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Developing a Tool to Measure Experiential Meaning of CaringTV[®] for the Elderly



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Developing a Tool to Measure Experiential Meaning of CaringTV[®] for the Elderly

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Abstract

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Improved healthcare services coupled with advanced technology have contributed to a global increase in life expectancy leading in turn to an increase in the ageing population worldwide. Demands on healthcare services have consequently increased dramatically making it imperative to search for effective ways to solve or slow down the associated problems. Technology and technology-based services have been envisaged as some of the possible means by which these problems could be controlled. Attempts have therefore been made in recent years to explore the potentials of technology to develop products and services such as CaringTV® to help address some of these problems.

CaringTV® is a virtual interactive service concept designed with and for elderly people and other target groups with an ultimate aim to support their well-being and enhance their quality of life (QoL) (Lehto 2008; Piirainen & Sarekoski 2008; Rajj & Lehto 2008; Lehto & Leskelä 2011). The service concept has different uses including helping elderly people maintain their independence and continue living in their own homes. CaringTV® is still undergoing development.

In an attempt to find ways to evaluate the extent to which elderly people, their significant others, professionals other care-givers and people with exposure to or encounter with the CaringTV® concept understand CaringTV® as a means of providing supportive services to the elderly, the current study aimed at developing an initial tool called Experiential Meaning of CaringTV®-elderly and captioned EMoCTV-elderly.

The EMoCTV-elderly measurement tool addresses 11 construct domains which the author believes will best reflect people's understanding or perception of CaringTV®. These 11 constructs are: Experiential Meaning of Social Engagement, Social Networking and Social Support, Experiential Meaning of Health, Experiential Meaning of Activity, Experiential Meaning of Personal Outlook on Life, Experiential Meaning of Empowerment, Experiential Meaning of Home, Experiential Meaning of Participation, Experiential Meaning of Knowledge, Experiential Meaning of the Use of New Technology/Information and Communications Technology, Experiential Meaning of Formal support Network and Experiential Meaning of Safety.

Items best related to the constructs mentioned above, have been identified and operationalized into a 53-item questionnaire of the EMoCTV-elderly tool.

The EMoCTV-elderly tool would need to be validated in future studies to improve its usefulness.

Key words CaringTV®, Tool, Experience, Meaning, Elderly, Empowerment, quality of life

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1 INTRODUCTION

Life expectancy has increased dramatically in recent years due mainly to improved healthcare services and advanced technology. This has in turn led to an increase in the proportion of the aging population worldwide, thereby creating an increased demand on public healthcare. There is a severe shortage of staff to take care of elderly people. Institutionalization of elderly people is on the rise but the current global economic difficulties have put financial constraints on the optimal running of such institutions. Suitable strategies are therefore needed to address the problems effectively.

Attempts have been made in recent years to explore the potentials of technology to develop products and services with the help of which some of the problems relayed above could be addressed. Most elderly people view advances in technology in a positive light as they believe such advancements will improve their quality of life (Li & Perkins 2007). Given the option and where possible, most elderly people would like to live independently in their own homes which have familiar environments, so that they can “age in place”. Different Information and Communications Technologies (ICTs) and ICT-based service concepts have been developed to help improve the quality of life (QoL) of elderly people and empower them to live independently in their own homes whilst they age in place. CaringTV[®] is one of such promising service concepts that have garnered momentum in recent years.

CaringTV[®] is a virtual interactive service concept designed with and for elderly people and other target groups with an ultimate aim to support their well-being and enhance their QoL (Lehto 2008; Piirainen & Sarekoski 2008; Raij & Lehto 2008; Lehto & Leskelä 2011). The service concept is used in different ways including helping elderly people maintain their independence and continue living in their own homes. CaringTV[®] is still undergoing development. Various projects and studies on the service concept have been carried out successfully. It would be beneficial to know what CaringTV[®] means to the service users and those who have had encounter with or been exposed to the concept in order to help develop this service concept further. Currently there are no measurement tools with which to assess what CaringTV[®] means to elderly people, their relatives, significant others, experts, professionals and any other people who have had exposure to or encounter with this service concept. As part of the on-going development, the current study will attempt to initiate the development of such a tool. The development of such an assessment tool is warranted because aspects of the service concept, which happen to be poorly understood for instance can be identified and worked over with further education of the target groups, thereby helping to further develop the CaringTV[®] service concept.

2 REVIEW OF LITERATURE

2.1 Life expectancy

Life expectancy has been defined, as the expected number of years of life remaining at a given age (Arthur & Sheffrin 2003). The world's average life expectancy at birth has increased dramatically over the past century. In the beginning of the 20th century, it stood at 31 yrs and rose through 48 yrs by mid-20th century to 65.6 yrs in 2005 (Prentice 2006). The latest estimates made in 2009 indicates that it is 66.12 yrs (CIA 2010) with a projection to rise well above 80 yrs, at least in some countries, by 2030 (Prentice 2006).

Different factors have collectively contributed to causing this global increase. Prominent amongst them are improvements in our living standards, introduction of more efficient public health measures and advancement in medical science.

2.2 Definition of old or elderly

Old people have been referred to as seniors, senior citizens or the elderly. Old or elderly has arbitrary been defined as a chronological age of 65 yrs and above even though clear evidence for this definition is lacking (Orimo, Ito, Suzuki, Araki, Hosoi & Sawabe 2006). This definition has been accepted by most developed countries but does not adapt well to the situations in some underdeveloped countries where birth records are sometimes either missing or poorly kept, with various conditions difficult to standardize, making data comparability problematic across nations (WHO 2010). At the moment the UN has not adopted any standard numerical criterion but uses 60+ yrs to refer to the older population (WHO 2010). The ages 60- 65yrs even though arbitrary seem historically associated with the ages at which people become eligible for statutory and occupational retirement pensions (Thane 1978; 1989; Roebuck 1979). Some studies have suggested that the current prevailing definition of elderly is inappropriate in this era of high life expectancy and have therefore recommended its revision based on comprehensive evidence in all aspects of social, cultural and medical sciences (Orimo et al. 2006).

