SIforAGE: Deliverable D2.2

One Technology Experience Café organized in ITALY

The SIforAGE Consortium

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1. Executive Summary

SIforAGE -Social Innovation for Active and Healthy Ageing- project pursues to strengthen cooperation among the stakeholders working on active and healthy ageing. In this framework, the Work package 2 -Active participation of end-users in research activities- focuses on opening research activities to older people as final users and giving them the opportunity to directly speak with researchers and developers of assistive technologies. In particular through testing and giving their opinion about recent devices, solutions and products offered in the market for them.

The Technology Experience Café (TEC) in Italy (second for the SIforAGE Project) has been organized by the City of Turin in collaboration with many realities of the territory on the 5th and 26th of February 2014 at the "*Casa del Quartiere*" (House of the Borough). This experience reached good feeling, interest and participation both by the involved older people, local stakeholders and Project's Partners.

The first TEC was launched by CARINNA in France and gave the opportunity to try and evaluate five technology devices for an active and healthy ageing. Instead Turin tested the local e-government platform "Torino Facile" (Easy Turin) that offers services of payments, documents, free consulting and community.

Turin TEC wants to extend information for citizens on technological resources available in the territory and the analysis of accessibility and usability of public resources throughout Community intervention (fight digital divide and increment opportunities for socialization) for an Active and Healthy Ageing - AHA (brain training, reduction of cognitive decline, acquisition of new skills, easier daily life). In that sense, it also contributes to other objectives of SIforAGE such as inclusion and social policy in the field of AHA.

The technology presented was the e–government and services platform "Torino Facile" ("Easy Turin"), that allows registered users to access many services of the City such as certificates, payment of fines, booking of advices, connect to the free public wi-fi service of the City, and more.

Turin TEC gave 30 older citizens and interested stakeholders the opportunity to exchange points of view in the field of web technology and healthy ageing. The training has been given by the Web and Training Office of the Trade, Employment, Innovation and ICT Department of the City. The participants were supported by 3 tutors. Before and at the end of the experience it was submitted to the participants a questionnaire to understand and collect their opinion and suggestions about technological instruments. This work, done in collaboration with the University of Lisbon ISCTE will be useful for a comparative analysis of these results at European level.

The response of the participants was generally positive regarding both the experience proposed and with reference to the context and environment in which the trial was held. ICT Department has declared interest in knowing the TEC results also for deepening the qualitative elements; this in order to have an useful feedback to improve the platform's experience of use. They are also interested to evaluate the results of the other TECs and of the WP2 as a whole.

2. Introduction

Presentation of City of Turin - SFEP

City of Turin is involved in SIforAGE with its Lifelong Learning Education Service (SFEP) and with its Health Office. Both are part of Social Services Department.

The Department, in addition to its own institutional activities, managed in these years several initiatives, projects and actions aiming to fragile citizen's health promotion with a particular focus on older people through Health Office.

SFEP plans and manages activities of basic training and re-training for social professions, social, health and community education not included in university training courses; upgrading, training and researching for professionals operating in city services. It also analyzes needs with respect to the training of social professionals and develops researches on the processes of change related to the areas of competence.

Focus and motivation for the TEC

The City has decided to propose for the TEC of Turin the e–government platform "Torino Facile". The choice was made considering its role and the opportunities, and approved by the partners of the project.

"*Torino Facile*" is running from several years and constantly evolving; given the variety of services offered is likely to be a good test for evaluate how such technology can make life easier for people who usually use the same services at one or more physical branches.

It is a service created in collaboration with the Polytechnic and the Consortium for Information System (CSI Piemonte). It is offered by the City as a public service (CSI is the technical partner as the exclusive provider of ICT services for the Piedmont Public Administrations) and is not directly connected to the business world. However, until now it had never been brought directly to citizens with such marked characteristics: then results can be made available to CSI and other stakeholders in order to provide useful information in guiding future research and development to design more "age friendly" products. Given the specificity of the proposed service in the TEC, participants' selection was addressed to older people over 65 years old with a sufficient level of competence on the use of computers and the Internet. It was therefore chosen to recruit participants within different local realities already engaged in the provision of computer labs for older people.

Stakeholders' involvement

In organizing the event, it was decided to invite representatives from some significant organizations such as the Retired section of trade union and association in the field of social intervention to raise awareness on the project and also collect their contribution to the objectives of the TEC.

3. Event Objectives

General objective

According to general objective agreed in the Description of Work (DoW – official project description), the Turin TEC was organized in a pleasant environment that could help the older participants in testing the proposed technologies. The TEC was also attended by some of the developers and managers of the service so that they could have an immediate feedback on the effectiveness of the platform with respect to the particular target audience.
The Turin TEC tried to analyze the opinions and impressions of the elders involved and to offer them a possibility of direct contact with other stakeholders with different functions (researchers, developers, managers with responsibility for planning interventions ...) working in the field of ageing and of interventions and technologies dedicated to them. This opportunity enables stakeholders to get feedback directly, with respect to their activities, as part of an European project of scientific research.

Specific objectives

The specific objectives of the Turin TEC have been in relation with two macro areas: Active Healthy Ageing (brain training, reduction of cognitive decline, acquisition of new skills, easier daily life) and community intervention (fighting digital divide, increment of opportunities for socialization, intergenerational dialogue, empowerment security and support).

3.1 Target groups

Direct users: 30 individuals over 65 years old.
Indirect: stakeholders (organizations involved)

3.1.1 Direct Users

The TEC involved 30 participants in total, all direct users divided in two pre-selected groups: 15 with more technological skills and 15 with less technological skills. Overall, participants in the two groups were similar in demographic characteristics. They had similar age (M = 69.83; SD = 4.43), years of education (M = 11.77; SD = 3.84) and rated their overall health as mostly "good" (86% of all participants). All participants were born in Italy and were mostly retired from work (90%) and lived in their own house (96.7%) with their partner or spouse (73.3%). However, the two groups differed significantly in gender proportion. The number of male participants was significantly higher in the low technological skills group (F: 40%; M: 60%) than in the higher technological skills group (F: 86.7%; M: 13.3%)[1]. Also, in accordance to the sample selection, participants in the more technological skills group reported using more frequently the internet (M = 4.71; SD = 0.47) than participants in the low technological skills group (M = 4.00; SD = 1.20)[2].

3.1.2 Indirect Users

See 3.3.1

3.2 Technology

3.2.1 Selection rationale

TEC Turin is in particular addressed to the topic of E-Government and relations with older people with the intention to improve:

[1] χ^2 (1) = 5; p = .025
[2] t (27) = -2.09, p =.046

- Information for citizens on technological resources in the territory
- Analysis of accessibility and usability of public resources

3.2.2 Description of the technology

It is a development of a prototype born (1999 - 2000) with the Distinct project, promoted by the European Community. In Italy were involved the City of Turin, CSI Piemonte and Turin Polytechnic.
"*Torino Facile*" is the e-government portal in the city of Turin; it makes accessible the key services for citizens - from the release of personal certificates to complaints and claims, to the payment of taxes and fines - directly from their computer. Anyone can register, it is only needed a valid identity document and social security number. By registering you get a "digital identity" (User IDs, passwords and Personal Identification Number CIP), which allows access to all services.
In addition to the issuance of certificates of civil status registry it is possible to access to services in the context of taxes, fines, permits, appeals, zoning and private building practices professional consulting services.
"*Torino Facile*" also offers free connectivity through the wi-fi network that the municipality has made available in some public areas of the city. The portal also provides two web 2.0 services. The first allows users to create specific maps of the city and thematic paths, which are then saved in thematic areas and shared. For example, the map and the addresses of historical Turin, the FIAT plants or the city before Napoleon. There is also a social bookmarking service that allows registered users to mark pages of the site of the municipal administration considered helpful and interesting, with custom "tags" that will facilitate all subsequent research on the portal.

3.3 Involved stakeholders

3.3.1 Organizations involved

3.3.1.1 Name: Casa del Quartiere di San Salvario

Type: Not for profit Association

Role/reason for involvement: structure that hosted the event. It has meeting rooms, bar, restaurant and catering services. Was chosen as the location of the TEC as it represents a point of reference for the City District n. 8; is hosted at premises owned by the city and this has allowed to keep down the costs for the spaces. It also hosts numerous associations active and vital in the district and this has allowed to build a link between the SIforAge Project idea and the city area.

3.3.1.2 Name: SPI - CGIL

Type: trade union – retired workers section
Role/reason for involvement: organizes computer courses at various levels throughout the city and addressed to the older people. Gave an important collaboration in the selection of the older persons that will attend the TEC (with features given by the SIforAGE staff).

3.3.1.3 Name: Area Anziani - Circoscrizione 8 – Città di Torino

Type: City District older people service.
Role/reason for involvement: in addition to the management of the services for the older persons provided by the City, organizes computer courses for seniors. Gave an important collaboration both in the selection of the older persons that will attend the TEC (with features by the SIforAGE staff) and in tutoring during the trial.

