

Project_Survey

Page 1: Participant Information Sheet and Consent Form

Educating autistic children with human emotions and sign language using deep learning

The purpose of the research is to enhance the communication skill of the autistic children and make their life better by educating them with human emotions and sign languages through deep learning techniques.

The research project is being conducted by Tessy Elsa Peter at Coventry University. You have been selected to take part in this questionnaire survey because you are one who knows better which all methodologies are suited to autistic children. Your participation in the survey is entirely voluntary, and you can opt out at any stage by closing and exiting the browser. If you are happy to take part, please answer the questions relating to the behavior of the autistic children and the functionalities you expect from my proposed system to improve their communication and life. Your answers will help us to implement appropriate functionalities and look and feel of the system. If you want more information about the project, please go to this [link](#). The survey should take approximately 10 minutes to complete.

Your answers will be treated confidentially and the information you provide will be kept anonymous in any research outputs/publications. Your data will be held securely in our university one drive account in the form of the excel data. All data will be deleted by May 30,2022.

The research was granted ethical approval by Coventry University's Research Ethics Committee P133488.

For further information, or if you have any queries, please contact the lead researcher or supervisor

Researcher

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If you have any concerns that cannot be resolved through the lead researcher, please contact ethics.uni@coventry.ac.uk.

Thank you for taking the time to participate in this survey. Your help is very much appreciated.

1. Please tick below to continue. * *Required*

- ☐ I have read and understood the above information.
- ☐ I understand that, because my answers will be fully anonymised, it will not be possible to withdraw them from the research once I have completed the survey.
- ☐ I confirm that I am aged 18 or over.
- ☐ I agree to take part in this questionnaire survey.

Page 2: Questionnaire

Section 1

2. What is the highest level of education you have completed?

- ☐ Some college coursework
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Advanced degree
- ☐ Other

2.a. If you selected Other, please specify:

3. Years of experience do you have in teaching profession?

- ☐ Less than 2 years
- ☐ 2-5 years
- ☐ 5-10 years
- ☐ More than 10 years

4. Years of experience have you had in teaching autistic children

- ☐ Less than 2 years
- ☐ 2-5 years

- ☐ 5-10 years
- ☐ More than 10 years

5. How long have you been teaching in this institution?

- ☐ Less than 2 years
- ☐ 2-5 years
- ☐ 5-10 years
- ☐ More than 10 years

6. Whether you have used any special software's like vizzle,Proloquo2Go etc. for teaching to make the classroom more positive and engaging? (Vizzle : Visual learning software for autism Proloquo2Go: Language development app)

- ☐ Yes
- ☐ No

Page 3: Section 2

As there are three categories of autism spectrum disorder(ASD), this research project mainly aims at level 2 autistic children. **Therefore all the below questions would be related to level 2 children.**

Three categories of autism:

- Level 1 ASD- Children in this category face some social challenges that require some support.
- Level 2 ASD- These children have difficulty understanding or using verbal and nonverbal communication, including facial expressions. They require substantial support than level 1 ASD.
- Level 3 ASD- Extremely sensitive and require much more support than other categories of ASD children.

7. Rank in the order of difficulty in interaction for level 2 autistic children in the following modes of communication

Please don't select more than 1 answer(s) per row.

	1 (Less Difficult)	2	3	4	5 (Very difficult)
Phone Calls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video Conference	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Everyday direct Human interaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social gathering	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Children with level 2 autism becomes more vulnerable in communication when they (Select all that apply)

☐ Meet strangers

- ☐ Meet somebody already known
- ☐ At school

9. When level2 autistic child verbally communicating in what all ways they are challenged (Select all that apply)

- ☐ Inhibition
- ☐ Increase in anxiety
- ☐ Delay in response
- ☐ Difficulty in understanding what others say to them
- ☐ Difficulty in using language effectively
- ☐ Difficulty in making eye contact

10. To what degree can level2 autistic children recognize human emotions?

- ☐ 80-100 %
- ☐ 60-79%
- ☐ 40-59%
- ☐ 20-39%
- ☐ 0-19%

11. Which emotion is most challenging for level2 autistic children?

- ☐ Anger
- ☐ Fear
- ☐ Happy
- ☐ Sad

☐ Disgust

12. Level 2 autistic children are strong visual learners of (Select all that apply)

- ☐ Video
- ☐ Emoji
- ☐ Hand-drawn pictures
- ☐ Visual Images

13. Rank in the order level2 autistic children's response to

Please don't select more than 1 answer(s) per row.

	1 (No response)	2	3 (Quick Response)
Visual Images	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hand-drawn images	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Video	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emoji	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Which age group is better for level 2 autistic children to introduce new mode of communication?

- ☐ 3-5
- ☐ 4-8
- ☐ 5-10
- ☐ 5-13

15. How helpful has it been to educate level 2 autistic children with sign language and emotion to enhance communication

- ☐ Not at all helpful
- ☐ Not very helpful
- ☐ Quite helpful
- ☐ Immensely helpful

16. Which mode of teaching would you prefer for level 2 autistic children?

- ☐ Visual – Using diagrams, pictures and symbols
- ☐ Auditory – Using vocal collaboration and discussion
- ☐ Kinesthetic – Using physical activities

17. Which mode of teaching would you personally like to carry out ?

- ☐ Visual
- ☐ Auditory
- ☐ Kinesthetic

18. Since women shows relatively stronger emotional expressivity than men, do you think handling and teaching autistic children are more suitable for women

- ☐ Yes
- ☐ No
- ☐ I don't know

19. Do you feel level 2 autistic children became more stressed due to covid-19 emergency related school-disruptions

- ☐ Yes
- ☐ No
- ☐ I don't know

20. Do you think level 2 autistic children became more used to their routine change in 2021 pandemic lockdown than those in previous year?

- ☐ Yes
- ☐ No
- ☐ I don't know

21. Is training for autistic children continued during covid-19 lockdown?

- ☐ Yes
- ☐ No

22. What extra measure taken during covid 19 lockdown to conduct interactive session with autistic children?

23. Do level2 autistic children become more concentrated with virtual learning than face to face teaching at school?

- ☐ Yes
- ☐ No
- ☐ I don't know

24. In which period do you think online apps helped level 2 autistic children more for skill development

- ☐ Always
- ☐ Pre-pandemic period
- ☐ During pandemic
- ☐ Post-pandemic period

25. Do you agree that showing emoji pictures while teaching can catch level 2 autistic children attention and eye contact?

- ☐ Definitely agree
- ☐ Slightly agree
- ☐ Slightly disagree
- ☐ Definitely disagree

26. How helpful to incorporate recording option to this research project prototype

- ☐ Not very helpful
- ☐ A bit helpful
- ☐ Quite helpful

☐ Extremely helpful

27. Which all options and functionalities do you expect from this research project?

28. What is your expectation about the look and feel of the system?

29. Do you think this project ideas is helpful not only to level 2 autistic children but also to their families, educational institutions, teachers etc.

- ☐ Yes
- ☐ No
- ☐ May be

30. Overall, how satisfied do you feel with this project idea?

31. Do you have any comments/suggestions?

Page 4: Final page

Thank you for filling the questionnaire

I really appreciate your effort and the time you devoted to filling the questionnaire.
