeling as though their personal freedom has been restricted (Consumer News and Business Channel, 2021). Similarly, a CDC article showed that when the White House advised people to wear face coverings, the general Public were more likely to wear one (Centers for Disease Control and Prevention, 2020d). Additionally in a Public opinion study published in Stoutonia (2021), members of the Public reported to be more likely to wear a face covering if the business or institution mandates it. These findings suggest that when a person or institution in a position of authority advises or mandates the use of face coverings in Public spaces, this can affect Public behaviour in this regard.

A1.3.2 A more in-depth knowledge of COVID-19

A news article published by the BBC, in July 2020, has shown a rapid shift in the adoption of face coverings in certain countries with no previous history of wearing face coverings e.g. Spain (BBC News, 2020b). The author has explained this transition partly due to a better understanding of how COVID-19 spreads. The item states that by understanding how COVID-19 particles spread, the general population are more likely to wear a face covering to protect themselves and others from the virus.

A1.3.3 The inconvenience of wearing a face covering

There are multiple factors that have been cited in the literature which explores the inconvenient aspects of wearing a face covering to one's self. For example, articles produced by the British Psychological Society and CNBC found that members of the Public reported that face coverings can be uncomfortable to wear (The British Psychological Society, (2020a) & Consumer News and Business Channel, 2021) and can make emotions difficult to express (ref 20). Additionally, BBC News (2020b) cite in an article reporting that individuals may choose not to wear a face covering due to the inconvenience of having to find and purchase one, put it on and dispose of it in a certain way.

A1.3.4 Not enough access to face coverings

A survey published by the Royal Pharmaceutical Society found that 34% of pharmacists reported being unable to source continuous supplies of PPE to protect themselves from potential infection by

the Public or colleagues in the workplace (Royal Pharmaceutical Society, 2021). This includes fluid resistant surgical face coverings when sourced for use within pharmacy settings. This suggests that if pharmacists do not have access to face coverings throughout their working day then they may have periods of time where they are not wearing one and are therefore at risk of contracting or transmitting the COVID-19 virus to colleagues or members of the Public. This finding isolated to one item of grey literature, namely a survey conducted in July 2020, near the beginning of the pandemic. It is therefore likely that pharmacists now have adequate access to face coverings at the current time, though this assumption warrants further exploration through the data collected in the present research project. Moreover, it would be useful for the current research project to explore whether Workers delivering services within retail consulting rooms more generally have adequate provision/access to face coverings to cover the duration of their working days consistently.

A1.3.5 Political stance

One item of grey literature has suggested that political affiliation determines how likely a member of the population is to wear a face covering. In an article by Stoutonia (2021), a Public opinion study found that Republicans were 50% more likely to be 'anti-mask', with 50% of Democrats more likely to support a nationwide face covering policy. It could be interpreted that this is due to following the advice about the severity of COVID-19 from their affiliated politician.

A1.4 RESEARCH QUESTION 4: WHAT BEHAVIOURS IMPACT THE EFFECTIVENESS OF FACEMASKS IN REDUCING VIRAL TRANSMISSION?

19 items of grey literature highlighted a number of behaviours which may impact the effectiveness of face coverings in reducing viral transmission. Such behaviours are evident across the six stages of use including; putting on (donning), wearing, removal (doffing), storage, washing/drying of reusable face coverings, disposal of disposable or damaged face coverings. The grey literature evidence identified for each of these stages is presented below.

A1.4.1 Putting on a face covering (donning)

A number of articles were identified to suggest that individuals are not washing/sanitising their hands before putting on a face covering (Best Life, (2020); Huffington Post, (2021); University of Iowa Hospitals and Clinics, (2020); Newsweek, (2021), The New York Times, (2020), Web MD, (2021), Pharm Easy,(2021)). This is because of the potential to unknowingly transfer virus from the hands to the nose, mouth and eye areas easily (Huffington Post, 2021). The current study could usefully explore people's practices when donning a face covering and whether this incorporates hand washing beforehand.

A1.4.2 Wearing of face covering

The grey literature cites various ways in which people wear face coverings which may reduce their effectiveness as a barrier to viral transmission, each of which are discussed in turn as follows.

A1.4.3 Positioning of the face covering

There is evidence to suggest that the positioning of face coverings does not always cover the mouth and nose as recommended by the UK government (Gov UK, 2021a). Instead, the grey literature sources, including articles, posters reveal:

- Face coverings being worn above the chin, e.g. (Forbes, 2020a).
- Face coverings being pulled down beneath their mouth/chin or pulled up to rest on their forehead e.g. (University of Iowa Hospitals and Clinics, 2020).
- Failure to cover the nose with a face covering e.g. (Centers for Disease Control and Prevention. (2021a).
- Face coverings hanging from the ear by the straps (The Guardian, 2020).

A1.4.4 Closeness of fit around the nose and mouth

There is grey literature evidence to suggest that face coverings do not always closely fit the wearer around their nose and mouth (Forbes, 2020a; MOFFIT Cancer Centre, 2020; UI Healthcare, 2020; Web MD, 2021 & Pharm Easy, 2021) in accordance with Public heath guidance (World Health Organisation, 2021).

A1.4.5 Sharing of face coverings

Grey literature items were found to highlight that some members of the Public are sharing face coverings with one another (Huffington Post, 2021 & Newsweek, 2021).These sources also acknowledge that the sharing of face coverings reduces their effectiveness in reducing viral transmission.

A1.4.6 Wearing of face coverings inside out

An article published by Forbes (2020a) refers to Public practices of wearing disposable face coverings inside out. This practice may undermine the material design of the face covering, for example, in the case of surgical masks, the coloured side is designed to face outwards in order to repel incoming droplets whilst the non-coloured side wicks away moisture from the wearer (Nanoscience, n.d.). Depending on the type of face covering worn and material composition, it is possible that wearing a face covering inside out may increase the risk of viral transmission

A1.4.7 Face touching whilst wearing a face covering

Grey literature articles identified members of the Public to be touching their face covering whilst wearing it. This is a behaviour which can increase the viral transmission of COVID-19 as the face covering could potentially be contaminated if there are COVID-19 particles on the hands, putting an individual at increased risk of catching the virus (Forbes, 2020a; MOFFIT Cancer Center, 2020; University of Iowa Hospitals and Clinics, 2020 & UI Healthcare, 2020).

The current study could usefully explore people's practices when wearing their face covering along with personal awareness of ineffective practices performed whilst wearing a covering (such as those discussed above), both amongst Workers and members of the Public.

A1.4.8 Removing a face covering (doffing)

Only one source of grey literature acknowledged the removal of face coverings to impact their effectiveness as a barrier to transmission of the COVID-19 virus. UI HealthCare (2020) acknowledge failure to remove a face covering by unlooping it from the ears as an ineffective practice that may contaminate the face covering amongst members of the Public. The study could investigate how Workers and members of the Public remove their face coverings (i.e. whether via handling only the loops by their ears).

A1.4.9 Washing/drying a face covering

There were various ineffective behaviours identified in the grey literature with regards to washing and drying a face covering. An article published by MOFFITT Cancer Centre (2020) reported that members of the Public are not washing their mask properly, and define this as washing in the washing machine, ECDC recommend that this is done at a temperature of 60 degrees Celsius (European Centre for Disease Prevention and Control, 2020a) and thoroughly drying in between each use (MOFFITT Cancer Centre, 2020). Further grey literature sources referred to the following common washing and drying practices said to impact their effectiveness as a barrier to viral transmission:

- Wearing dirty or wet face coverings (Best Life, 2020).
- Washing face coverings with cold water (Forbes, 2020a; Hackensack Meridian Health, 2020 & Best Life, 2020).
- Not washing reusable face coverings in between use (MOFFITT Cancer Centre, 2020; Huffington Post, 2021; Newsweek, 2021, PharmEasy, 2021).
- Washing of disposable face coverings that should be disposed of after one use, (Huffington Post, 2021).

- Not washing a new face covering that they have purchased prior to use (Web MD & Pharm Easy, 2021).
- Putting face covering in the tumble dryer (Best Life, 2020).

The grey literature demonstrates that some members of the Public are not washing and drying their face coverings at appropriate times or in the appropriate manner and are therefore wearing a dirty face covering and putting themselves at higher risk of catching COVID-19.The current study could most usefully investigate how, where and when reusable face coverings are being washed and dried.

A1.4.10 Storing a face covering in between use

Five items of grey literature identified that the general Public were putting their face covering down on open surfaces and not storing it in a hygienic way, such as within a ziplock bag (Best Life, 2020; Newsweek, 2021; Web MD, 2021 & Pharm Easy, 2021). This can increase the risk of items being contaminated between uses. The study could explore where Workers and members of the Public are storing reusable face coverings in between use or if they are wet and soiled.

The current study could explore Worker and Public practices for storing face coverings before, in between and following their use.

A1.4.11 Disposal

Guidance from the UK Government states that disposable face coverings should be disposed a in a general waste bin (Gov UK, 2022). The guidance states that disposable face coverings should not be put in recycling bins as they cannot be recycled through conventional recycling facilities. There was no grey literature found for ineffective disposal of face coverings. However, multiple articles identified that members of the Public are reusing face coverings intended for 'single use' instead of disposing of them (Huffington Post, 2021; Newsweek, 2021; Web MD, 2021 & Pharm Easy, 2021). Further grey literature sources also identified members of the Public to be using damaged face coverings which have tears or holes in which should have been disposed of (Forbes, 2020a; The Guardian, 2020; Web MD, 2021 & Pharm Easy, 2021). It would be useful to explore in the current study whether Workers or members of the Public are incorrectly reusing disposable or damaged face coverings and the reasons for this practice if so.

A1.5 RESEARCH QUESTION 5: WHAT 'NON-BENEFICIAL/USELESS' PRACTICES ARE THERE WITH RESPECT TO THE USE OF FACEMASKS AND IN WHAT CONTEXTS?

Six items within the grey literature identified face covering practices that make little or no difference to the risk of transmitting the COVID-19 virus. This includes use of face shields, wearing scarves, bandanas, ski masks or neck gaiters along with the wearing of face coverings with built in exhalation valves. It would be interesting to explore within in the current study whether people still engage in these non-beneficial behaviours such as wearing face visors, two years since the pandemic began.

A1.5.1 Face shields

The CDC and Government of Canada produced guidance which advised against the use of face shields as a barrier to transmission of the COVID-19 virus, citing them as a non-beneficial practice amongst the general population (Centers for Disease Control and Prevention, 2021a & Government of Canada, 2021). Furthermore, two items (both from within the UK) (Science Focus, 2020 & The Argus, 2020) highlight the change in knowledge and subsequent guidance surrounding the use of face visors amongst hairdressers and barbers. Initially, when hairdressers returned to work in the UK on July 4th 2020 face visors were recommended to be used by Workers within this sector. However this guidance was quickly revised by July 23rd 2020 as evidence showed that visors were found to be ineffective in controlling aerosol transmission. Primary research conducted in this context from an outbreak in Switzerland demonstrated that hairdressers wearing face shields were more likely to be infected with COVID-19 than those wearing masks (Science Focus, 2020). Therefore the recommendation now state that hairdressers and barbers should wear a face covering which fits securely over the nose and mouth

when providing services to clients. The use of face visors only seems to be evident within the context of hair and beauty.

A1.5.2 Wearing scarves/bandana/ski masks/neck gaiters

Another non-beneficial practice identified in the grey literature is the use of scarves, bandanas, ski masks and neck gaiters as substitutes for a face covering to prevent COVID-19 transmission. Guidance from CDC for the general Public states that wearing a scarf or ski masks as a face covering is an ineffective practice (Centers for Disease Control and Prevention, 2021a). Similarly, guidance from the Government of Canada cites that neck gaiters, scarves and bandanas are useless practices with respect to the use of face coverings as they do not effectively stop the spread of COVID-19 (Government of Canada, 2021). An article published by The Guardian (2020) cites that scarves and snoods are ineffective at preventing the spread of COVID-19 as the materials cannot trap the COVID-19 particles. The ineffective practice of wearing scarves, bandanas, ski masks and gaiters has only been shown amongst the general population in the grey literature. The present study could usefully explore the extent to which people substitute face coverings for these ineffective alternatives within the UK.

A1.5.3 Exhalation valves

Guidance from the CDC and the World Health Organisation state that face coverings with exhalation valves or vents are ineffective for preventing the transmission of COVID-19 (Centers for Disease Control and Prevention, 2021a & World Health Organisation (2020). This is because the exhalation valve bypasses the filtration function of the fabric covering (World Health Organisation, 2020). It would be interesting to understand through the present research whether this is a current practice within the UK and amongst which population segments.

A1.6 RESEARCH QUESTION 6: WHAT KNOWLEDGE/UNDERSTANDING GAPS AND MISCONCEPTIONS ARE THERE REGARDING FACEMASKS AS A MEANS OF PREVENTING VIRAL TRANSMISSION?

A small proportion of the grey literature (eight references) considered gaps and misconceptions regarding people's knowledge and understanding with respect to the use of face coverings as a barrier to preventing transmission of the COVID-19 virus. Unlike the evidence on risk perceptions discussed in response to RQ1, the following evidence relates to evidence of gaps in peoples knowledge and understanding with respect to face coverings that are not grounded in experience.

A1.6.1 Misconceptions regarding face coverings

The grey literature highlights that some people are cautious about wearing a face covering due to their lack of knowledge about the effects that face coverings can have on the body. A commonly held belief by some members of the general population, highlighted in four news articles, is that face coverings deprive the body of oxygen, causing excess carbon dioxide to be re-inhaled (BBC News, 2020a; C Net Wellness, 2020; World Economic Forum, 2020 & Reuters, 2020). Other health-related misconceptions about the wearing of face coverings held by members of the Public (also identified within news articles) include the potential for them to make the wearer unwell if worn for prolonged use, due to bacteria build up (Intermountain Healthcare, 2020 & The Atlantic, 2020), weakening the immune system (Intermountain Healthcare, 2020 & Reuters, 2020) and being harmful to health through self-contamination (Nebraska Medicine, 2020).

Further misconceptions evident within the grey literature include:

- General ineffectiveness of face coverings as a mitigation measure to slow the spread of COVID-19 (Oregon Live, 2021);
- Face coverings only being effective if someone has symptoms of COVID-19 (Nebraska Medicine, 2020 & World Economic Forum, 2020);

- The only mask effective at preventing COVID-19 transmission is the N-95 respirator (Intermountain Healthcare, 2020).
- Cloth face coverings do not prevent COVID-19 transmission (C Net Wellness, 2020), with reference made to their being 'scientifically inaccurate' because the weaved material is too widely spaced to block coronavirus particles (Reuters, 2020).

The grey literature only explores members of the Public's misconceptions. There is no grey literature exploring misconceptions amongst Worker populations. It may therefore be useful for the current project to explore misconceptions of face coverings amongst Workers and members of the Public, as well as general awareness of what constitutes good and bad practices for their effective use.

A1.7 GREY LITERATURE REFERENCES

Adjodah, D., Dinakar, K., Chinazzi, M., Fraiberger, S., Pentland, A., Bates, S., Staller, K., Vespignani, A. and Bhatt, D. (2021) Association between COVID-19 outcomes and mask mandates, adherence, and attitudes. *PLOS ONE,* 16(6).

Agyemang, E., Agyei-Mensah, S. and Kyere-Gyeabour, E. (2021) Face Mask Use Among Commercial Drivers During the COVID-19 Pandemic in Accra, Ghana. *Journal of Community Health,* 46(6), pp. 1226-1235.

Ajzen, I. (1991) The theory of planned behavior. *Organizational behavior and human decision processes,* 50(2), pp.179-211.

Al-Bsheish, M., Jarrar, M.T. and Scarbrough, A. (2021) A Public Safety Compliance Model of Safety Behaviors in the Age of the COVID-19 Pandemic, INQUIRY. *The Journal of Health Care Organization, Provision, and Financing,* 58, pp. 1-6.

American Academy of Ophthalmology. (2021) How to Wear a Face Mask Without Fogging Your Glasses. Available at: https://www.aao.org/eye-health/tips-prevention/face-mask-foggy-glasses-coronavirus-covid (Accessed 10th December 2021).

American Optometric Association. (2020) Updated Eye Protection, Face Mask and Contingency Planning for Doctors of Optometry and Their Staff in Response to the COVID-19 Pandemic. Available at: https://www.aoa.org/AOA/Documents/Advocacy/HPI/HPICOVID19UpdatedFDAGuidanceonFaceMasks.pdf (Accessed 10th December 2021).

Anderson, K.M. and Stockman, J.K. (2021) Staying home, distancing, and face masks: COVID-19 prevention among US women in The COPE study. *International journal of environmental research and Public health,* 18(1), p.180.

Association of Optometrists. (2021) COVID-19 guidance for primary eye care services in England 13 July 2021. Available at: https://www.aop.org.uk/our-voice/aop-news/2021/07/13/covid-19-guidance-for-primary-eye-care-services-in-england-13-july-2021 (Accessed 10th December 2021).

Banerjee, R., Bhattacharya, J. and Majumdar, P. (2021) Exponential-growth prediction bias and compliance with safety measures related to COVID-19. *Social Science & Medicine*, 268, p.113473.

Barile, J., Guerin, R., Fisher, K., Tian, L., Okun, A., Vanden Esschert, K., Jeffers, A., Gurbaxani, B., Thompson, W. and Prue, C. (2020) Theory-based Behavioral Predictors of Self-reported Use of Face Coverings in Public Settings during the COVID-19 Pandemic in the United States. *Annals of Behavioral Medicine,* 55(1), pp.82-88.

Barrios, L., Riggs, M., Green, R., Czarnik, M., Nett, R., Staples, J., Welton, M., Muilenburg, J., Zullig, K., Gibson-Young, L., Perkins, A., Prins, C., Lauzardo, M., Shapiro, J., Asimellis, G., Kilgore-Bowling, G., Ortiz-Jurado, K. and Gutilla, M. (2021) Observed Face Mask Use at Six Universities — United States, September–November 2020. MMWR. *Morbidity and Mortality Weekly Report,* 70(6), pp.208-211.

Barry, C., Anderson, K., Han, H., Presskreischer, R. and McGinty, E. (2021) Change Over Time in Public Support for Social Distancing, Mask Wearing, and Contact Tracing to Combat the COVID-19 Pandemic Among US Adults, April to November 2020. *American Journal of Public Health*, 111(5), pp.937-948.

Bazant, M.Z. and Bush, J.W. (2021) A guideline to limit indoor airborne transmission of COVID-19. *Proceedings of the National Academy of Sciences,* 118(17).

BBC News. (2020a) Coronavirus: 'Deadly masks' claims debunked. Available at: https://www.bbc.co.uk/news/53108405 (Accessed 22nd November 2021).

BBC News. (2020b) Coronavirus: Why attitudes to masks have changed around the world. Available at: https://www.bbc.co.uk/news/world-53394525 (Accessed 10th December 2021).

Best Life. (2020) 7 Face Mask Care Mistakes you're Making. Available at: https://bestlifeonline.com/face-mask-mistakes/ (Accessed 22nd November 2021).

Bhatt, N., Bhatt, B., Gurung, S., Dahal, S., Jaishi, A., Neupane, B. and Budhathoki, S. (2020) Perceptions and experiences of the Public regarding the COVID-19 pandemic in Nepal: a qualitative study using phenomenological analysis. *BMJ Open*, 10(12).

British Retail Consortium. (2020a) Assessing face mask and sanitiser safety for retailers. Available at: https://brc.org.uk/news/the-retailer/assessing-face-mask-and-sanitiser-safety-for-retailers/ (Accessed: 18th October 2021).

British Retail Consortium. (2020b) Coronavirus FAQs (for members of the media). Available at: https://brc.org.uk/news/2020/coronavirus-faqs-for-members-of-the-media/ (Accessed: 18th October 2021).

British Retail Consortium. (2020c) Face coverings in store: all you need to know. Available at: https://brc.org.uk/news/corporate-affairs/face-coverings-in-store-all-you-need-to-know/ (Accessed 18th October 2021).

British Retail Consortium. (2020d) Retailers stand ready to implement government guidance on face coverings. Available at: https://brc.org.uk/news/corporate-affairs/retailers-stand-ready-to-implement-government-guidance-on-face-coverings/ (Accessed: 18th October 2021).

British Retail Consortium. (2020e) Customers must play their part for safe reopening. Available at: https://brc.org.uk/news/corporate-affairs/customers-must-play-their-part-for-safe-reopening/ (Accessed: 18th October 2021).

British Retail Consortium. (2020f) Reopening means respecting shop Workers. Available at https://brc.org.uk/news/corporate-affairs/customers-must-play-their-part-for-safe-reopening/ (Accessed: 18th October 2021).

Brooks, J.T. and Butler, J.C. (2021) Effectiveness of mask wearing to control community spread of SARS-CoV-2. *Jama,* 325(10), pp.998-999.

Business Companion. (2021) Hair and Beauty: Guidance for hair and beauty businesses during the COVID-19 pandemic. Available at: https://www.businesscompanion.info/focus/coronavirus-covid-19/hair-and-beauty (Accessed 23rd November 2021).

C Net Wellness. (2020) 8 COVID-19 mask myths to stop believing today. Available at: https://www.cnet.com/health/8-covid-19-mask-myths-to-stop-believing-today/ (Accessed 22nd November 2021).

Caplanova, A., Sivak, R. and Szakadatova, E. (2021) Institutional Trust and Compliance with Measures to Fight COVID-19. *International Advances in Economic Research*, 27(1), pp.47-60.

Centers for Disease Control and Prevention. (2020a) What Grocery and Food Retail Workers Need to Know about COVID-19. Available at: https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/grocery-food-retail-Workers.html (Accessed 18th October 2021).

Centers for Disease Control and Prevention. (2020b) Guidance for Pharmacies. Available at https://www.cdc.gov/coronavirus/2019-ncov/hcp/pharmacies.html (Accessed 18th October 2021).

Centers for Disease Control and Prevention. (2020c) What Nail Salon Employees Need to Know about COVID-19. Available at https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/nail-salon-employees.html (Accessed 18th October 2021).

Centers for Disease Control and Prevention. (2020d) CDC calls on Americans to wear masks to prevent COVID-19 spread. Available at: https://www.cdc.gov/media/releases/2020/p0714-americans-to-wear-masks.html (Accessed 18th October 2021).

Centers for Disease Control and Prevention. (2020e) Facemask Do's and Dont's. Available at: https://www.cdc.gov/coronavirus/2019-ncov/downloads/hcp/fs-facemask-dos-donts.pdf (Accessed 17th December 2021).

Centers for Disease Control and Prevention. (2021a) Your Guide to Masks. Available at https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprevent-getting-sick%2Fcloth-face-cover-guidance.html (Accessed 18th October 2021).

Centers for Disease Control and Prevention. (2021b) Types of Masks and Respirators. Available at: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/types-of-masks.html (Accessed 18th October 2021).

Centers for Disease Control and Prevention. (2021c) Improve the Fit and Filtration of Your Mask to Reduce the Spread of COVID-19. Available at: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/mask-fit-and-filtration.html (Accessed 19th October 2021).

