

Facilitating Communication with the Help of Technology

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According to research from the National Health Service (One of the four health care systems in the United Kingdom), 1 in 140 young children are affected by selective mutism. On the contrary, less than 1 in 5 Americans are aware or have heard of the term "selective mutism" throughout their lives according to the statistics from PR Newswire (A Cision company that is the global distributor through various multimedia). Selective mutism – severe anxiety disorder where a person is unable to speak at a specific moment– can significantly affect the way they communicate with others. Communication is crucial in a modern society like today, where every daily action requires some type of communication between one person to another. Selective mutism can have various reasons for its cause, and depending on how long a child has had it for, the interval of the recovery process of the disorder can also vary. It is challenging for children to recover from such disorders without the assistance they need. As not all children have the resources to obtain the help, selective mutism may remain incurable for ones that can't find a solution easily.

There have been efforts put in by organizations such as Selective Mutism Foundation Inc.- A non-profit organization that has put in effort to help patients with selective mutism, as well as to increase public awareness- have focused on aiding people with selective mutism to recover from their disorder, and have tried educating their careers. However, what these organizations neglect are the challenges of communicating while the patients are still recovering from the disorder. The incapability to communicate frustrates both the audience and the speaker, and finding a solution to this problem is the key to a more natural way of communication. A technology that could aid patients with selective mutism should be able to read their emotions without them having to say it in words. The Emotion Translator has been developed as a way for patients to express their six emotions even in an environment or situations where they can not freely talk. The Emotion Translator is a portable device that features a built-in camera that could readily read the facial expressions and the language of a person. According to Paul Ekman, an American psychologist and professor emeritus at University of San Francisco, explained that by looking at the person's facial expression, their emotions can be assumed. By analyzing the movements of the eyebrows, eyes, eyelids, lips, jaws, and the wrinkle on the face, the data can then be transported into the database, which would then match to its corresponding emotions. The key point to this apparatus is the capability of translating the simplest terms in communication. The ability to express their six basic emotions in any circumstance would be crucial. This would significantly soothe the patient, as they are aware they can communicate simple terms even in an uncomfortable environment, which could also facilitate the healing process. Furthermore, the Emotion Translator would be able to translate these emotions into different languages around the world, which also opens up more opportunities for patients with selective mutism.

I want to start an online campaign in California where there is an increase in awareness of selective mutism. I would first create an Instagram account to first spread awareness about selective mutism as well as create a small fundraiser to support the children that may struggle with selective mutism. Apart from the



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Instagram account, I would create a website to both increase the awareness of such disorders, as well as the effectiveness of the Emotion Translator in certain situations. By using these resources as a basis, I would then share this information with the clubs that I am currently enrolled in at UC Davis. With so many children affected in the modern days, such a disorder is mysterious to most of the population. The amount of frustration children has with selective mutism is unimaginable, and their pain is unrecognized around the globe. Selective mutism limits and thus degrades the quality of life for the patients. I would like to bring that quality of life back to these people where they wouldn't be limited due to the challenges of communication. I hope my campaign will alert more people, and eventually create a society where selective mutism, or mutism itself, wouldn't be a disorder that limits people's natural way of communication.