2.3 Ageing population and new socio-economic challenges

The global increase in life expectancy, coupled with a rapid decline in both fertility and mortality rates over the past century, have led to new socio-economic challenges. A demographic shift is gradually taking place whereby the proportion of the elderly unproductive layer of society is increasing, whilst the proportion of the young productive layer relatively decreases. This trend is projected to continue until at least the middle of this century (Rechel, Doyle, Grundy & Mckee 2009). An ageing population brings about an increase in expenditure on long-

term care, whilst a reduction in the working age population leads to the generation of less income for health and social services. It is imminent therefore that appropriate measures are needed to help reduce the pressure that results from this demographic transition. The World Health Organization proposes the application of appropriate and well-coordinated health and social policies to slow the rate of health decline associated with ageing and the number of health care services required (Rechel et al. 2009).

2.4 Long-term institutional care of the elderly

Given the option, most people would like to act as primary caregivers to their elderly family members and relatives. For long-term care, however, a great deal of commitment is needed. Sacrifices such as partial loss of income due to reduction in working hours, relocation, less time for oneself, insufficient time spent with family- sometimes leading to strains in relationships-, strains on the caregiver's own physical and mental health -stress, sleep disturbances, exhaustion- to mention a few, are imminent. The desire to play the role of one's elderly relative's long-term primary caregiver thus becomes non-viable at some point resulting in the necessity to place these elderly relative under long-term institutional care. An institutional long-term care facility or a nursing home, has been defined as: a place of residence that provides nursing supervised assistance with activities of daily living, health care (such as wound dressing change or colostomy care), and rehabilitation primarily for the aged (Wingard, Jones & Kaplan 1987).

McConnel (1984) has estimated the risk of being admitted to a nursing home over a lifetime to be 43% and for people over 65 years old, 63% over the remaining lifetime. Factors predicting the placement of elderly people in nursing homes or long-term institutionalization of the elderly have been identified in various studies. These factors include: **Demography** - age (75+), sex (female), Ethnicity (white), income (low, high), education (less than high school)-; **Availability of caregivers** -unmarried, few or no children, no daughters, great distance from relatives, lack or loss of social support, living alone-; **Health and functional ability** - poor and declining health, multiple medical conditions, reduced mental capacities (inability to make decisions, loneliness, depression), functional disability (unable to take medications, incapable of self-care, inability to prepare meals), extensive use of health service and hospitalization, unmet needs-; **Attitudinal** - favoured towards institutionalization, family attitude favourable; and **Housing** -not own house (Nielsen, Blenkner, Bloom, Downs & Beggs 1972; Palmore 1976; Vicente, Wiley & Carrington 1979; McCoy & Edwards 1981; Branch & Jette, 1982; William & Hornberger 1984; Shapiro & Tate 1985; Luppá, Luck, Weyerer, König & Riedel-Heller 2010).

Following an extensive review of literature and analyses of data covering a period of more than half a century, Luppá and colleagues (2010) regrouped these predicting factors into

those backed with; strong evidence, moderate evidence, weak evidence and inconclusive evidence, based on the levels of statistical significance in the original studies. Age (increased age), Housing (not having one's own house), Ethnicity (being white American), Self-rated health status (low), functional impairment (ADL-Activities of Daily Living, IADL-Instrumental Activities of Daily Living), cognitive impairment, dementia diagnosis, prior nursing home placement and number of prescriptions (high), appeared to be strong and consistent predictors of nursing home placement and therefore placed in the strong evidence group (Luppa et al. 2010). Employment status (unemployed), Social network (low contacts), Activity level (low) and diagnosis of diabetes had moderate predictive effect and therefore placed in the moderate evidence group (Luppa et al. 2010). Marital status (married, unmarried, widowed, divorced) had weak predictive effect and placed in the weak evidence group (Luppa et al. 2010). Factors placed in the inconclusive group were inconsistent, had partly significant and non-significant results in the original studies and were predictors with both positive and negative effects. They include Gender (male), Living situation (living alone), Education (low), Income level (low), Prior hospital use, Stroke, Hypertension, Arthritis, Respiratory diseases, Incontinence and Depression (Luppa et al. 2010).

Institutionalization of the elderly or placing the elderly in a nursing home has its own advantages and disadvantage. The advantages include; the fact that nursing homes are well equipped with skilled staff and specialized medical care to cater for the needs of the elderly, elderly people having companionship with peer residents of the nursing home, stress and strains on family members can be reduced.

The disadvantages include; the fact that no matter how well-equipped a nursing home or an institutional facility may be, it cannot offer the level of comfort that elderly people may find with family or in their own homes, leaving one's familiar home environment social circles can have negative psychological effect on elderly people and may lead to depression. Antonelli and colleagues (2000) studied the self-concept in institutionalized and non-institutionalized elderly people and found that compared to their non-institutionalized counterparts, institutionalized elderly have a more negative self-concept, lower level of self-esteem and a more restricted inter-personal self.

2.5 Ageing in place

Ageing in place has been defined by the Centre for Disease Control as: "The ability to live in one's own home and community safely, independently and comfortably regardless of age, income or ability level" (<http://www.cdc.gov/healthyplaces/terminology>, 2013). In recent years, increasing attention has been given to the potential advantages of ageing in place (Luppa et al. 2010; Greenfield 2012; Greenfield, Scharlach, Lehning & Davitt 2012; Wiles,

Leibing, Guberman, Reeve & Allen 2012; Greenfield, Scharlach, Lehning, Davitt & Graham 2013).

In view of the disadvantages of institutionalization listed above, most elderly people would prefer to remain and age in their homes in order to be able to; maintain the integrity of their social network including friends and family, maintain their independence and autonomy, preserve environmental landmarks and enjoy higher QoL (Keeling 1999; Luppá et al. 2010), maintain continuity of habits and routines (Löfqvist, Granbom, Himmelsbach, Iwarsson, Oaswald & Haak 2013). Other reasons why elderly people and their families sometimes tend to favour ageing in place over institutionalization are that; institutionalization could be expensive for the service user (Luppá et al. 2010) and has been associated with several negative outcomes such as increased mortality (Wolinsky, Callahan, Fitzgerald & Johnson 1992).

A recent study to find out what the “ageing in place” concept means to elderly people similarly indicated that; elderly people want choices about where and how they age in place, they perceive “ageing in place” as an advantage in terms of a sense of attachment or connection, feeling of security and familiarity in relation to both homes and communities, and that ageing in place relates to a sense of identity both through independence and autonomy and through caring relationships and roles in places people live (Wiles et al. 2012). This led the researchers to conclude that the meanings of ageing in place for elderly people, have pragmatic implications beyond internal “feel good” aspects and operate interactively far beyond the “home” or housing (Wiles et al. 2012).

