

SOCIAL RELATIONS, COGNITION AND TECHNOLOGY: THEIR ROLE IN DESIGNING A P2P PLATFORM FOR ELDERLY PEOPLE

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1. INTRODUCTION

Indicators of social isolation and cognitive decline pose health risks and reduce quality of life in elderly people. Studies with older ICT users found that social isolation problems that this population face on a daily basis could be reduced through the use of computer and online technologies (Kiel, 2005; Czaja & Schulz, 2006). Moreover, older people who used computers enjoyed better social interaction, (Heart & kalderon, 2011), and they maintain their cognitive capabilities (Kiel, 2005).

2. OBJECTIVE

In an attempt to fulfill these needs, the main objective of PeerAssist project, funded by the AAL Joint Programme, is to promote a P2P platform to provide an improvement in the communications and social support needs of senior citizens.

3. METHODS

Initially we applied to both Spanish and Greek elderly users, showing normal cognitive aging and were involved in different social activities in their own communities, a questionnaire divided in different domains, including: **family situation** ("objective" and perceive frequency of contact), **social relationships**,

leisure activities, **perceived health status**, **satisfaction with life**, **cognition** (WAIS's Digit Symbol Subtest and MAC-Q) and **motor abilities** (Gibson's Spiral Test), and **technological expertise** (including use of a computer and interest in talking to relatives or meeting new people via Internet).

4. RESULTS

Valid responses were collected for 20 participants in Gipuzkoa, Spain (8 men and 12 women, 57 to 78 years, average age=66.35; S.D.=6.53) and 18 in Athens, Greece (9 men and 11 women, 67 to 76 years, average age=71.70; S.D.=2.67). Firstly, **users who prefer to talk to others** (family, friends or others) via Internet show **better quality of social contacts** ($U= 418$; $p=0.03$) and **lower memory complains** ($U= 416$; $p=0.28$) measured by MAC-Q test. Secondly, the **participants who had used a computer** show a **greater cognitive** ($U= 45$; $p=0.00$) and **motor** ($U=314$; $p=0.02$) **performance** measured by Digit Symbol Subtest and Gibson's Spiral Test respectively. Regarding the use of the technology for the rest of the variables no significant difference were found.

5. CONCLUSION

Our results suggest that the use of Internet and social networks could improve the social interactions and quality of life of aging people and could help in the maintenance of their cognitive and motor performance.

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