3.3.1.4 Name: Servizio Passepartout – Città di Torino

Type: City Service.
Role/reason for involvement: provides mobility services and many other activities with citizens and Associations. Organizes also computer courses for seniors and disabled people. Gave an important collaboration both in the selection of the older persons that will attend the TEC (with features by the SIforAGE staff) and in tutoring during the trial.

3.3.1.5 Name: Sistemi Informativi - Città di Torino

Type: ICT Department - City of Turin.
Role/reason for involvement: it is the City Service that manages ICT issues and is the interface with CSI Piemonte. They were involved in TEC planning and design for what it concerns the contents of the training and for the provision of the two trainers that held the course.

3.3.2 Other stakeholders

3.3.2.1 Name: City Council and Committee

Type: local authority, political and executive representative bodies.
Role/reason for involvement: involve the city's political level in order to increase the visibility of the project and begin to provide new tools to decision-makers responsible for the definition and implementation of municipal policies for the older people.

3.3.2.2 Name: City District n. 8

Type: borough authority.
Role/reason for involvement: the City District is the point of union between the instances of the neighborhood and the City decision-makers.

3.3.2.3 Name: Seniores Council

Type: Second level association.
Role/reason for involvement: the council of seniors is a second-level association (association of associations) that represents instances of the older population of the city. Is an advisory body to the city council. Having regard to its structure, is the best connection between SIforAGE and associations active in the area. It also has active and important collaboration with the University of Turin.

3.3.2.4 Name: Torino Wireless

Type: Foundation for regional development.
Role/reason for involvement: Torino Wireless' Mission is to bring the Piedmont ICT companies along the way of innovation and competitiveness, to promote models of collaboration, knowledge transferring and cluster projects, and to establish the ICT District as an international hub of technology and innovation. It could represent a strong link between the Project and the ICT Companies of the area.

3.3.2.5 Name: SIforAGE partners

Type: Universities, Research and development Centres, Incubators.
Role/reason for involvement: Support and advice for the implementation of the TEC.

3.3.2.6 Name: Cross Project

Type: Cross – Citizen Reinforcing Open Smart Synergies (CIP 2007 – 2013, ICT-PSP-325141) funded by European Commission.
Role/reason for involvement: Project in which the City of Turin is partner. Liaison with SIforAGE for deepening the relations between older persons, healthy ageing and voluntary services.

4. TEC preparation activities

4.1 The Italian TEC in the frame of the Work Package 2

The TEC in Turin was organized taking into account the recommendations of the DoW, and the suggestions from the Project partners and the peculiarities of Turin that is a local authority, directly involved in the delivery of services to citizens, including those specific to the older people, and plugged into a network of public administrations engaged on the issue of the AHA.

The general objectives, the scientific method and the operating procedures have been shared with partners through teleconferences and especially during the WP2/WP8 meeting held in Copenhagen on the 23rd and 24th of May 2013. On these occasions, in particular, have been defined the issues related to size and composition of the target group (direct and indirect users), management of ethical issues and IPR, issues related to the user experience survey, dissemination. In the management of the organizational process of the TEC was also decisive the contribution in terms of experience of Carinna, as the organizer of TEC1. As already pointed out in its report (D 2.1), it is confirmed as "this experience will represent an important additional outcome of the SIforAGE project". As a result, it was decided that the TEC experiences obtained throughout organizing all four TECs will be collected in a Blueprint Document. Such document was created and maintained by the WP2 team in the project wiki. Also, the textual version of the document is maintained".

As for the TEC1 organised in France, the roles of the WP2 partners were as follows:

- COMMTORINO: organization of the event, general TEC2 design, contribution to the survey design, global reporting on the TEC2.

- DFKI: coordination of preparatory activities, design and maintenance of the Blueprint document and the deliverable template, contribution to the discussions and observing the event.

- INVESTORNET: key contribution to the TEC design from the business prospective, supporting the organizers in communication, providing expertise on IPR issues, etc.

- ISCTE: overall design of the survey and processing of the collected data, contribution to the event report concerning the TEC results.

- CARINNA: as a partner responsible for the TEC1 organization, provided contribution in terms of experience, comparative perspective, communication tools and the logo of the event.

- BCC: provided observations, coordination and information exchange with other activities in the project.

- Other WP2 participants: through the participation in the discussions and meetings all partners involved in WP2 contributed with their country-specific opinions and experiences. This contribution allowed, for instance, generalizing the TEC concept and providing Europe-wide relevant recommendations integrated in the Blueprint document.

4.2 List of documents developed for the TEC

4.2.1 By COMMTORINO

- Registration form (Annex D2.2_1)
- List of participants (Annex D2.2_2)
- Pre-questionnaire (Annex D2.2_3)
- Post-questionnaire (Annex D2.2_4)
- Informed consent form, authorization to process personal data and information sheet (Annex D2.2_5)
- Press release (Annex D2.2_6)
- Poster (Annex D2.2_7)
- TEC leaflet (Annex D2.2_8)
- Website article on the TEC

4.2.2 By ISCTE (with translation in Italian and pre-testing by COMMTORINO)

- Questionnaires:
    - Pre-questionnaire (to be filled in before the TEC, see Annex D2.2_3) also used for the Control Group composed by older people that are not participating in the TEC.
    - Post-questionnaire (to be filled in after the TEC, see Annex D2.2_4).

4.3 User involvement (direct users)

To identify an appropriate number of participants among the potential candidates, it was decided to ask the cooperation of various entities involved in training of older people on the issues of the use of computers and the Internet. Through their mediation was possible to easily identify 30 people willing to participate in the Technology Experience Cafè. Once identified, people have been contacted directly by the staff to give the necessary informations and confirm the attendance. Subsequently to each applicant was delivered the first questionnaire (annex 2.3).

4.4 Other stakeholders' involvement (indirect users)

The Project SIforAGE was presented in detail to the policy makers of the City, in particular the President and Council of the District 8 (district which hosted the TEC) and the Deputy Mayor of the City who also has the mandate to Social Policies. They then took part in the TEC introducing the work and highlighting the interest of the City with respect to the issue of active and healthy ageing.

The other stakeholders were contacted individually in relation to the interest that could have compared to the activities of the SIforAge project in general and in particular on the TEC.

To all has been provided materials explaining the project and the TEC; their presence during the two days allowed them to exchange opinions and creating contacts.

4.5 Publicity / Promotion

- Dissemination of leaflets
- Article published through websites and social media
- Press release

5. Event Organization

5.1 Event Structure

The event took place with 2 sessions in two different days. Each session, in each day, hosted 15 users.

- two groups of 15 older persons 65 + (with medium-high computer and web alphabetization)
- two sessions for each day (5th and 26th of February) – morning/afternoon)
- duration of 3,5 hours/session (3 effectives hours considering the breaks).

5.1.1 **Technology testing**

- each member had access to a work station with laptop technology for demonstration and testing of the service
- each user group has been led by a trainer (responsible for the city of "Torino Facile" service) and supported by 3 class tutors
- staff of the project introduced the TEC and picked up the first questionnaire (distributed and filled out in advance by each participant. See Annex D2.2_3). Subsequently, at the end of the two days were collected the post – questionnaire - see Annex D2.2_4)

Planning of the two-day event:

- 5th February 2014

Morning

9:00 – 9:30 am	Welcome of President of City District n.8 and local SIforAGE staff (including registration and consent form if not signed previously)
9:30 – 10:00 am	Presentation of Easy Turin service
10:00 – 10:45 am	Sign up to the system and print each personal card "Easy Turin"
10:45 – 11:15 am	Coffee break
11:15 – 11:30 am	Access to the personal page
11:30 – 12:15 pm	Demonstration of the functionality of four areas and testing with autonomous production of certificates
12:15 – 12:30 pm	Questions

Afternoon

14:00 – 14:30 pm	Welcome of the Council of City District n.8 and local SIforAGE staff (including registration and consent form if not signed previously)
14:30 – 15:00 pm	Presentation of Easy Turin service
15:00 – 15:45 pm	Sign up to the system and print each personal card "Easy Turin"
15:45 – 16:15 pm	Coffee break
16:15 – 16:30 pm	Access to the personal page
16:30 – 17:15 pm	Demonstration of the functionality of four areas and testing with autonomous production of certificates
17:15 – 17:30 pm	Questions

- 26th February 2014

Morning

9:00 – 9:30 am	Welcome of the SFEP Manager and local SIforAGE staff
9:30 – 10:30 am	Access to the personal page and discussion and resolution of problems incurred in "homework"
10:30 – 11:00 am	coffee break
11:00 – 12.15 pm	Exercises and testing with autonomous production of certificates and explication on how to generate a "virtual card"
12:15 – 12:30 pm	Questions

Afternoon

14:00 – 14:30 pm	Welcome of deputy mayor of the City of Turin and local SIforAGE staff
14:30 – 15:30 pm	Access to the personal page and discussion and resolution of problems incurred in "homework"
15.30 – 16:00 pm	coffee break
16:00 – 17:15 pm	Exercises and testing with autonomous production of certificates and explication on how to generate a "virtual card"
17:15 – 17:30	Questions

5.2 Ethical / IPR issues

The SIforAge Project was submitted to the Ethics Committee of the University of Turin, which approved it and has also validated documents giving the informations about the research and the sheet for the collection of the informed consent to be distributed to the participants. It was also prepared a statement in accordance with the requirements set forth by Italian law on the protection of personal data (Legislative Decree 196/2003). All the documents were distributed and explained to the participants before the beginning of the Technology Experience Cafè, then were collected after the signing by each participant (see Annex D2.2_5).