2.6 Determinants of Quality of Life (QoL) among elderly people

Several different definitions have been assigned to QoL in the past. Abrams (1973) has defined it as the degree of satisfaction or dissatisfaction felt by people with various aspects of their lives, Andrew (1974) has related it to the extent to which pleasure and satisfaction characterize human existence and the World Health Organization (WHO) has defined it as “individuals’ perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (WHO 1997). Quality of life as a concept has also been described as amorphous, multi-layered and complex with a wide range of components, including objective, subjective, micro-societal, micro-individual, positive and negative interacting together (Lawton 1991; Rosenberg 1992; Bowling 1995a; 1995b; 1996; 2004; Bowling & Windsor 2001; Tesch-Römer, von Kondratowitz & Motel-Klingebiel 2001).

Methods of assessing quality of life are inconsistent because different people value different things (Farquhar 1995; Smith 2000; Bowling 2004; Walker 2005). Models of quality of life have

equally remained inconsistent. They have ranged from needs-based models derived from Maslow's hierarchy of human needs to classical models based solely on psychological well-being, happiness, morale, life satisfaction, social expectations or individual's unique perceptions (Andrews & Withey 1976a;1976b; Larson 1978; Calman 1984; Andrews 1986; O'Boyle 1997; Bowling 2004). The main models of quality of life according to the literature (Bowling 2004) are: **Objective indicators** (they include standard of living, health and longevity, housing and neighbourhood characteristics), **Subjective indicators** (they include life satisfaction and psychological well-being, morale, individual fulfillment, happiness measured by using indicators of life satisfaction, morale, affect self-worth/self-esteem), **Satisfaction of human needs** (they include objective circumstances such as housing, security food and warmth, and opportunities for self-actualization as in Maslow's theory of human needs -physiological, safety, security, social and belonging, ego, status, self-esteem), **Psychological models** (they include influencing and mediating variables and emphasize personal growth, cognitive competence, efficiency and adaptability, level of dignity, perceived independence, social competence, control, autonomy, self-efficacy or self-mastery), **Health and functioning models** (based on measures of health status, depression scales and scales of physical functioning - ADL,IADL), **Social health models** (measured with indicators of social networks, support and activity, integration with local community), **Social cohesion and social capital** (they include societal, environmental and neighbourhood resources), **Environmental models** (they are concerned with studying aging in one's place of residence and the importance of designing enabling internal and external environments in order to promote the independence and active social participation of older people (Schaie, Wahl, Mollenkopf & Oswald 2003, cited from Bowling 2004), and **Ideographic models** (they concern individualized hermeneutic approaches based on the individual's values, interpretations and perceptions, satisfaction with their position, circumstances and priorities in life) (Bowling, 2004)

In the World Health Organization's Quality of Life (WHOQOL) instrument (figure 8M), a person's physical health, psychological state, level of independence, social relationships, spirituality/ religion/ personal beliefs and environment have been identified as important determinants of QoL (WHO 1997).

Brown & Flynn (2004) conducted a systematic literature review of the components of quality of life from elderly people's own perspectives and reported that family, other relationships/contacts with others, emotional well-being, religion/spirituality, independence/mobility/autonomy, social/leisure activities, finance/standard of living, own health and health of others are perceived by elderly people as important components of quality of life.

Bowling (2004) after an extensive literature review came to an identical conclusion that quality of life can involve a wide range of domains including individual's physical health and func-

tioning, psycho-social well-being, psychological outlook, psychological and social role functioning, social support and resources, independence, autonomy and perceived control over life, material and financial circumstances, community social capital and the external environment including the political fabric of society.

Several other studies have identified health and functional status (Farquhar 1995; George & Bearon 1980; WHO 1997; Kunzmann, Little & Smith 2000; Michalos, Zumbo & Hubley 2000; Seik 2000; Bowling & Windsor 2001; Michalos, Hubley, Zumbo & Hemingway 2001; Michalos & Zumbo 2002; Gabriel & Bowling 2004; Smith, Sim, Scharf & Phillipson 2004; Bowling & Gabriel 2007; Raij, Lehto & Piirainen 2009), social contacts and social support (Bowling 1995a; Farquhar 1995; George & Bearon 1980; WHO 1997; Gabriel & Bowling 2004; Smith et al. 2004; Sixsmith, Gibson, Orpwood & Torrington 2006; Bowling & Gabriel, 2007; Raij et al., 2009) and physical and social activities (Farquhar 1995; WHO 1997; Gabriel & Bowling 2004; Sixsmith et al. 2006; Bowling & Gabriel, 2007; Raij et al., 2009) as important determinants of elderly people's quality of life.

Other dimensions that have been mentioned as influencing or having the potential to influence elderly people's quality of life, well-being or aging-well process include; independence/ empowerment (WHO 1997; Gabriel & Bowling 2004; Malender-Wikman, Jansson & Ghaye 2006; Sixsmith et al. 2006; Bowling & Gabriel 2007; Malender-Wikman, Jansson & Ghaye 2008a), safety/ security/ home/ housing/ neighbourhood/ environment (Farquhar 1995; WHO 1997; Gabriel & Bowling 2004; Smith et al., 2004; Sixsmith et al. 2006; Bowling & Gabriel 2007; Malender-Wikman, Fältholm & Gard 2008b; Raij et al. 2009), Finances/ material security (Farquhar 1995; Ferring, Wenger, Hoffmann, Petit, Weber, Gluk, Burholt, Wood, Spazzafumo & Thissen 2003; Gabriel & Bowling 2004; Bowling & Gabriel 2007), personal meanings/ psychological feeling of well-being/ life satisfaction/ self-worth/ self-esteem (Farquhar 1995; George & Bearon 1980; WHO 1997; Ferring et al. 2003; Gabriel & Bowling 2004; Sixsmith et al. 2006; Bowling & Gabriel 2007; Malender-Wikman et al. 2008a). In a review article, Bowling (2004) mentions income, employment, housing, education, other living and environmental circumstances, perception of overall quality of life, individual's experiences and values, well-being, happiness and life satisfaction as indicators of quality of life.