Centre for Disease Control and Prevention. (2021) 'COVID-19.' *Guidance for wearing masks*. Available at: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-cover-guidance.html (Accessed: 7th December 2021).

Chan, E. Y. (2021) Moral foundations underlying behavioral compliance during the COVID-19 pandemic. *Elsevier Public Health Emergency Collection*, 171.

Chang, H., Min, S., Woo, H. and Yurchisin, J. (2021) Mask-Wearing Behavior During the COVID-19 Pandemic: A Cross-Cultural Comparison Between the United States and South Korea. *Family and Consumer Sciences Research Journal,* 50(1), pp.5-26.

College of Opticians of Ontario. (2020) Frequently Asked Questions. Available at: https://collegeofopticians.ca/sites/default/uploads/files/2020-09-29%20Updated%20FAQs%20on%20letter%20head.pdf (Accessed 10th December 2021).

Community Pharmacy News. (2020) PHE: Teams should wear face masks if pharmacy is not 'COVID-19 secure'. Available at: https://www.chemistanddruggist.co.uk/CD006628/PHE-Teams-should-wear-face-masks-if-pharmacy-is-not-COVID19-secure (Accessed 10th December 2021).

Community Pharmacy News. (2021) Updated IPC guidance and face coverings mandatory again in pharmacies. Available at: https://communitypharmacyhumber.co.uk/our-news/infection-prevention-and-control-guidance-face-coverings-ppe-obtaining-ppe/ (Accessed 10th December 2021).

Consumer News and Business Channel. (2021) Mask-wearing becomes a new battleground in England as Covid rules are eased. Available at: https://www.cnbc.com/2021/07/06/wearamask-mask-wearing-becomes-a-new-battleground-in-england.html (Accessed 9th December 2021).

Croucher, S. et al. (2021) A Longitudinal Analysis of Handwashing and Mask-Wearing during COVID-19. *Frontiers in Communication*, 6.

Cunningham, G.B. and Nite, C. (2021) Demographics, politics, and health factors predict mask wearing during the COVID-19 pandemic: a cross-sectional study. *BMC Public Health,* 21(1).

Davis, R., Sharma, M., Simon, K. and Wilkerson, A. (2021) Conceptualization of college students' COVID-19 related mask-wearing behaviors using the Multi-Theory Model of health behavior change. *Health Promotion Perspectives,* 11(2), pp.194-201.

Demirtaş-Madran, H.A. (2021) Accepting Restrictions and Compliance With Recommended Preventive Behaviors for COVID-19: A Discussion Based on the Key Approaches and Current Research on Fear Appeals. *Frontiers in Psychology,* 12.

Dental Nursing. (2020) COVID-19: A guide to face masks. Available at: https://www.dental-nursing.co.uk/news/covid-19-a-guide-to-face-masks (Accessed 3rd February 2022).

Department for the Economy. (2020) Keeping Workers and clients safe during COVID-19 in close contact services. Available at https://www.economy-ni.gov.uk/sites/default/files/Publications/economy/close-contact-services-keeping-safe.PDF (Accessed 2nd February 2022).

Diers-Lawson, A., Johnson, S., Clayton, T., Kimoto, R., Tran, B., Nguyen, L. and Park, K. (2021) Pandemic Communication: Information Seeking, Evaluation, and Self-Protective Behaviors in Vietnam and the Republic of Korea. *Frontiers in Communication,* 6.

Discover. (2020) Why Wearing a Face Mask Halfway Can Be Dangerous. Available at: https://www.discovermagazine.com/health/why-wearing-a-face-mask-halfway-can-be-dangerous (Accessed 19th November 2021).

Egan, M., Acharya, A., Sounderajah, V., Xu, Y., Mottershaw, A., Phillips, R., Ashrafian, H. and Darzi, A. (2021) Evaluating the effect of infographics on Public recall, sentiment and willingness to use face masks during the COVID-19 pandemic: a randomised internet-based questionnaire study. *BMC Public Health,* 21(1).

European Centre for Disease Prevention and Control. (2020a) Infographic: Using face masks in the community. Available at: https://www.ecdc.europa.eu/en/Publications-data/infographic-using-face-masks-community (Accessed: 18th October 2021).

European Centre for Disease Prevention and Control. (2020b) Video on COVID-19: How to wear your re-usable/textile face mask? (short version) Available at: https://www.ecdc.europa.eu/en/Publications-data/video-covid-19-how-wear-your-re-usabletextile-face-mask-short-version (Accessed 18th October 2021).

European Centre for Disease Prevention and Control. (2020c) Video on COVID-19: Do you know how to wear a face mask properly? (long version) Available at: https://www.ecdc.europa.eu/en/Publications-data/video-covid-19-do-you-know-how-wear-face-mask-properly-long-version (Accessed 18th October 2021).

European Centre for Disease Prevention and Control. (2021a) Video: Help slow the spread of COVID-19 - wear a face mask!. Available at: https://www.ecdc.europa.eu/en/Publications-data/video-help-slow-spread-covid-19-wear-face-mask (Accessed: 18th October 2021).

European Centre for Disease Prevention and Control. (2021b) Questions and answers on COVID-19: Prevention. Available at: https://www.ecdc.europa.eu/en/covid-19/questions-answers/questions-answers-prevention (Accessed 18th October 2021).

Federation of Small Businesses. (2020) Small firms hope face coverings announcement will bring confidence back to shoppers. Available at: https://www.fsb.org.uk/resources-page/small-firms-hope-face-coverings-announcement-will-bring-confidence-back-to-shoppers.html (Accessed 15th November 2021).

Federation of Small Businesses. (2021) Face coverings: What are the rules for businesses? Available at: https://www.fsb.org.uk/resources-page/face-coverings-what-are-the-rules-for-shop-owners.html (Accessed 15th November 2021).

Fielmua, N. Guba, B.Y. and Mwingyine, D.T. (2021) Hand hygiene and safety behaviours at shopping centres in COVID-19: an observation in Wa township in Ghana. *Journal of Water, Sanitation and Hygiene for Development, 11*(3), pp.442-452.

Forbes. (2020a) 8 Face Mask Wearing Mistakes People Are Making With Covid-19 Coronavirus. Available at: https://www.forbes.com/sites/brucelee/2020/06/08/8-mask-wearing-mistakes-you-can-make-like-exposing-your-nose-with-coronavirus/?sh=4d39bc273ae6 (Accessed 19th November 2021).

Forbes. (2020b) Feeling Anxious About Wearing A Mask? Here Are 5 Ways To Overcome It. Available at: https://www.forbes.com/sites/jessicagold/2020/07/01/feeling-anxious-about-wearing-a-mask-here-are-5-ways-to-overcome-it/?sh=6a55665f4629 (Accessed 8th December 2021).

Fujii, R. Suzuki, K. and Niimi, J. (2021) Public perceptions, individual characteristics, and preventive behaviors for COVID-19 in six countries: a cross-sectional study. *Environmental health and preventive medicine,* 26(1).

Global News. (2020) Coronavirus face coverings under the nose equivalent to 'not wearing a mask': experts. Available at: https://globalnews.ca/news/7362921/coronavirus-experts-masks-properly-worn/ (Accessed 19th November 2021).

Gov Scot. (2021) Coronavirus (COVID-19): close contact services. Available at: https://www.gov.scot/Publications/coronavirus-covid-19-close-contact-services/pages/high-risk-zone-and-good-practice/ (Accessed 15th November 2021).

GOV UK. (2020) Duration of Wearing of Face Coverings. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/923607/s0760-4a-duration-wearing-face-coverings-170920.pdf (Accessed 23rd November 2021).

Gov UK. (2021a) Working safely during coronavirus (COVID-19). Available at: https://www.gov.uk/guidance/working-safely-during-covid-19/shops-branches-and-close-contact-services (Accessed 15th November 2021).

Gov UK. (2021b) Working safely during coronavirus (COVID-19). Available at: https://www.gov.uk/guidance/working-safely-during-covid-19/shops-branches-and-close-contact-services (Accessed 10th December 2021).

Gov UK. (2022) Face coverings: when to wear one, exemptions and what makes a good one. Available at: https://www.gov.uk/government/Publications/face-coverings-when-to-wear-one-and-how-to-make-your-own/face-coverings-when-to-wear-one-and-how-to-make-your-own (Accessed 15th February 2022).

Government of Canada. (2021) COVID-19 mask use: Advice for community settings. Available at https://www.canada.ca/en/Public-health/services/diseases/2019-novel-coronavirus-infection/prevention-risks/about-non-medical-masks-face-coverings.html (Accessed 29th October 2021).

Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P. and Ditto, P. H. (2013) Moral foundations theory: The pragmatic validity of moral pluralism. In Advances in experimental social psychology (Vol. 47, pp. 55-130). *Academic Press*.

Hackensack Meridian Health. (2020) 5 Mask Mistakes People Make. Available at: https://www.hackensackmeridianhealth.org/HealthU/2020/07/10/5-mask-mistakes-people-make/ (Accessed 19th November 2021).

Han, B., Zhao, T., Liu, B., Liu, H., Zheng, H., Wan, Y., Qiu, J., Zhuang, H. and Cui, F. (2020) Public Awareness, Individual Prevention Practice, and Psychological Effect at the Beginning of the COVID-19 Outbreak in China. *Journal of Epidemiology*, 30(10), pp.474-482.

Haq, S., Shahbaz, P. and Boz, I. (2020) Knowledge, behavior and precautionary measures related to COVID-19 pandemic among the general Public of Punjab province, Pakistan. *The Journal of Infection in Developing Countries,* 14(08), pp.823-835.

Health Connection. (2020) Leaving Your Nose Uncovered Defeats the Purpose of Wearing a Mask: Study Reveals. Available at: https://www.nbcdfw.com/news/health/leaving-your-nose-uncovered-defeats-the-purpose-of-wearing-a-mask/2412189/ (Accessed 19th November 2021).

Health University of Utah. (2020) Tips for avoiding foggy eyeglasses when you wear your face mask. Available at: https://healthcare.utah.edu/healthfeed/postings/2020/06/foggy-glasses-face-masks.php (Accessed 10th December 2021).

Hong, Q.N., Pluye, P., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.P., Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.C. and Vedel, I. (2018) *Mixed Methods Appraisal Tool (MMAT), version 2018.* Registration of Copyright (#1148552), Canadian Intellectual Property Office, Industry Canada.

Hornik, R., Kikut, A., Jesch, E., Woko, C., Siegel, L. and Kim, K. (2020) Association of COVID-19 Misinformation with Face Mask Wearing and Social Distancing in a Nationally Representative US Sample. *Health Communication*, 36(1), pp.6-14.

Huffington Post. (2021) The Face Mask Mistakes People Make Without Realizing It. Available at: https://www.huffingtonpost.co.uk/entry/face-mask-mistakes-covid-19_l_5ff35c27c5b65a92291089df (Accessed 22nd November 2021).

HuffPost. (2020) You really need to stop wearing your face mask under your nose. Available at https://www.huffingtonpost.co.uk/entry/wearing-a-face-mask-under-your-nose-is-a-bad-idea_uk_5f7c7377c5b61229a05786f8 (Accessed 19th November 2021).

INews. (2020) Face masks terrify me — and I don't know how I'll cope under the new rules. Available at: https://inews.co.uk/inews-lifestyle/wellbeing/face-masks-uk-coronavirus-rules-anxiety-558942 (Accessed 8th December 2021).

Intermountain Healthcare. (2020) Debunking common face mask misconceptions. Available at: https://intermountainhealthcare.org/blogs/topics/covid-19/2020/07/debunking-common-face-mask-misconceptions/ (Accessed 22nd November 2021).

Irfan, M., Akhtar, N., Ahmad, M., Shahzad, F., Elavarasan, R., Wu, H. and Yang, C. (2021) 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*, 18(9), p.4577.

Karijo, E., Wamugi, S., Lemanyishoe, S., Njuki, J., Boit, F., Kibui, V., Karanja, S. and Abuya, T. (2021) Knowledge, attitudes, practices, and the effects of COVID-19 among the youth in Kenya. *BMC Public Health*, 21(1).

Kwan, R.Y.C., Lee, P.H., Cheung, D.S.K. and Lam, S.C. (2021) Face Mask Wearing Behaviors, Depressive Symptoms, and Health Beliefs Among Older People During the COVID-19 Pandemic. *Frontiers in Medicine,* 8.

Lahiri, A., Jha, S.S., Chakraborty, A., Dobe, M. and Dey, A. (2021) Role of Threat and Coping Appraisal in Protection Motivation for Adoption of Preventive Behavior During COVID-19 Pandemic. *Frontiers in Public Health*, 9.

Lao, C.K., Li, X., Zhao, N., Gou, M. and Zhou, G. (2021) Using the health action process approach to predict facemask use and hand washing in the early stages of the COVID-19 pandemic in China. *Current Psychology*.

Lerner, J.S. and Keltner, D. (2000) Beyond valence: Toward a model of emotion-specific influences on judgement and choice. *Cognition & emotion,* 14(4), pp.473-493.

Lerner, J.S. and Keltner, D. (2001) Fear, anger, and risk. *Journal of personality and social psychology*, 81(1), p.146.

Li, J., Verteramo Chiu, L.J., Gómez, M.I. and Bills, N.L. (2021) Strategies to reduce risk perception among grocery shoppers in the US: A survey study. *Plos one,* 16(4).

Liebst, L.S. et al. (2021) Face-touching behaviour as a possible correlate of mask-wearing: A video observational study of Public place incidents during the COVID-19 pandemic, *Transboundary and Emerging Diseases.*

Liu, Y., Duong, H.T. and Nguyen, H.T. (2021) Media exposure and intentions to wear face masks in the early stages of the COVID-19 outbreak: the mediating role of negative emotions and risk perception. *Atlantic Journal of Communication.*

Mahalik, J. R., Bianca, M. D. and Harris, M. P. (2021) Men's attitudes toward mask-wearing during COVID-19: Understanding the complexities of mask-ulinity. *Journal of Health Psychology.*

Michie, S., Van Stralen, M.M. and West, R. (2011) The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science,* 6(1), pp.1-12.

Mind. (2021) Mask anxiety, face coverings and mental health. Available at: https://www.mind.org.uk/information-support/coronavirus/mask-anxiety-face-coverings-and-mental-health/ (Accessed 8th December 2021).

MOFFIT Cancer Center. (2020) 5 mistakes you may be wearing when wearing face masks. Available at: https://moffitt.org/endeavor/archive/5-mistakes-you-may-be-making-when-wearing-face-masks/ (Accessed 19th November 2021).

Moss, S.E., Kessler, S.R., Martinko, M.J. and Mackey, J.D. (2021) The Relationship Between Follower Affect for President Trump and the Adoption of COVID-19 Personal Protective Behaviors. *Journal of Leadership & Organizational Studies*.

NanoScience. (no date) Why Your Surgical Mask Orientation Matters: How We Use Wettability to our Advantage. Available at: https://www.nanoscience.com/applications/medical/why-your-surgical-mask-orientation-matters-how-we-use-wettability-to-our-advantage/ (Accessed 15th February 2022).

National Hair & Beauty Federation. (2020) Beauty Industry to fully reopen and type II face masks required in England. Available at: https://www.nhbf.co.uk/news-and-blogs/news/beauty-industry-to-fully-reopen-and-type-ii-face-masks-required/ (Accessed 16th November 2021).

National Hair & Beauty Federation. (2021a) NHBF urges Scottish Government to allow the removal of face masks for beauty treatment. Available at: https://www.nhbf.co.uk/news-and-blogs/news/nhbf-urges-scottish-government-to-allow-the-removal-of-face/ (Accessed 16th November 2021).

National Hair & Beauty Federation. (2021b) Back to business with the NHBF: Four nations FAQs. Available at: https://www.nhbf.co.uk/news-and-blogs/blog/back-to-business-with-the-nhbf-four-nations-faqs/ (Accessed 16th November 2021).

National Hair & Beauty Federation. (2021c) Back to business with the NHBF: Providing a great client experience despite restrictions. Available at: https://www.nhbf.co.uk/news-and-blogs/blog/back-to-business-with-the-nhbf-providing-a-great-client/ (Accessed 16th November 2021).

National Hair & Beauty Federation. (2021d) Back to business with the NHBF: Rules for mobile stylists and therapists. Available at: https://www.nhbf.co.uk/news-and-blogs/blog/back-to-business-with-the-nhbf-rules-for-mobile-stylists-and/ (Accessed 16th November 2021).

National Hair & Beauty Federation. (2021e) Coronavirus: NHBF update- 1 June 2021. Available at: https://www.nhbf.co.uk/news-and-blogs/news/coronavirus-nhbf-update--1-june-2021/ (Accessed 16th November 2021).

National Pharmacy Association. (2020) Face coverings in shops, including pharmacies and supermarkets in Northern Ireland. Available at https://www.npa.co.uk/information-and-guidance/face-coverings-in-shops-including-pharmacies-and-supermarkets-in-northern-ireland/ (Accessed 15th November 2021).

National Pharmacy Association. (no date) Specific Covid-19 news and resources for NPA Members in England. Available at: https://www.npa.co.uk/coronavirus-updates/specific-covid-19-news-and-resources-for-npa-members-in-scotland-northern-ireland-and-wales/ (Accessed 2nd February 2022).

Nebraska Medicine. (2020) 3 common mask myths debunked by an infectious diseases expert. Available at: https://www.nebraskamed.com/COVID/3-common-mask-myths-debunked-by-an-infectious-diseases-expert (Accessed 22nd November 2021).

Newsweek. (2021) 8 Face Mask Mistakes People Make Without Realizing It. Available at: https://www.newsweek.com/amplify/how-wear-face-masks-mistakes (Accessed 22nd November 2021).

NI Direct. (no date) Coronavirus (COVID-19): face coverings guidance. Available at: https://www.nidirect.gov.uk/articles/coronavirus-covid-19-face-coverings-guidance#:~:text=If%20you%20are%20in%20any,the%20wearing%20of%20face%20coverings. (Accessed 2nd February 2022).

Northants Live. (2021) Asthmatic key Worker's plea to supermarket 'nose-exposers'. Available at: https://www.northantslive.news/news/northamptonshire-news/asthmatic-key-Workers-plea-supermarket-4922469 (Accessed 19th November 2021).

Oregon Live. (2021) Did you hear about a study that showed masks don't work for viruses? That's misinformation. Available at: https://www.oregonlive.com/coronavirus/2021/10/did-you-hear-about-a-study-that-showed-masks-dont-work-for-viruses-thats-misinformation.html (Accessed 22nd November 2021).

Organisation for Economic Co-operation and Development. (2020) COVID-19 crisis response in MENA countries. Available at: https://www.oecd.org/coronavirus/policy-responses/covid-19-crisis-response-in-mena-countries-4b366396/ (Accessed 2nd November 2021).

Pan, Y., Fang, Y., Xin, M., Dong, W., Zhou, L., Hou, Q., Li, F., Sun, G., Zheng, Z., Yuan, J., Wang, Z. and He, Y. (2020b) Self-reported compliance with personal preventive measures among Chinese factory Workers at the beginning of work resumption following the COVID-19 outbreak: Cross-sectional survey study. *Journal of medical Internet research*, 22(9).

Pan, Y., Xin, M., Zhang, C., Dong, W., Fang, Y., Wu, W., Li, M., Pang, J., Zheng, Z., Wang, Z., Yuan, J. and He, Y. (2020a) Associations of Mental Health and Personal Preventive Measure Compliance With Exposure to COVID-19 Information During Work Resumption Following the COVID-19 Outbreak in China: Cross-Sectional Survey. *Journal of medical Internet research,* 22(10).

Peixoto, S., Nascimento-Souza, M., Mambrini, J., Andrade, F., Malta, D. and Lima-Costa, M. (2020) Health behaviours and the adoption of individual protection measures during the new coronavirus pandemic: the ELSI-COVID-19 initiative. *Cad Saude Publica*, 36.

Pfattheicher, S., Nockur, L., Böhm, R., Sassenrath, C. and Petersen, M.B. (2020) The emotional path to action: Empathy promotes physical distancing and wearing of face masks during the COVID-19 pandemic. *Psychological Science,* 31(11), pp.1363-1373.

Pharm Easy. (2021) What Common Face Mask Mistakes Do People Make? Available at: https://pharmeasy.in/blog/what-common-face-mask-mistakes-do-people-make/ (Accessed 10th December 2021).

Pharmaceutical Services Negotiating Committee (2021) Face coverings and PPE in pharmacies – advice from 19th July. Available at: https://psnc.org.uk/our-news/face-coverings-and-ppe-in-pharmacies-advice-from-19th-july/ (Accessed 10th December 2021).

Prichard, E.C. and Christman, S.D. (2020) Authoritarianism, conspiracy beliefs, gender and COVID-19: links between individual differences and concern about COVID-19, mask wearing behaviors, and the tendency to blame China for the virus. *Frontiers in psychology,* 11.

Professional Beauty. (2021) Government guidance updated for close contact services in England. Available at: https://professionalbeauty.co.uk/site/newsdetails/government-guidance-updated-close-contact-services (Accessed 17th December 2021).

Public Health England. (no date) Coronavirus (COVID-19) Resource Centre. Available at: https://coronavirusresources.phe.gov.uk/ (Accessed 15th February 2022).

Qian, M., Wu, Q., Wu, P., Hou, Z., Liang, Y., Cowling, B.J. and Yu, H. (2020) Anxiety levels, precautionary behaviours and Public perceptions during the early phase of the COVID-19 outbreak in China: a population-based cross-sectional survey. *BMJ open*, 10(10).

Redfield and Wilton Strategies. (2020) A Detailed Timeline of Public Opinion on the UK's Mask Policy. Available at: https://redfieldandwiltonstrategies.com/a-detailed-timeline-of-Public-opinion-on-the-uks-mask-policy/ (Accessed 9th December 2021).

Retail Week (2020) How masks will instil consumer confidence in retail once more. Available at: https://www.retail-week.com/retail-voice/how-masks-will-instil-consumer-confidence-in-retail-once-more/7035458.article?authent=1 (Accessed 17th December 2021).

Reuters. (2020) Fact check: False and misleading information in post listing 'dangers' of face masks. Available at: https://www.reuters.com/article/uk-factcheck-masks-list-idUSKBN24333G (Accessed 22nd November 2021).

Rogers, R.W. (1975) A protection motivation theory of fear appeals and attitude change1. *The journal of psychology*, 91(1), pp.93-114.

Rosenstock, I.M. (1974) Historical origins of the health belief model. Health education monographs, 2(4), pp.328-335.

Royal Pharmaceutical Society. (2020) RPS England calls for mask-wearing to continue in pharmacies. Available at: https://www.rpharms.com/about-us/news/details/RPS-England-calls-for-mask-wearing-to-continue-in-pharmacies#:~:text=Following%20the%20Government%20announcement%20yesterday,pharmacies%20and%20other%20healthcare%20settings (Accessed 15th November 2021).

