INTERACTION WITH SOCIAL ICT: STUDY AMONG ELDERLY IN INDIA

A THESIS

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ABSTRACT

In today's world, elderly are the fastest growing population segment. In the past, management research scholars have not given enough importance to this age group owing to their non-significant proportion compared to other age groups. We find limited literature to understand the problems of elderly life and their solution. Below we outline two key reasons why it is vital to study elderly as a separate population segment. First, elderly are psychologically different, studies dedicated to other age group are not directly applicable to them. Second, contrary to other age groups, elderly are reluctant to adapt to new development or new environment.

Broadly, our study belongs to the subject of gerontechnology. "Gerontechnology is defined as the study of technology for ensuring good health, full social participation, and independent living throughout the lifespan, as long as it may extend" (Plaza, Martin, Martin, & Medrano, 2011). The main objective of our study is to understand the role of ICT in reducing the psychological problems of elderly.

We follow a mixed method approach to conduct our study. In the initial stage, we use a qualitative research methodology. With the help of a semi-structured interview, we elicited the information from selected elderly. Using content analysis of the interview transcripts we extracted the most relevant themes. The extracted themes helped to construct the conceptual research model that was used in quantitative analysis. Our research study consist of two quantitative research models; to explore how ICT use by elderly ends in positive socialization outcome and to find factors and mechanism that contribute to the technology resistance among elderly.

Our study is based on the three prominent theories of elderly i.e. the disengagement theory, the continuity theory, and the activity theory of aging. On the foundation of these three theories, a model is built considering Actor-Network Theory and Activity Theory. We conceptualized

moderated mediation model of construct Social Participation. In the model, ICT use (ICT) is the independent variable, Social Participation (SOP) is outcome variable, and the relationship of ICT to SOP is mediated by Social Isolation (SOI). Further, based on a neuroscientific study the relationship of ICT to SOP and SOP to SOI is hypothesized by the moderating variable "loneliness"; Analysis of the first model suggests that with the use of ICT, elderly develop a network that ultimately leads to their social participation resulting in their well-being.

The second study explores the salient factors contributing to the resistance to ICT by elderly. The second model is causal mechanism model of technology resistance. Resistance being a cognitive force, we considered cognitive theory such as Social Cognitive Theory (SCT) of Bandura in this part of our study. We found elderly resistance to new technology is deeply grounded in the past where hierarchical cognitive mechanism controls the resistance. Past and family and social support for elderly forms various perceptions on new technology leading to the resistance. The salient factors include perceived threat, perceived cost, and self-efficacy. A significant contribution of our study is about slicing of human cognitive mechanism in three distinct levels such as sources of perceptions, various perceptions, and resisting cognitive force. Whereas the previous studies have not used cognitive mechanism to explain resistance (H. W. Kim & Kankanhalli, 2009; Xue et al., 2015). Existing measurement scales are adopted, and modified to suit our context.

Our study contributes to the literature by exploring the agency of ICT and demonstrating its favorable outcome in a specific context. Further, the study examines human-technology interaction from human cognition point of view. To managers, our research shows an innovative mechanism by which they can understand their specific age group customers and customized their product and services accordingly.

Keywords

Elderly, Resistance to ICT; ICT enable socialization; Technology Anxiety, Loneliness, Content analysis,

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ANT	Actor-Network Theory
AT	Activity Theory
AVE	Average Variance Extracted
BT	Back Translation
CA	Content Analysis
CB-SEM	Covariance Based SEM
CFA	Confirmatory Factor Analysis
CIT	Collaborative and Iterative Translation
CMB	Common Method Bias
CMV	Common Method Variance
CR	Composite Reliability
CTA	Confirmatory Tetrad Analysis
DV	Dependent Variable
EIM	Equity Implementation Model
ETAM	Extended Technology Acceptance Model
FSS	Family and Social Support
ICT	Information and Communication Technology
IS	Information Systems
IT	Information Technology
IV	Independent Variable
LON	Loneliness
MDS	Minimum Data Set
MIS	Management Information Systems
PEOU	Perceived Ease of Use
PFC	Perceived Financial Cost
PKI	Past Knowledge Inertia
PLS	Partial Least Square
PLS-SEM	Partial Least Square SEM
PRT	Perceived Threat
RES	Resistance to ICT
SBT	Status-quo Bias Theory
SCT	Social Cognitive Theory
SEF	Self-Efficacy
SEM	Structural Equation Modeling
SOI	Social Isolation
SOP	Social Participation
STAM	Senior Technology Acceptance Model
UN	United Nations
WHO	World Health Organization