

Technology and Relationship Quality of Life in Later Adulthood

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“You are never too old to set another goal or to dream a new dream.”
~ C. S. Lewis

Method
Participants
 49 users and 10 non ICT users from northwestern Wisconsin senior center and assisted living facility
Research Design
 Non-random survey research
 Cross-sectional
 Purposive sampling design
Procedure
 Administered surveys to older adults (55 years and older) at two Wisconsin facilities
Data Analysis Plan
 Statistical Package for the Social Sciences (SPSS)
 Cross-tabulations, frequencies, mean-comparisons, and a reliability analysis: Cronbach's Alpha

Implications
Practitioners
 •Results would greatly benefit older adults when used by directors of senior facilities. Users and non-users who felt too old to learn would find enhanced quality of life when encouraged to engage in a creative and positive learning environment the use of ICT.
 •To possibly work through the self-imposed age barrier, lessons could be taught one-on-one or in small groups, and possibly peer-facilitated.
Future Research
 •If this survey were to be repeated, we would recommend asking questions about the relationship between individual living arrangements (living alone or with others in private residence; living alone or with others in a rural private residence; living alone or with partner in an assisted living facility) and the use of ICT to combat isolation.
 •In addition, pulling questions from the Geriatric Depression Scale (GDS) would give greater depth and understanding to the aspect of loneliness and isolation of older adults.
 •Future samples should be larger in size, random, and include more diversity in terms demographic variables such as gender, race, education, and income level with a more-equal distribution of male and females.
 •If this study were to be repeated, similar sample sizes of users and nonusers would allow for significance testing.
 •Adding qualitative interviews would assist in discovering the true lived experience of ICT use, to be able to clarify questions and responses.

Research Problem
 By the year 2030 it is predicted that 45 percent of the adult population in the United States will be over the age of 60. Increased emphasis on aging in place (older adults remaining in their home as they age) will lead to greater numbers of older adults living alone, which can promote social isolation and feelings of loneliness (Rebola & Jones, 2011).
Research Question
 What is the relationship between information/communication technology and quality of life in later adulthood
Hypothesis
 Based on current literature and Family Ecological Theory the researchers predicted older adult users of ICT would have better quality of life than older adult non-users.

Variables
Demographic Variables
 Age (Age) Gen (gender)
Independent Variable
 YNO (User / Non-User)
Dependent Variables
 TOL (I believe that I am too old to use ICT)
 FIP (I feel isolated from other people without using ICT)
 TWF (I use or would use ICT to stay in touch with family)
 STF (I use or would use ICT to stay in touch with friends.)
 SWC (I use or would use ICT to stay connect with society; world and community news)
 MFR (I would use ICT or use more frequently if I had more financial resources to purchase devices)
 ETU (I would use ICT or use more frequently if they were easier to use)
 AIC . I would use ICT if I had access to instructional classes.
 TTC I would use ICT or use more frequently if I had transportation to a location that had computers to use.
 UEP I use ICT or would use for entertainment purposes.
 FSP I use ICT or would use for shopping purposes.

Conclusion
 •Family Ecological theory demonstrates the importance of family in the life of an individual. Continued connection with family can be key in the quality of life of those in late adulthood; however, this is often difficult to maintain in today's highly mobile society.
 •The introduction of ICT to non-users as well as the stated benefits and enjoyment available with the use of ICT would improve the quality of life of the lonely and isolated individuals in late adulthood.
 •The family unit remains the backbone of a community. Continued connection within the family will promote greater quality of life for the members within the family as well as stronger, healthier communities.

Theoretical Framework
Family Ecological Theory
 •The Family Ecological Theory states that there are four basic systems of environment that influence individual development: the macrosystem, exosystem, mesosystem, and microsystem (Smith, Hamon, Ingoldsby, & Miller, 2009).
 •This theory would predict that the use of technology by older adults to stay connected to family and friends would alleviate feelings of isolation and loneliness.

Literature Review
 •Rebola and Jones (2011) stated that aging in place could ease future burden on the healthcare system and increase quality of life and independence in older adults; however, this can lead to loneliness and social isolation. These two significant factors can contribute to depression, decline, and early death.
 •Wang, Rau, and Salvendy (2011) observed the challenge to provide appropriate ICT (information and communication technologies) products for older adults. Common limitations of older adults, such as vision and hearing should be considered when designing technological devices.
 •Feist ,Parker, Howard, and Hugo (2010) examined the attitudes of technology use by older adults in rural Australia to stay connected to their community.
 •Arning and Ziefle (2008) examined the need for tools to assess computer proficiency in older adults. Instruments for young users of ICT were not applicable to older adult users.
 •Selwyn (2004) stated that use of ICT was reputed to be a requirement for living in the “information age”. The use of ICT will allow older adults to “reconnect or improve their connection with the outside world and enjoy a higher quality of life” (p.370).

Results Summary
 We predicted that users of ICT would report better quality of life than non-users of ICT. The variables that are associated with quality of life are: FIP, TWF, STF, and SWC.
 We found mixed support for our hypotheses with users responding at higher levels that they would use ICT to stay in touch with family (TWF) and also with friends (STF). In addition, non-users responded at higher levels that if they used ICT, they would be more connected with society (SWC). The responses between users and nonusers of ICT were similar for feeling isolated without using ICT (FIP).

Comparing Means

YNO	TOL	FIP	TWF	STF	SWC	MFR	ETU	AIC	TTC	UEP	FSP
User											
Mean	1.53	2.45	3.53	3.61	3.47	2.51	2.90	2.51	2.02	3.94	3.10
SD	1.04	1.31	1.57	1.62	1.57	1.34	1.37	1.28	1.21	1.28	1.62
Range	4.00	4.00	1.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Non-user											
Mean	2.60	2.40	2.80	2.60	4.50	2.60	4.00	2.90	2.40	2.10	2.60
SD	1.78	1.35	1.23	0.97	.59	1.71	0.94	0.74	1.35	0.88	1.71
Range	4.00	3.00	4.00	4.00	4.00	4.00	3.00	2.00	4.00	2.00	4.00