Royal Pharmaceutical Society. (2021) Pharmacists 'unable to maintain social distancing' at work and risk infection. Available at: https://www.rpharms.com/about-us/news/details/Pharmacists-unable-to-maintain-social-distancing-at-work-and-risk-infection (Accessed 15th November 2021).

Saint, S.A. and Moscovitch, D.A. (2021) Effects of mask-wearing on social anxiety: an exploratory review. *Anxiety, Stress, & Coping*, 34(5), pp.487-502.

Salon. (2021) As face masks become the norm, many wearers quietly suffer "mask anxiety". Available at: https://www.salon.com/2020/09/27/mask-anxiety-fear-of-masks-mental-health-pandemic-facemasks-covid19/ (Accessed 8th December 2021).

Salons Direct. (2020) A Guide to Using PPE in Your Salon. Available at: https://www.salonsdirect.com/blog/a-guide-to-using-ppe-in-your-salon/ (Accessed 10th December 2021).

Science Focus. (2020) COVID-19: Face shields alone 'unlikely' to protect hairdressers and barbers. Available at: https://www.sciencefocus.com/news/covid-19-face-shields-alone-unlikely-to-protect-hairdressers-and-barbers/ (Accessed 19th November 2021).

Sharma, M. (2015) Multi-theory model (MTM) for health behavior change. *WebmedCentral Behaviour.* 6(9).

Specsavers. (2020) How to stop your glasses fogging up while wearing a face mask. Available at: https://www.specsavers.co.uk/covid19-care/stop-glasses-fogging-with-face-mask (Accessed 10th December 2021).

Stoutonia. (2021) Public Opinion of Face Masks in Students Reveals People More Likely to Wear Masks if Businesses Say So. Available at: http://stoutonia.com/Public-opinion-of-face-masks-in-students-reveals-people-more-likely-to-wear-masks-if-businesses-say-so/ (Accessed 10th December 2021).

Sun, Y., Qin, B., Hu, Z., Li, H., Li, X., He, Y. and Huang, H. (2021) Predicting mask-wearing behavior intention among international students during COVID-19 based on the theory of planned behaviour. *Annals of palliative medicine*, 10(2), pp.55–55

The Argus. (2020) Coronavirus: Experts warn hairdresser 'visors' aren't enough. Available at: https://www.theargus.co.uk/news/18639790.coronavirus-experts-warn-hairdresser-visors-arent-enough/ (Accessed 19th November 2021).

The Atlantic. (2020) How a Bizarre Claim About Masks Has Lived on for Months. Available at: https://www.theatlantic.com/politics/archive/2020/10/can-masks-make-you-sicker/616641/ (Accessed 22nd November 2021).

The Beauty Guild. (no date) Beauty Guild Covid-19 Safe Working Guide. Available at: https://www.beautyguild.com/COVID-19/SafeWorkingGuide (Accessed 15th November 2021).

The BMJ. (2020) Efficacy of face masks depends on spatial relation between host and recipient and who is being protected. Available at: https://www.bmj.com/content/bmj/369/bmj.m2016.full.pdf (Accessed 3rd November 2021).

The British Psychological Society. (2020a) Returning to the workplace: Safety considerations for practising psychologists. Available at: https://www.bps.org.uk/sites/www.bps.org.uk/files/Policy/Policy%20-%20Files/Returning%20to%20the%20workplace%20-%20safety%20considerations%20for%20practising%20psychologists.pdf (Accessed 19th October 2021).

The British Psychological Society. (2020b) Delivering effective Public health campaigns during Covid-19. Available at: https://www.bps.org.uk/sites/www.bps.org.uk/files/Policy/Policy%20-%20Files/Delivering%20effective%20Public%20health%20campaigns%20during%20Covid-19.pdf (Accessed 26th October 2021).

The Conversation. (2021) Facts, fears and the evolution of masking throughout the COVID-19 pandemic. Available at https://theconversation.com/facts-fears-and-the-evolution-of-masking-throughout-the-covid-19-pandemic-165364 (Accessed 8th December 2021).

The Guardian. (2020) The most common ways we're wearing face masks incorrectly. Available at: https://www.theguardian.com/world/2020/oct/02/the-most-common-ways-were-wearing-face-masks-incorrectly (Accessed 19th November 2021).

The Lancet. (2020) Rational use of face masks in the COVID-19 pandemic. Available at: https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930134-X (Accessed 9th November 2021).

The New York Times. (2020) How NOT to Wear a Mask. Available at: https://www.nytimes.com/2020/04/08/well/live/coronavirus-face-mask-mistakes.html (Accessed 23rd November 2021).

UI Healthcare. (2020) Five common mistakes made when wearing a face mask. Available at: https://medcom.uiowa.edu/theloop/news/five-common-mistakes-made-when-wearing-a-face-mask (Accessed 23rd November 2021).

UK Government. (2021) 'Coronavirus (COVD-19) *Guidance and Support' Face coverings: when to wear one, exemptions, and how to make your own.* https://www.gov.uk/government/Publications/face-coverings-when-to-wear-one-and-how-to-make-your-own/face-coverings-when-to-wear-one-and-how-to-make-your-own (Accessed: 7th December 2021).

UK Parliament. (2020) Matt Hancock: "face coverings increase confidence in people to shop". Available at: https://www.parliament.uk/business/news/2020/july/coronavirus-statement-14-july/ (Accessed 17th December 2021).

University of Iowa Hospitals and Clinics. (2020) Five common mistakes made when wearing a face mask. Available at: https://uihc.org/health-topics/five-common-mistakes-made-when-wearing-face-mask (Accessed 22nd November 2021).

Unknown. (unknown). Usage and washing instructions included within a cloth face covering purchased from highstreet retailor (H&M). Product ref O/N 259849-4343 P/N 09840143.

Valenti, G.D. and Faraci, P. (2021) Identifying predictive factors in compliance with the COVID-19 containment measures: A mediation analysis. *Psychology Research and Behavior Management,* 14, pp. 1325-1338.

Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003) User acceptance of information technology: Toward a unified view. *MIS quarterly,* pp.425-478.

Venkatesh, V., Thong, J.Y. and Xu, X. (2012) Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly,* pp.157-178.

Vereen, R.N., Lazard, A.J., Frank, S.C., Pulido, M., Richter, A.P.C., Higgins, I.C.A., Shelus, V.S., Vandegrift, S.M., Hall, M.G. and Ribisl, K.M. (2021) Motivations, barriers, and communication recommendations for promoting face coverings during the COVID-19 pandemic: Survey findings from a diverse sample. *Plos one,* 16(5).

Wales Online. (2020) Hairdressers and beauticians ordered to wear medical masks and visors. Available at: https://www.walesonline.co.uk/news/uk-news/hairdressers-beauticians-ordered-wear-medical-18769210 (Accessed 10th December 2021).

Walsall Council. (2020) Changes to Coronavirus rules for beauticians, tattooists and massage therapists. Available at: https://go.walsall.gov.uk/newsroom/changes-to160coronavirus-rules-for-beauticians-tattooists-and-massage-therapists (Accessed 10th December 2021).

Web MD. (2021) Mask Mistakes You're Making Now. Available at: https://www.webmd.com/lung/ss/slideshow-mask-mistakes (Accessed 10th December 2021).

Welsh Government. (2021) Written Statement: Review of the Health Protection (Coronavirus Restriction) (No.5) (Wales) Regulations 2020. Available at: https://gov.wales/written-statement-review-health-protection-coronavirus-restriction-no5-wales-regulations-2020 (Accessed 31st January 2022).

Welter, V.D.E., Welter, N.G.E. and Großschedl, J. (2021) Experience and Health-Related Behavior in Times of the Corona Crisis in Germany: An Exploratory Psychological Survey Considering the Identification of Compliance-Enhancing Strategies. *International journal of environmental research and Public health,* 18(3), pp.933.

West, R., Michie, S., Rubin, G.J. and Amlôt, R. (2020) Applying principles of behaviour change to reduce SARS-CoV-2 transmission. *Nature human behaviour,* 4(5), pp.451-459.

Witte, K. (1994) Fear control and danger control: A test of the extended parallel process model (EPPM). *Communications Monographs,* 61(2), pp.113-134.

World Economic Forum. (2020) 5 myths about face masks under the microscope. Available at: https://www.weforum.org/agenda/2020/08/coronavirus-face-masks-myths/ (Accessed 22nd November 2021).

World Health Organisation. (2020) Mask use in the context of COVID-19. Available at: https://www.who.int/Publications/i/item/advice-on-the-use-of-masks-in-the-community-during-home-

care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak (Accessed 27th October 2021).

World Health Organisation. (2021) Mask Guidance. Available at: https://www.who.int/docs/default-source/searo/bangladesh/2019-ncov/epi-win-infographics.pdf?sfvrsn=fd860d4d_4 (Accessed 18th October 2021).

Wright, L., Steptoe, A. and Fancourt, D. (2021) Patterns of compliance with COVID-19 preventive behaviours: a latent class analysis of 20,000 UK adults. *Journal of Epidemiol Community Health*

Xu, Y., Lin, G., Spada, C., Zhao, H., Wang, S., Chen, X., Chen, Y., Zhang, Y., Marraro, G.A., Zeng, X., Ye, X., Zhang, L. and Zeng, Y. (2021) Public Knowledge, Attitudes, and Practices Behaviors Towards Coronavirus Disease 2019 (COVID-19) During a National Epidemic—China. *Frontiers in Public health*, 9.

Zhou, M., Long, P., Kong, N. and Campy, K.S. (2021) Characterizing Wuhan residents' mask-wearing intention at early stages of the COVID-19 pandemic. *Patient Education and Counseling,* 104(8), pp.1868-1877.

APPENDIX 2: REVIEW OF ACADEMIC LITERATURE

A2.1 PAPER CHARACTERISTICS

A2.1.1 Study design

Of the 48 papers included in this review of academic literature, 3 papers applied more than one research method to their study design and were hence dual coded during data extraction (Moss et al, 2021 & Fielmua, Guba & Mwingyine, 2021, Pfattheicher et al, 2020). 43 papers summarised empirical research, of which: 35 used quantitative descriptive methods (often in the form of online surveys); two encompassed Randomised Controlled Trials (RCTs); six conducted non-randomised intervention studies and two deployed qualitative methods. Of the five non-empirical papers included, three were discursive papers, one was an exploratory review, and two conducted meta-analysis of pre-existing data.

The study design for all included papers is presented within a separate deliverable (D1 - PROTECT NCS Face coverings R1 V7 FA).

A2.1.2 Study population

A2.1.3 Age of participants

The population age varied greatly across papers. Of the 43 empirical studies included in the review, 11 papers did not specify the age range of the participants or else did not provide either an upper or lower age limit for eligibility. Participants have been classified as: 'children' if they were aged 17 or under; 'adults' if they were between 18-49 years; and 'older adults' if participants were aged 50 and over. When considering the evidence base relative to these categorisations, the following summaries are made:

- Five papers included children as well as adults within their participant sample (Lao et al, 2021; Liu, Duong & Nguyen, 2021; Haq Shahbaz & Boz, 2020; Xu et al 2021; Fielmua et al, 2021);
- 30 papers included adults only, one of which (Karijo et al, 2021) focused on youths only (aged 18-35 years) and two others (Sun et al, 2021; Davis et al, 2021) focused on University students, so a minimum age of 18 was assumed.
- Two papers (Kwan et al, 2021; Peixoto et al, 2020) included a population of older adults.

A2.1.4 Study population of focus

In addition to participant's age, some studies specified a focus on a particular sub-group of the population. The sub-groups include; Workers, shoppers, females, males and University students. As shown in Figure 19, two papers examined Workers (Pan et al, 2020 A; Pan et al 2020 B), 2 papers looked at shoppers (Fielmua et al, 2021; Li et al, 2021), one paper examined only females (Anderson et al, 2021), one paper looked at only males (Mahalik et al, 2021) and two papers looked at university students (Sun et al, 2021; Davis et al, 2021). Further information about the study population for each study can be found within a separate deliverable (D1 - PROTECT NCS Face coverings R1 V7 FA).

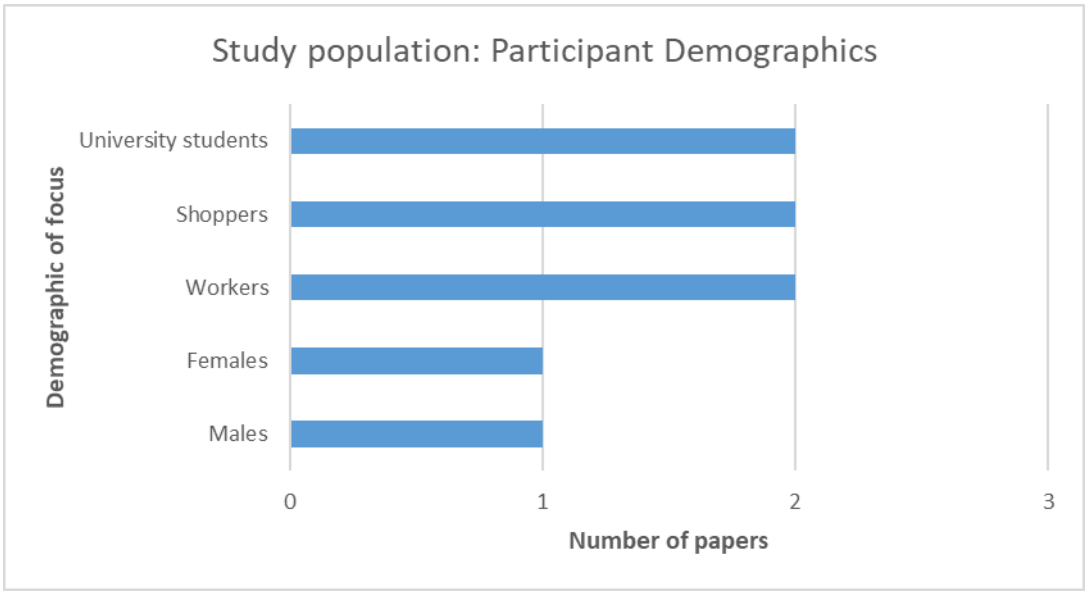


Figure 19 Graphical representation of study population

A2.1.5 Country of study conduct

Of the 43 empirical studies included, the country of study conduct was varied. As illustrated within Figure 20, the greatest volume of published research was conducted in the America, followed by China. Only two empirical studies were conducted in the UK (Wright et al, 2021; Egan et al, 2021). Nine studies were conducted with representation from participants in two or more countries, one of which encompassed participants worldwide (Saint & Moscovitch, 2021).

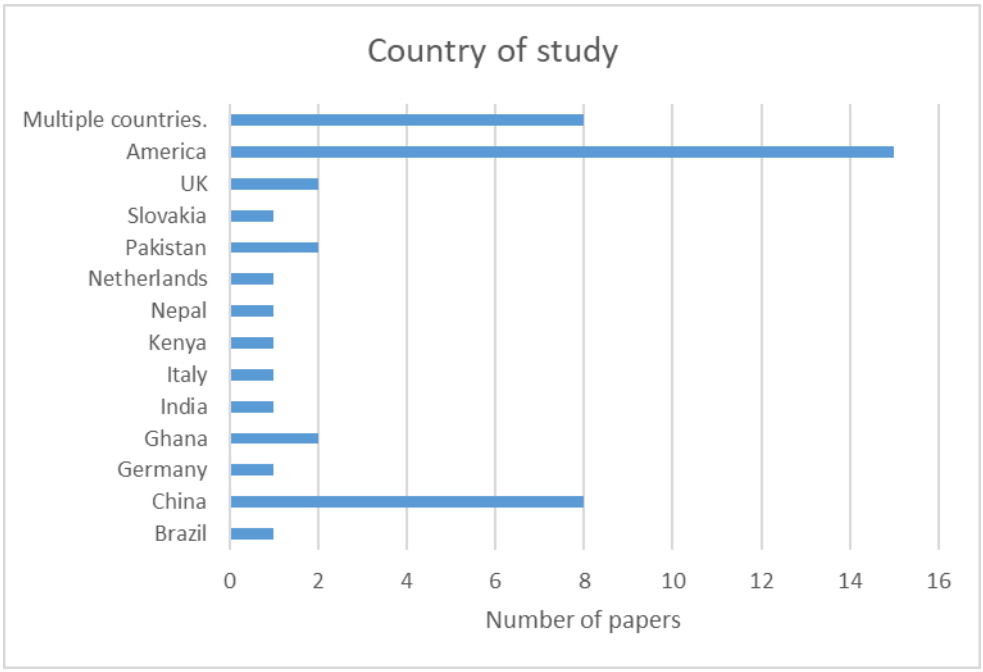


Figure 20 Graphical representation of country of study conduct

The geographic spread of included studies is highly relevant to note, as differences in political systems, structures and cultural practices are likely to impact behaviour in ways that are not applicable to the UK (country of focus for the current project). Two countries where such differences are prominent include: China - where the wearing of face coverings was already an established practice prior to the COVID-

19 pandemic, and America with its dissolved states which led to differences in guidance and legislation concerning the use of face coverings, as well as the Presidents expressed views on COVID-19. It also remains challenging to draw firm transferable conclusions from non-westernised countries, such as Ghana and Kenya, given substantive differences, for example in healthcare, transport infrastructure, and reduced access/presence of information/communications when compared to the UK.

Details of the country of study for all included papers is presented within a separate deliverable (D1 - PROTECT NCS Face coverings R1 V7 FA).

A2.1.6 Research setting/environment

The research settings in which the studies were conducted varied across the evidence base, however there were only two papers that explored the wearing of face coverings within a retail environment (Li et al, 2021; Fielmua et al, 2021). As illustrated within **Figure 21**, of the 48 papers included in this review, 28 papers did not specify the research setting that face coverings were being investigated under. Of the remaining 20 papers, 10 papers were set in Public settings, three papers (Sun et al, 2021; Davis et al, 2021; Barrios et al, 2021) were set in Universities, one paper (Agyemang et al, 2021) was conducted in a Public transport terminal, one paper (Barry et al, 2021) explored face covering wearing indoors, and three papers (Pan et al, 2020; Pan et al 2020; Kwan et al, 2021) explored the use of face coverings in multiple settings (including the workplace, Public settings, doctors clinic, home setting, factories and Public transport). Further information about the study setting for all included papers can be found within a separate deliverable (D1 - PROTECT NCS Face coverings R1 V7 FA).

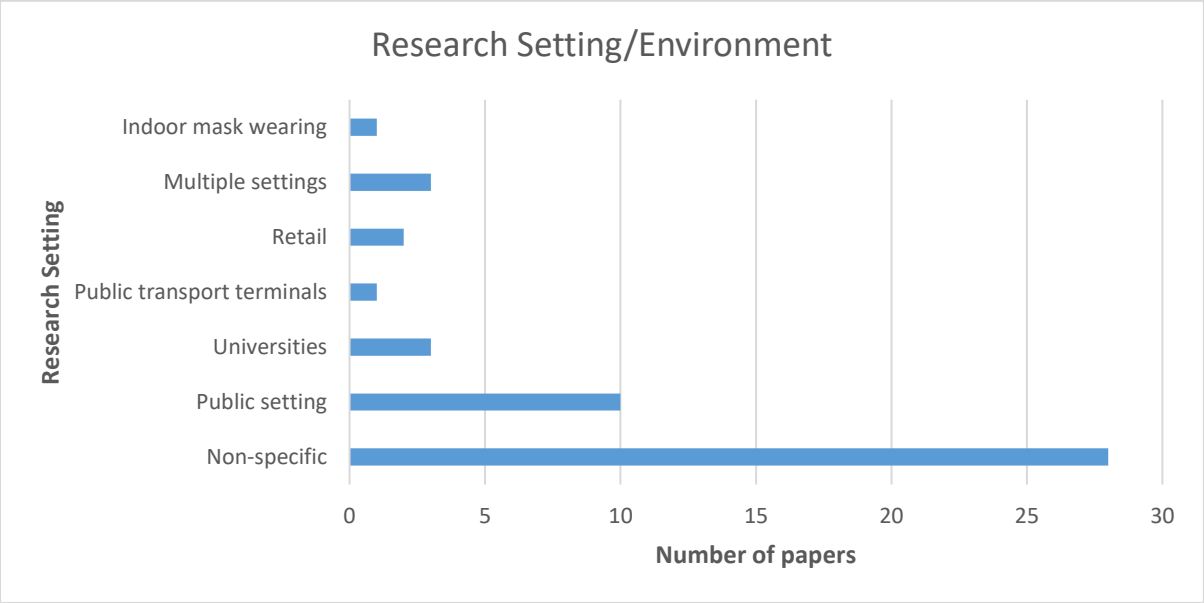


Figure 21 Graphical representation of research setting

A2.1.7 Type of face covering covered

Of the 48 papers included in the review, 41 did not specify the type(s) of face covering they were investigating. Of the seven papers that did specify the type of face covering explored, four papers (Barrios et al, 2021; Barile et al, 2021; Davis et al, 2021; Egan et al, 2021) covered more than one type of face covering and were therefore dual coded for the purposes of the analysis. Amongst those papers where the type of face covering was specified, this was most commonly cloth and surgical face coverings, followed by N95 and disposable face coverings, as illustrated within **Figure 22**. Further information about the type of face coverings investigated across each study can be found within a separate deliverable (D1 - PROTECT NCS Face coverings R1 V7 FA).

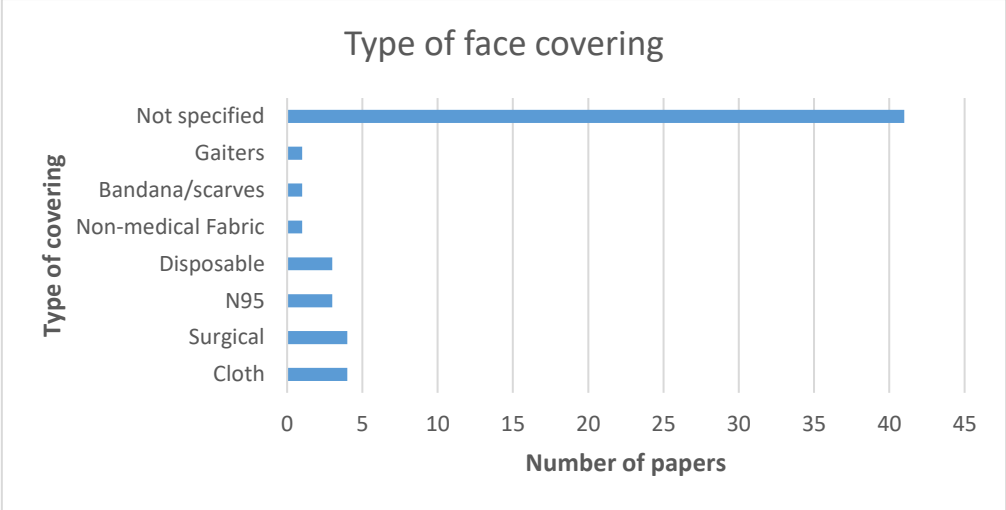


Figure 22 Graphical representation of type of face coverings explored within the literature

A2.1.7.1 Behavioural models/theories applied

Of the 48 papers included in this review, 22 made no reference to the application of behavioural models or theories. Of the remaining 26 papers, 19 reported the application of a single behavioural model or theory and a further seven papers reported application of more than one behavioural model or theory[8].