2.7 The role of technology in supporting elderly people to live independently at home

Several technologies and service concepts have been developed over the past decade with the core intentions to; support elderly people live independently in their homes and communities, support successful ageing, help improve the quality of life of elderly people and their families, help improve elderly people's safety and risk from harm, support and enable caregivers and professionals to safely monitor elderly people at home, promote safe hospital dis-

charge and prevent or reduce emergency room visits and hospital admissions, (Sävenstedt, Brulin & Sandman 2003; Sävenstedt, Zingmark & Sandman 2004; Barlow & Venables 2004; Camarinha & Afsarmanesh 2004; Barlow, Bayer & Curry 2005; Barlow, Sing, Bayer & Curry 2007; Malender-Wikman et al. 2006; Brownsell, Aldred & Hawley 2007; Mitchell, Nicolle, Maguire & Boyle 2007; Bestente, Bazzani, Frisiello, Fiume, Mosso & Pernigotti 2008; Bianchi, Grossi, Matrella, De Munari & Chiampolini 2008; Bierhoff & Panis 2008; Botsis & Hartvigsen 2008; Botsis, Demiris, Pedersen & Hartvigsen 2008; Bouma 2008; Brink, Jessurun, Franchimon & van Bronswijk 2008; Loader, Hardey & Keeble 2008; Melander-Wikman 2008; Melander-Wikman et al. 2008a; Melander-Wikman et al. 2008b; Mellor, Firth & Moore 2008; Raij & Lehto 2008; 2010; van Bronswijk, Bouwhuis, Fozard & Bouma 2008; van Bronswijk, Bouma, Fozard, Kearns, Davison & Tuan 2009; Zhang, He & Wei 2008; Mahoney, Mahoney & Lsis 2009; Money, Fernando, Lines & Elliman 2009; Pallikonda-Rajasekaran, Radhakrishnan & Subbaraj 2009; Reder, Ambler, Pilipose & Hedrick 2010; Riikonen, Mäkelä & Perälä 2010; Lehto & Leskelä 2011). CaringTV[®] is one of such promising service concepts. It seems to have gained increased attention and prominence in Finland, Japan and elsewhere in recent years.

2.7.1 CaringTV[®] as a service concept

CaringTV[®] is a customer-driven innovative 2-way virtual interactive service design developed through extensive collaboration between higher educational, research and development institutions, business enterprises, municipal councils and other public sector institutions, customers, service providers and students for different target groups including elderly people living in their own homes, elderly people living in service houses, the disabled and mental health patients, with the intention of supporting and/or enhancing their well-being and quality of life (Lehto 2008; Raij & Lehto 2008; 2010). The CaringTV[®] concept has been developed primarily through major sponsored action-research-based research and development projects such as “Coping at Home”, “Going Home” and “Safe Home”.

2.7.2 The “COPING AT HOME” Research and Development Project

2.7.2.1 Coping at Home R&D project - Background information

The Coping at Home project (2005-2007) co-ordinated by the Laurea University of Applied Sciences, Espoo, Finland and partnered mainly by the City of Espoo, TDC-Song Oy, Videra Oy, FysioSporttis Oy, Helsingin Lääkärikeskus-Yhtymä Oy, HUR Labs Oy, Mawell Oy, Medixine Oy and Vivago Oy, was funded by the FinnWell programme run by TEKES (the Finnish Funding Agency for Technology and Innovation) (Pirainen & Sarekoski 2008; Raij & Lehto 2008). Laurea University of Applied Sciences' responsibilities in the joint venture were to develop the overall CaringTV[®] concept, produce content, conduct action-based research and development

and to train professional staff to fulfil new service roles in the future (Piirainen & Sarekoski 2008). Research partnership was also maintained between the Laurea University of Applied sciences in Espoo, Finland, the University of Jyväskylä in Jyväskylä, Finland and the Tohoku Fukushi University in Sendai, Japan (Piirainen & Sarekoski 2008).

2.7.2.2 Coping at Home R&D project's purpose and aims

The primary purpose of the Coping at Home project was to produce a customer-driven service concept that promotes living at home among elderly family care givers and to evaluate the effects of the resulting concept from the points of view of carer families, the city of Espoo and the concept producers and was thus intended to produce research data for welfare organisations to use in relation to facilitating living at home and delaying institutionalisation (Piirainen & Sarekoski 2008).

The Coping at Home project aimed among other things, at examining the perceptions of family care-givers living at home, regarding their abilities to cope at home, examining the expectations of family care-givers living at home, regarding welfare technology, investigating the collaboration process that led to the creation of the CaringTV[®] gerontechnology solution, examining the kinds of elderly family care-giver users of the CaringTV[®] concept, evaluating the benefits that elderly family care-givers' families feel they have received from the CaringTV[®] concept, evaluating the benefits that the CaringTV[®] concept has brought to the elderly service that the City of Espoo has in place for family care givers, evaluating how the participants feel they benefited from participating in the product development and evaluating the significance of CaringTV[®] programme production for students' learning process (Piirainen & Sarekoski 2008).

2.7.2.3 Selected findings and outcomes of the Coping at Home R&D project

Relative to the CaringTV[®] concept, different user groups were identified as Active users, Silent users, Occasional users and Transferors (figure 1) and that CaringTV[®] has been developed as a service production by the integration of welfare, technology and service competence (Piirainen & Sarekoski 2008; Raij & Lehto 2008).

