

## **INFORMATION AND COMMUNICATION TECHNOLOGIES AND THEIR EFFECTS ON THE ELDERLY.**

### **QUALITY OF LIFE AND SOLITUDE PERCEIVED IN INFORMAL CAREGIVERS OF OLDER PERSONS.**

#### **ABSTRACT**

The increase in the older adult population, increase in a proportionality way the deterioration at the physical-cognitive level, generating a situation of dependency and vulnerability in many individuals, for which reason one of the family members must assume the role of informal caregiver. Playing this role has certain implications that can directly affect quality of life and experience feelings of loneliness both emotionally and socially. As a result of the demand for constant attention and agile assistance in an emergency, ICTs through home telecare terminals, allow constant monitoring of the user, able to identify any type of emergency, giving greater autonomy to both people with dependency and those informal caregivers. This study aims to identify the relationship between quality of life and perceived loneliness in informal caregivers, determining the effects of those who use the ICT care service on those who do not. There was a sample of 10 informal caregivers of dependent people between grades 2 and 3, and they were evaluated using the Jon Gierveld Solitude Scale and the WHO-5 Quality of Life Questionnaire and the data has been analyzed using the U test of Mann-Whitney, in which no relevant results were identified that affirmed significant differences between the two groups.

- Keywords: Elderly, ICT, quality of life, loneliness, dependency, caregivers, well-being.

## **TECNOLOGÍAS DE LA INFORMACIÓN Y COMUNICACIÓN Y SUS EFECTOS EN PERSONAS MAYORES.**

### **CALIDAD DE VIDA Y SOLEDAD PERCIBIDA EN CUIDADORES INFORMALES DE PERSONAS MAYORES.**

#### **RESUMEN**

El incremento de la población adulta mayor, eleva de forma proporcional el deterioro a nivel físico-cognitivo, generando una situación de dependencia y vulnerabilidad en muchos individuos, por lo que uno de los integrantes familiares debe asumir el rol de cuidador informal. Desempeñar este rol conlleva ciertas implicaciones que pueden afectar directamente en la calidad de vida y experimentar sentimientos de soledad tanto a nivel emocional como social. Fruto de la demanda de una constante atención y asistencia ágil en caso de urgencia, las TICs por medio de los terminales de teleasistencia domiciliaria, permiten una monitorización constante del usuario, capaz de identificar cualquier tipo de emergencia, dotando de mayor autonomía tanto a las personas con dependencia como aquellos cuidadores informales. Por medio de este estudio se pretende identificar la relación entre la calidad de vida y soledad percibida en cuidadores informales, determinando los efectos de aquellos que utilizan el servicio de TICs asistenciales respecto a los que no. Se contó con una muestra de 10 cuidadores informales de personas con dependencia entre los grados 2 y 3, y fueron evaluados por medio de la Escala de Soledad De Jon Gierveld y el Cuestionario de Calidad de Vida WHO-5 y los datos analizados por medio de la prueba U de Mann-Whitney, donde no se identificaron resultados relevantes que afirmaran diferencias significativas entre ambos grupos.

- *Palabras clave: Personas mayores, TICS, calidad de vida, soledad, dependencia, cuidadores, bienestar.*

# ICTs AND ITS EFFECTS ON QUALITY OF LIFE AND PERCEIVED LONELINESS IN INFORMAL CAREGIVERS OF OLDER PERSONS

Jorge Crespo Bonet (Tutor: Antonio Caballer Miedes) TFG Psychology 2019-2020

## INTRODUCTION

The increase in the older adult population, increase in a proportionality way the deterioration at the physical-cognitive level, generating a situation of dependency and vulnerability in many individuals, for which reason one of the family members must assume the role of informal caregiver. Playing this role has certain implications that can directly affect quality of life and experience feelings of loneliness both emotionally and socially. As a result of the demand for constant attention and agile assistance in an emergency, ICTs through home telecare terminals, allow constant monitoring of the user, able to identify any type of emergency, giving greater autonomy to both people with dependency and those informal caregivers.