Amongst the most commonly cited behavioural models and theories, the Health Belief Model (Rosenstock, 1974) was most commonly applied within the literature (eight papers), followed by the Theory of planned behaviour (Ajzen, 1991) (five papers), Protection Motivation Theory (Rogers, 1975) (four papers) and COM-B (Michie et al, 2011) (two papers).

It should be noted that theoretical models and theories were applied in different ways across the literature. Some papers (e.g. West et al, 2020) discussed the principles of behaviour change relative to behavioural models and theoretical constructs. Some used behavioural theory to inform the development of data collection tools and methods (e.g. Welter et al, 2021). Others applied behavioural theories and models to interpret study findings (e.g. Agyemang et al, 2020).

Details of the theories and models applied by all included papers are presented within a separate deliverable (D1 - PROTECT NCS Face coverings R1 V7 FA).

A2.1.7.2 Time period of data collection

Of the 43 experimental studies included, all of these conducted their data collection during 2020. This is perhaps unsurprising given the time taken to conduct, report and publish research findings. The implication of this, however, is that the evidence base is restricted to the early part of the COVID-19 pandemic, when understanding of the COVID-19 virus was relatively low amongst both the scientific community and wider Public; the accuracy of related communications was unassured and legal mandating of face-coverings was variably introduced at different times in different countries. Given the international spread of the papers discussed in Section 0 of this report, it is also worthy to note that the timeline of COVID-19 knowledge and actions were experienced differently around the world in terms of peak infection, communications, changes in knowledge and practice. The timeline in the UK is not likely to coincide with the timeline experienced in other countries.

Six of the 48 papers did not specify a time-period of data collection, a summary of the 42 papers that did report the start and end dates is presented within Figure 23. It can be seen that a considerable amount of data collection took place between March and June of 2020.

[8] Given the specific focus on use of face coverings for this review, theoretical models/theories were only recorded if explicitly applied in the context of this behaviour. If their application was not directly related to the use of face coverings, the model/theory was not recorded in our tabulation and subsequent analysis.

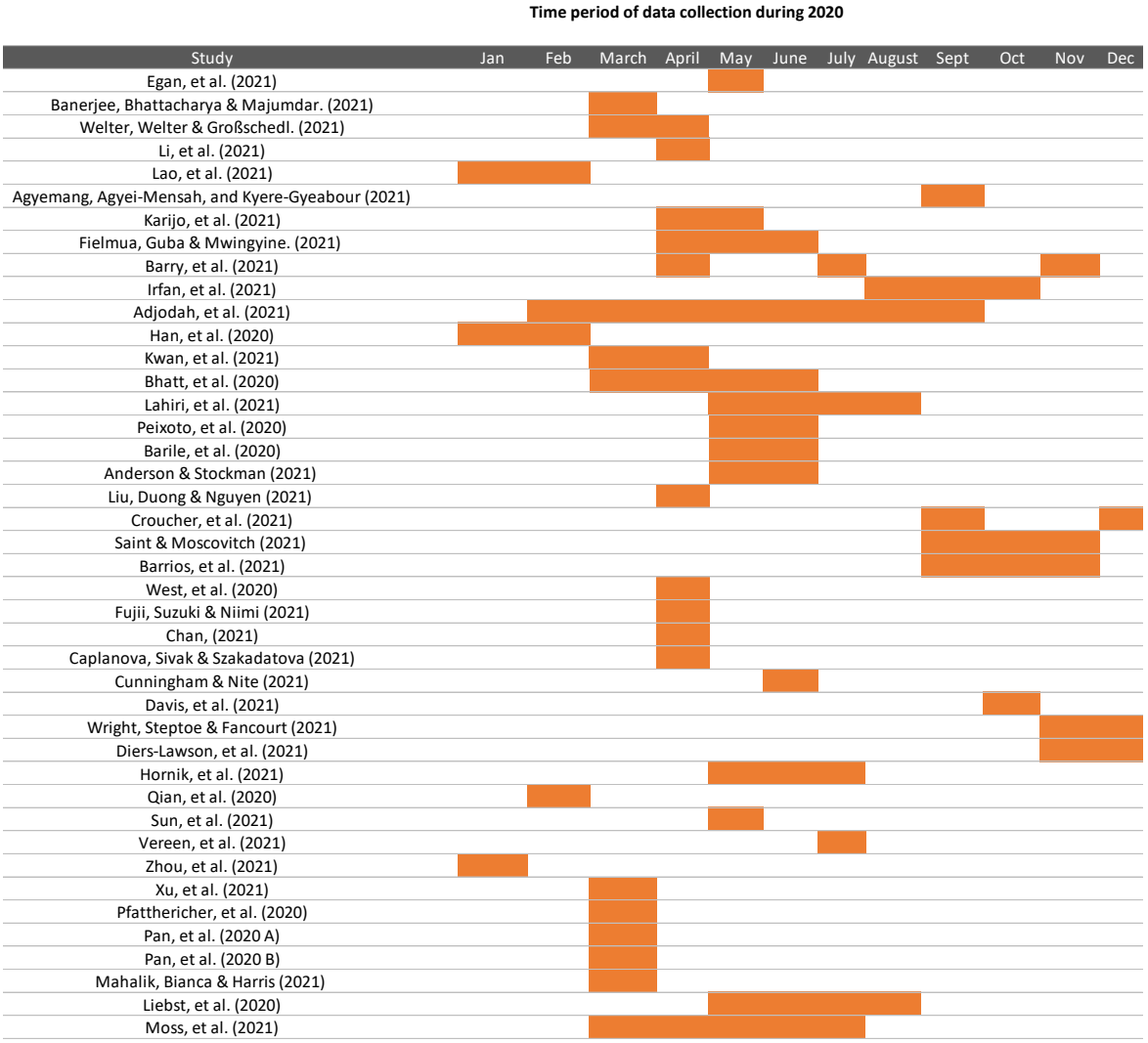


Figure 23 Graphical representation of time-period of data collection

A2.1.7.3 Study quality

Of the 48 papers included in the review, 43 were empirical studies, all of which were subject to critical appraisal using the MMAT (Hong et al, 2018). Each study was given an overall percentage score to reflect study quality, with a higher score reflecting a higher quality paper. Where studies applied mixed methods in their study design, more than one quality appraisal score was calculated with an assessment of overall study quality reflecting the weakest component (in accordance with guidance on MMAT application guidance provided by Hong et al (2018)).

The overall spread of study quality is illustrated within Figure 24. It can be seen that the majority of studies conducted were of moderate to high quality. With the majority of studies using quantitative descriptive methods (in the form of online surveys), many of these were open to non-response bias and did not present mechanisms to counter this within their approach to data collection.

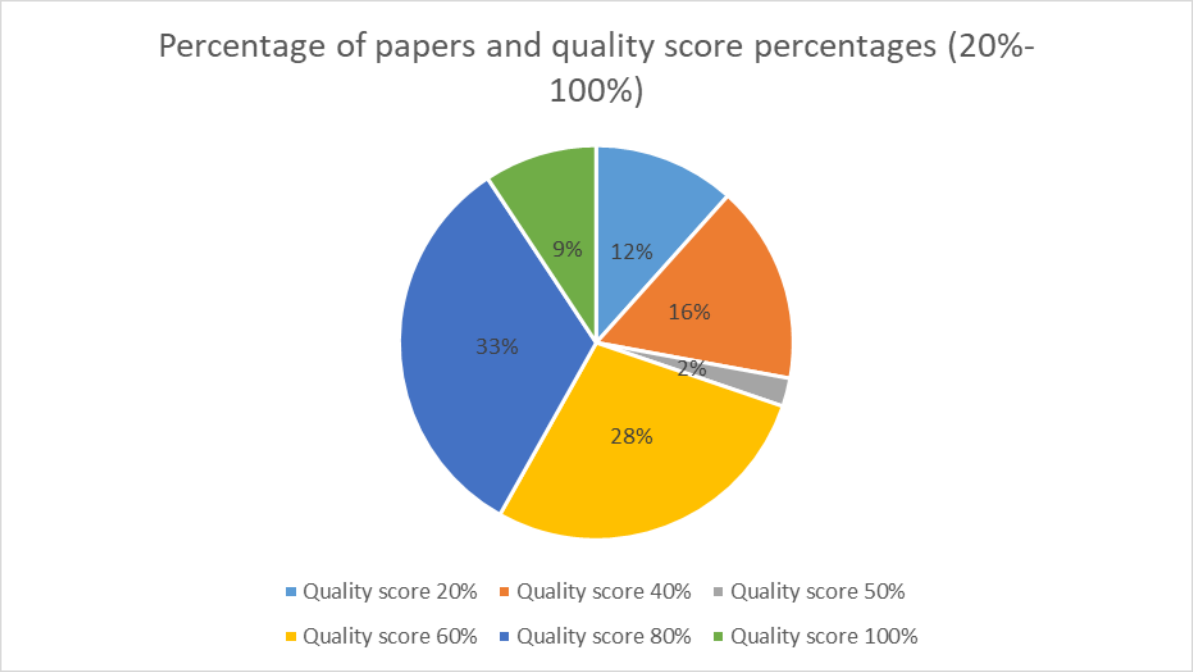


Figure 24 Spread of critical appraisal scores (%) for all empirical studies

A2.1.8 Findings: What behavioural factors affect the wearing (or not) of face coverings?

The results and discussions presented below provide an evidence base for us to inform the development of the consultation materials (e.g. interview schedules, survey questions) for the next stage of this project where we will further explore these issues with Workers in retail consulting businesses and consumers/general Public. The section is structured by primary and secondary constructs of relevance along with text boxes to highlight the key implications for this study. The primary constructs covered include; attitudes towards face coverings, norms in the context of wearing face coverings, barriers that inhibit the wearing of face coverings, motivation to wear face coverings, knowledge of COVID-19 and face covering usage, media communications, environmental cues and risk perceptions.

It is anticipated that the review of grey literature will enhance knowledge with respect to recommendations for practice, behaviours that impact the effectiveness of face coverings, non-beneficial/useless practices and gaps in knowledge and understanding.

A2.1.8.1 Retail specific research

As discussed in section 0, only two papers explored the use of face coverings within a retail environment (Li et al, 2021; Fielmua et al, 2021). Given the environment of interest to the present study, namely retail consulting rooms, it seems sensible to first summarise the findings from these studies with respect to the factors that were found to influence the wearing of face coverings within retail environments, as follows. The implications of these study findings are discussed relative to the wider evidence base thereafter in this report.

A2.1.8.2 Observed practices in Ghanaian shopping centers

Research conducted by Fielmua, Guba & Mwingyine (2021) focused on observed practices of wearing face coverings at shopping centres in Ghana. Observations of both retail Workers and shoppers across 50 shops, revealed low levels of adherence to the wearing of face coverings (as one of many health protective behaviours recommended by the World Health Organisations (WHO)) at the time of the study. Only in one shop were all staff observed to be wearing a face covering. Indeed, in 78% of shops observed, none of the staff were wearing a face coverings, with some attendants wearing face coverings in remaining retail premises. When combining observations of youth

(estimated to be 18-40 years) and adult (estimated to be above 40 years) shoppers, 82% did not wear a face covering. No substantial differences were observed by gender. The researchers report strict enforcement of COVID-19 protocol in only 3 out of the 50 shops observed, leading to an argument between the customer and shop attendant in one instance. During this observed instance, the customer cited a lack of financial means as justification for not purchasing a face covering (available for sale within the shop). Despite then being given the money to purchase the face covering the customer left with the money. This observation highlights that the rational underpinning people's behavior may not always reflect the reasons which they self-report.

A2.1.8.3 Self-reported risk perceptions amongst American grocery shoppers

Research conducted by Li et al (2021), used an online survey to explore COVID-19 risk perceptions amongst grocery shoppers in America (within New York and Washington specifically). Participants were self-identified to be the primary grocery shoppers of the household. The survey explored socio demographic information; level of concern over COVID-19 infection whilst shopping for groceries and undertaking other activities; perceived benefits of wearing a face covering; perceived risk when shopping for groceries pre and post information intervention; and other factors potentially influential to shoppers risk perception (e.g. family working in the healthcare system, experience of COVID-19 and underlying health conditions).

Concern for getting infected with COVID-19 whilst grocery shopping was high relative to other activities, with 70% of respondents reporting feeling very or extremely concerned. Concern for self and store employees was reduced by 37.5% and 51.2% respectively following information intervention. Regarding perceived benefits of wearing a face covering, 69%, 77%, and 75% of respondents agreed or strongly agreed that wearing a face covering reduces their chance of getting infected, reduces their tendency to touch face, nose, and eyes; and protects them from smaller respiratory droplets, respectively.

The findings suggest that respondents who perceived more benefits of wearing face coverings were less likely to perceive themselves and store employees as being at a high risk of getting infected. Also, the findings suggest more contagious respondents think COVID-19 is, the more likely they perceived themselves and store employees to be at a high risk of getting infected. Shoppers who had family members working in grocery stores were found to be more likely to perceive store employees as being at a high risk of getting infected, whereas, shoppers who had family members working in the health care system are less likely to perceive store employees as being at a high risk of getting infected. Age was also influential to risk perceptions with older participants less likely to perceive store employees as being at a high risk of getting infected. The perceived risk for shoppers who did not wear face coverings is significantly lower after the information intervention. Shoppers who wore face coverings perceived a much lower risk after information treatment but this information effect was greater amongst wearers of face coverings.

A2.1.8.4 Attitudes towards face coverings

No papers identified attitudes as a direct predictor of behaviour with respect to the wearing of face coverings. There was however evidence of attitude as a predictor of behavioural intention (Sun et al, 2021; Barile et al, 2020; Chan et al, 2021; Mahalik et al, 2021), although Irfan et al (2021) identified that attitudes (along with perceived benefits) make the weakest contribution towards willingness to wear face coverings (relative to other factors explored amongst a residential sample of Pakistani residents). In a sample of American men, Mahalik et al, (2021) identified attitudes towards the wearing of face coverings was mediated by other factors, namely perceived benefits, perceived barriers, confidence in scientific experts, and empathy to persons vulnerable to COVID-19.

Research conducted by Chan et al (2021), comparing face covering wearing attitudes and behavioural intention amongst Korean participants and American participants, found overall attitudes and intentions were higher amongst Koreans. Further correlations indicate that whilst subjective norms were influential to cognitive attitudes (e.g. belief and knowledge) towards face covering wearing amongst both participant populations, personal norms were only found to influence cognitive attitudes amongst American participants. It is speculated that this difference in attitudinal drivers may reflect the collectivist culture of South Korea, which is in contrast to the individualistic culture in America.

Implications for this study:

- The extent to which attitudes towards the wearing of face coverings are mediated by other factors warrants exploration.

A2.1.8.5 Norms

Research has explored the association of norms in the context of wearing face coverings. Some papers (Irfan et al, 2021; Saint et al, 2021) looked at social norms (what society thinks or does) and some (Sun et al, 2021; Chang et al, 2021; Barile, et al, 2020) explored subjective norms (what those important to you think or do), whilst others (Chang et al, 2021) looked at personal norms from the individual's perspective.

Survey findings from residents in Pakistan (Irfan et al, 2021) suggest that Public willingness to wear face coverings is positively impacted by social norms. In a review of existing literature, Saint et al (2021) surmise that social norms may be more likely to increase the wearing of face coverings amongst individuals with social anxiety, due to fear of negative judgement or interpersonal conflict in the event of non-compliance.

With respect to social norms, Sun et al (2021) identified a direct effect on attitude, perceived behavioural control and behaviour intention amongst a student sample in China. They also found subjective norms to be a strong determinant of intention to wear face coverings, a finding supported by Barile et al (2020).

Chang et al (2021) found cultural differences in the contributions to both subjective norms and personal norms. Amongst American participants, past face covering wearing behaviour (before and during the pandemic) was found to increase both social norms and personal norms for face covering use. Amongst Koreans, past face covering use (during the pandemic) and social appearance anxiety (SAA) were found to form subjective norms, with experiences of everyday discrimination found to decrease social norms. These factors in addition to past face covering use before the pandemic were also then found to increase personal norms. Both subjective and personal norms were significant predictors of participants' cognitive attitude toward wearing face coverings, but personal norms did not influence the Koreans' cognitive attitude toward wearing face coverings.

Implications for this study:

- There is value to explore the impact of social, subjective or personal norms amongst a UK population to ascertain the extent and prominence of their impact on intentions to wear face covering.

A2.1.8.6 Barriers

Studies report a range of barriers found to inhibit the wearing of face coverings. Most commonly reported barriers were related to discomfort (Karijo et al, 2021; Agyemang et al, 2021; Vareen et al, 2021) and access barriers with respect to cost/affordability (Fielmua, Guba & Mwingyine, 2021; Irfan et al, 2021; Karijo et al, 2021).

A2.1.8.7 Accessibility

In a study of observed practices concerning the wearing of face coverings, Fielmua, Guba & Mwingyine (2021) report an observed altercation between a prospective shopper and retail Worker where lack of financial means was cited as justification for not purchasing a face covering (available for sale within the shop). Despite then being given the money to purchase the face covering the customer then left with the money. This observation highlights that the rational underpinning people's behaviour may not always reflect the reasons which they self-report.

A2.1.8.8 Discomfort

Research by Peixoto et al (2020) explored whether healthy behaviours determine individual protective measures to prevent transmission of the COVID-19 virus amongst a Brazilian sample of older adults. They found the wearing of face coverings in Public places was more frequent amongst ex-smokers, and less frequent amongst those who reported practicing physical activity to recommended levels. The authors speculate that the negative association between exercise and use of face coverings may be

explained by impacts on exercise performance and feelings of discomfort when breathing during exercise.

In a discursive paper, Al-Bsheish, Jarrar & Scarbrough (2021) present the wearing of face coverings as one of three practices (alongside social distancing, and hygiene) in a Public safety compliance model to mitigate the spread of COVID-19. A number of expected challenges to the wearing of face coverings in Public are presented, including inconvenience (e.g. warmth, irritation and moisture build up on the face), shortages in availability and health concerns in the event of prolonged use. Subsequent recommendations for practice are then proposed.

A2.1.8.9 Interpersonal barriers

In a review of the literature, Saint et al (2021) highlight additional challenges of interpreting of social and emotional cues as a result of wearing face coverings, in particular amongst those with social anxiety. This is, due to the partial occlusion of facial expressions but also the potential for face coverings to create a physical barrier to audible communications (although this is said to be largely perceived).

Vareen et al (2021) identified other common barriers to wearing a face covering in America varied across different ethnic groups as follows:

- Latino participants - the need to save face coverings for essential Workers, social perception that others will think them unwell and not wanting to breathe in one's own carbon dioxide;
- Black participants - the need to save face coverings for essential Workers, forgetting to bring a face covering with them from home, not being afraid of COVID-19 and not knowing where to find a face covering;
- White participants - difficulty for others to read ones facial expressions, not feeling the need to wear one around friends and family and distrust in the efficacy of this protective practice.

A2.1.8.10 Concerns over prolonged use

Al-Bsheish, Jarrar & Scarbrough (2021) present three behaviours (i.e. social distancing, wearing a face covering, and hygiene) in a Public safety compliance (PSC) model to mitigate the spread of COVID-19. As stated by Al-Bsheish, Jarrar & Scarbrough (2021), for the behaviour of face covering wearing the following challenges were expected from the Public:

- Challenges in terms of inconvenience include face warmth, skin irritation, sticking to the skin moisture build-up, etc.;
- Irrational use of a face covering could be one reason for respiratory infectious diseases;
- Information related to the prevention efficiency and capacity of each type is not sufficient;
- Shortage issue; and
- Risk of respiratory distress of prolonging the use of face coverings, especially among school-age children and Public transportation users.

The authors suggest the following recommendations to overcome some of the challenges above:

- Conducting Public campaigns regarding the importance of PSC behaviours to survive that account for norms, normative behaviours, and culture;
- Providing the appropriate infrastructure for social distancing and making it easy to practice;
- Ensuring the availability of appropriate places for handwashing and providing sterile materials and face coverings in all places visited by the Public;
- Providing a guide for PSC behaviours in the different workplaces;
- Linking PSC behaviours to assertive legislation and laws to ensure compliance by all;
- Emphasizing medical education and training for correct techniques to practice PSC behaviours and updating these techniques continuously as needed
- Expanding the use of health applications supporting PSC behaviours; and
- Studying the individual factors affecting the voluntary PSC mode.

A study of commercial drivers in Ghana by Agyemang et al (2021) identified changing perceptions of the virus as no longer being as frightening and trust that god will protect them as barriers to wearing face coverings. As discussed elsewhere within this report, the cultural context in which research is conducted is likely to have a substantial impact on risk perceptions, attitudes and behaviours relative

to the wearing of face coverings. These findings by Agyemang et al (2021) may reflect the ubiquity of religions in Ghana, which translates into greater trust that a higher power will protect people from the COVID-19 virus, potentially resulting in lesser importance of protective practices such as face covering use.

Implications for this study:

- The present study could usefully explore prominent barriers cited within the literature (namely accessibility, discomfort, interpersonal barriers and concerns for health implications of prolonged use and the extent to which they are reflective of UK population.
- It may be pertinent to explore whether barriers to wearing face coverings within retail consulting environments differ amongst Workers compared to members of the Public within the UK.

A2.1.8.11 Efficacy

Research has explored the impact of efficacy on the wearing of face coverings. Some papers (Lahiri et al, 2021; Barile, et al, 2020; Lao et al, 2021) explored self- efficacy, e.g. Individuals belief in their ability to effectively wear a face covering, whilst others (Lahiri et al, 2021; Fujii et al, 2021; Pan et al, 2020b; Qian et al, 2020) looked at response efficacy in this regard (Norman et al, 2005), e.g. individuals belief regarding the effectiveness of face coverings in reducing transmission of the COVID-19 virus.

Studies show that feelings of confidence and self-efficacy are associated with intentions to wear face coverings (Davis et al, 2021; Barile, et al, 2020; Lao et al, 2021). Actual behaviour concerning the wearing of face coverings was found to be mediated by other factors, including action control (Lao et al, 2021) and observing others wearing a face covering (Barile et al, 2020).

Research by Lahiri et al, (2021) explored self-efficacy and response efficacy under the 'coping appraisal' construct within the Protection Motivation Theory (Rogers, 1975). Amongst a study sample of social media users in India, they found better response efficacy was associated with better self-efficacy. Frequency of performing preventive practice was not statistically associated with the perceived efficacy of the practice in five of the six protective practices performed (including face covering wearing). However, practice of the preventive behaviours, including face covering use, was however found to have a statistically significant association with respective self-efficacy. Furthermore, the practice of one preventive behaviour was often associated with the practice of the other.