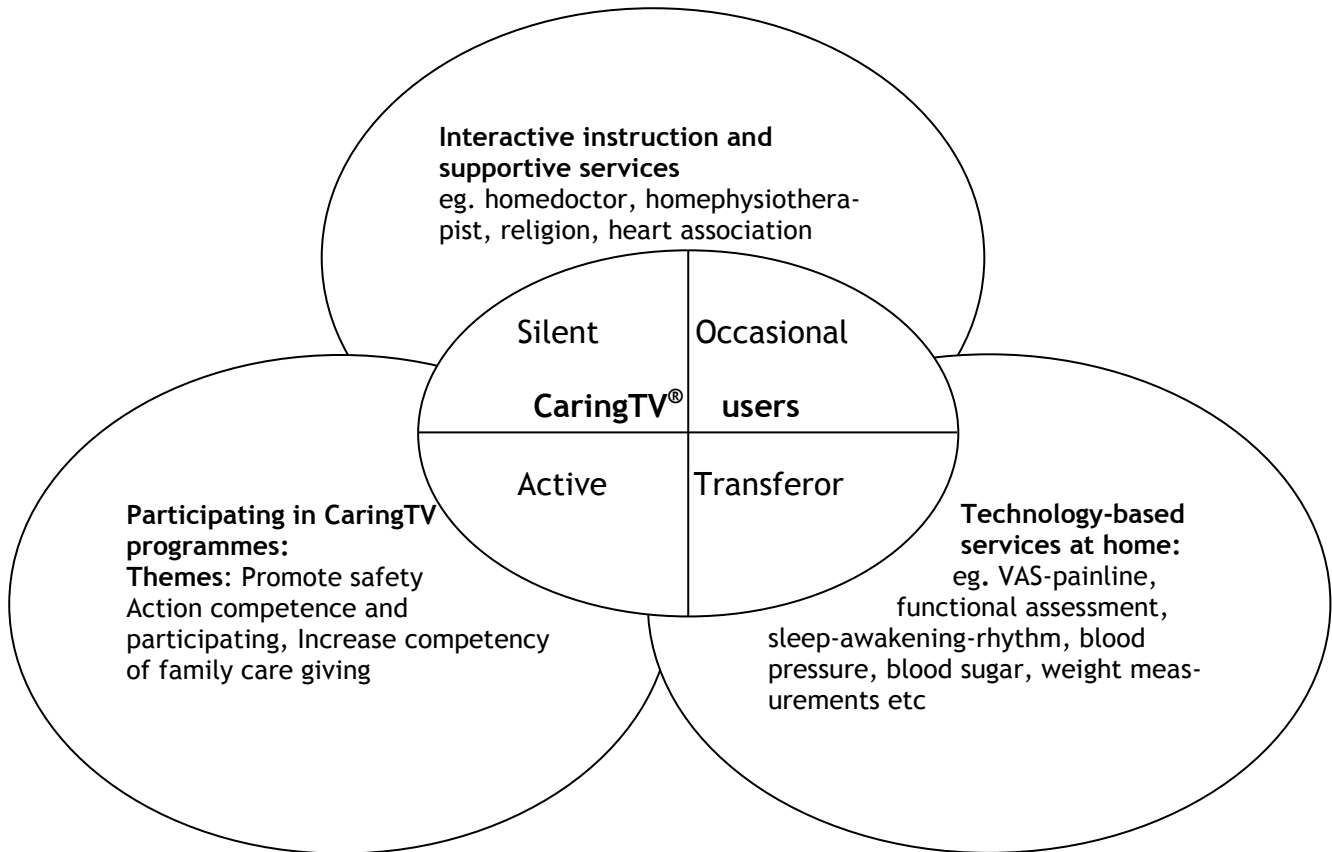


Figure 1. Client relationships in the CaringTV® concept and CaringTV® as a service production. (Adapted from Piirainen & Sarekoski (2008) with modifications from Raij & Lehto (2008))

2.7.3 The “GOING HOME” Research and Development Project

2.7.3.1 Going Home R&D project - Background information

The Going Home project (2006 -2008), co-ordinated by the Laurea University of Applied Sciences in Espoo, Finland was part of the European Union’s InnoElli Senior programme (this programme aims at developing innovative operating models to benefit the elderly), funded by the European Regional Development Fund (ERDF), with Espoo City, Vantaa City, Turku City, Laitila City, Lappeenranta City, Lappeenranta Rehabilitation, Spa Foundation, Association for Vicinity Services in Turku, Medixine Oy, TDC-Song Oy, Videra Oy and the Turku University of Applied Sciences acting as project partners (Lehto 2008).

2.7.3.2 Going Home R&D project’s purpose and aims

With a primary purpose to investigate, develop, produce and evaluate interactive programmes to be broadcast on CaringTV® to people who are over 65 years of age with high risk of illness and living at home or in service centres, the Going Home project aimed at using the latest knowledge from Information Technology to produce new applications that are based on interactions and in turn increase interactions, in order to support living at home (Lehto 2008). Additionally, the DIGAME subproject aimed at investigating and developing a contact network, digital services and related interactive tools for supporting living at home among the elderly and their families (Lehto 2008). The Going home research project tried among other things, to determine the kind of guidance and service concept that can be developed to support elderly patients who have been discharged from hospitals to live at home or in service centres and their families, to determine the kind of expectations that elderly people discharged from hospitals, their families and healthcare professionals have regarding support that can be provided to enable coping at home, to determine the contents and methods of programme production needed for the elderly, to determine the extent to which the elderly feel that the programmes support their abilities to cope at home, to determine impact of the project from the point of view of elderly people, their friends and relatives and to determine the impact of each subproject as a case study (Lehto 2008).

2.7.3.3 Selected findings and outcomes of the Going Home R&D project

The project resulted in the production of interactive programmes related to the themes of the research for broadcast to private households and care home environments (Lehto 2008). It also piloted virtual welfare services such as disability aid clinic, consultations and peer support as supportive methods for coping at home among the elderly (Lehto 2008). The project yielded a virtual guidance and counselling concept and a theoretical model detailing the sig-

nificance of CaringTV[®] with reference to daily events, activities, knowledge, socialization and life in general (see figures 2) (Lehto 2008; 2009).

The project identified problems or difficulties or obstacles or handicaps related to coping at home such as; loneliness, insecurity, sleep-related problems, sleeping disorders, hygiene-related difficulties, nutrition-related difficulties, medication-related problems, care-procedure-related problems, reduced mobility and fitness, difficulties related to medication and care procedures, lack of knowledge and skills in the usage of disability aids, lack of activity, frustration, listlessness, apathy, accidents, falling over and obstacles in the household (Lehto 2008). This in turn was used as a guide to create a classification of themes for programme production such as; a theme that promotes mental agility, a theme that supports daily functions, a theme that promotes mobility and rehabilitation, a theme that guides and supports provision of care, a theme that encourages participation, a theme that encourages sociability and a theme that promotes safety of the environment (Lehto 2008).