### Objectives

To evaluate the quality of life and perceived loneliness of informal carers of elderly in dependent situation, determining the effects of those who use the service of ICT assistance for those who do not.

**Hypothesis (1)** Quality of life  $G1 > G2$  **(2)** Perceived loneliness  $G1 < G2$

## METHOD

### Participants

Group	N	Caregiver's sex	Caregiver's age	Sex of the elder	Age of the elder
G1. ICT user	5	5 (women)	58,1	2 (women) 3 (men)	85,6
G2. No Us. ICT	5	5 (women)	58,8	3 (women) 2 (men)	86,2

### Instruments

**-Jon Gierveld's Loneliness Scale:** measures the concept of the experience of perceived loneliness based on its own model.

**-WHO-5 questionnaire:** published by WHO measures the concept of quality of life related to perceived health.

### Statistical analysis

Using statistical software (IBM SPSS Statistics v25) and the Mann-Whitney U nonparametric statistical model

## RESULTS

RANGES				
	Group	N	Average range	Rank sum
Quality of life	1	5	7,40	37,00
	2	5	3,60	18,00
	Total	10		
Perceived loneliness	1	5	5,70	28,50
	2	5	5,30	26,50
	Total	10		

TEST STATISTICS		
	Quality of life	Perceived loneliness
U de Mann-Whitney	3,000	11,500
W de Wilcoxon	18,000	26,500
Z	-2,034	-,215
Sig. asymptotic (bilateral)	,042	,830
Sig. exact (unilateral)	,056 <sup>b</sup>	,841 <sup>b</sup>

- **Quality of life** → ( $U = 3$ ;  $p = 0.056$ ) → The hypothesis of equality of averages is not rejected.

- **Perceived loneliness** → ( $U = 3$ ;  $p = 0.056$ ;  $p = 0.841$ ) → The hypothesis of equality of averages is not rejected.

P values are greater than 0.05, therefore we cannot reject the null hypotheses of equality of averages

## DISCUSSION

The results obtained did not confirm the hypotheses raised, so it cannot be affirmed that there are differences in quality of life and in the level of perceived loneliness between informal caregivers of both groups. The main reason why we believe that the differences between groups have not been significant is due to the sample size, which is very small.

We believe that the results should be seen as a provisional step forward, and we hope that it will serve as a basis for a future replication, with a broader sample, due to the originality of the subject matter of the study and being a field where we consider that there is still much to be explored.

## BIBLIOGRAPHIC REFERENCES

- Abellán García, A., Esparza Catalán, C., & Pérez Díaz, J. (1). Evolución y estructura de la población en situación de dependencia. *Cuadernos De Relaciones Laborales*, 29(1), 43-67
- Fernández, I. P., de la Escalera, D. R., Maestro, I. E., & Ramos, Ó. B. La irrupción de la movilidad. los proyectos de hospitalización a domicilio y teleasistencia. *Informes SEIS*, 7, 125-137.
- Fernández-Hermida, J.R., Fernández-Sandonis, J., & Fernández-Menéndez, M. (1990). Factores que influyen en la tolerancia familiar hacia los pacientes ancianos demenciados. *Psicothema*, 2, 25-35.
- Gil A.C., Herranz P., Calvo F.A., Fernández Hidalgo O., Santos M, Sierrasesúmaga L. et al. (1988). Síndrome terminal de enfermedad criterios y actitudes. *Revista Médica Universitaria de Navarra*, 32(2), 111-118
- Gutiérrez, A. (2016). Envejecimiento cerebral: ¿un proceso irreversible?. *Encuentros en la Biología*, 9(160), 165-174.
- IMSERSO (2005). *Cuidados a las personas mayores en los hogares españoles*. Madrid: IMSERSO.
- Instituto Superior de Estudios Sociales y Sociosanitarios. (2018, febrero 1). Recuperado de <https://www.isesinstituto.com/noticia/personas-dependientes-en-espana-cifras-y-datos>
- Papalia, D., Wendkos, S. & Duskin, R. (2004). *Desarrollo Humano*. México: Mc Graw Hill.