In an international study by Fujii et al (2021), 'perceived effectiveness' was identified as a common driving factor for engaging in preventive behaviours in all six countries of study (namely, China, Italy, Japan, Korea and America). When compared to the wider countries of interest, the UK had the greatest proportion of participants that reported no perceived effectiveness for wearing face coverings (20% of sample population, relative to <7% across the remaining five countries). Moreover, the proportion of participants that reported perceived effectiveness of face coverings to be very or extremely effective, was substantially lower in the UK (32%) when compared to respondents from other countries under study (China, 84%; Italy, 74%; Japan, 53%; Korea, 82%; and America 64%). UK participants most commonly reported perceived effectiveness of face coverings to be moderate (27% of total UK sample). The researchers therefore recommend that when encouraging the general Public to engage in preventive measures during a pandemic, the effectiveness of this encouragement may be increased if the effectiveness of such measures were to also be Publicised. This finding is echoed in a quote from the research by Bhatt et al (2020) which suggests a lack of clarity over the relative effectiveness of different types of face coverings:

> *"One thing I am still not sure about is the mask, some say surgical masks, some say N95, and some say a mask cannot stop the infection, it's worthless. [laughs…] But I am still using my old mask when I go out. I believe a mask can prevent its (COVID-19) transmission to a significant level."*

There is research evidence from China that response efficacy is positively associated with self-reported face covering wearing (Qian et al, 2020), alongside other personal protective behaviours - sanitising hands, avoiding social gatherings and avoiding crowded places (Pan et al, 2020b). Qian et al (2020) also found stronger self-confidence and perceived efficacy of wearing a face covering were associated with lower odds of moderate or severe anxiety.

In a discursive paper, Demirtas-Madran (2021) highlights efficacy as an important influential construct across relevant theories (including Protection Motivation Theory (Rogers, 1975), Extended Parallel Process Model (Witte, 1994), Fear Drive Theory (Janis, 1967, cited within Demirtas-Madran, 2021))and the Health Belief Model (Rosenstock, 1974)) that offer conceptual explanation of the effect of fearful messages. The importance of perceived self-efficacy and response efficacy is highlighted in order for people to take action in response to persuasive fear appeals.

Implications for this study:

- There is value to explore levels of self-efficacy and response efficacy relative to the wearing of face coverings within retail consulting environments amongst the UK Worker and consumer population.
- It may be pertinent to explore the underpinning contributors towards peoples self-reported level of self-efficacy and response efficacy in the context of wearing face coverings in retail consulting environments.

A2.1.12 Motivation

Motivation to wear face coverings was explored from a variety of perspectives within the literature. Research by Adjodah et al (2021) found that face covering mandates motivate an increase in adherence of wearing by over 20% in an American sample. Davis et al, 2021 applied the Multi-Theory Model (MTM, Sharma, 2015) of behaviour change to conceptualise initiation and sustenance of face covering-wearing behaviour amongst students in America. Both participatory dialogue (advantages-disadvantages) and behavioural confidence were identified as a significant predictors of initiation of face covering wearing practices. Emotional transformation, practice for change, and changes in the social environment were identified as significant predictors of face covering wearing sustenance. Behavioural confidence exhibited the strongest relationships to initiation, whilst emotional transformation was found to exhibit the strongest relationships to maintenance of face covering wearing. These findings emphasise the need for individuals to understand the advantages of face covering-wearing over potential disadvantages, have confidence in their ability to effectively wear a face covering, be able to convert their emotions or feelings into goals and actively focus and monitor their own face covering wearing behaviour in order to motivate face covering wearing practices.

A2.1.13 Motivation as a construct within the COM-B model

A discursive paper by West et al (2020) describes the requirements for people to feel motivated to wear face coverings, in relation to wider constructs of the COM-B model (Michie et al, 2011). This includes: countering motivations to undesirable practices concerning the wearing of face coverings (e.g. lowering them to scratch an itch or talk to others); establishing routines/habits for the different stages of face covering use (e.g. removal and disposal); and avoiding over-reliance on face coverings and subsequent neglect of other protective behaviours. Also applying the COM-B model, Wright et al (2021), found that compliance with face covering wearing was particularly high, even among the low compliance group. Further analysis identified high compliance was strongly related to older age and to lower risk-taking which represent motivators for behaviour within the COM-B model. The authors speculate that face covering wearing being a legally mandated practice at the time of data collection (8 months after the first UK lockdown), with little personal sacrifice required, Publicly visible and with environmental cues to action present may have contributed to high compliance rates.

A2.1.14 Moral foundations and empathy and consideration for others

Research by Chan (2021) applied Moral Foundations Theory (Graham et al, 2013) to explore acceptance and resistance to face covering use as one of three core protective behaviours amongst an American sample. The findings show high and medium compliance respondents were more likely than low compliance respondents to place an emphasis on caring and fairness. High and medium compliance respondents were also less likely than the low compliance group to place emphasis on sanctity. Further analysis revealed age differences in sanctity concerns for wearing face coverings, as younger respondents negatively associated sanctity with the use of face coverings.

Research by Pfattheicher et al (2020) found that found that empathy for those most vulnerable to the COVID-19 virus represents an emotional basis for the motivation to wear a face covering. Furthermore, providing individuals with background information regarding why it is important to wear a face covering

was not enough to significantly increase their behaviour motivation, it was only if empathy was added did the motivation increase. Further analysis provided evidence that state empathy drove the effect of the empathy condition on the motivation to wear a face covering.

An American study by Vareen et al, (2021) sought to explore motivators for wearing a face covering with specific consideration for populations with COVID-19 disparities. Most commonly cited motivations for wearing a face covering in general were not wanting to spread the COVID-19 virus (77%), and to protect people who are vulnerable (76%) and one's community (72%). Amongst Black participants, approximately 80% endorsed statements suggesting desire for control and normalcy as a key motivator.

Mahalik et al (2021) explored men's attitudes toward face covering wearing in the United States. They found that the relationship between conformity masculinity norms (CMN) and attitudes toward face covering -wearing was mediated by perceived benefits, perceived barriers, confidence in scientific experts, and empathy to persons vulnerable to COVID-19.

Research findings by Agyemang et al (2021) identified the most common motivators for face covering wearing amongst commercial drivers in Ghana (and insisting passengers wear face coverings) were personal safety and the safety of loved ones, expressed by 94% of the study sample.

Implications for this study:

These diverse findings discussed above demonstrate the breadth of factors that may influence motivation and subsequently impact behaviours, either directly or indirectly, concerning the use of face coverings. It is important for the present research to understand motivational factors in that impact behaviour in the UK. This could include, but should not be limited to, exploration of the influence of:

- Moral foundations and empathy to those most vulnerable to the COVID-19 virus;
- Habits/routines concerning the usage cycle of wearing a face covering (from storage, donning and doffing, cleaning and disposal/reuse);
- Environmental cues/nudges;
- Extent of engagement in undesirable practices (e.g. slipping face coverings down below nose or under chin);
- Levels of confidence concerning the different stages in the face covering usage cycle;
- External factors that supersede individual motivations (e.g. mandating of use face coverings by government or retailers).

A2.1.16 Knowledge

A2.1.16.1 COVID-19

Studies have shown there is an association between knowledge of COVID-19 and face covering wearing behaviours. In a study of urban residents in China, Zhou et al (2020) extended the Unified Theory of Acceptance and Use of Technology (UTAUT) theoretical framework (Venkatesh et al, 2003; Venkatesh et al, 2012) by adding 'knowledge about COVID-19', this knowledge included; incubation period, difference with seasonable flu, preventive measures, and case fatality rate. The study reported that this construct of knowledge was a significant factor in affecting the intention and behaviour of face covering wearing. This is supported by findings that face covering wearing is associated with knowledge of COVID-19 transmission routes (Pan et al 2020b), being familiar with the COVID-19 pandemic (Irfan et al, 2021) and knowing where to be tested for COVID-19 (Anderson and Stockman, 2021).

Results from a survey of 9,764 respondents identified that the Public had a high awareness of knowledge of the COVID-19 outbreak, and a high proportion practiced good hygiene behaviour (Han et al, 2021). However, the study by Han et al (2021) also found that those with risk behaviours (e.g. coming in to contact with someone with a confirmed or suspected case) could clearly know that they were at high risk, but did not pay attention to wearing a face covering when going out.

Related to knowledge and understanding of COVID-19, Banerjee et al (2021) investigated the importance of an exponential-growth prediction bias (EGPB) to understand why the COVID-19 outbreak has exploded. The authors define this prediction bias as the 'systematic error arising from under or over prediction of the number of COVID-19 positive detections by weeks'. As such, their

analysis assumes that 'those who suffer from EGPB will significantly underestimate how quickly a disease spreads, fail to perceive the onrushing infection risk, and hence, show low compliance with safety measures'. The results show that EGPB is negatively correlated with staying at home, minimizing contact, and avoid social gathering, however, it is positively correlated with wearing a face covering.

A2.1.16.2 Face covering use practices

Research suggests that there is an association between knowledge about face covering use practices and face covering use behaviours, this is demonstrated by Zhou et al (2020) who found that during the earlier periods of COVID-19 residents lacked the necessary knowledge of face covering wearing measures to prevent COVID-19 transmission, which therefore impacted on face covering use. However, following campaigns and expert content on social media in China, this significantly increased individual's knowledge on the disease and prevention measures (Zhou et al 2020). In an observational study conducted in America in Autumn 2020 and therefore around 9 months in to the pandemic when knowledge was available, Barrios et al (2021) found that rates of correct face covering use were high within indoor environments (92%); this was highest for N95-type masks (97%) and lowest for other face coverings (79%) (e.g. bandanas, scarves, and similar face coverings). Particularly in relation to the disposal of face coverings, Xu et al (2021a) found that only 63% of respondents were able to identify that the correct measures to deal with a used disposable face covering was to dispose of it into designed dustbins in the community in China.

Research has also been conducted around the impact of the wearing of face coverings on other behaviours, Liebst et al (2020) conducted an observation study in Amsterdam and Rotterdam identifying that the wearing of a face covering does not have an adverse effect on hand contact with the face and its t-zone (i.e. eyes, nose and mouth).

A2.1.16.3 Capability

West et al (2020) reported that the behaviour of wearing a face covering, requires individuals to have the capability to do so, by understanding the type of face covering to use, when to use it, how to use it, how to safely dispose of it or disinfect it and a technique for taking it off without causing contamination. Following this, the individual then needs the opportunity and the motivation to wear the face coverings.

The studies highlighted above (knowledge; COVID-19, face covering use practices, capability) all demonstrate the importance of individuals being equipped with knowledge about COVID-19 (generally and specifically) and face covering uses in order to make informed decisions about their face covering behaviours.

Implications for this study:

- There is value in exploring:
  - Level of perceived knowledge in relation to COVID-19
  - Level of perceived knowledge in relation to face covering use (generally)
  - Level of perceived knowledge/correct use of types of face covering worn by the respondent
  - Content of knowledge respondents are aware of/have used for face covering use/practices

A2.1.17 Media communications

A2.1.17.1 Social media use and mass media

Research suggests that the use of media campaigns can influence behaviour, in this instance the wearing of face coverings. Zhou et al (2020) found that in China social media content increased knowledge and therefore compliance. Whereas in America, Liu, Duong & Nguyen (2021) identified differences between mass media and social media, they found that exposure to mainstream media was associated with fear, anxiety and anger, whereas social media (Facebook, YouTube, Instagram, and Twitter) content related to COVID-19 was not. This therefore demonstrates a need to consider the media route being used to share communications about COVID-19 and how these routes are perceived by the audience.

A2.1.17.2 Positive info/negative info

Research has explored the impact of both positive and negative information and its influence on behaviour. Pan et al (2020a) identified that exposure to statistics about the COVID-19, negative information about governmental responses, heroic stories about frontline healthcare Workers, and positive information about patients with COVID-19 were positively associated with face covering wearing. These findings highlight that in some cases exposure to positive and negative information can increase face covering use and it is therefore important to consider this in COVID-19 messaging.

A2.1.17.3 Experts

Knowledge and influence from experts (e.g. doctors, politicians, health professionals, scientists) has been researched. A study across six countries identified that those in China, Italy, Japan and American were more likely to wear a face covering as a result of recommendations from doctors, however recommendations by politicians did not significantly affect preventive behaviours, except for wearing a face covering in America (Fujii et al 2021). Other research in the America has found that those who approved of their political leader tended to approve of their leadership regarding COVID-19 and were less likely to engage in face covering wearing and other protective behaviours (Moss et al, 2021). In addition government experts have increased face covering use, in China through speeches that increased knowledge (Zhou et al, 2021) and perceived effectiveness of governmental preventive measures (Pan et al, 2020b). However in a study of Slovakian adults, Caplanova et al (2021) found that there was no significant relationship between institutional trust and face covering wearing compliance, however, trust in health institutions and government was reported to be high amongst both compliers and non-compliers.

In relation to trust in science, Mahalik et al (2021) found that conformity to traditional masculinity norms and attitudes towards face covering wearing was mediated by confidence in scientific experts in the US. Also in the US, Barry et al (2021) found that in November 2020, 89% of those reporting trust in science supported face covering wearing in comparison to 55% of those having not much trust in science.

As demonstrated above, the expert that messaging and evidence on COVID-19 is delivered from and/or by can have an impact on whether or not face covering use is adopted, therefore this should be carefully considered in relation to improving face covering compliance.

A2.1.17.4 Misinformation/conspiracy

In relation to misinformation, Hornik et al (2021) found that belief in misinformation was negatively correlated with face covering wearing practices but more strongly associated with beliefs around face covering wearing outcomes. The relationship between face covering wearing behaviours and associated beliefs were greater than behaviour and misinformation beliefs. In an American study, Prichard and Christman (2020) found that conspiracy beliefs were not related to the tendency to wear a face covering.

A2.1.17.5 Infographics

In addition to information and speeches provided by experts, other more accessible information has been prepared in the form of COVID-19 infographics. In the UK, Egan et al (2021) found that the use of infographics led to a higher recall of the appropriate techniques and behaviours for wearing a face covering. It was suggested that this is due infographics providing salient steps and reducing cognitive burden. This is supported by Diers-Lawson et al (2021) who found that participants in the Republic of Korea judged self-protective instructions to be the most useful during COVID-19 including the importance of wearing face coverings (practising good hygiene and social distancing). In addition, the research by Egan et al (2021) reported that infographics demonstrated greater trustworthiness than text-only guidance, with those that only read text guidance feeling less confident about using a face covering.

Implications for this study:

There is value in exploring:

- The sources of information that respondents are using concerning when and how to wear face coverings (e.g. mass media, social media, retail stores)

- The formats of information respondents are using/have used in relation to face coverings (e.g. posters, infographics)
- The perceived impact of positive and negative messaging on use of face coverings
- Trust in experts (e.g. government, scientists, doctors)

A2.1.18 Environmental Cues

Research has suggested that where there are cues to action in the environment then these can increase face covering wearing compliance (Wright et al, 2021; Kwan et al, 2021). Wright et al (2021) found face covering wearing compliance was highest, which may be due to there being clearer cues in the environment for this preventive behaviour, as opposed to other behaviours. The authors suggest that efforts to increase compliance should focus on increasing motivation to comply.

Research in Pakistan found that Public willingness to wear face coverings was negatively influenced by the unavailability of face coverings (Irfan et al 2021). The study suggests that factors that discourage face covering wearing includes it being difficult to obtain a face covering and high prices for face coverings, therefore increasing the availability and lowering the price could be important factors for increasing face covering use.

Cunningham & Nite (2021) found that face covering wearing was most prevalent in countries that have a less healthy physical environment. It was suggested that this could be due to people in these environments with pollution and severe housing are aware of the need for and value in wearing a face covering.

Implications for this study:

- There is value in exploring cues to action for face covering wearing in retail environments (e.g. posters, provision of face coverings, reminders)

A2.1.19 Risk perception

A2.1.19.1 Risk perceptions

The likelihood of people wearing a face covering can be influenced by their risk perceptions, which includes constructs such as perceived susceptibility, severity, threat and fear. Some studies consider risk perception as a whole, whereas others focus on the specific constructs, examples of these are presented below.

Studies that have investigated risk perception in relation to willingness to wear face coverings have found that the more risk perceived from COVID-19 the more people were willing to use a face covering (Irfan et al, 2021; Pan et al 2020b). Irfan et al (2021) therefore suggest that the lack of risk perception might then lead to less willingness to use a face covering and highlight the need to enhance risk perceptions by publicising the negative effects of COVID-19 at an individual and societal level. Consideration of the risk to others around the individual was demonstrated in a study by Vareen et al (2021) who found that two of the most commonly cited motivations for wearing a face covering were to protect people who are vulnerable (76%) and one's community (72%). Specifically in relation to a retail setting, findings from Li et al (2021) suggest a consideration of family members and grocery store employees. Their results show that customers who had family members working in grocery stores were more likely to perceive store employees as being at a higher risk of being infected by COVID-19, whereas those with family members working in healthcare were less like to perceive store employees as being at a higher risk of being infected.

A2.1.19.2 Severity

Kwan et al (2021) explored the associations between depressive symptoms, health beliefs, and face covering wearing behaviours among older people in China. The results show that those who reused face coverings had a stronger belief in disease severity, had poorer cues to preventive measures, and were more likely to experience depressive symptoms. A moderation effect of health beliefs (disease severity and cues to preventive measures) on face covering reuse and depression was observed, identifying a need for mental health support in addition to health education for promoting health beliefs in the prevention of COVID-19 (Kwan et al 2021).

Applying the Health Belief Model (Rosenstock, 1974) and constructs of susceptibility and severity, Vareen et al (2021) sought barriers and motivators for wearing a face covering in the US. The study identified that participants were motivated by statements about not wanting to give COVID-19 to others (77%) and preventing themselves from getting COVID-19 (69%). Similarly to the studies above on risk perception, the authors suggest that messaging around COVID-19 face covering use should focus on individuals, but also on protecting family and friends (Vareen et al, 2021). There is a need for this messaging on perceived benefits of behaviours modification to be reinforced and regular, as demonstrated in a four week investigation in the earlier period of the pandemic (25 March to 22 April 2020) where Welter et al (2021) found that the willingness to take preventive measures decreased and self-assessed vulnerability to COVID-19 decreased.

A2.1.19.3 Fear/threat

Research has explored the extent to which individuals perceive COVID-19 as a threat and have a fear of the virus. In a longitudinal study in the US, Croucher et al (2021) found that personal fear of the virus increased face covering wearing regardless of political affiliation. Similarly, a study of Slovakian adults found that those felt endangered by COVID-19 were 25% more likely to wear a face covering (Caplanova et al, 2021) and a study in Italy found that fear mediated the relationship between pessimism and face covering wearing (Valenti et al, 2021).

Using the Health Belief Model (Rosenstock, 1974), Agyemang et al (2021) explored face covering use amongst commercial drivers in Ghana and explored perceptions of vulnerability to COVID-19 and identified a strong positive correlation between fear of infection and face covering wearing.

Applying the Appraisal Tendency Framework (Lerner and Keltner, 2000; Lerner and Keltner, 2001) and Protection Motivation Theory (Rogers, 1975) Liu, Duong & Nguyen (2021) and found that fear and anxiety positively associated with face covering use intention whilst anger was negatively associated with face covering use intention. Lahiri et al (2021) also applied the Protection Motivation Theory to explore threat, concluding that threat appraisal of COVID-9 illness was an important determinant of face covering use. The authors suggest that risk communication strategies to improve perceptions regarding threat appraisal could improve face covering use. This is supported by Demirtas-Madran (2021) who suggest the use of the Extended Parallel Process Model (Witte, 1994) explanation of protection motivation to ensure that Public messages support the proposed preventive measures and severity of risk by emphasising the severity and risk but also highlighting the action. The example message provided was: “The COVID-19 virus is dangerous, but do not worry, it is easy to protect you and your loved ones; wear a face covering, keep your distance from others, and wash your hands often”.

Li et al (2021) conducted a survey of grocery shoppers and found that concern for getting infected with COVID-19 whilst grocery shopping was high relative to other activities, with 70% of respondents reporting feeling very or extremely concerned. The findings suggest that respondents who perceived more benefits of wearing face coverings were less likely to perceive themselves and store employees as being at a high risk of getting infected. Also, the findings suggest the more contagious respondents think COVID-19 is, the more likely they perceived themselves and store employees to be at a high risk of getting infected.

Implications for this study:

There is value in exploring:

- Perceptions of risk to self (including severity, fear, threat) in relation to COVID-19
- Perceptions of risk to others (including severity, fear, threat) in relation to COVID-19
- Occupation of respondents
- Whether family or close friends work in retail environments, or in roles that are Public facing or have a risk of contact with those testing positive for COVID-19

APPENDIX 3: FINDINGS FROM WORKER INTERVIEWS

A3.1 D1 KNOWLEDGE

Why are face coverings recommended in consulting rooms?

The majority of the Worker respondents identified that they believe that face coverings are recommended when delivering services/treatments in consulting rooms due to the nature of their work being conducted in close contact to others in an enclosed environment. In addition, the majority of Workers felt that face coverings are recommended in their work to prevent the spread of COVID-19.

> *"Because you can never maintain even one meter social distancing let alone two and often, you know, if you're looking at some of these rash, or often, will you look at my daughter's sore throat, you know, you can't you can't do anything, but wear a mask really." (W2)*

> *"Well, we are working very closely with people that we see probably once every six to eight weeks. So therefore, on average, throughout the week, we have like 100 people come through the front door. And we're actually mixing with them as a team. So therefore, there's a I think there's a high percentage of opportunity that we're going to contract it. So wearing the mask protects us, and them at the same time…" (W15)*

> *"Because of the close proximity of people within the room. So those of us working in retail pharmacy, obviously can come into contact with any number of people carrying any number of lovely infections. This [face coverings] I believe helps us from spreading it to other people who come in our consulting rooms, should we pick anything up from somebody else." (W5)*

Current Government guidance

When asked about the current (at the tie of interview) government guidance on the use of face coverings, relevant to retail consulting rooms, many Workers believed them to be recommended. There was variation in Worker understanding of whether this was a legally mandated requirement or just advisory, with some individuals said to be unsure. Indeed, some Workers believed this to be a trivial detail, either because they would follow recommended practice as if it were legislation or on the contrary, because they choose to follow industry guidance for their profession over government guidance.

> *"I think it's a legal recommendation to wear in health and social care settings, especially when you're seeing patients. […] but it doesn't really make any difference to me [pharmacist] […] professionally, you should have be able to have a very, very good reason why you're not following guidelines."(W8)*

> *"We don't really follow the government guidelines. We follow the College of Optometry, wherever they publish out. I don't even know if it follows, because optometry is such a weird retail healthcare. We are more healthcare but people see us as retail so we just went to the College of Optometry and think they've kept us on the amber phase, whatever that is. And I don't know, I don't know government guidelines are I've no idea."(W12)*

Many Workers acknowledged the imminent/recent change (dependent on the date of interview and country of participant residence) no longer mandating the use of face coverings within shops. A number of Workers also reported not knowing or being unsure of the current government guidelines, a small proportion of which cited the frequently changing guidance as a contributing factor to their lack of current knowledge.

