

Dear XXXXXX,

Thank you for agreeing to take part in this Delphi study which will form part of my Ph.D research project. Your participation will be completely confidential and you will remain completely anonymous throughout this process. It is intended that the findings of this study will be submitted for publication.

My Ph.D project aims to explore the potential for language to aid in the early detection of MCI that progresses to dementia. As part of this process, I have identified a need for an smartphone application and associated protocol to aid in the collection of language samples. It is therefore the goal of this study to identify what the application might look like and the best way to collect the data. The results of this Delphi study will inform a pilot study that will test the protocol created by this study.

The following survey is stage 1 of a Delphi questionnaire. This is designed to obtain your personal opinions relating to the problem described above. The Delphi process involves obtaining responses from you on three separate occasions and we estimate that it should take no more than 30 minutes to respond at each stage:

Round One: Some general open ended questions will be submitted to you requiring your response. These are below for you to reply to now.

Round Two: Your answers (and those from the other panellists) from round 1 will be summarised and formulated into a series of more specific questions that you will be asked to respond to.

Round Three: Round Two's questions will be submitted to you again but this time you will also be able to see the average reply of the other panellists and you will then be asked if you would like to adjust your answer from the second round or not. The identity of all panelists will remain confidential at all times.

The 4 questions listed below are designed to seek your personal opinion. Please reply to each one but please do not feel limited in the length or style of your answers. A reply to these by email is fine.

1) It is estimated that between five and ten minutes of spontaneous speech would be an ideal balance between data quality and ease of providing a sample.

- (a) Do you agree with this? if not, please state why?
- (b) What task(s) do you think would be useful for eliciting an appropriate amount of speech?
- (c) How often should data be collected that will provide a balance between accurate tracking of language use over time whilst reducing intrusiveness?

2) The aim of the end application is to provide a way for users to provide multiple samples over a period of time, however as with all longitudinal data

collection methods will be subject to participant attrition.

- (a) In your opinion, how might this application encourage continued submissions of language samples?
- 3) The aim of creating this mobile application is to facilitate the ease in which a large number of samples can be collected?
  - (a) In your opinion, what problems do you foresee happening with this collection method?
  - (b) Are there any potential solutions to these problems that spring to mind?

Thanks in advance for your time,

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