5.3 Infrastructure / Facilities

The TEC has been hosted in the "Casa del Quartiere di San Salvario".

16 computer stations were made available to participants with connection to Internet, network printer, projector and sound system.

3 rooms have been used for the organization of the TEC:

- the main room dedicated to accommodate the individual workstations testing of 15 users
- the other two rooms for the use of coffee breaks for meetings with and among stakeholders

Furthermore, the "*Casa del Quartiere*" had a bar-restaurant for any other needs of users, staff and stakeholders.

The atmosphere was older people – friendly with other available spaces, as the coffee shop, that during all the day are frequented by people of all the ages. In fact from 9am to 24pm the rooms are available and used by different local associations offering activities addressed to young and/or older people without distinction. One of the interested stakeholders that collaborated in the selection of older persons, use this location to organize computer training courses for older people. These elements were surely an advantage for the cooperation and sense of involvement and utility of participants.

Electricity, chairs, tables, wireless access were necessary and provided by the *Casa del Quartiere* over the two days. Folders containing blocknotes, SIforAGE and TEC brochures, pens, usb pens were delivered to all the participants.

5.4 Venue

The "*Casa del Quartiere of San Salvario*" has been chosen because of its specific characteristics. It is a public space, a laboratory for the development and realization of social and cultural activities which include associations, citizens, artists and musicians. It is an open and multicultural space, a forum for encounter and the exchange of activities between people. This public space is a project of laboratory of ideas, a "home for the neighbourhood" in transformation. It is located in a part of Turin with a lot of resources near to the Center and well connected with buses and metro.

The "*Casa del Quartiere of San Salvario*" was launched thanks to financing of Foundations and the co-partnership of the City of Turin for covering the costs of renovation of the building that had housed the former public baths in Via Morgari 14.

The SIforAGE Turin staff has proposed this venue also in consideration of its nature and of the facilities proposed for the meetings (internal cafeteria, garden, offices, roof garden).

6 User experience survey

6.1 Survey design

In order to evaluate the results of the TEC two types of strategies were used:

i) **Pre-post evaluation (n=30)**: to evaluate the efficacy of the TEC to influence attitudes and behaviours toward the use of technologies we used a pre-post design. All participants were asked to fill a questionnaire before (pre-questionnaire) and after (post-questionnaire) attending the TEC. The post questionnaire also included some questions addressing the reactions regarding the TEC. All of the participants answered both the pre and the post questionnaire. Our initial goal was also to include a control group. However, due to the limited number of participants that answered only the initial questionnaire (90 %), we decided to exclude this group from the analyses.

Also, it is important to emphasize that in the case of the Italian TEC there were two groups of users: more or less experienced with technology use. In all the analyses we controlled for the effect of this variable.

6.2 Questionnaires

We used a similar questionnaire as in the TEC1 in France. This questionnaire was created to evaluate attitudes and motivations regarding the use of technology.

The questionnaires were based on the **Technology Acceptance Model (TAM)** introduced by Davis (1986), which is one of the most widely accepted information technology (IT) models. This model theorizes that an individual's behaviour intention to use a system is determined by two beliefs:

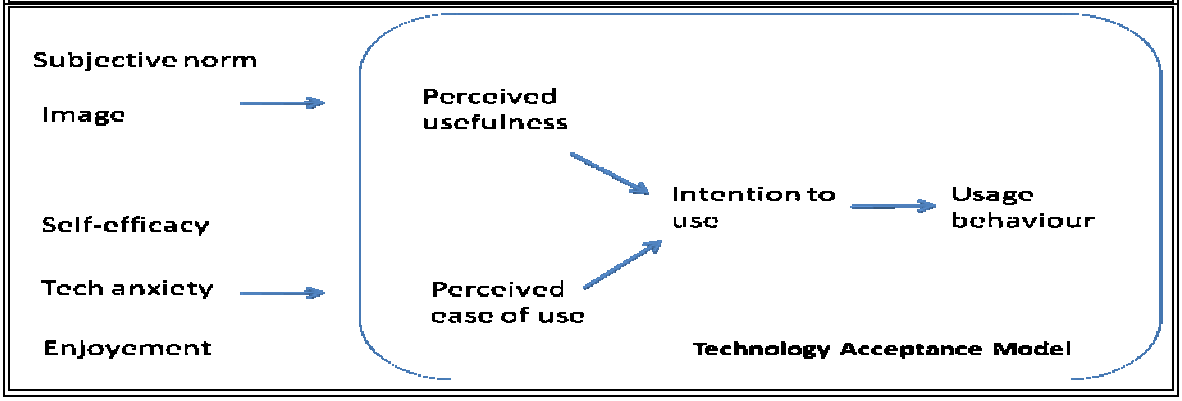
- perceived usefulness, defined as the extent to which a person believes that using the system will enhance his or her performance, and

- perceived ease of use, defined as the extent to which a person believes that using the system will be free of effort.

Recently TAM was theoretical extended by Venkatesh & Davis (2000), to explain perceived usefulness and usage intentions in terms of social influence and cognitive instrumental processes. TAM-2 includes additional key determinants of TAM's perceived usefulness and usage intention constructs, and to understand how the effects of these determinants change with increasing user experience over time with the target system. These authors have developed an instrument to measure these variables. Later, a **Modified version of TAM-2** was developed by Won et al. (2007) to evaluate the acceptance and characteristics of technologic products for the older users.

In this work, our goal was to use this instrument to measure usage intentions, exploring in particularly some of the key predictors of perceived usefulness and perceived ease of use (see Figure 1). Table 1 presents a brief definition of each factor included in this model.

Figure 1. Dimensions of the TAM2 model before and after the TEC (n = 30) (1 = strongly disagree; 7 = strongly agree)



Based on the literature review we also included a measure of the stereotypic perceptions of older people and use of technology since this is identified as one of the main barriers to technology use by this age group. In fact, there is a stereotypical view that older adults are technologically inadequate. What is particularly insidious is that the negative sloping of human potential represented by ageism may well form the image that older people themselves internalize (Chaffin & Harlow, 2005). For example, being too old to learn to use computers is a belief held by many older people, even before attempting to use computers (Timmermann, 1998, in Broady, 2010).

In fact, the manner in which older people are viewed and treated can impact upon their acceptance and utilization of technology (Broady, 2010). The negative self-beliefs held by the older students may well be ascribed not solely to their poor performances (Hawthorn, 2007), but also to the negative stereotypical views held by their tutors, as well as the fact that the tutors expected them to learn new skills not commensurate with their existing skills and knowledge more rapidly than they were capable of doing (Broady, 2010). In order to measure the impact of aging stereotypes we included some items measuring stereotype threat, stigma consciousness, stereotype content in general and specifically related with the use of technology by older people (see Table 1).

Finally, we also included some demographic questions and items evaluating previous experience with technological devices.

Table 1. Variables measured in the questionnaire – psychometric qualities

Variables		Source	Pre	Post
Previous experience with technologies	**Use of technologies** *refers to the frequency of use of use of technologies in daily life*	Original item	Q1.1.	Q1.1.
	Frequency of use of different types of technologies *(refers to the frequency of use of specific technologies in daily life)*	Adapted from Matlabi (2012); Hernandez-Encuentra et al. (2009); Patomella et al. (2011)	Q1.2.	Q1.2.

TAM2	**Intention to use technology/specific technology** ***expressed tendencies to use technologies in daily living***	Adapted from Venkatesh (2000); Venkatesh & Davies (2000); Wong et al. (2007)	Q2.1.1; Q2.2.2 r = .84**	Q2.1.1; Q2.2.2 r = .92**
	Ease of use of technologies/specific technology ***the extent in which the person believes that using the system will be free of effort***		Q2.1.3-Q2.1.5 α = .85	Q2.1.3-Q2.1.5 α = .83
	Useless of technology/specific technology ***the extent to which a person believes that using the system will enhance his or her performance***		Q2.1.6-Q2.1.8 α = .64	Q2.1.6-Q2.1.8 α = .84
	Subjective norm ***person's perception that most people who are important to him think that he should or should not perform the behaviour in question***		Q2.1.9-Q2.1.10 r = .80**	Q2.1.9-Q1.1.10 r = .83**
	Image ***the degree to which use of innovation is perceived to enhance one's status in one's social system***		Q2.1.11-Q2.1.12 r = .36*	Q2.1.11-Q2.1.12 r = .59*
	Self-efficacy ***one's beliefs about his/her ability to perform a certain task/job using technology***		Q2.1.13-Q2.1.15 α = .76	Q2.1.13-Q2.1.15 α = .68
	Technological anxiety ***individual's apprehension or even fear when he/she is faced with the possibility to use technologies***		Q2.16/Q2.1.20-Q2.1.22 α = .72	Q2.16/Q2.1.20-Q2.1.22 α = .76