> *"I can't describe it today, no because it changes consistently. But our manager just keeps us informed of what's actually happening at the time and how we have to comply."(W9)*

Workplace guidance

When Workers (including employees and owners) were asked about the workplace guidance surrounding use of face coverings within their retail consulting rooms, response were seen to differ slightly between professional groups/retail settings. Those working within community pharmacy

settings were keen to emphasise that as a healthcare setting, they were required to follow government guidance that continued to mandate the use of face coverings amongst both Workers and customers (at the time of interviews). This guidance was generally considered to apply to the consulting room as well as the wider retail premises and sales counter. One respondent however perceived a "grey area" between the consulting room and wider retail space within a community pharmacy, citing different guidance for retail and healthcare. This individual reported that this distinction can sometimes interrupt discussion during a consultation that might start at the retail counter but move into a consultation room if it becomes sensitive in nature and the customer isn't wearing a face covering. In this instance, the Worker would need to pause or interrupt discussion to retrieve a face covering or prompt the customer wear one.

> *"So basically, we have to wear masks pretty much from the beginning of our shift. Before we've entered the building, everyone has to have masks on. And then in the for consultations rooms, we would expect our patients to wear their masks." (W1)*

> *"We're a healthcare setting. So face coverings are still required." (W13)*

> *"… we sort of read the guidance for retail, we read the guidance for the NHS, for health care, and we tried to adapt to sort of a hybrid model […] you can come to the pharmacy without a face covering but you can't come into the consultation room without a face covering. (W16)*

Conversely, those working within Hair and beauty salons described how their workplace guidance surrounding the use of face coverings had now relaxed for members of the Public visiting their premises, though their workplace still required Workers to continue wearing them.

> *So we've continued and we've just now made it for customers to be, it's their choice, what they want to do so. New guidelines came in last week, I think we've had about five or six people have chosen not to wear, everybody else has continued.(W4)*

> *"Well I am the business salon owner. So, we have agreed amongst all the staff that we will, we will wear them, but clients don't have to, because they felt more confident because they were in close contact with people. And we've got quite a lot of people that are still very nervous. It's almost a business decision that you might lose, you know, 10 or 20% of people if they came in and you weren't wearing one. […] everyone agreed that they would have clients that probably wouldn't like it if we didn't wear a mask at the moment." (W18)*

Self-reported practices

Interview respondents were asked to talk thorough the steps they perform when donning/doffing, storing, and where applicable washing, drying and disposing of face coverings. Common themes in Worker responses for each of these practices is summarised in turn below.

Donning/Doffing

Workers most commonly made reference to washing/sanitising their hands prior to putting on or after removing their face covering and securing a tight fit over the bridge of their nose, cited to prevent glasses fogging up amongst some. Other prominent practices included holding the face covering by the ear loops/strings, trying to handle the rest of the covering as little as possible and ensuring the covering is positioned under the chin.

> *"my hands are always washed. I won't touch the part that had to touch my face I'd hold it by the strings." (W1)*

Storage

The vast majority of Worker respondents stated that they wear disposable face coverings and dispose of these immediately after use when at work, hence very few Workers discussed storage practices. One respondent however storing additional clean cloth coverings in a plastic bag, whilst another reported placing their disposable face covering on the work surface in between uses.

“if I'm going to put up a cloth that one over the top of it[disposable covering], I've got clean cloth ones in plastic bags that I carry around with me.”(W14)

“I normally just pop it on the worktop I'm not gonna lie. I keep my mask on all the time the salon when obviously with clients. Obviously if we go in the back room, if I was looking to have lunch, have a break something like that, I literally go, okay, and I pop it on the work surface in the salon […] we've all got our own little workspace, it's fairly rare that we tend to mix workspaces really”. (W4)

Washing/drying

Whilst a small number of Workers reported using reusable face coverings, no detail was provided related to washing or drying practices.

Disposal

Workers reported disposing of their face coverings immediately after use whilst at work. Some Workers described disposing of used face coverings within the general waste bin, or in the clinical/medical waste bin. Less frequently Workers reported disposing of their face coverings within a specific PPE bin, or separate waste bag specifically for used face coverings. One respondent also reported breaking the loops when disposing of their face coverings to protect animals from becoming trapped in them.

“I heard about all the poor little sort of creatures and hedgehogs who were getting all caught up in them. I do snap the elastic, so the elastic is no longer in a loop.”(W3)

General population knowledge

The Worker respondents felt that the main gaps in the knowledge of the general Public around face coverings was focused on how to wear them correctly, the effectiveness of them and the benefits of wearing them. Respondents also highlighted that there are mixed messages and differing guidance within the UK, which then adds to the gaps and misunderstanding as people are confused in relation to the rule changes that have happened at different times.

“Yeah, because nobody knows how to wear one properly. They wear it around the chin, or they just wear it over their mouth. So yeah, I think there's a lot of misunderstanding how to wear the mask properly I think to be fair” (W4)

“Yeah, definitely. I think the differences between Scotland and England has been a bit confusing. I think the fact that, you know, there's people that just, there's people that just will not wear them. You know, there's a lot of sort of confusion as to, like, some people don't believe in the benefits.” (W9)

“The amount of people I see wearing dirty reusable masks, and even dirty disposable masks, I just don't understand. And they pull a disposable one out of their pocket. And they just don't understand that you need to put a clean mask on to be safe. It just, I'm gobsmacked, sometimes I really am. But that some of them are filthy, absolutely filthy and they also don't understand that the reusable ones only really, you can only wash them about 30 times. I think they're now saying, before we need to get rid of them and buy new ones. So I think there's a huge lack of knowledge and compliance with them, unfortunately…” (W11)

The use of dirty face coverings and improper use were further mentioned by other Worker respondents. Particularly around whether the face covering is covering both the mouth and nose and the cleanliness of the face covering.

“... a lot think that it's fine just to cover your mouth, not your nose. And they frequently come in with them around the neck. Would you like to put it over your mouth? But I think that's just maybe it's just lack of education? […] a lot of customers that like to use the homemade ones, or the washable ones. But oh, they look at some of them look as if they've been worn for weeks. They don't wash them.” (W2)

"Or they've got a mask and a some of the mask, you know, you can see, they've, they look, they look grubby, you know, like they've been carrying around for like weeks or months or something. So you think well, how effective is that?" (W16)

One of the respondents identified that they were unsure whether the incorrect wearing was due to a gap in knowledge and wearers choosing not to wear face coverings correctly.

"…do you see people going along with them? Definitely not over their nose. People routinely go along with them tucked around the ears with the face covering bit tucked under their chin. Well, so I seen can't remember. But that that's the that's the main. Yeah, the main one. So I suppose I don't know whether it's really a gap in knowledge, or whether it's just a choosing? To wear it in that in that manner? Because that's what a what everyone else around you is doing? Or be because you don't know. Or see, because, you know, I've got to have it on." (W3)

A3.2 D2 SKILLS

Ease or difficulty of wearing a face covering

The majority of the Worker respondents identified that the main reason it is easy to wear a face covering is due to it being the norm and a habitual behaviour.

"I guess it's become the norm now, isn't it? It's almost like, I feel naked if I don't wear that mask anymore." (W1)

Where Worker respondents identified it is difficult to wear, the main reason for this was due to the impact on communication with those that they are providing a treatment/service to or with colleagues in the workplace.

"I think we've got used to it. It used to be very difficult, trying to learn to communicate with patients through plastic screens and masks because it was just new to us and we're used to reading people's lips for what they're trying to say to us and their emotions as well. So it has been difficult, but I think we have got used to it now and it's just what we do every day." (W11)

Sources of guidance

In the Worker interviews the respondents were asked about the sources of guidance that they have accessed and found helpful for using face coverings correctly in the workplace. The majority of the respondents identified that the main source of guidance was sub-sector or profession specific guidance. This was Government guidance that had been translated for the intended sub-sector audience. In terms of ensuring the guidance was helpful and useful many of the respondents identified having the guidance displayed in the workplace facilitated the use of face coverings. The types of guidance identified as being most useful were videos and pictorial guidance.

"You know, generally turn towards [sub-sector association], because they were sort of guys that seem to have the time to sort of review what the government had said pretty quickly, and then tell them about, tell us about, you know, when and how to use them. So that's pretty much where I went to knowing, trusting that they got the right information from central government in the first place." (W18)

"There were videos for us to watch. So we could learn. We'd never wore masks before, so it was totally new concept to us. So there were videos released for us to help us learn how to put masks on in the first place." (W11)

A3.3 D3 IDENTITY

Changed aspects of work

Of the Worker respondents that identified that the wearing of face coverings had changed aspects of their work, the main impacts were focused around changes in treatments/services, change in communication methods (see section on communication) and changes in the use of the consulting rooms.

Examples of the changes to treatments and services included massages being limited to no more than 30 minutes, stopping any treatments that involved the use of heat (use of facial steamer) and when premises first opened up not offering treatments to the face. However, it was identified that whilst treatments to the face were not allowed at first for women (e.g. lip and chin wax) it was reported that barber shops could still trim beards.

In the pharmacy environment, it was mentioned that changes to services included the use of sending photos of issues such as rashes to bring in to the pharmacy and the use of triage services and pre-assessments over the phone to assess patients before they visit the pharmacy and therefore reducing time spent in the consultation rooms.

> *"And we can then do sort of preliminary, preliminary conversations with them. And then if they need to come in and spend time with us in the consultation, like for the morning after pill, we'll do the consultation on the phone, and then they can come in and take it face to face. And it just means we're in that small room for less time together." (W11)*

> *"…we will try and get picked people to take pictures and bring them in. So you don't necessarily have to sit in a room so that they can undress in a private environment. So we can we can we could sort of sit in a couple of chairs at the corner of a of the pharmacy with by the by the front door, you know, with fresh air with nobody else around so it's still private, but its more ventilated atmosphere. (W14)*

The use of some consulting rooms also changed during COVID-19, for example, some of the Worker respondents identified that the rooms became a refuge for anyone that was escaping domestic violence and became vaccination rooms for the COVID-19 vaccine.

Professional/personal identity

Many of the Worker respondents identified that the wearing of face coverings in the workplace had changed or impacted upon their professional identity. The main reasons for this were around how they communicated with their service users and their professional responsibility as part of their role.

> *"Patients and customers don't see our full faces. So communication is reduced and rapport is reduced." (W13)*

> *"Yeah, I think yeah, because basically hair and beauty obviously is a visual thing. So obviously no longer we visual because we're obviously covered. And it's I think people we've been doing for a long time, it's fine but new clients we've never seen their faces and they have never seen ours…" (W15)*

> *"I think it gives quite a professional appearance, you know, to people, people think they're taking this seriously everything else like that. So I think there's that kind of element to it." (W5)*

A3.4 D4 CAPABILITY BELIEFS CONFIDENCE

Confidence in using a face covering

All of the Worker respondents felt confident in their ability to use a face covering correctly whilst delivering professional services within a retail consulting environment. This ranged from somewhat confident to extremely confident. Many of the Workers identified that it had become a norm and habitual behaviour for them and mentioned that they thought it was not hard to wear a face covering correctly and therefore this influenced their confidence with the behaviour. Others also referred to the long duration of time for which they have been wearing the face coverings and the level of training and guidance received on wearing face coverings correctly.

> *"it's just become a habit […] wear it for the whole pandemic" (W1)*

> *"…it's not that hard…" (W13)*

> *"Just with the training given and the length of time that we've been wearing the masks now." (W10)*

A3.5 D5 CONSEQUENCE BELIEFS

Face covering effectiveness

When asked about how effective face coverings are in preventing the transmission of the COVID-19 virus within retail consulting rooms, the majority of Worker respondents identified they were effective (ranging from fairly effective to extremely effective). One of the main reasons given for this included respondents believing that the face coverings stops the individual breathing on others and vice versa, therefore reducing the transmission of COVID-19.

> *"Well, it's a two way process, isn't it? Mine protects you, and yours protects me. So if we both wear them, we've both got a good degree of protection. […] I think you get maximum protection when you're both wearing them." (W2)*

Some of the Worker respondents identified that they had experienced few COVID-19 cases within their workforce and attributed this to the effectiveness of face coverings. However, others identified that the effectiveness of face coverings depends on the face coverings being worn, particular examples were provided in relation to the type of face covering, how it is worn and cleanliness of face coverings worn by service users. In relation to how it is worn (including donning and doffing), Worker respondents felt that if face coverings were worn properly by service users then they would be move included to identified that face coverings are more effective at reducing the transmission of COVID-19.

> *""… virtually everyone who comes into a face into a consultation, either has like a cloth covering, which I think is probably, you know, not very effective, Or […] they look grubby, you know, like they've been carrying it around for like weeks or months or something. So you think well, how effective is that? Probably not very, so I think the risk of me is probably quite, quite great. But the risk from me to them is probably a lot less." (W16)*

> *"Because I think it very much depends how they're being worn. And then also, how they're taken on and off. I do know that COVID is pretty much all droplets spread. You know, if you've got someone aren't wearing masks properly, like not over their nose properly, and coughing and sputtering at the same time. That's not going to be particularly effective." (W7)*

Some of the Worker respondents detailed that they felt that the face coverings are effective based on their experiences of themselves and their colleagues not catching COVID-19 in the workplace, and attributing this to the use of face coverings alongside other measures.

> *"It can only be through wearing the face masks and the PPE. […] So I can only assume it's due to the measures, which include the face masks that have helped that." (W5)*

A couple of the Worker respondents also identified that they thought face coverings were effective due to seeing statements and articles about this in the media/news.

> *"Oh, just following news articles, I mean, obviously, I'm not a scientist, and I don't have any of those search results. But we are constantly informed that this is beneficial, and is restricting." (W9)*

Impact of face coverings on risk

Many of the Worker respondents felt that the wearing of face coverings within consulting rooms reduced their risk of contracting COVID-19. It was identified that this is largely due to working in such close proximity to service users and therefore the face covering provides protection from transmission. However it was acknowledged that face coverings are one of the measures that are implemented alongside other measures in the workplace (e.g. hygiene measures, sanitising, social distancing, vaccines).

> *"I think it does reduce the risk. I'm not sure it eliminates it because obviously COVID spreads through other ways than just using the facemask, but I think it helps reduce it and keep us as safe as we can be." (W11)*

One of the Worker respondents identified that they are aware of the risks around COVID-19 and the impact that service users not wearing face coverings correctly can have on the risk of transmission,

therefore they acknowledge there is a risk there, but wearing a face covering provides some level of protection.

> *"Exactly, they quite often just wear the rectangular masks, which doesn't give me a lot of protect, he gives me some protection. It's better than nothing, you know, and all they perhaps got a cloth face mask, which you have no idea how often they've washed it, or if even if they do wash, you know if they have it hanging around their ear or what? For half of the day. So there's all sorts of aspects as to how other how other people's behavior affects you. And therefore, that's why I gave the answer I did because I can't legislate what other people do. But my profession means that I have to be available to speak to people in an environment that suits them. Therefore, I have to take some risks to actually do my job." (W14)*

Many of the Worker respondents also felt that the risk of COVID-19 transmission was reduced by wearing face coverings due to it preventing air transmission. For example wearing face coverings prevents breathing in the air others had breathed out and acts like a physical barrier.

> *"…reduces personal risk because you're not breathing in. So much of other people's breathed out air." (W13)*

> *"Just sort of like a kind of protective barrier, you're wearing as opposed to nothing at all? (W10)*

A3.6 D6 REINFORCEMENT

Benefits of wearing face coverings

When discussing the benefits of wearing face coverings, many of the Worker respondents mentioned the nature of their role and not being able to socially distance from service users. The most common benefits of wearing a face covering mentioned by the Worker respondents included protecting service users and the face covering wearer from COVID-19 as well as protection beyond COVID-19 (e.g. coughs, colds). In addition, a few Worker respondents identified the benefit and importance of protecting co-Workers and family from COVID-19.

> *"I think I definitely think there's some benefit to me wearing it, because I hope I wear it as well as I can rather than so I hope there's benefits the other people in the room." (W14)*

> *"Yeah, I want to keep myself safe. I want to still be able to do my job and look after my customers and keep my colleagues safe. And my husband as well. That's really important." (W11)*

> *"The larger benefit is actually from me transmitting, so protecting others, but I understand there is some protection for me, but the most protection is me passing anything on to anyone else." (W6)*

> *"And also just simple things like every single Christmas for as long as I can remember, I'm always ill always have a cold […] they drag their poorly sorry [selves] out of their house to come and get their treatment that they want before Christmas, particularly because I do a lot of nails and things as well. And they will always give me a cold. And yet the last two Christmases I have been cold and flu and cough and chest infection free." (W3)*

> *"But I think it's not about the bad idea anyway, because for myself and my family, and we've noticed that we just don't have the general cold symptoms that we would normally get in winter. However, the mask on has like, protected us from those little things as well." (W1)*

Negatives of wear face coverings

There were a range of negatives of wearing face coverings identified by the Worker respondents, the most common of these were the masks making it difficult to communicate with others. Difficulties in communication was identified to be more pronounced when there was a service user or Worker who was deaf as the face covering removed the chance for lip reading. This was also stated as a problem in hair and beauty salons where there is increased noise from hairdryers and this therefore impacts on the amount that can be heard through a face covering and where usually lip reading would

facilitate communication for all. In some instances Workers respondents identified that where there is a deaf service user they would adapt and user a visor or pulling the mask down briefly so the service user could lip-read.

> *"Patients and customers don't see our full faces. So communication is reduced and rapport is reduced." (W13)*

> *"No, no, no, you're definitely making more effort talking. You're raising your voice and you're definitely trying to push it out there." (W18)*

> *"I am able to project so my customers can hear what I'm saying. If we've had anybody who's hard of hearing, I will take it off and I'll wear a visor so that they can lip read if they need to." (W5)*

Another negative mentioned by the majority of the Worker respondents was the impact on non-verbal communication and the face covering removing the ability to read facial expressions of service users and colleagues.

> *"It's a shame you lose facial expressions. Which when you're working in very close contact with people? No, I do think it's sometimes it's a lot more difficult to judge. You know exactly how they're feeling. particularly when you're doing something like say, a massage or foot massage, or reflexology?" (W3)*

> *"The, that's the experience of the client, between us as individuals as team members or people working together, you lost a lot of kind of a lot of the fun, fun stuff, you know, seeing peoples expressions and faces. The informal stuff, the raised eyebrows, the curl of a mouth to smile, all those sorts of things. People had to be more obvious about how they were feeling. You couldn't pick up on how they were feeling so much either. As a manager, you know, you're conscious of checking in with them. Yeah, you become you've definitely become disconnected." (W18)*

Other negatives identified by a few of the Worker respondents included; the face feeling hot when wearing a face covering, the financial costs of the face coverings, the comfort of wearing a face covering and the impact that face coverings can have on the skin.

A3.7 D7 INTENTIONS

Intention to wear a face covering

All of the Worker respondents identified that they would intend (ranging from might still wear to definitely still wear) to wear face coverings whilst working in a retail consulting room even if they were no longer mandated by Government or employers. Many of the respondents identified their reasoning for this focuses on the nature of their job involving seeing lots of service users during the day, close proximity to service users and therefore potentially exposing themselves to COVID-19 and also other viruses. As part of this protection it was also highlighted that this protects others including colleagues, service users and family.

> *"I'd still wear it. […] I think the breath one still has a thing for me. I want to wear it for that. But then also, I mean, […] I don't want to catch other people's colds or chest infections. So I mean, it's not just COVID that I want to be protected from. I mean, I see 15 people a day. God knows what they're bringing in. I'd rather not be ill, if I can avoid it." (W15)*

> *"I would choose to anyway, even if they didn't mandate it, because I just think it's safer. And I know, the new variants not as severe, but, you know, unless we all try and reduce the transmission of it is never going to go away." (W2)*

Another reason provided for the intention to wear face coverings even if they were not mandated was protecting the individuals from other particles and pollution in the air, such as nail dust in a beauty salon.

"Yes, absolutely. And for some of the treatments in particular, say I do quite a lot, a lot of nail treatments. And that does create quite a lot of nail dust. And even though I have I have an extraction system, and I did note, and I never, I sometimes used to wear a mask, but not always prior to the pandemic. I have noticed I don't get quite so many sore throats. And I think that was because I was inhaling the nail dust, so from a from a non covid point of view as well, it's I think, you know, it helps with my, my physical wellness as well." (W3)

A pharmacy Worker identified that they would see the continued use of face coverings being expected for them due to them working as health professionals.

"In a way, it depends on a number of aspects now, what's going to be expected in a healthcare setting, such as pharmacy, and I think the expectation will be to wear a face covering probably from healthcare professional." (W7)

Where Worker respondents identified that they probably would wear a face covering, but not definitely it was identified it could depend on the work being done and whether or not they are in close contact with anyone.

A3.8 D8 GOALS

Increasing likelihood of wearing a face covering

The majority of the Worker respondents identified that they would definitely wear a face covering in retail consulting rooms even if they were not mandated by the Government. A few of the respondents were asked what would increase the likelihood of Workers wearing face coverings if they were not mandated, there were varying results. This included; continued access to free PPE, Government advice, employer advice and case numbers in the local area. The behaviours of colleagues and customers were also mentioned, in two ways; firstly if they weren't wearing a mask the individual possibly would not either and secondly, if customers weren't wearing a face covering then the individual Worker would be more likely to wear a face covering for protection.

A3.9 D9 MEMORY, ATTENTION, DECISION PROCESSES

Changing a face covering

Of the Worker respondents that identified that they change their face covering during their working day, the majority described that this would be after their lunch break. Others also mentioned other frequencies of changing their face covering, for example; between service users/patients, between particular treatments (e.g. if examining someone's throat), if they coughed or sneezed in the mask or if the inside of the mask had become damp.

"So I change it per session. So, morning session, so that's, or if it's got damp inside, and I get rid of it. […] Whatever comes first damp, or if the morning session is finished, then I get rid, have lunch, put a new one on." (W12)

"I would probably change it at my lunch break. So I would just change it once in the day that would be then. It's just when I take off for lunch for an hour, and then when I'm finished lunch, I would put a new one back on, that's the only time I would ever really take it off." (W10)

"At least once at lunchtime. […] That was the government advice so we you know, we have we have one per shift. So we have a morning shift and you have an afternoon shift. And if you do both shifts you swap, or if you sneeze into it or similar and it gets moist and you need to change it?" (W13)

What helps to remember to wear a face covering

The Worker respondents were asked about what helps them to remember to wear a face covering in the workplace. The main response was that wearing a face covering is habit now and therefore it is just usual practice to wear one with some respondents identifying that is now part of their uniform.

"I think it's just become habitual now." (W9)

"No, it's just part of my uniform. Yeah, I go into work, I wash my hands. And I'll sort of hook my mask on ready for my client. And then you just set up for the day. So it has just become pretty much second nature." (W4)

Other reminders reported by Worker respondents included them wearing it all day and therefore once it is on then they don't need to remember, it is helpful having face coverings or signage by the door as they enter the workplace and seeing others wearing face coverings.

