The perceived effects of facemasks on communication in Irish healthcare settings and possible compensatory strategies to overcome these effects.

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Background

The use of facemasks is key in the effort to prevent airborne transmission of the COVID-19 virus and continues to be mandatory in healthcare environments in many countries (Li et al., 2020). However, facemask use can have negative implications for social interaction and communication (Bani et al., 2021). Firstly, because the portion of the face below the eyes is not visible, mask wearing impairs the ability to reliably detect or express emotions via facial expressions. This serves as a barrier to social interaction which in turn affects communication. Secondly, information may be misinterpreted due to decreased speech intelligibility varies according to the degree of background noise and type of mask (Corey et al., 2020). There is also an extensive literature highlighting the contribution of visual speech cues for more accurate auditory detection of spoken language (Calvert & Campbell, 2003). Therefore, the loss of lip-reading cues due to facemasks also hinders effective communication.

Hypothesis:

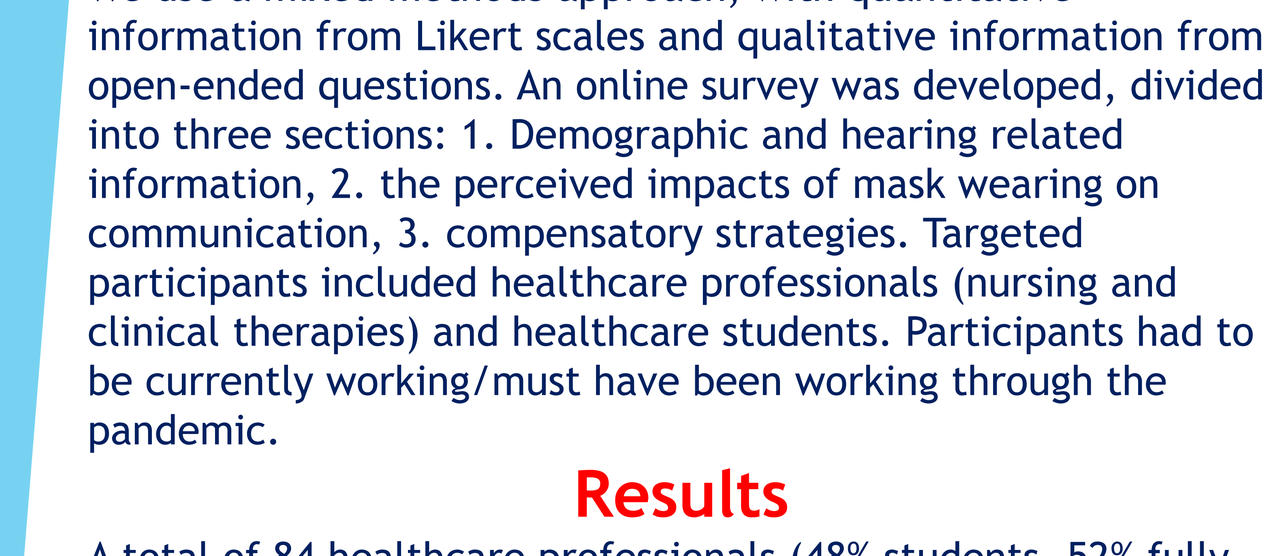
- Healthcare workers in Ireland will perceive mask wearing to have a negative impact on communication in the workplace.
- Healthcare workers in Ireland will perceive mask wearing to have a negative effect on building rapport with a patient/client.
- The impact of mask wearing on communication will vary according to client group.

Method

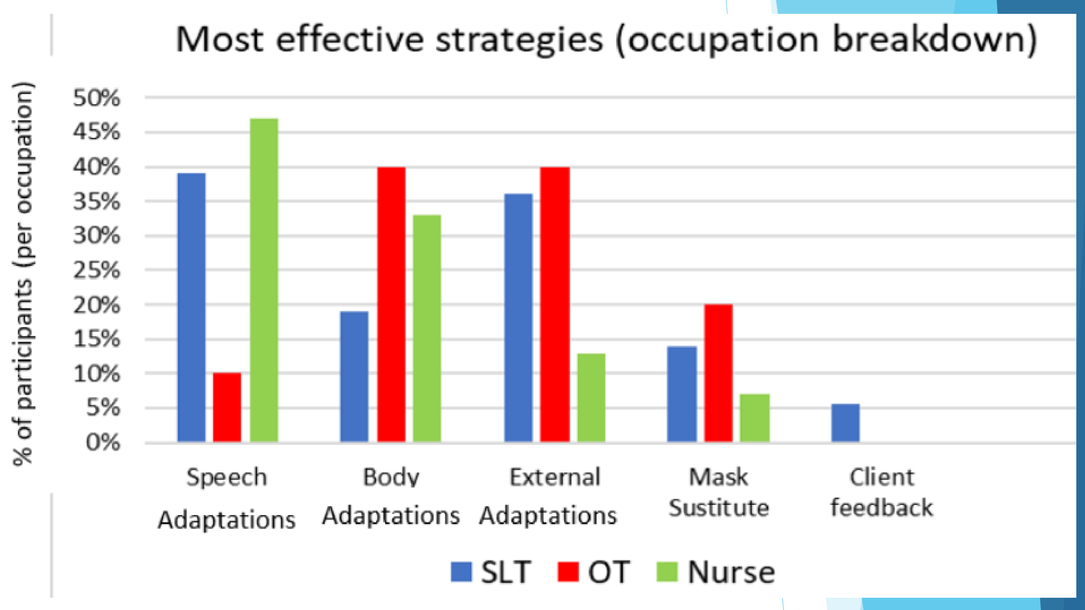
We use a mixed methods approach, with quantitative information from Likert scales and qualitative information from open-ended questions. An online survey was developed, divided into three sections: 1. Demographic and hearing related information, 2. the perceived impacts of mask wearing on communication, 3. compensatory strategies. Targeted participants included healthcare professionals (nursing and clinical therapies) and healthcare students. Participants had to be currently working/must have been working through the pandemic.

Results

A total of 84 healthcare professionals (48% students, 52% fully qualified professionals) completed the survey. Speech and Language Therapists (SLT) made up 54% of the total participants, with 27% nurses, 14% Occupational Therapists (OT), 5% psychologists and physiotherapists. The chart below highlights aspects of communication effected.



The survey found that communication is most impacted in geriatric populations, children, and those with additional needs. The majority of participants (69%) felt that the quality of service they provide is negatively impacted by facemasks. Healthcare professionals are currently using a variety of compensatory strategies to overcome these effects. Strategies include speech adaptations, body adaptations, external adaptations, mask substitution or removal and listening cues. The table below highlights which strategies were rated a 'most effective' by each occupation.



Discussion

Our results indicate that the impact of masks on communication in healthcare settings is considerable. All three hypotheses were supported: respondents reported that facemasks negatively impact how well they are understood, the accuracy of information exchange, their expression of emotion, their relationships with patients and the overall quality of service provided. The highest impacts were recorded for geriatric clients. Our findings are in accordance with literature reporting the negative effect of masks on speech production, speech recognition and emotion recognition (Grieco-Calub, 2021) and human connections (Broomfield and Clay (2022). As noted, the geriatric client group were described as having the most significant difficulty. Hearing impairment in this client group undoubtedly contributes to communication breakdown when masks are in use (Irish Society of Hearing Aid Audiologists, 2022). Participants suggested a wide variety of compensatory strategies, with some variation according to profession. We suggest that multidisciplinary training would equip HCPs with the most effective compensatory strategies across client groups.

References

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