	Enjoyment ***the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use***		Q2.1.17-Q2.1.19 α = .91	Q2.1.17-Q2.1.19 α = .90
Stereotypes of old age and technologies	**Stereotypic behaviours and technology** ***the degree in which certain behaviours are perceived to be typically associated with different age groups***	Swift, Abrams & Marques (2013)	Q3	Q3
	Stereotype threat ***anxiety or fear that one's performance could be affected by the stereotypic expectancies regarding one's age group***	Marx & Goff (2005)	Q41-Q4.4 α = .83	Q41-Q4.4 α = .92
	Stigma consciousness ***awareness of the negative representations associated with the age group***	Brown & Pinnel (2003)	Q4.5-Q4.7 α = .61	Q4.5-Q4.7 α = .65
	Stereotype content model ***the degree in which older people are typically perceived to be competent or warm***	Fiske et al. (2002)	Q5	Q5
	Identification with old age ***the degree in which individual's believe that they belong to the age group and that this is important for their self-concept***	Abrams et al. (2006)	Q6 α = .54	Q6 α = .84
Reactions to the TEC	**Reactions to the TEC** ***opinion regarding the TEC experience***	Adapted from Velada (2009)	-	Q7
Demographics	**Age, gender, place of living, people living with, work and leisure, education, habit to fill questionnaires**	Original items	-	-

6.3. TEC feedback

6.3.1. Previous experience with technology

6.3.1.1. Use of technology

100% of the participants in the TEC stated that use technological devices in their daily living in the pre and post questionnaire.

6.3.1.2. Types of devices used

Table 2 presents a list of the technological devices TEC users referred to use in their daily living. Participants use in a regular basis different types of home appliances such as the remote control, TV, microwave and the dishwasher. It is also important that participants in the TEC also referred a frequent use of the desktop computer, the internet and the mobile phone.

There were no significant differences between the use of these devices before and after participation in the TEC for none of the two groups.

Table 2. Frequency of use of different type of devices regularly used by TEC users (n = 15) (1 = never; 2 = a few times during the year; 3 = once a month; 4 = every week; 5 = everyday) – less technological skills

Types of devices used	Before TEC			
			95% CI	
	M	SD	IL	SL
Remote control	5.00	0.00	5.00	5.00
TV	5.00	0.00	5.00	5.00
Microwave	3.00	1.95	1.61	4.39
Mobile phone	4.70	0.95	4.02	5.38
Dishwasher	2.10	1.79	0.82	3.38
Internet	3.80	1.40	2.80	4.80
Desktop computer	3.50	1.50	2.42	4.58
Laptop	3.00	2.10	1.49	4.51
Coffee maker	2.40	1.84	1.09	3.71
CD	2.20	0.79	1.64	2.76
Digital camera	2.20	1.22	1.32	3.08
Other	3.40	2.19	0.68	6.12
GPS	1.50	0.85	0.89	2.11
DVD	1.90	0.99	1.19	2.61

Assisted health devices	3.20	1.69	1.99	4.41
Emergency call systems	1.10	0.32	0.87	1.33

Note: M : Mean; SD: Standard deviation; CI: confidence interval; IL: inferior limit; SL: superior limit

Table 3. Frequency of use of different type of devices regularly used by TEC users (n = 15) (1 = never; 2 = a few times during the year; 3 = once a month; 4 = every week; 5 = everyday) – more technological skills

Types of devices used	Before TEC			
			95% CI	
	M	SD	IL	SL
Remote control	5.00	0.00	5.00	0.00
TV	5.00	0.00	5.00	5.00
Microwave	2.67	1.86	0.61	4.72
Mobile phone	5.00	0.00	5.00	0.00
Dishwasher	2.67	1.86	0.71	4.62
Internet	4.67	0.52	4.12	5.21
Desktop computer	4.50	0.55	3.93	5.07
Laptop	2.33	1.75	0.50	4.17
Coffee maker	1.00	0.00	1.00	1.00
CD	2.17	1.33	0.77	3.56
Digital camera	3.00	0.63	2.34	3.66
Other	2.38	1.92	0.77	3.98
GPS	1.33	0.52	0.79	1.88
DVD	2.33	0.82	1.48	3.19
Assisted health devices	2.50	1.23	1.21	3.79
Emergency call systems	1.00	0.00	1.00	1.00

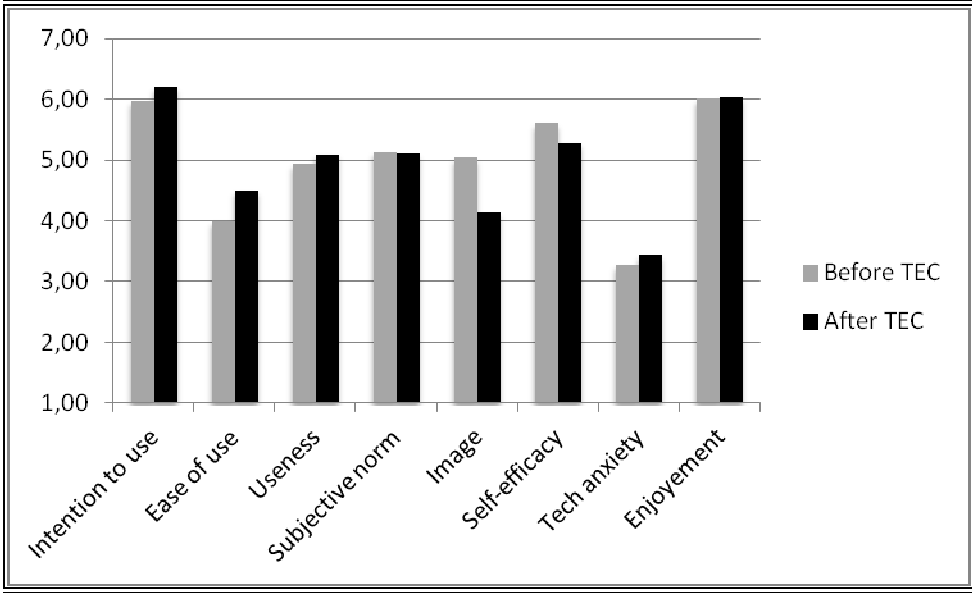
Note: M : Mean; SD: Standard deviation; CI: confidence interval; IL: inferior limit; SL: superior limit

6.3.2. TAM2

6.3.2.1. Pre-post comparison

A 2 (Between participants factor "level of proficiency with technologies": high or low) x 2 (Within participants factor "moment": before and after the TEC) Mixed ANOVA was performed with the TAM2 model dimensions as dependent variables. (Figure 1). Overall, we did not find any significant change in TAM2 perceptions in neither of the groups. The only exception was regarding the factor "image" where participants in the low technological skills condition decreased their "image" of technology as a possibility to increase the perceived status of the group[3].

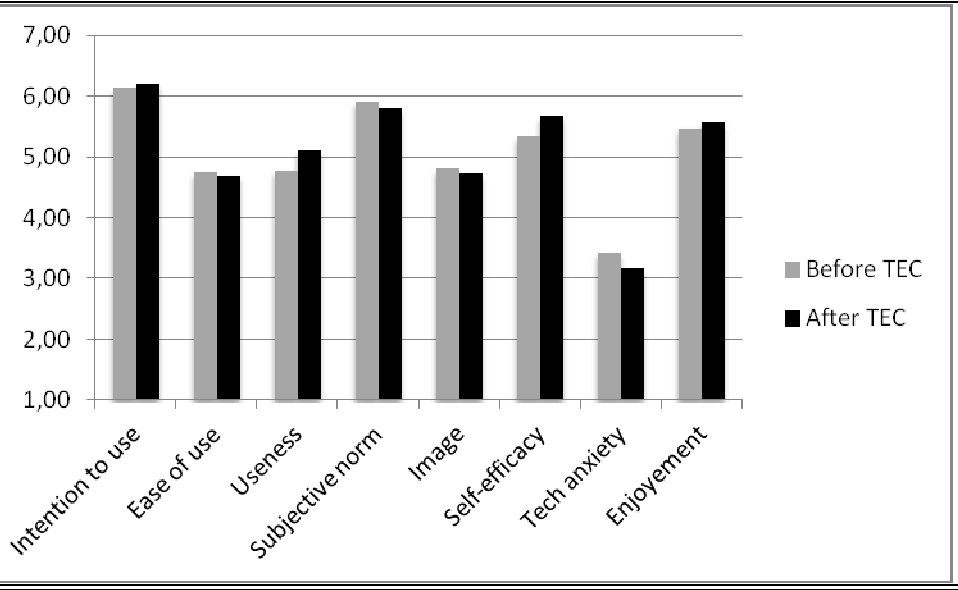
Figure 2. Dimensions of the TAM2 model before and after the TEC (n = 15) (1 = strongly disagree; 7 = strongly agree) – less technological skills



Note: * < .05 (one-tailed)

Figure 2. Dimensions of the TAM2 model before and after the TEC (n = 15) (1 = strongly disagree; 7 = strongly agree) – more technological skills