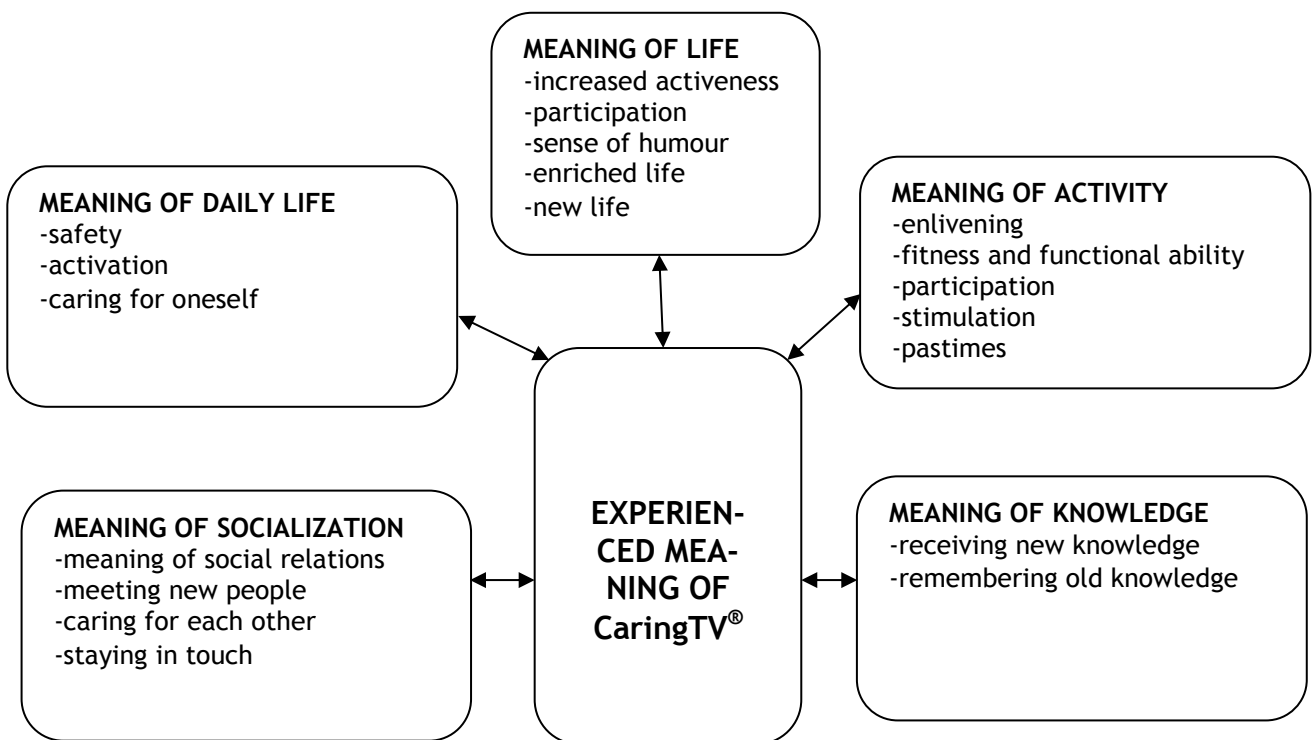


Figure 2. The conceptual model of the Experienced Meaning of CaringTV[®] (adapted from Lehto 2008, 2009)

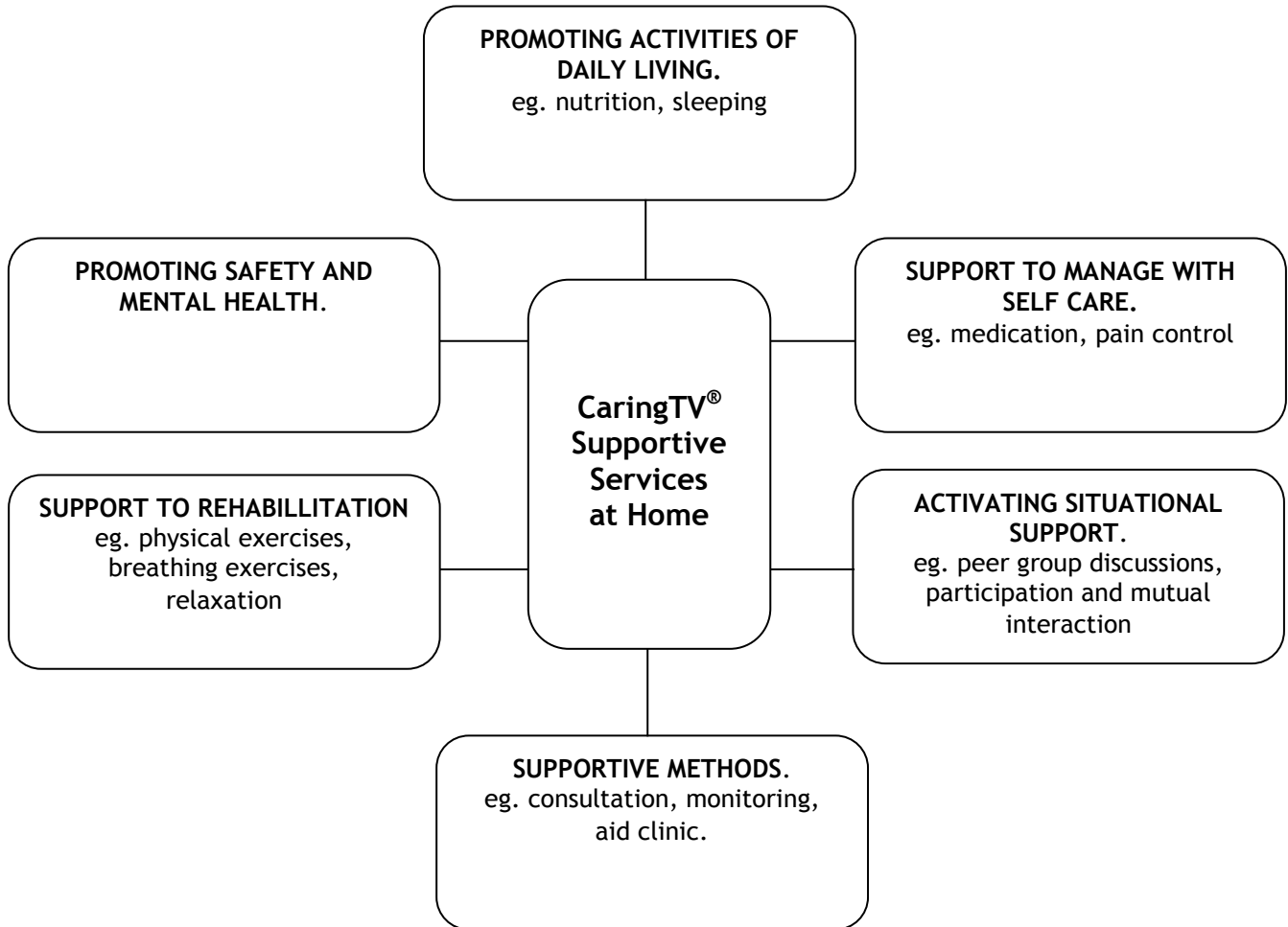


Figure 3. Client-driven holistic and supportive e-services (adapted from Lehto 2008)