"It is on all the time when we're at work, so it's absolutely fine." (W13)

"The fact that they are when you enter and leave the premises. And there are signs up and everyone wears one? So do you tend to remember as you see somebody wearing one." (W10)

A3.10 D10 ENVIRONMENTAL CONTEXT AND RESOURCES

Supply of face coverings

When asked about the supply of face coverings in the workplace, the Workers identified that they have a plentiful supply. Of the respondents that identified where they source the face coverings, they mentioned the NHS online ordering portal, health board, from head office and Amazon. Frequencies of sourcing face coverings ranged from weekly to every 2 weeks with the majority identifying that they would order them as and when they are required. Overall, all the respondents identified that there are always enough face coverings available to allow them to be changed throughout the day, where appropriate, and for service users to access them if they have forgotten to bring theirs along.

"There's boxes open all over the place. Yeah. They're not difficult, you won't struggle to find one. […] Nobody's ever asked me how many ever used? I'll just use any. And when I need a new one, I have a new." (W5)

"No, there's no limit on how many you can have, we always have a stock of I think we try to keep 10 boxes of 100 in stock. When they drop down, there's couple of boxes we replenish. They come via our head office." (W8)

"They're all over, there is one in each test room, and there's one at the front for patients that come in and don't have a mask. They're all over, there's a box everywhere." (W15)

Environmental facilitators and barriers

Many of the work respondents identified that the work environment facilitates the wearing of face coverings due to there being a supply of them available (see section on supply of face coverings) and there being an expectation to wear them whilst in the workplace. Others also mentioned that the wearing of face coverings is facilitated by the workplace being persistent about the behaviour and there being rules in place to ensure they are worn.

"The biggest factor is that masks are easily and freely available to us." (W8)

"…it's availability, it's the fact that everybody else is doing it, it's the expectation that you should be wearing one." (W5)

Related to the sourcing and supply of face coverings, one of the respondents also identified that their workplace have sourced different face coverings to ensure comfort and therefore facilitating the use of the face coverings.

"Yeah, and I think the knowledge of the team as well, because we all care about each other and keeping each other safe and well, so therefore, we all want to look after each other. Our managers have always been supportive and making sure there are plenty of masks available

for us. And if we don't like the ones that have come in, then we've been sourcing an alternative type that are a bit more comfortable." (W11)

A3.11 D11 SOCIAL INFLUENCE

Some of the Worker respondents identified that social influences make it somewhat easier for them to wear a face covering within retail consulting environments. Those that felt influenced by others identified that these would include family, friends, colleagues, wider industry and clients/service users/patients. More generally, it was mentioned that some respondents are influenced by the behaviour and attitudes of everyone around them and that we have a social responsibility for one another.

"So I think it's just a general, overall social responsibility for one another." (W3)

A3.12 D12 EMOTION

Anxiety

Many of the Worker respondents identified that the wearing of face coverings within retail consulting rooms decreased their anxiety. Reasons for this included the feeling that a face covering increases protection for themselves as well as protecting those around them. Therefore, reducing their anxiety around transmitting COVID-19 to others (e.g. service users).

"I think it's great for anxiety, it's better to have the mask on because any anxiety I might feel about catching something or spreading something is greatly reduced when you've got a mask on, you just feel a lot safer." (W17)

"...because I have a lot of elderly clients, all of whom either have other comorbidities, or who are probably a little bit more vulnerable. My, my worry about catching COVID and transmitting it on to somebody who is more vulnerable. You know, that was that did cause us a huge amount of anxiety. Again, particularly more in the early days. So, the face covering made me feel just more responsible for them, like I was caring a little bit more for them." (W3)

"Okay, so I'm not generally an anxious person in the first place. So basically, my anxiety levels normally are pretty low to non-existent. […] I've got asthma so I'm pretty aware that if I caught COVID In the first waves of COVID, that that might have meant I'd be hospitalized. […] So knowing that there was some positive action you can take such as wearing a face mask […] that could reduce your risk, then reduces your anxiety level." (W8)

Mood

In the interviews, many of the Workers identified that the wearing of a face covering in retail consulting rooms has no impact on their mood. A couple of Workers identified that it impacts on their mood in a negative way due to them not being able to conduct a consultation in the way they would want, as the face covering impacts on the level of body language and non-verbal communication. Others identified that it lowers their mood due to the frustration they experience when wearing a face covering.

"My mood? Yes. Yes. Yes. I, I think because mainly because I'm not able to have the consultation that I want. i.e., lots of empathy, lots of body language, lots of sort of supportive eye contact with body language and mouth and expression. So, I find that I that is masked, and I think that's does affect my mood, because I'm unable to deliver the consultation the way I want to do it." (W6)

"Sometimes it gets on your nerves. So yeah, it can be a downer." (W13)

"It does lower your mood because I find from a health point of view, you become thirstier, because you're not getting as much moisture in your mouth. I found I sneeze a lot more,

because I think my nasal passages are obviously drying up. So, I think it does make you miserable. And you do get fed up with it. But you know, it's for the greater good. So, you just get on with it." (W11)

A3.13 D13 BEHAVIOURAL REGULATION

Ineffective practices

Half of the Worker respondents identified that they do not have any ineffective practices that they are aware of doing in relation to wearing a face covering. The most common ineffective practices identified by the other respondents included, not changing the face covering frequently enough, touching the face covering and hanging it on an ear. In terms of the frequency of changing the face covering, a couple of respondents were honest about their feelings of whether they change them enough or not.

"I don't change it. I'm going to be honest with you can't change it. Unless I've made a mess of it. Then then then No, I just won't just wear it all day and I think that's wrong." (W17)

"I guess I touched the facemask without noticing it. Because obviously, we all have that hand to mouth sort of habit. And it must feel a bit uncomfortable over your nose every now and then. So I'm fairly I do catch myself doing it occasionally." (W14)

"I take it off if I wanted to have a drink or, you know, carefully I'd hook it around my ear while I have a drink, but that's about it." (W5)

Practices could improve

Worker respondents were asked if there are any face covering practices they felt they could improve upon. The most commonly reported practices focused on the changing of face coverings and the wearing of face coverings, this focussed on not handling them correctly when donning and doffing and self-reported behaviours of not changing them frequently enough (e.g. after breaks, durations of time).

"…putting on and changing them […] Just sometimes we don't handle them as well as we should do" (W13)

"So at the moment, yeah, I take it off and it goes in my pocket. It needs to go in the bin and then I should use a new one when I come back in the building. So I suppose that needs to improve." (W7)

"I could probably improve on the amount of times I change them during the day. There's probably other times when I possibly should have changed it and I didn't." (W5)

"I'm a little bit unsure that if you take off, can you store it effectively, and then put it back on again, I just tend to dispose or put a new one on if I'm using the material one. So I could probably learn a little bit more about storing or how that's possible." (W9)

Selection of different types of face covering

The vast majority of Worker respondents reported wearing disposable face coverings (or surgical masks), a few identified they use type 2 R masks, one reported using an N95 mask and another used a re-usable cloth mask. In addition, one of the respondents that typically wears a disposable face covering (or surgical mask) reported that they use a face visor when they are working a service user who is deaf. There were also a few instances where Worker respondents identified that they wear two types of face coverings at the same time, examples included; wearing a face shield and a surgical/disposable mask, N95 and a reusable cloth mask, visor and a disposable/surgical mask. The reason for doubling the face coverings included it offering greater protection generally, but also when the Worker is conducting particular treatments/services (e.g. examining a throat).

"We have visors for deaf patients" (W15)

"…right in the beginning close contact services required a visor and a face mask. […] And then sometimes when, so when […] omicron appeared. And there was increased transmissibility […] because I didn't want to the risk of getting COVID I did start to wear my visor again for a short time. Just to, just for that extra layer of protection." (W3)

"And if I was examining someone's throat, then I would, where they take their mask off, then I'd wear visor as well" (W8)

Considerations within the retail consulting rooms

Many of the Worker respondents identified aspects of the retail consulting rooms that reinforce the need for face coverings to be worn to ensure the protection of Workers and service users against COVID-19. This included physical aspects of the room including; small size of the rooms (and therefore close proximity to service users) and a lack of ventilation in these spaces.

"So they do tend to be quite small rooms. And they one of the design features of them is for this private conversation. So they all tend to be quite soundproof so that their quite small rooms in the quite sort of like, hermetically sealed, there is zero air moving in the consultation room." (W16)

"And because the problem is with pharmacy consultations for all the ones that I've ever worked with, and we don't have any ventilation. But it's very rare that you have a window, anything you can open, or any air con inside. Obviously, if you leave the door open, then it sort of defeats the reason for that having a consultation is because you take them in there to be private, if you've got the door open, then it's not private." (W6)

APPENDIX 4: FINDINGS FROM PUBLIC INTERVIEWS

A4.1 D1 KNOWLEDGE

Why are face coverings recommended in consulting rooms?

The majority of Public respondents believed that face coverings are recommended within retail consulting rooms in order to prevent the spread of the COVID-19 virus, more commonly reported to protect others than to protect oneself. Some respondents made reference to the small space in which services were being delivered in close proximity by Workers whilst others acknowledged the physical barrier provided by a face covering to block infectious particles, particularly amongst individuals who may be asymptomatic. A small number of respondents also acknowledged their being frequent users of the consulting space without their being much provision of ventilation present.

> *"…it's an intimate space. And therefore you are in a closer proximity than you would be say, picking up a tin of baked beans in supermarkets."(P16)*
>
> *"…it protects the person providing the service or, you know, that I come into contact with, it protects them in case I'm asymptomatic, or, but also it protects me in case they are, you know, I think it's a two way thing." (P5)*
>
> *"It's a barrier between yourself and another person. How effective it is, I'm not sure, but, you know, it's, it's a cough bandage across your face. And hopefully, it's it's doing something to prevent interaction of bacteria and viruses. (P2)*

Current Government guidance

When asked about their knowledge of current government guidance surrounding the use of face coverings within retail consulting rooms, Public respondents generally acknowledged the imminent or recent change (dependent on the date of interview and country of participant residence) no longer mandating the use of face coverings in this setting. A small proportion of respondents reported being unsure of what was stipulated with current government guidance. The majority of Public respondents were aware of the recommendation to wear a face coverings when within indoor environments and/or and in close proximity to others, many of whom acknowledged that this was no longer legally mandated. Others acknowledged that continued use of face coverings was still actively encouraged or required by some retailers.

> *"They haven't been compulsory for a while, as far as I know. But it's suggested that you should wear face covering in all environments, Public environments indoors, I believe." (P15)*
>
> *"Within retail, you're requested, but it's not mandatory." (P12)*

Self-reported practices

Interview respondents were asked to talk thorough the steps they perform when donning/doffing, storing, and where applicable washing, drying and disposing of face coverings. Common themes in Public responses for each of these practices is summarised in turn below.

Donning/Doffing

Members of the Public most commonly made reference to holding face coverings by the ear loops/strings when donning or doffing their face covering, many of whom acknowledged trying not to touch the inside/outside of the covering. Respondents also commonly cited ensuring a good seal over the bridge of their nose or a close fit in general. Practices less frequently referred to (in relative order of prominence) included washing/sanitising their hands and ensuring mouth and/or nose is covered.

> *"I take it out of my pocket using the ear loops and puts it on with the ear loops, I don't touch the inside or the outside of the mask if I can help it." (P4)*
>
> *"I use the hoops, the bits at the side to put it on and bend the little wire thing over my nose, and then pull it down under my chin." (P3)*

Storage

Members of the Public interviewed most commonly cited soring face coverings within their handbag or pocket, within the next most prominent locations reported to be within a storage bag or inside their car (e.g. door pocket, glove compartment).

> *"I take it off and shove it in my handbag or my nearest pocket. I would probably, if I was out, and it went into my bag, and I needed it again, I'd probably get the same one out of my bag." (P9)*

> *"Take off with the ear things first. And then you know, obviously trying to avoid touching my face, put it in a, normally I have like a little ziploc bag, you know, sandwich bag or something." (P5)*

Washing and drying

Less than half of all Public respondents discussed their washing and drying practices concerning re-useable face coverings. Amongst these respondents, the majority said that they wash their face coverings in the washing machine, some reportedly washing with the rest of their laundry whilst others acknowledged taking specific precautions to washing coverings on a high temperature (e.g. 60 degree wash cycle) or with laundry cleansing products. Very few respondents commented in their practices for drying face coverings. Those that did reported placing them on the washing line, airier or radiator to dry.

> *"…just put them in with my normal washing darks and like, depending on the colour of the mask." (P9)*

> *"So they get washed at 60 degrees, and then they are air dried." (P2)*

> *"…these ones get washed, actually, with the clothes now because I actually use the Dettol laundry, antibacterial stuff that also now has an added COVID killer. Because that's obviously probably going to be true. But it just it means it's antibacterial." (P6)*

Disposal

The majority of Public respondents said that they dispose of their face coverings within a standard rubbish bin or with their usual household waste. A small number of respondents cited cutting the strings prior to disposing of the face covering, citing this to be better for the environment or so as to avoid wildlife becoming trapped in them. A small number of respondents also said that they continued to wear their face covering until returning home when it was then disposed of.

> *"I would keep my mask on when I'm out and about, if I've been shopping, I would keep the mask on when I come back in the house and unpack my shopping, and then put it in the bin after that." (P14)*

> *"I usually take off the little stringy bits on the ears and then I'll dispose of all of it just in a normal bin. […] apparently it's better for the environment that way." (P11)*

General population knowledge

Public respondents perceived a wide variety of gaps in knowledge concerning the use of face coverings. Most prominent amongst Public respondents were understanding the physical science and requests for use of simpler language in general (e.g. requests for the use of more familiar terminology 'face masks' as opposed to face coverings). Less frequently cited gaps in knowledge included making it easier to find good information, clearer distinction between effective and ineffective practices, clarity on how face coverings provide protection against viral transmission and fewer variations in current guidance (relative to devolved nations and changes over time on whether face coverings were legally mandated) to make it easier for people to know what is expected of them.

> *"…here wasn't a lot about the airborne transmission initially was that. So I think, you know, maybe people don't understand that." (P5)*

> *"I think generally, if there were more studies and more science around how masks protected you because as a nation, we are quite selfish." (P6)*

"I don't think there's been any clarity or proper explanation that like, say the government website, still talks about face coverings, it doesn't talk about masks." (P8)

"This nonsense with England, Wales, Scotland, Northern Ireland being all different. You know what happens when you nip over the border into somewhere you suddenly got to change the whole thing for them, keep it simple." (P16)

Over three quarters of Public respondents cited frustrations with other peoples behaviours concerning the use of face coverings in general, causing many to question whether these perceived poor practices were the result of knowledge gaps or conscious choice on the part of the wearer. Most commonly, members of the Public cited frustrations with other people only covering their mouths (and wearing the face covering underneath their nose), pulling the face covering down to rest it underneath their chin. In addition some cited frustration at others not wearing face coverings at all, in particular when in closed environments. A small number of Public respondents acknowledged that some individuals may be exempt from wearing a face covering (e.g. for medical reasons) however, they acknowledged feelings of frustration towards all persons not wearing face coverings either because they were not wearing a visible badge or lanyard informing others of their exemption or relative to their own continued usage practices, despite suffering physical or psychological ill-health that means they would be exempt.

"…people around me don't wear face masks correctly. I get so frustrated when they were under their nose." (P12)

"I definitely don't put it under my chin. That drives me bananas." (P10)

"…it does irritate me somewhat that other people don't wear them. However, I understand there are medical reasons why some people don't wear them […] you do feel for them, but personally, I found myself doing it, you think why aren't you wearing a mask?" (P3)

"I do get quite frustrated at the moment when I see members of the Public not wearing masks in enclosed environments, given all the guidance we've had previously and all, as far as I can tell all that very clear evidence that they work." (P1)

"I have had asthma in the past. And some people said, say, Oh, I can't breathe with a mask. But it's, it's no big deal." (P12)

A4.2 D2 SKILLS

Ease or difficulty of wearing a face covering

The majority of Public respondents identified the wearing of face coverings within retail consulting rooms to be easy. The main reasons cited for ease of use included not only needing to wear a face covering for relatively short periods of time, ease and simplicity of wearing a face covering, practices now having been long established since the start of the pandemic and hence now a habitual behaviour. A small number of Public respondents also reported feeling positive about the wearing of face coverings, and hence personally found it easy to continue wearing them.

"Sometimes it can be a little bit difficult to breathe, but I'm not in a mask all day. I think it would be different if I was in a mask all day, but I know it's only for a limited amount of time. And then I'm coming back out of that environment." (P2)

"Well, I don't really think you can get it very wrong […] it just sort of more or less becomes a habit after a while, you know, we've been so long doing this now." (P3)

"…it doesn't seem something that that's very hard, and a whole nation in Japan manages to do quite, quite effectively. So I'm not sure why we have so much trouble." (P6)

"I suppose it's my own perspective, my own perspective or experienced you know, my own belief that I want to wear it you know, to me that makes it easier for me." (P15)

A small number of Public participants made reference to their wearing of face coverings or facemasks prior to the COVID-19 pandemic, either as a requirement for their daily work or from living overseas where the use of face coverings was already commonplace. Hence these respondents reported the wearing of face covering to be easy for these reasons.

> *"I wear PPE in my day to day job. So wearing a mask is not something not alien to me." (P16)*

> *"I've lived in Japan where it's a bit more normalized […] And, you know, I've been a nail artist as well. So you always wear a mask, as there was nail dust." (P6)*

No substantial difficulties were identified to the wearing of face coverings amongst Public respondents, although some individuals identified that their glasses fogged over when wearing a face covering (discussed further within section 5.2.7.2).

Sources of guidance

Public respondents cited accessing variety of guidance to support them in wearing a face covering correctly. Government guidance was cited by approximately half of all interview respondents, followed by health agency sources (such as NHS guidance or World Health Organisation (WHO)) and published scientific research. Individual participants reported accessing industry guidance related to their profession or looking at guidance provided within courtiers further ahead in the Pandemic. Speaking about how this guidance had supported correct use of face coverings, Public respondents made reference to understanding recommended practices for performing, what was for them, a new behaviour at the start of the pandemic, understanding what to do as well as the relative benefit/impact of different practices (e.g. securing a good fit) and reflecting on personal practices in light of new evidence and evolving recommendations.

> *"They [health agency] were just quite explicit about it, they don't just tell you "you must wear this", they say "you should wear this, and the reason why its beneficial is because of the fibres within the mask that they help trap things. And it's important that it fits well." So they explained it." (P10)*

> *"…just at first, when we were asked to wear face masks, I just went on the site [Government guidance] and watched the video? And it's, it was useful, because people around me don't wear face masks correctly." (12)*

> *"…when it first came out, I wanted to find out what the scientific experts suggested we should do. So I should follow that." (P15)*

> *"…every time it changes, I tend to click on that just to remind me what I'm supposed to be doing this week." (P16)*

A4.3 D3 IDENTITY

Personal identity

None of the Public respondents believed that the wearing of face coverings had changed or impacted upon their personal identity.

A4.4 D4 CAPABILITY BELIEFS CONFIDENCE

Confidence in using a face covering

When asked about their confidence in using a face covering correctly within a retail consulting room, Public respondents generally said they felt somewhat or very confident in their capability. Respondents attributed this confidence to a variety of things. Most commonly respondents said that they could see and feel the close fit of their covering around their face. A small number of respondents made reference to the length of time they have now been wearing face coverings, said to make the practice feel more instinctive or reported feeling that their own practices reflect those recommended within guidance.

"…because there's three layers in the mask, I can feel it, or I can see it coming in and out as I'm breathing through. So I know if it's not moving, it's not working as well as it should be. Yeah, there's not as good a seal." (P1)

"Because I've read the guidelines. And I, I follow what it says." (P14)

Other reasons Public respondents felt confident I their own practices concerning face coverings, cited by isolated respondents, included: simplicity of their design believed to make it difficult to use incorrectly; working within a health related discipline; glasses fogging over seen to indicate when a face covering is being worn incorrectly; feeling as though they are doing the best they can.

A4.5 D5 CONSEQUENCE BELIEFS

Face covering effectiveness

One Public respondent reported that they do not wear face coverings within retail consulting environments because they believed them to be ineffective as a barrier to virus transmission. This individual felt as though face coverings (both reusable and disposable) offered little protection to the wearer and others around them.

"A surgical mask is a completely and utterly pointless piece of protection for the person that's wearing it, because it's not going to provide them with any protection from any airborne contaminants, or very minimal. […] A surgical mask is designed purely and simply to stop large droplets being emitted from somebody in a surgical environment into an open wound. […] surgical mask is, marginally better than the vast majority of cloth masks out there, which are entirely pointless." (P7)

All Public respondents who reported wearing face coverings within retail consulting rooms felt that they were either very or moderately effective. The most commonly cited reasons for participants holding this belief included: perceptions that the wearing of face coverings has contributed to a reduction in rates of the COVID-19 virus and/or other illnesses (e.g. cold, flue) either amongst interview respondents themselves or amongst the wider population; face coverings offering some form of protection and hence seen to be more effective than nothing; perceived quality of the face covering being worn; providing a barrier to airborne particles within a close contact environment; offering a level of protection in the event that someone may be unknowingly asymptomatic.

"I just think you better with them than without frankly." (P4)

"I think if you're wearing a proper face covering that fits well and has the right fibres in it to filter out the virus. You're safe, you know, you're protecting yourself." (P10)

"My understanding now is that most transmission comes from droplets from your nose or mouth, and if you're wearing the face covering that catches the droplets." (P14)

"…you could be asymptomatic or have not yet tested positive, either me or somebody else, and not be aware and if you've not got a face covering on you have a raised chance of passing it on to somebody else." (P2)

Other less common themes in Public perception related to the effectiveness of face coverings included: their being research evidence for their effectiveness; face coverings being one of a suite of protective measures that can be used in combination to reduce viral transmission; acknowledgement that retail consulting rooms and the premises in which they are located may be poorly ventilated and subsequently present increased risk of transmission, making the wearing of face coverings perceived to be all the more important.

"So I think in all of this, you know, I'm vaccinated I wear a mask, I, you know, socially distance as much as I can, I think all of these little things that we can do, then none of them are 100%." (P8)

Amongst those who perceived face coverings to be moderately effective, respondents mentioned the duration of time and proximity to others within the consulting room; movement of the face covering when speaking; and a tendency to touch or reposition coverings whilst they are in situ – all of which were perceived to impact effectiveness of face coverings. Others aknowledged wider factors that can contribute to transmission of the COVID19 virus, such as touching surfaces inside or outside of the retail consulting room or handling and storage of peoples coats whilst undergoing their consultation within the consulting room.

> *"…it did fleetingly cross my mind last time I was in the hairdresser that my coat was being taken and put in a cupboard beside somebody else's. And I don't know, you know, how careful they've been […] there's other aspects to it, it's not just the service and the person that you're taking service from. It's all the other interactions that go on around and about that." (P2)*

A small number of respondents also acknowledged how no measure is completely effective in preventing transmission of the COVID-19 virus.

Both Public respondents that believed face coverings to be ineffective reported that they do not wear a face covering when visiting retail consulting rooms.