[3] $F(1, 26) = 4{,}71$, $p = .039$, $\eta^2_p = .15$



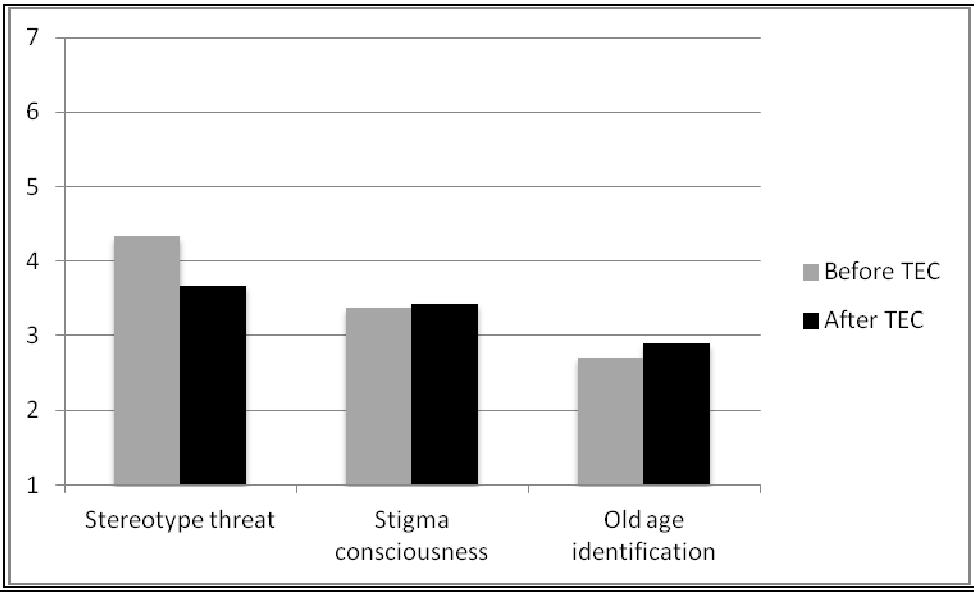
Note: * < .05 (one-tailed)

6.3.3. Stereotypes of old age and technologies

6.3.2.1. Pre-post comparison

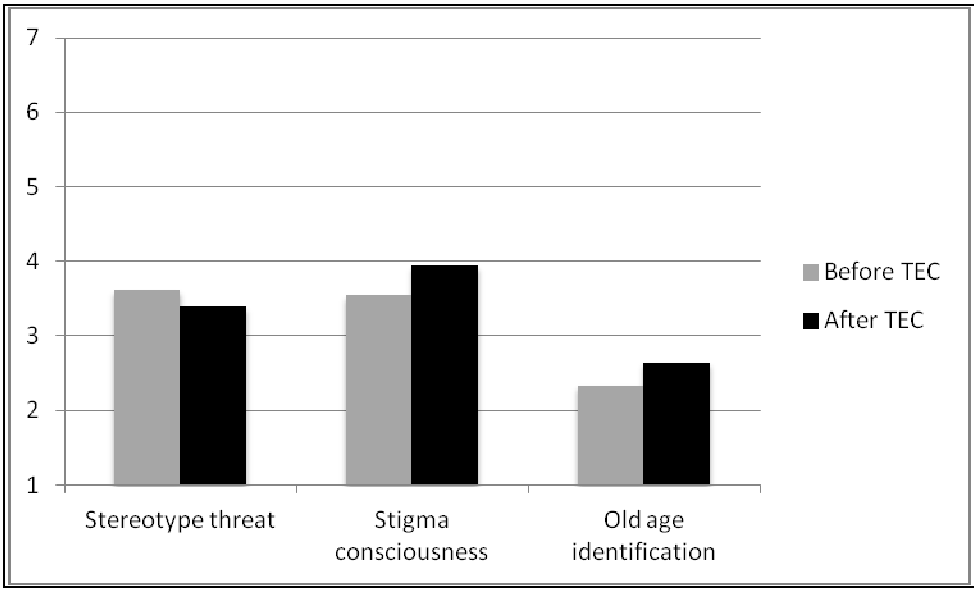
The analyses of the results show that participants experience medium/low levels of stereotype threat regarding the use of technologies and that they have a low consciousness level of being stigmatized due to their age. Moreover, results also revealed a low level of identification with the old age group. There were no significant changes in these perceptions after the TEC neither for the low or high technological skills groups (Figure 3 and 4).

Figure 3. Stereotype threat, stigma consciousness and old age identification before and after the TEC (n = 15) (1 = strongly disagree; 7 = strongly agree) – less technological skills



Note: * < .05 (one-tailed)

Figure 4. Stereotype threat, stigma consciousness and old age identification before and after the TEC (n = 15) (1 = strongly disagree; 7 = strongly agree) – more technological skills



Note: * < .05 (one-tailed)

In the pre-post evaluation questionnaire we were also interested in evaluating whether the participation in the TEC could have a significant impact on the stereotypic perceptions of older people and use of technology. The analyses of the pre-questionnaire revealed that both participants with less (LT) or more technological (MT) skills associated using the internet with the 25 year old group (LT: 100%; MT: 71.4%). However, in some cases a significant percentage of participants also associated the use of specific technologic devices with both age groups: using a mobile phone (LT: 86.7%; MT: 80%) and using the microwave (LT: 85.7%; MT: 80%).

There were significant changes in stereotypic perceptions after the TEC, but only in the group of participants with more skills in technology. In fact, after the TEC these participants perceived certain technological associated behaviours to be more likely to be performed equally well by both age groups or even better by people over 75 years old. This is the case of behaviours "using the computer"[4], "using the internet to buy something"[5], using a DVD[6]. There was however a decrease of the perceptions of older people using the microwave[7] and using a mobile phone[8]. Nevertheless, in the case of both these behaviours, participants always perceived them to be equally performed by both age groups (Figure 5, 6, 7 and 8).

Figure 5. Behaviours associated with different age groups before the TEC (n = 15) – less technological skills

[4] χ^2 (1) = 4.2; p = .040
[5] χ^2 (2) = 8.56; p = .014
[6] χ^2 (1) = 6.96; p = .008
[7] χ^2 (1) = 14; p = .000
[8] χ^2 (1) = 5.09; p = .024

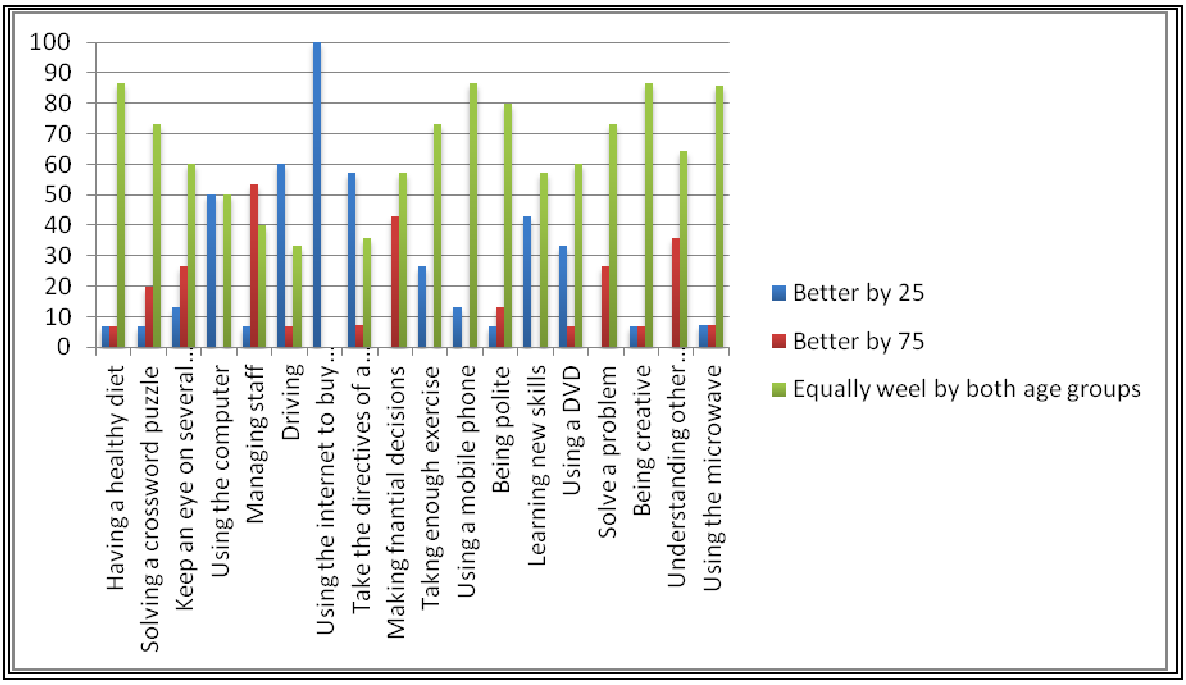


Figure 6. Behaviours associated with different age groups after the TEC (n = 15) – less technological skills