2.7.4 The “SAFE HOME” Research and Development Project

2.7.4.1 Safe Home R&D project - Background information

The Safe Home Research and Development Project (2008 - 2011), co-ordinated by Laurea University of Applied Sciences, Espoo, Finland and partnered by the City of Espoo, City of Turku, Videra Oy, Medixine Oy, Everon Oy, Arcticare Oy, FysioSporttis Oy, Lääkärikeskus Yhtymä and Medineuvo Oy, was also funded by the European Regional Development Fund (EU/ERDF) (Lehto & Leskelä 2011).

2.7.4.2 Safe Home R&D project's purpose and aims

The main purpose of the Safe Home project was to study, develop, produce and evaluate eWellbeing services with different focus groups in an attempt to promote welfare, rehabilitation and support independent living at home (Lehto & Leskelä 2011). The project aimed at producing virtual wellbeing services to support the focus group's daily life at home and enhance participation in group activities (Lehto & Leskelä 2011).

2.7.4.3 Selected findings and outcomes of the Safe Home R&D project

The project resulted among other things, in the production of interactive programmes and selected e-Wellbeing services such as e-Doctor, e-Nurse, e-Physiotherapist, e-Pharmacist, e-deacon consultation services as well as e-Clubs, e-Library and virtual calls through CaringTV® or alternative technological solutions (Lehto & Leskelä 2011). Interactive image-based services such as e-24-hr services, remote monitoring and security systems were also developed and tested (Lehto & Leskelä 2011). The virtual e-Wellbeing services (n=691) were broadly categorized into; product and prescription services, library services, parish services, club activities, ask the expert, consultation and clinic services, e-Discussion, click for help, information channel, cultural and recreational services (Lehto 2011). A CaringTV® roadmap as depicted in figure 4 gives a summary description of services related to the CaringTV® concept (Lehto 2011). Analyses of the research data led to the proposing of focus-group-based conceptual models of CaringTV® (Table 1) consisting of Promoting factors, Inhibiting factors, Contents and methods and Meaning of CaringTV® (Lehto & Leskelä 2011).

Sample interactive CaringTV® programme themes for the elderly identified by the Safe Home project included: supporting safety and mental health (eg. stimulus, hobbies, reminiscence), supporting daily functions (eg. nutrition, hygiene, rest), supporting self-care (eg. medical

care, monitoring), supporting social relationships and togetherness (eg. chats, peer support), promoting health (eg. consultation, monitoring, assistive device clinic) and promoting rehabilitation and functional ability (eg. exercise programmes, balance) (Lehto 2011).

CaringTV[®] content themes with most relevance identified for the elderly in the Safe Home project also included: programmes and services promoting rehabilitation and physical ability (eg. workout sessions, chairbics), stimulating and entertaining programmes (eg. quizzes, music programmes, cultural programmes, reminiscence sessions), services produced by students (eg. information, personal guidance, counselling for self-care), services promoting well-being and health (eg. doctor/pharmacist, clinics, assistive device demonstrations), Community programmes and peer support (eg. religious programmes produced by local parishes, discussion programmes) (Vuorio 2011).

Sample interactive CaringTV[®] programme themes identified for people with developmental disabilities in the Safe Home project included: supporting everyday coping (eg. errands, clothing care), daily functions (eg. hygiene, skin care), personal well-being (eg. routine outdoor activity, friends), promoting togetherness and revitalisation (eg. discussion groups, club activities), nutrition (eg. nutritional knowledge, eating habits, weight management), being active (eg. hobbies, exercise, music, singing) and self-actualisation (eg. profile, introduction, presentation, art, group) (Lehto & Matero 2011).

Sample interactive CaringTV[®] programme themes identified for mental health patients in the Safe Home project included: looking after oneself (eg. healthy and balanced diet, medication, first aid at home, cleanliness), healthy lifestyle (eg. exercise, rest, importance of sleep, quality of sleep), everyday coping (eg. what is difficult and how can I overcome it?, “a stone in my shoe”, how are you?) (Isaksson, Lehto & Leskelä 2011).

Sample interactive CaringTV[®] programme themes identified for young people included: supporting daily functions and everyday life (eg. nutrition, hygiene, sleep), self-care monitoring (eg. e-diary), programmes to promote togetherness and participation (eg. discussions, competitions, clubs), health and well-being programmes (eg. consultations, clinics, weight management clinics), promoting functional ability and exercise (eg. workout, balance exercises), recreation and entertainment (eg. art, music, singing, e-Library, book groups) (Lehto, Leskelä & Matero 2011).

