

# AGING SENSITIVITY TRAINING EFFECTS ON TELEMEDICINE COMMUNICATIVE BEHAVIORS

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## **Abstract**

Telemedicine is a form of healthcare that uses telecommunication and electronics such as virtual videoconferencing and remote patient monitoring technology to provide personalized care at a distance. With healthcare expenditures being 1/3 higher in the United States than any other country, and a growing aging population with a high volume of individuals needing both acute and chronic care located in rural communities, new technologies and processes are necessary to bridge the gap and decrease healthcare expenses. The rapid development of this technology requires qualitative investigation into the usability, efficiency, and operationalization of telemedicine systems, which can benefit designers and end-users needs.

Telemedicine is being driven by the need to increase efficiency, decrease cost, increase patient access and increase just-in-time care. Clinicians support the use of telemedicine practices because of the release of burden it can provide and the exploration of different modes of care. Patients support the uptake of telemedicine practices because it gives them access to specialists while decreasing travel and healthcare costs. To optimize the benefits of telemedicine technologies, a usable system must meet the needs of the patients and clinicians. However, questions remain around where clinicians are gaining adaptive capacity. Within this context, usability is defined as the level at which the specified users can achieve their goals effectively, efficiently, and satisfactorily with the usage of telemedicine technology. Thus, requiring the study of a user's experience and effort required to maximize on their adaptive capacity in telemedicine technology operation.

Our recent study revealed that clinicians have concerns about infrastructure integrity of telemedicine systems and patient acceptance of this provision of care. Telemedicine will likely alter clinician-patient interactions, therefore changing the real-time adaptive capacity of both patients and their caregivers. In addition, systems and technologies designed for telemedicine may create opportunities for 'garden path' thinking and disrupt the patients' ability to communicate problems. However, clinicians can overcome this potential 'garden path' problem and communication error by training with videoconferencing simulations that their future patients may utilize. Even the simulation of patient conditions such as age-related eye sight and hearing deficiencies can reveal flaws in the system design. Identification of these potential constraints can help prepare clinicians for the use of telemedicine systems now and in the future.

I believe attending the Young Talent Program would allow for improvements to be suggested and made to my proposed research study design. The goal of this research project is to strengthen the implementation efficacy and reduce errors in telemedicine consultations. Overall, this could help generate evidence-based recommendations and guidelines for system developers and end-users.