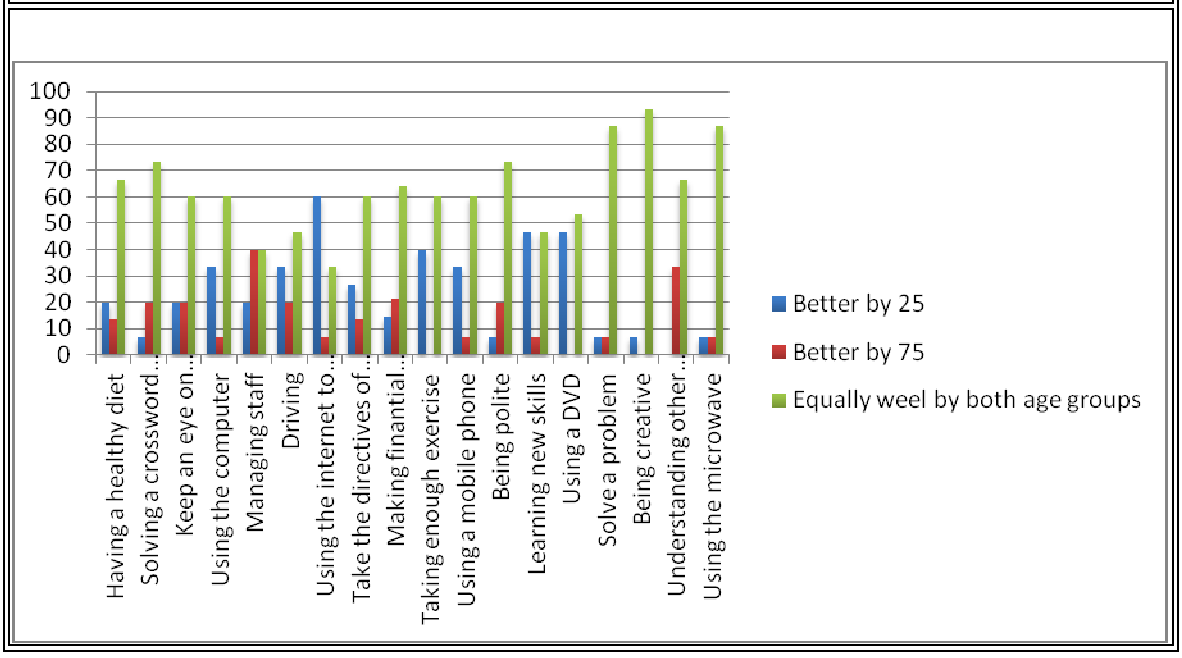


Figure 7. Behaviours associated with different age groups before the TEC (n = 15) – more technological skills

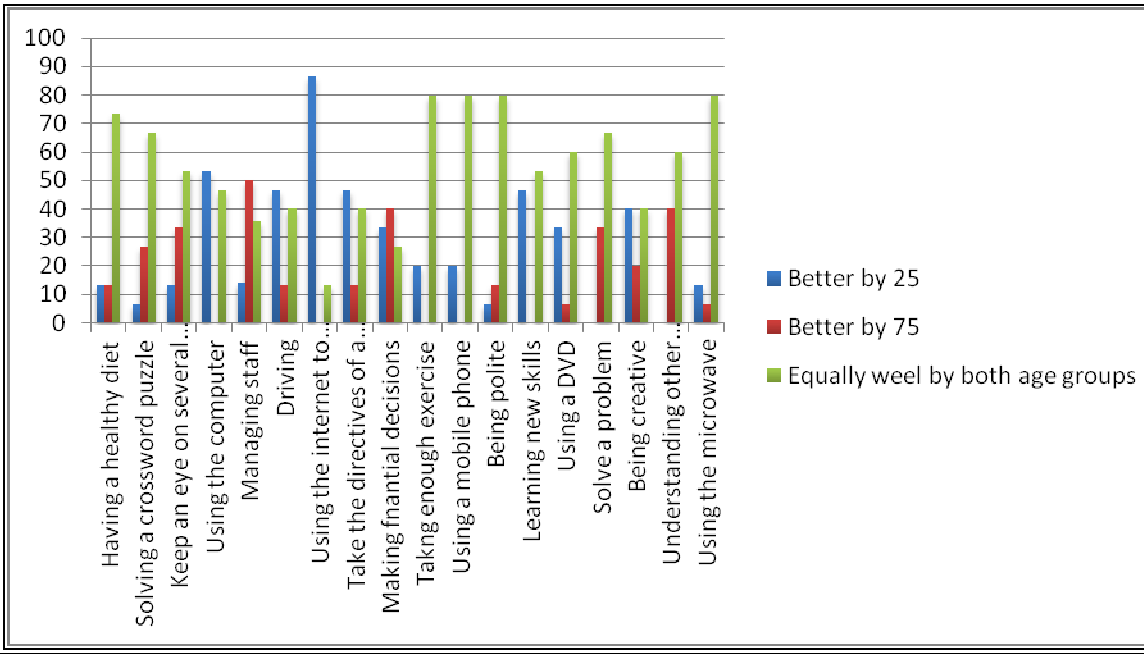
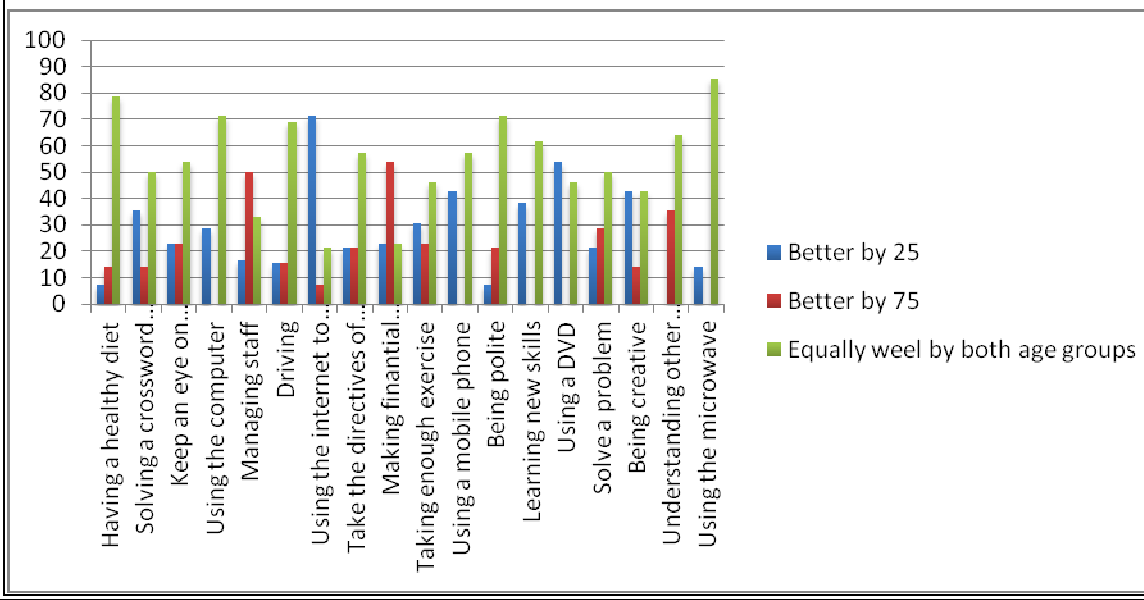


Figure 8. Behaviours associated with different age groups before the TEC (n = 15) – more technological skills



6.3.4. Reactions to the TEC

Participants in both groups rated their participation in the TEC in a very positive way regarding the different facets of participation in this experience (see Figure 9 and 10 for a detailed description of this opinion). They also enjoyed the experience with Easy Turin (Figures 11 and 12). There were no significant differences in opinions according to the level of participant's technological skills.

Figure 9. Reactions regarding the TEC after participation (n = 15) (1 = strongly disagree; 7 = strongly agree) – less technological skills