A4.6 D6 REINFORCEMENT

Benefits of wearing face coverings

The most prominent benefit of wearing face covering within a retail consulting room (cited by two thirds of Public respondents) were protecting others and themselves, in broadly equal measure. The second most prominent benefit cited related to positive social judgement/acceptance from others (cited by approximately one third of Public respondents), although multiple respondents spoke of receiving negative social judgement or even abuse early on in the Pandemic, before the wearing of face coverings became an accepted common practice.

> *"I don't think they're 100% effective. But I think any little thing you can do to help stop the spread of it. You need to do for your own protection and others." (P3)*

> *"…for the people that are working in those consulting rooms, be a pharmacist, be a beautician, whoever it might be, […] I think it's as much on me to try and protect them as it is on them to try and protect me. And that's why I think that wearing the masks is the best way forward." (P4)*

> *"I actually started wearing them before it was mandatory to wear them. Which was an interesting experience because I felt incredibly self-conscious. […] I don't feel self-conscious anymore." (P9)*

> *"…if everyone's wearing them, who the hell cares? You know?" (P13)*

Other perceived benefits to wearing face coverings cited amongst small numbers of Public respondents included: reducing droplets dispelled into the air when individuals caught or sneeze; trapping airborne particles when breathing and speaking in close proximity to others; protection against general viruses and illnesses beyond COVID-19 (e.g. colds and flue); increased feelings of confidence and safety; avoidance of fines; and not having to wear makeup.

> *"…if I cough or sneeze or, you know, any kind of speaking, you know, and release any of the airborne virus pathogens, whatever, then it will protect everyone else, I think." (P5)*

> *"I mean, I can understand an optician, they're coming very close to you. […] in most situations, they're going to prefer you wear a mask aren't they. Only Natural because you are in very close proximity to each other." (P17)*

> *"I would say that it's underpinned by the fact that I've been wearing a face covering for the last, I don't know, 18 months, well maybe not that long, at least 12 months, and I've been lucky enough not to even get a cold, so." (P10)*

"…it may be better than it was, but it's not gone. So I am happier keeping that barrier there. It just makes me feel more confident when I go somewhere. Yeah, now I wear it purely and simply because it makes me feel happier and may feel safer." (P3)

Negatives of wear face coverings

Public respondents cited a range of negatives to wearing face coverings. The most commonly reported negative was regarding communication challenges. Participants specifically reported being unable to lip read as they would have prior to the CVID-19 pandemic in noisy environments, feeling as though their voice or the voice of those they are speaking to is muffled, loss of non-verbal communication and difficulty interpreting emotion. Whilst many respondents reported encountering communication challenges themselves, a number of respondents also speculated this to be a challenge faced by others, for example those hard of hearing.

"I didn't realize how much I was lip reading in noisy environments until it's taken away (P2) Some people mutter, as it is anyway. And when they mutter behind the mask, it's almost impossible. And I find that quite often I've gone sorry, can you say that again." (P3)

"Birmingham's very diverse multicultural, and I find it if I can't see the lips moving as well. Sometimes if there's a strong accent, it's slightly harder to hear people even though I'm not hard of hearing." (P9)

"…a few of my friends wear hearing aids, and they struggle with communication." (P12)

"…as a human being, we interact with other human beings in subtle ways. And when you have got a covering on your face, you lose a huge part of that visual interaction that you don't realize, although you hear people you can't, you can't see the subtleties in how they're pursing their lips, how the holding the jaw." (P16)

Some Public respondents reported feeling discomfort when wearing a face covering, specifically this included feeling hot, itchy and uncomfortable behind the ears - the later two being more commonly (though not exclusively) reported relative to use of disposable/surgical face coverings. In response to feelings of discomfort, a small number of respondents reported the use of adaptations to ease the discomfort experienced.

"…because I use the disposable ones, they're a bit scratchy, they're not particularly the most comfortable." (P3)

"And I've got psoriasis you see so anything behind my ears hurts. And those ones [disposable face coverings] irritate me from having to twist it to tighten it […] even though I do use natural cotton on the inside [of home-made face coverings] at some point, they start to get a bit itchy." (P6)

"I find with [disposable] face coverings is the material. You get the odd strand of cotton that tickles your nose or it gets up and goes near your eye. It's really annoying, even if it's a new one you just put on." (P15)

"I tend to get a bit sore round my ears. So I've got a I've got a little sheet of fabric with some buttons on the I loop the the end of the loops through so it pulls it a bit tighter. Yep, but also takes the pressure of my ears." (P1)

Other common negatives to the wearing of face coverings cited by Public respondents included:

- the environmental impact of their use – specifically, the volume of waste created by disposable face coverings, not being eco-friendly and concern for wildlife getting caught in them through improper disposal.

  "…one thing I am aware of, they're not very eco friendly." (P14)

  "I was gathering up carrier bags full of litter every time I went up to the reservoir in the morning. And a lot of that was masks." (P18)

- financial cost of purchase or cleaning face coverings – perceived more commonly to be a negative for others (rather than the something directly experienced as a negative by the respondent themselves), or indirect costs incurred by one participant who lost a hearing aid in the process of removing their face covering.

  > *"My daughter bought a box of masks at the local pharmacy. And it was shockingly expensive. Compared to what I was getting them for on Amazon. And, you know, if you're on benefits, you don't get free masks. That might have been a barrier for some people." (P14)*
  >
  > *"…one time I managed to lose my one of my hearing aids and it only cost me 3000 quid to get another lot." (P13)*

- Experiencing glasses fogging over.

  > *"…wear glasses and it is annoying. You put a mask on and you put your glasses on, you can't see for five minutes. It does steam up your glasses because it pushes the air straight up through your glasses." (P3)*
  >
  > *"…i'm a glasses wearer, its a bit a faff if your glasses mist up. But like it's not the end of the world. I don't think thats an excuse to not wear a mask which some people seem to think it is. But I don't." (P14)*

A4.7 D7 INTENTIONS

Intention to wear a face covering

Interview respondents were asked about their intention to wear a face coverings should they no longer be mandated (either by the government or retail premises themselves).

The vast majority of Public respondents said that they intend to continue wearing a face covering within retail consulting rooms, regardless of whether this were to be mandated. Some cited protecting themselves, other people or Workers specifically as the reason underpinning this intention, whilst others reported now making their own judgement based on the information available to them, rather than following instruction or copying other people's behaviour.

> *"If I was going to the chemist, I just in my mind, it's, it's just another shop, so I probably stopped doing that whereas. So I would wear one, I did wear one at the opticians when I went for my test, and then my hair and beauty, they both relaxed their rules now. So I've kind of gone with them. Like follow followed their lead on that." (P9)*
>
> *"…one of my manicurist said she's had COVID twice because of her occupation. So, Yeah, I'm just very aware of that. It's just not fair on the people working in the environments that they choose to work in." (P12)*
>
> *"…will still wear them in confined areas. I think rather than the government telling me what I should do, I've learned what I should do. […] because of my perceived additional safety to both me and people around me. That's why I will continue to wear face coverings next week." (P15)*

A very small number of Public respondents reported intention to change their current practices and no longer wear a face covering if they were no longer mandated. One such individual reported that they would follow the preference of the retail premises/Worker, continuing to wear a face covering where this was known to be preferable but no longer wearing one in premises where the use of face coverings is less commonplace.

> *"I did wear one at the opticians when I went for my test, and then my hair and beauty, they both relaxed their rules now. So I've kind of gone with them. Like follow followed their lead on that." (P9)*

Intention to visit retail consulting rooms

The vast majority of Public respondents asserted that they would still visit retail consulting rooms should the wearing of face coverings no longer be mandated (either by the government or retail premises themselves). A small proportion of Public respondents reported being selective over when and where they choose to visit, both at the time of the interview as well as being conscious of this looking ahead into the future.

> *"I also am a bit choosy about where I go. So if I went somewhere and, and they, and nobody was wearing a face mask, or nobody was, you know, was bothered, I think I might opt to go somewhere else." (P8)*

One respondent, who reported not wearing face coverings for reasons of heightened anxiety, described how they felt unwilling to visit retail consulting rooms or even medical settings at the time of interview due and hence was suffering considerable pain.

> *"I'd rather put up with the pain and the illnesses than be surrounded by people wearing masks." (P18)*

A4.8 D8 GOALS

Increasing likelihood of wearing a face covering

Given the majority of Public respondents stated that they 'definitely would wear' a face covering within retail consulting environments if it were not mandated, few participants were asked about what might increase their intentions in this regard during interview. That said, a small number of Public respondents stated that increased COVID-19 cases or hospitalisations, perceived cleanliness of the retail premises, other people not wearing face coverings and visual reminders within the retail premises would increase their likelihood of wearing a face covering in this circumstance.

> *"Increased numbers in COVID cases or increased hospitalization or just general cleanliness and luck of the retail place […] Yeah, like if I walked in and there was no one wearing face coverings, I'd be more inclined to put one on." (P11)*

> *"…some are still showing the 'please wear a faced mask' [poster] […] I was in a conversation with her [beauty therapist] and she said that she would like everyone to continue to wear them, but they can't insist on it." (P12)*

A4.9 D9 MEMORY, ATTENTION, DECISION PROCESSES

Changing a face covering

When asked about the frequency at which members of the Public change their face coverings, Public respondents cited varying durations raging from daily (most commonly cited), to every four hours and weekly (cited by isolated individuals). Some individuals made reference to wearing a face covering for relatively short periods of time in order to access retail consulting services and hence not feeling the need to concern themselves about the need to change their covering at particular intervals. More commonly however, Public respondents cited environmental, experiential and triggers that would prompt them to change their face covering, including visible soiling, amount of contact with others, level of moistness or discomfort experienced during use.

> *"So I feel that with a limited amount of contact I'm having with people in the building and the shorter period of time I'm wearing the cloth face mask. It's not getting a soil, shall we say? So I feel if I have a new clean one, at the start of each week. That's sufficient, in my opinion, anyway". (P1)*

> *"I'm never usually out that long. It's usually, to the beautician to dip my feet, she lives up the hill, it's literally an hour in the mask and then home. […] I'm fortunate that I'm not having to wear it all day. I go to the hairdresser and it's just a cut. So I'm not having to wear it long […]*

they're not being worn long enough for it to be a situation where I need to set a reminder on my phone or anything like that to change it." (P2)

A small number of Public respondents reported the frequency of changing their mask to be dependent on the situation/environment being visited. Generally, these individuals felt comfortable continuing to wear and face covering within retail consulting premises that had been donned to visit friends or family at home but not the other way around. Furthermore, some Public respondents reported that they would re-use a pre-worn face covering, a more commonly reported practice with disposable face coverings. In contrast, similar numbers of respondents specifically articulated that they would don a clean/fresh face covering each time and never reuse a disposable covering after removal.

"…if I'm going to see my sister, I put the mask on when I get to her house. […] after I've been to her house, I would just keep the mask on and pop around to the shop with the same mask, but I wouldn't go to the shop and then go into her house will out putting on a fresh mask.(P14) probably once every two weeks, I'll chuck them out. I'll probably wear like six, seven or eight times before." (P11)

"…once I've taken it off, I would never put the same one on, basically, I'm then touching or what might be on the outside of it, which I'm not particularly happy about. And I would rather put a clean one on." (P3)

What helps to remember to wear a face covering

Over half of all Public respondents interviewed reported the wearing of face coverings to now be habit or second nature, due to the duration of time they have now been wearing them since the start of the pandemic. One Public respondent however acknowledged the changing guidance with respect to when and where face coverings were required to be counter-productive relative to building consistent practices over time. Product placement was identified by many Public respondents as a common practice supporting maintenance of face covering use consistently over time, citing placement of clean face coverings by the front door or keeping a spare in their handbag, pocket or car to ensure their ready availability for use when needed.

"…it's an automatic thing. Protection is in my brain. I need to put the face covering on. (P15) It does take a while to get used to wearing it. But unfortunately, if we now kind of been very sporadic where we wear it, people won't be used to it." (P6)

"…it's just kind of habit. It's on the hook as you leave to door you pick it up. You put it on." (P2)

"…it's become a habit now. I mean, we've been doing this for two, two years, I guess. So. Yeah, it's part of going out now, make sure you've got your mask in your bag. And I always have the box in the car as well." (P8)

Just under half of all Public respondents reported to be already wearing their face covering prior to entering the retail premises where their close contact consultation would take place. This was acknowledged by some to remove the conscious requirement to don their face covering before entering the retail consulting room.

"I'm always wearing it when I go to go to the shops anyway […] So it's not even a conscious decision of having to wear it, you know, to don it before you're going in there. You're already wearing the mask." (P1)

"It's just automatic. The fact that I'm going into a building never mind a consulting room, triggers me taking it out of my pocket.(P15)"

"I would keep my mask on when I'm out and about, if I've been shopping, I would keep the mask on when I come back in the house and unpack my shopping, and then put it in the bin after that." (P14)

A4.10 D10 ENVIRONMENTAL CONTEXT AND RESOURCES

Environmental facilitators and barriers

Some Public respondents described the way in which the retail premises help to facilitate the wearing of face coverings amongst their consumers. Visual reminders in the form of signage and posters or verbal reminders by retail Workers were most commonly cited. Provisions to support the use of face coverings (either in the form of hand sanitiser or disposable face coverings), often placed by entrances and exits, were also acknowledged by multiple respondents. A small number of respondents acknowledged that these supportive provisions could be improved, with specific reference made to the sometimes poor visual cleanliness of these provisions or provision of facilities to enable prompt disposal of face coverings when exiting retail premises.

> *"There's always a mask sign saying please wear a mask. So I think it's quite easy for you to wear one." (P4)*

> *"I think a lot of them still have visual reminders some of them often offer free masks as you walk in as well sometimes like a gentle reminder from staff before you come in. (P11) here's also the hand sanitizer was outside the door, and inside the door, it would have been nice, had they had something outside a bin or something outside that you could have taken your face mask off and put it straight in the bin. But I haven't seen that anywhere." (P2)*

A4.11 D11 SOCIAL INFLUENCE

With respect to social influences on the wearing of face coverings, many Public respondents referred to the widespread normalised practice of wearing face coverings within other countries, such as Japan. Some people acknowledged that they themselves initially started wearing a face covering as this was a protective practice already being implemented within wider countries, considered to be further ahead within the pandemic. Others simply made comparative reference to face covering practices and acceptance outside of the UK and acknowledged the influence of wider social influences here.

> *"I actually started wearing them before it was mandatory to wear them. […] I just decided I would because other countries were." (P9)*

> *"…they do that [wear face coverings] in Japan and other countries. You know and they have done for years. […] I have a feeling it may not persist in the UK because Um, part of it is the government's approach that they, they seem hell bent, Freedom Day." (P14)*

Others reported that the wearing of face coverings amongst Workers within the retail premises to reinforce their own usage behaviour.

> *"So he's [hairdresser] in his mask, I'm in my mask, and you know that you're trying to keep each other safe." (P2)*

Some respondents were keen to emphasise that their wearing of face coverings reflected their own personal choice and risk perceptions. Conversely, some respondents reported supporting others to enable their the use of face coverings, for example through discussion of personal experience on social media, manufacture and provision of face coverings for others, or correcting others practices where these were perceived to be ineffective.

> *"I wouldn't say those people surrounding me affect my decision at all it's my decision." (P11)*
> *"I'm not swayed by what people think or say, we were told what the government guidelines were in the first place. I'm now doing it because I believe the situation to be that it adds protection in both directions." (P15)*

> *"So I helped people understand, definitely on my Facebook feed about the benefit of masks […] because people panic a lot when they put a mask on, and it doesn't actually, you know, it doesn't restrict your breathing […] So I helped a lot of and influenced a lot of people with*

different designs of masks to make sure they tried out the different ones to see which one actually worked for them." (P6)

"People around me don't wear face masks correctly. I get so frustrated when they wear them under their nose. And yeah, and sometimes in shops, I say to people, excuse me your face mask has slipped." (P12)

A4.12 D12 EMOTION

Anxiety

Some Public respondents did not believe the wearing of face coverings within retail consulting rooms had any impact on their level of anxiety surrounding the COVID-19 virus or their mood. Amongst those that did, respondents generally reported reduced levels of anxiety said to come from feeling safer themselves as a result of wearing a face covering when in close proximity to others. A small proportion of respondents conversely cited feelings of increased anxiety, either due to the elevated risk of transmission received relative to the size of the consulting room and close proximity to the Worker, or through concern over the accuracy of communication important during their consultation.

"It definitely lowers my anxiety if I feel that I'm protecting myself. You know, I feel that I'm doing everything that I can then I feel fine. That is reassuring." (P8)

"It just worries me at the moment, because of my age going out, you know, I'm 68. So going out. Sort of is a little, it does give me a little bit of anxiety going out somewhere where there are a lot of people. […] It is worrying. But it does help me to think, well I've got my face mask on, if you like it does make me feel a little bit safer than if I didn't have one on. […] like a little security blanket, I suppose." (P3)

"The main feeling of anxiety, especially with the pharmacist, was whether communication was as good? Okay, I'm trying to explain something very sensitive and important and I wanted to make sure the pharmacist understood exactly what I was saying. And if the face covering is preventing that happening, that was a concern." (P15)

One respondent specifically cited anxiety as the reason for them not wearing a face covering within retail consulting environments. This was said to encompass anxiety over having their face covered but also anxiety related o others covering their face around them.

"I was terrified of people with motorbike heads, with you know, covering their faces on motorbikes and their heads. And also I lived in a Muslim country and I was absolutely terrified of the people that were absolutely totally covered head to foot. I feel anxious if I have my face covered, because I don't like things touching me that I don't like the feel of. I like to wear clothes fairly loose and also I like to see people smiles, it's really hard to, you know, you just see people covered and it's really scary." (P18)

Mood

A small number of Public respondents described how the wearing of face coverings affects their mood, either positively or negatively but with equal prominence across the interviews. Positive impacts on mood related to being able to relax more and focus on the consultation in progress, or the absence of frustrations experienced if they or their consultant weren't wearing a face covering. Relative to the detrimental impact of wearing a face covering on mood, respondents cited the sensation of breathing difficulties when wearing a face covering and difficulty reading facial expressions that subsequently lowered their mood.

"…it's more that if I'm wearing it, and I know and the consultants wearing it. I'm not getting frustrated." (P1)

"I suppose it's just a little bit because I know, I'm going to find it hard to breath. And that makes me feel a bit down." (P5)

A4.13 D13 BEHAVIOURAL REGULATION

Ineffective practices

Very few members of the Public identified themselves to be performing practices which they considered to be ineffective. One respondent said that they move their face covering over on their face in response to their glasses steaming up. Another member of the Public described removing their face covering in order to sneeze, blow their nose or read something with their glasses on, although this individual did not acknowledge this to be an ineffective practice.

> *"…the only thing is my glasses when they get steamed up. Yeah. I'm having to sort of put that on the edge of my mouth." (P5)*

> *"Sometimes if I need to sneeze or blow my nose, I pull it down and put it back again straight away. Yeah. Or as I say, if I'm putting my glasses on to read a label in the shop, I'll take it down, put my glasses on, take my glasses off and put it back again." (P15)*

One Public respondent reported that they do not wear a face covering within retail consulting rooms because they believe them to be ineffective this was due to the very small particle size of infectious droplets that can carry COVID-19 virus, said to escape around the sides of a standard face covering. This individual also highlighted the perceived ineffectiveness of face coverings with exhalation valves, described to circumvent any filtering benefit of the covering materials as the wearer breaths out.

> *"…some masks have an exhalation valve […] So that means that the air comes out through an opening and isn't filtered. There are a large number of products that are available in the marketplace, which don't have exhalation valve, […] and that will filter the air that they're breathing out so that they're protected when they breathe in. They'll be not protecting others when they breathe out." (P7)*

Practices could improve

Respondents were asked whether there were any practices surrounding the use of face coverings that they could improve upon. Amongst the most commonly reported practices that Public respondents were aware of doing and felt could be improved included: storage of face coverings in between use and prior to disposal; re-use of pre-worn face coverings (explored further within section 5.2.10; hanging from one ear or pulling down below the mouth or nose in between uses.

> *"Storing definitely. [I'm] just sticking it in my jacket pocket and that goes in and out and if I change [coverings], it's still going in and out of the same jacket pocket which isn't cleaned." (P15)*

> *"I know I probably shouldn't put the ones back on that are in my handbag, you know, so yes, I know that. Ideally. You know, it's like blowing your nose, isn't it? Ideally, you blow your nose into a tissue once and then you dispose of it. But practically, that doesn't always happen.(P9) I do that, I have done that. You stick it under your chin or you dangle it off one ear." (P16)*

Selection of different types of face covering

Public respondents most commonly reported wearing disposable face coverings (or surgical masks) or reusable cloth coverings (in broadly equal proportions), with some citing use of both types of face coverings. A small number of respondents said that they wore FP2 masks and one individual reported wearing an N95 mask. None of the Public respondents reporting wearing a visor at the time of interview, although these were discussed by a small number of respondents. One person spoke about prior use of visors and acknowledged difficulties with them steaming up as the reason for no longer using them. Another discussed the use of visors amongst close friends with hearing difficulties who otherwise struggle with communication when wearing a mask, though the interview respondent themselves perceived them to be ineffective as a barrier to virus transmission. Another expressed frustration towards other people wearing a visor believing this to be an ineffective practice.

Speaking about their reasons for wearing specific types of face coverings, some Public respondents made reference to trying to wear high quality face covering perceived to afford them heightened protection. Others spoke about careful selection their coverings to ensure the fit won't trigger panic if in close contact with their mouth or with specific or with particular functionality (e.g. splash resistant) for use within their occupation. Some Public respondents felt as though disposable coverings offer greater protection than cloth coverings, whilst those using cloth coverings generally reported these to be more comfortable an ecological and therefore impacted upon individual usage choice.

> *"My confidence in the cloth mask, I think was massively diminished. Particularly when Omicron came in and everyone was like, you know, don't use the cloth masks. They're good, but they're not that good. So it's a step up and try and go medical grade, if you possibly can." (P4)*

> *"…i'm autistic, if I have something that's too like close by face, it kind of creates like an irrational panic. So these are based off the 3M Aurora masks because I wore those while I was volunteering and when I've done some painting, etc. But I find that that 3D pattern because it gives you a little bit more space around your mouth is much better. So I prefer these to the disposable type." (P6)*

Why would stop wearing

When asked what would make them stop wearing a face covering within a retail consulting environment, Public respondents most commonly described cases of transmission to be low within the community. Other triggers cited by multiple respondents, though less prominent included the health impact of the COVID-19 virus being much less severe and this no longer posing substantial risk to the vulnerable.

> *"I think I would have to know that the case levels are low in my area." (P8)*

> *"When COVID is no longer a threat to our communities and the vulnerable around about us." (P2)*

The PROTECT COVID-19 National Core Study on transmission and environment is a UK-wide research programme improving our understanding of how SARS-CoV-2 (the virus that causes COVID-19) is transmitted from person to person, and how this varies in different settings and environments. This improved understanding is enabling more effective measures to reduce transmission – saving lives and getting society back towards 'normal'.

Behavioral factors to effective use of face coverings within retail consulting environments. Findings from a literature review.

Published by the PROTECT COVID-19 National Core Study 2022