

Trust, Interoperability and Inclusion: A Framework for Creating Cyber-Trust in Connected Homes

Dr. Stephanie J. Blackmon, Associate Professor, William & Mary

Dr. D. E. Wittkower, Associate Professor & Chair, Department of
Philosophy and Religious Studies, ODU

Dr. Saikou Diallo, Research Associate Professor, ODU

Dr. Krzysztof Rechowicz, Research Assistant Professor, ODU



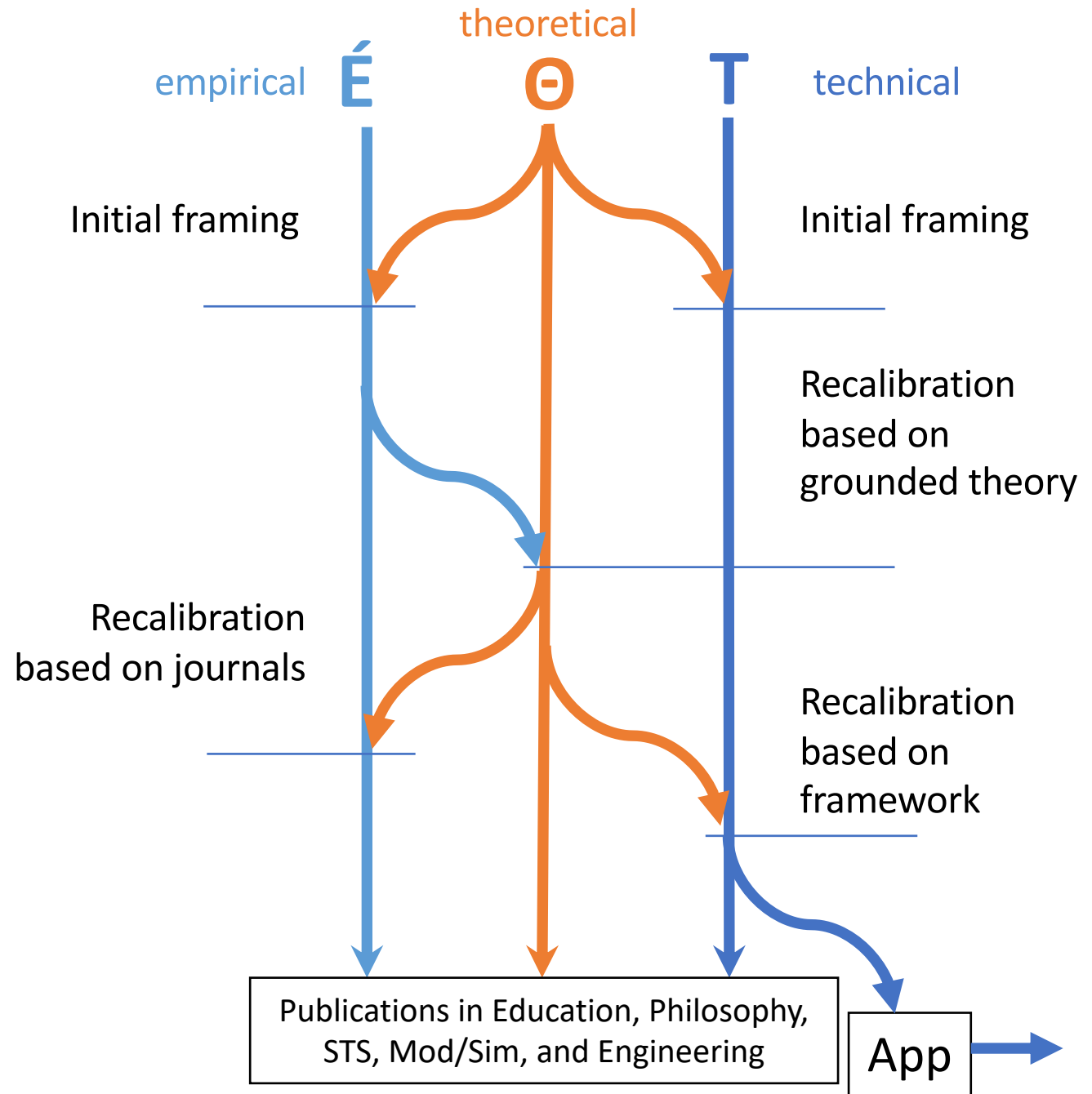
Study structure

We are conducting research on conditions creating trust or distrust in consumer IoT devices as experienced by users with disabilities.

The Empirical Thrust is guided by universal design (UD) and universal design learning (UDL) to focus inclusion and accessibility and will develop grounded theory on cybertrust through focus groups.

The Theoretical Thrust is guided by disability studies and feminist ethics of care, and will use postphenomenological methodology to develop a Trust Framework.

The Technical Thrust will develop an app that will present disabled users with an accessible interface to potential concerns with IoT devices automatically generated from ToS using a neural network trained in distant reading.



Data Collection Plan



Populations

Vision disabled

Autism

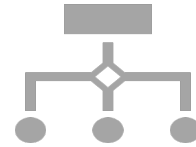
Cognitive disabled

Mobility disabled

PTSD

ADD/ADHD

Multiply disabled



Approach

Recruit people participants and collect data via a survey

Provide IoT device to those who do not have one or select people who already have a device

Conduct focus groups, collect journal entries, and conduct interviews (qualitative data) before moving on to quantitative data and completion of app development

Incorporate data into prior research to develop Trust Framework



Completed

Identify initial set of trust concerns in data use

Working with contacts for population community

Survey data being collected

Process for app development partially completed