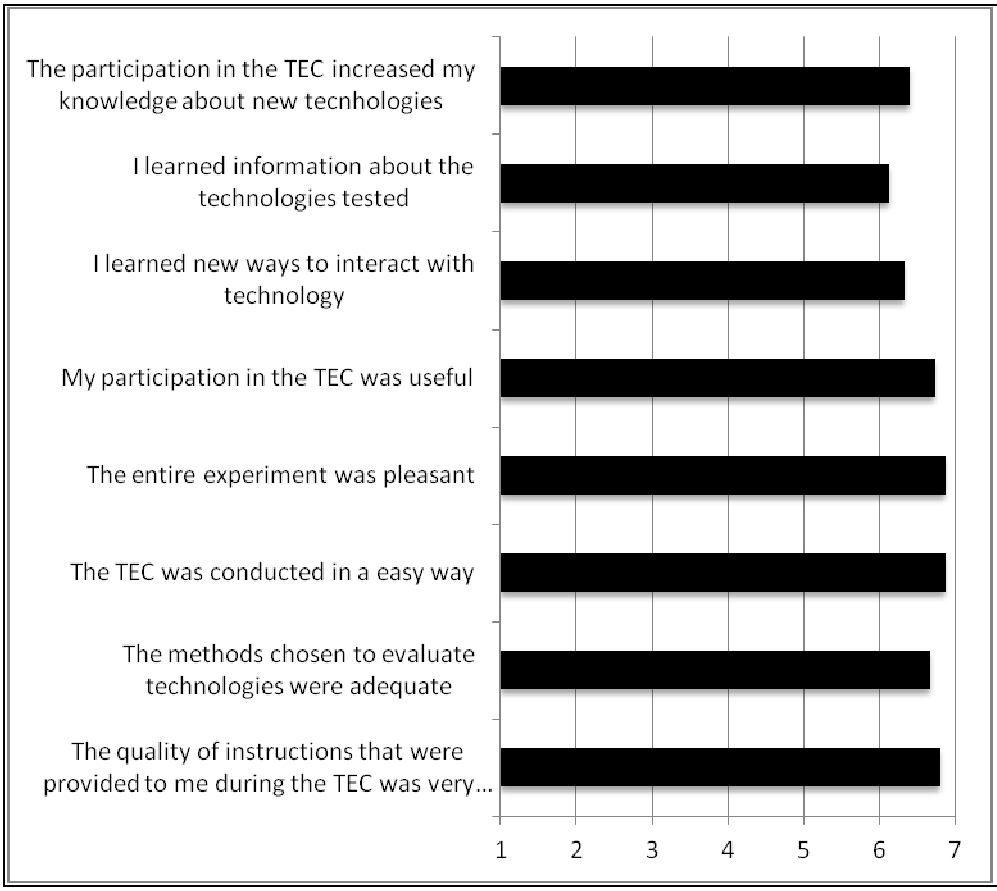


Figure 10. Reactions regarding the TEC after participation (n = 15) (1 = strongly disagree; 7 = strongly agree) – more technological skills

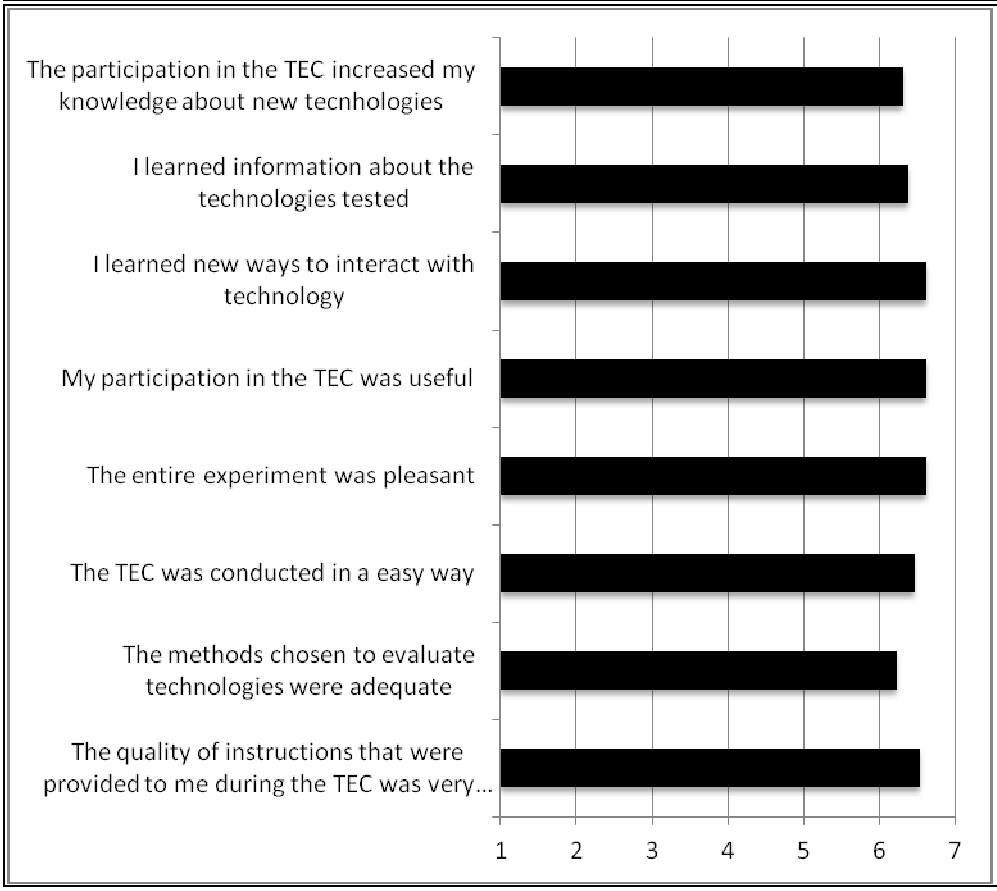


Figure 11. Reactions to Easy Turin (n = 15) (from 1 to 7) – less technological skills

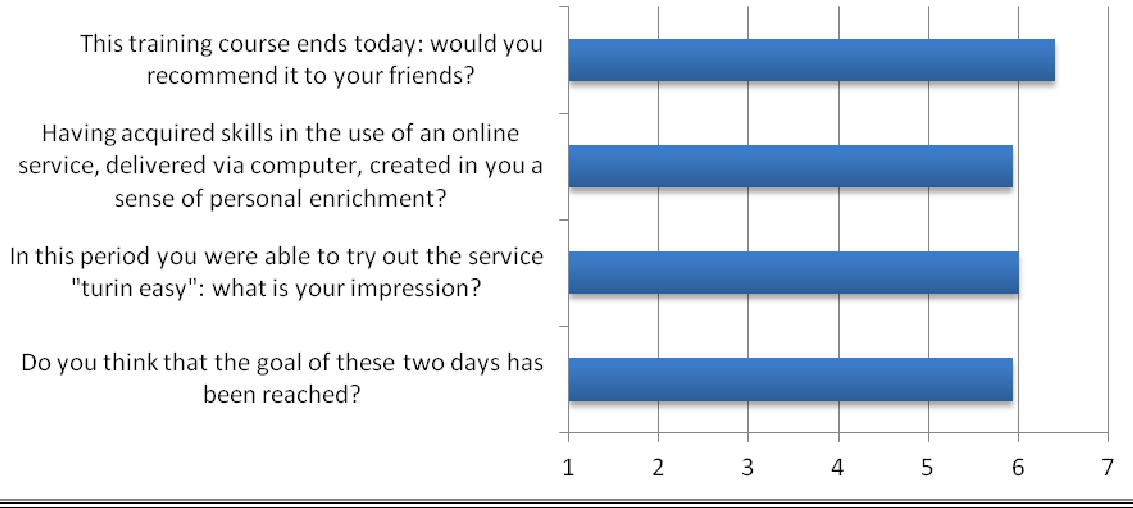
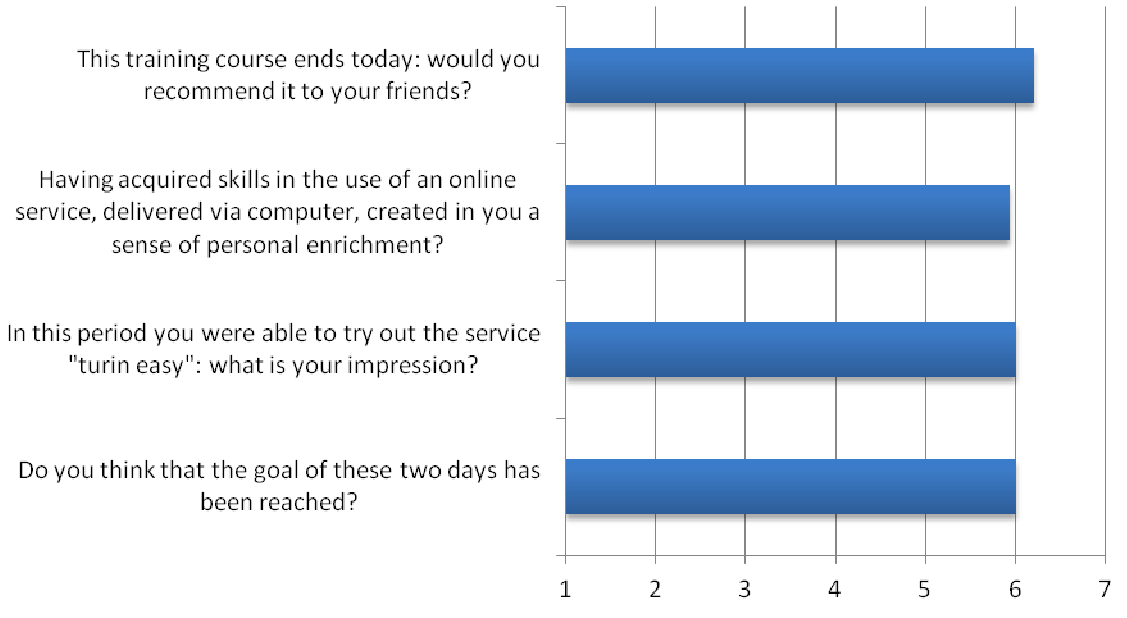


Figure 12. Reactions to Easy Turin (n = 15) (from 1 to 7) – more technological skills



7. Resources employed for the TEC

7.1 Personnel

Turin TEC was managed directly by the Comune di Torino with the two Services involved in SIforAGE: SFEP and Health Service under the supervision and coordination of the Social Policies Department. All the people involved in SIforAGE have collaborated for the realization and good result of Turin TEC. The organization of the two session in two days has been planned and realized with a great collaborations of other local bodies and entities (SPI CGIL, Passepartout Service, Circoscrizione 8 - Area Anziani) and of all the SIforAGE partners involved in work-package 2. The total resources employed for 2 days TEC were approximately (FTE – Full Time Equivalent at Comune di Torino's level) 0.4 Person/Months (as yet included in personnel costs and efforts transmitted for the periodic project report). For a more complete information, this efforts do not include important contributions offered by other co-organizers, SIforAGE partners that also attend the 2nd session and from other Department of Turin Municipality (ICT) that collaborate with 2 trainers and 3 tutors for the two TEC days. The global design of TEC has been discussed in different phases of its elaboration with the partners of SIforAGE during meeting (23rd of May 2013) and phone conferences (4th of February, 28th of March 2013) before the launch of TEC1 in France. ISCTE-IUL has strongly collaborate also for the adaptation, elaboration and analysis of the questionnaires, evaluating its involvement at 0.5 P/M.

7.2 Publicity

TEC Turin has not submitted direct costs because all the publicity material was provided without costs by internal service (local adaptation of logo design, TEC and SIforAGE brochures).

7.3 Other costs

Considering the whole TEC organization, the following costs have been incurred:

- internal Cafè has organised catering in the two sessions of the two TEC days. The total cost amount to 675,00 € (4 coffee break for totally 150 persons) They also provide for the 2 days and 2 session 16 workstation with pc, network print rented for 560,00 €

- it has been supplied to each TEC participants and stakeholders who attend the events, individual folders with informative brochures on project and on TEC, USB pen drive, pencil and notes). The total cost of this benefits amount to 488,87 €.

In this account are not considered:

- other costs covered by total overheads (e.g. utilities, letters, transport for local meeting with co-organizers)

- rooms for the TEC experimentation has been made freely available by the Casa del Quartiere di San Salvario for the Municipality according to an agreement y that provide for free utilization in some specific events organized by the City and/or Local districts.

8 Impact Assessment

8.1 Introduction

The impact assessment of the Turin TEC is based on the following shared methodology and indicators:

- Perception/acceptance of technologies by older people
- Major barriers/enablers
- Benefits for the industry, technology developers, marketing/retail agents, etc.
- Other relevant assessments (guidelines IAIA 2003)

8.2 Perception/acceptance of technologies by older people

The evaluation of the TEC café revealed the following pattern of results:

- Although participants in the more skilled group reported using more the internet, participants in the two groups were nevertheless regular users of technologies both regarding digital devices (computers, mobile phone) but also home appliances
- Participation in the TEC café was perceived as a very useful and positive experience
- Participants perceived Easy Turin as an interesting and useful program and expressed willingness to recommend this program to their friends
- Participants revealed low levels of anxiety regarding the use of technologies and low levels of influence by aging stereotypes
- Participation in the TEC café did not lead to a direct increase in the intention to use and perceived useness regarding the use of technologies in the future. However, for both groups of participants the intention to use technological devices in the future was already quite high.
  Nevertheless, there was a significant improvement in the vision of older people while active users of technologies (computer related) especially in more a priori skilled group of participants

8.3 Major barriers/enablers

Main limitations of the evaluation results:

- As in the French case, the impossibility of analysing the control group limits the conclusions of the efficacy of the TEC café in the sense that it is not possible to verify the possible influence of confounding effects (other types of experiences that participants in the TEC café might have had and influenced their attitudes toward technologies)
- Even though the Italian TEC café included a lower skilled technological group of older people, these had nevertheless already had a high level of experience with technologies in their daily life. Hence, these results cannot be generalized to other groups of older people less experienced. It would be very important to test this methodology in older people more blatantly less familiar with technological devices. In fact, many of the barriers that we encounter in the literature for older people's lack of interest in the use of technological devices refer to this second group of people.

8.4 Benefits for the industry, technology developers, marketing/retail agents, etc.

Turin TEC has analyzed a typical "in house" service. ICT Department has been involved in the whole process also with the aim to TEC results and for deepening the qualitative elements. Feedback about TEC and about WP2 could be also useful to improve the platform's experience of use and the work of their internal and external technology developers. In our case the role of the City as public administration is double, not only giving incentives to citizen/older people to use ICT solutions (proposal of services with also social policies addressed such as training and tutoring) but also stimulating the development of age friendly technologies.

8.5 Other relevant assessments (guidelines SIA – Social Impact Assessment)

The impact assessment of the Turin TEC has been further implemented taking in account the IAIA guidelines 2003 (Annex D2.2_9) for SIA (Social Impact Assessment) based on the following list of indicators grouped into the 3 levels below described.

Definition: "The social impact assessment includes the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment"

- **Levels / Indicators**

A. Impact on health (especially in terms of psycho – physical well being)
A1 – Fragility / Soundness
A2 – Dependence / Autonomy
A3 – Marginality / Protagonism

B. Economic Impact
B1 – Loss / Gain of capital
B2 – Loss / Gain of job opportunities
B3 – Marginality / Centrality in economic policies decisions

C. Social and cultural impact
C1 – Loss / Gain social capital
C2 – Loss / Gain cultural capital
C3 – Breach / Increase of the social cohesion
C4 – Breach / Increase of the social protagonism

8.5.1 First results

From the month of April 2014 were informally collected data on the impact of the event requiring advice to people who has been involved. This early investigation did not have the official status of a scientific survey, as it has been mainly carried out for the purpose of maintaining contact with the actors in view of the continuation of the work. The survey is expected to be repeated in a more precise way after 1 year from the event through focus groups. Here are dialogically summarizes the results of informal discussions that have taken place with all categories of stakeholders (senior, policy makers, trainers, organizers, other stakeholders).

A) The TEC of Turin has shown that in all three indicators of the state of health may have occurred positive gains. In the analysis of the impacts is necessary to specify that the progress of telematics expertise, reinforced by the TEC, it has necessarily evolved positively the index of basic and advanced computer skills, thanks to the exercises performed and the resulting better understanding of the workings of the PC. More precisely, the impact on health can be

ascribed to an increased and better use of network resources (information, reports, communication with the primary care physician, using advice from experts...).

B) From the economic point of view, although the purchase of a PC can be regarded as a cost, it can be largely balanced by the opportunities and savings associated with the use of the online services offered by the card Easy Turin, the use of e-commerce and the possibilities offered by prices comparison on the internet. It is also (slightly) increased the power to affect areas of economic policy through participation in buying groups / representatives of the consumers, any consultations and / or opinions expressed on social media.

C) The social and cultural impact is very important and is related to the previous ones. Much of the positive effects observed derives directly from the methodology setting given to the TEC, which was designed as a moment of aggregation, comparison and participatory community development. It often happens that the number of social contacts could be gradually diminishing with the increasing of the age. This also applies to the combined action of several factors among which is useful to highlight the reduced mobility, the tendency to focus on the friendship between peers acquired in the first phase of life, the decline in the investment economic capital. The TEC also had the goal, not secondary, to increase contacts between the persons concerned, by promoting both online communication, both in the presence and especially the meetings, joining the two goals of social promotion and promotion of learning. As shown in the preceding paragraphs, the fallout of the processes induced by the TEC could have a direct bearing on the improvement of factors related to social cohesion and leadership of the older persons, because action was not limited to a specific time, but placed in a series of long-lasting measures oriented to this purpose. In this sense, the TEC is also configured as a moment of disclosure and strengthening of the ongoing local intervention, as such, has enhanced the factors related to the feasibility and sustainability.

8.5.2 Criticalities

At summary of the arguments above were detected, in informal discussions, some critical factors. These factors can be summarized as:

- factors related to the fast changing of technologies. The services and telematic tools evolve rather quickly and must be provided moments of updating and periodic review of the instrumentation. This involves costs and time which can not always be correctly provided.
- Factors related to the maintenance of the support standards. While some actions produce a cascading effect that requires no special support (skills, interpersonal relations, ...), the presence of aggregation and training activities centers seems to be the crucial need of the local programmatic and governance actions.

8.6 Conclusions

The Turin TEC tried to connect both objectives linked to the territory and related to the Project. The link to the project and the guidelines of the European Commission led to the choice of technologies and the area of intervention (fight the digital divide); connection to the territory led to explore the system of existing resources, and promoting innovative players and actions on the field. Were also considered strategic all those choices that promote the leadership and the self-determination of older people. This type of intervention is also possible depending on the role done by the Municipality of Turin at the local level about management and programming of the social policies. This peculiarity of the context of Turin TEC could be an enriching and specific contribution to the completeness of the research and analysis in SIforAGE.

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10 Annexes

10.1 Annex 1. Documents developed for the event and for user experience survey

1. Registration form (Annex D2.2_1)
2. List of participants (Annex D2.2_2)
3. Pre-questionnaire (Annex D2.2_3)
4. Post-questionnaire (Annex D2.2_4)
5. Informed consent form, authorization to process personal data and information sheet (Annex D2.2_5)
6. Press release (Annex D2.2_6)
7. Poster (Annex D2.2_7)
8. TEC leaflet (Annex D2.2_8)
9. Guidelines IAIA 2003 (Annex D2.2_9)