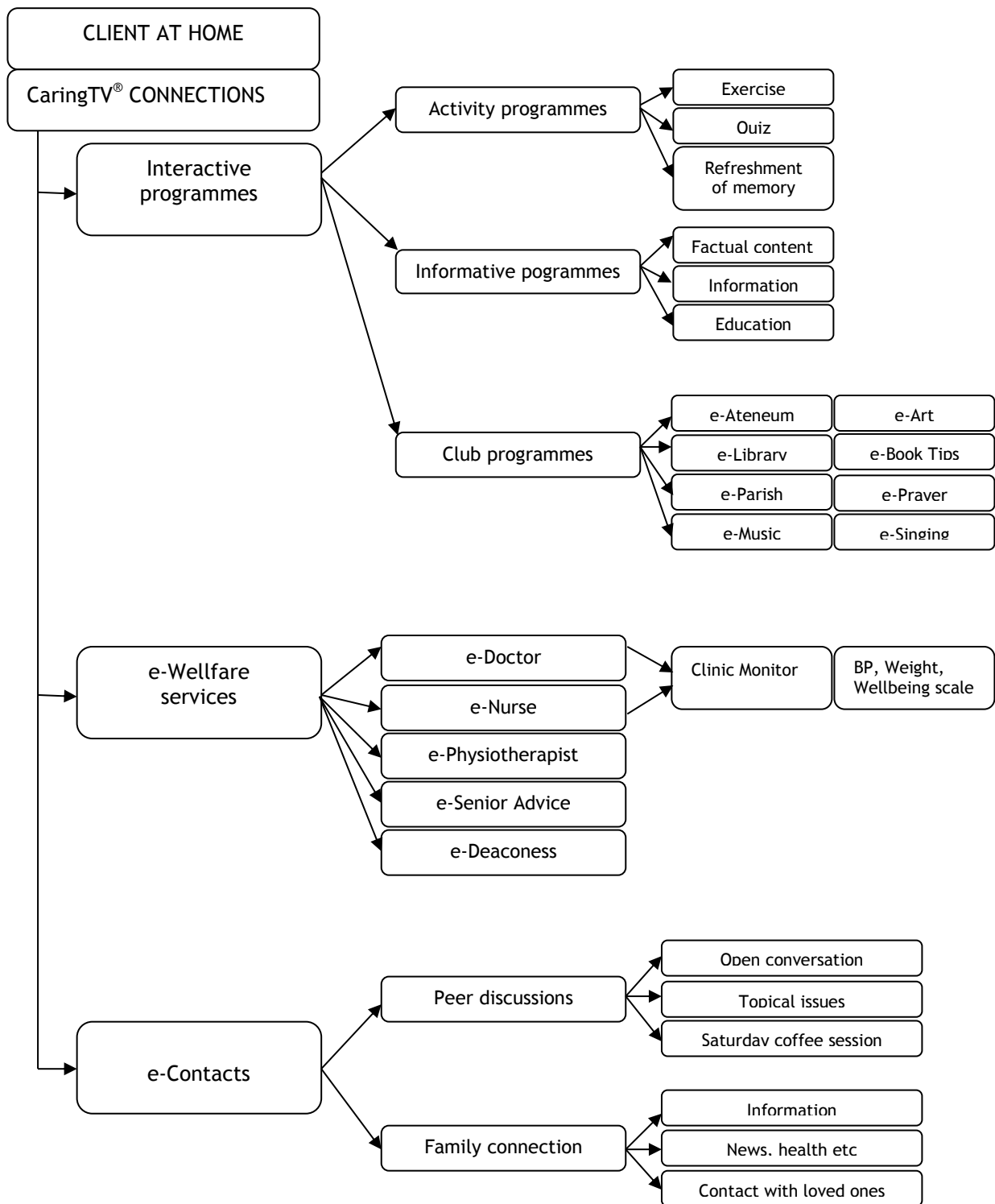


Figure 4. CaringTV® roadmap (adapted from Lehto 2011: In Lehto & Leskelä 2011)

CONCEPTUAL MODEL OF CARINGTV® WITH AND FOR:

	THE ELDERLY	THE DISABLED	MENTAL HEALTH PATIENTS	YOUNG PEOPLE
SOURCE →	Lehto 2011	Lehto and Matero 2011	Isaksson et al. 2011	Lehto et al. 2011
PROMOTING FACTORS	<ul style="list-style-type: none"> -participation (willingness and enthusiasm) -interaction -peer group -enthusiastic and supportive expert 	<ul style="list-style-type: none"> -active participation -learning how to use <ul style="list-style-type: none"> -voluntary programmes -support from the experts 	<ul style="list-style-type: none"> -meaningful participation -peer support, friends -programme contents -expert support 	<ul style="list-style-type: none"> -enthusiastic client -supportive expert <ul style="list-style-type: none"> - CaringTV® ease of use
INHIBITING FACTORS	<ul style="list-style-type: none"> -client sensitivity and demand -environmental distraction -technical fault -attitudes -programme timing 	<ul style="list-style-type: none"> -location of CaringTV® -sound problems -difficulty using remote monitors -varying expert support -getting a turn to speak 	<ul style="list-style-type: none"> - CaringTV® technical/sound problems -shyness -lack of commitment 	<ul style="list-style-type: none"> -coordinator's skills (inability to coordinate group dynamics) -technical problems -restlessness in the group
CONTENT AND METHODS	<ul style="list-style-type: none"> -interactive programmes -discussions -spontaneous programme sessions e-Welfare services 	<ul style="list-style-type: none"> -interactive programmes (music, exercise, quizzes) -one-to-one e-Chat 	<ul style="list-style-type: none"> -interactive programmes -programmes to support self-esteem -programmes about health -music, -exercise -e-Physiotherapy consultation 	<ul style="list-style-type: none"> -music, -library, -activity programmes -recreational programmes -personal involvement in programme- making
MEANING OF CARINGTV®	<ul style="list-style-type: none"> -personal significance in terms of: <ul style="list-style-type: none"> -social relationships, -everyday life, -functional ability. -empowerment 	<ul style="list-style-type: none"> -activation -sociability -affirmation of belonging in a group -new acquaintances -concentration -punctuality 	<ul style="list-style-type: none"> -new experience -activation -openness -activity programme 	<ul style="list-style-type: none"> -intensive interaction -video contact appeals -use of time (worker has more time for clients), -flexibility -young person is activated

Table 1. Conceptual model of CaringTV® with and for: the elderly, the disabled, mental health patients and young people. (Isaksson et al. 2011, Lehto 2011, Lehto & Matero 2011, Lehto et al. 2011).

3 THE PURPOSE AND AIM OF THE STUDY

The purpose of the study was to find a way to evaluate the extent to which elderly people, their significant others, professionals, other care-givers and any people with exposure to or encounter with the CaringTV® concept understand CaringTV® as a means of providing supportive services for the elderly.

The aim of the study was to develop a tool that can be used to assess how elderly people, their significant others, professionals and other care-givers with prior exposure to or encounter with the idea of CaringTV® understand the concept.

The main research questions in the current study were:

- a. Which sets of indicators, attributes, constructs or construct domains will best reflect people's understanding or perception of CaringTV®?
- b. Which variables, characteristics or items are best related to the indicators, attributes, constructs or construct domains identified in question (a) above?
- c. How can the variables, characteristics or items identified in question (b) above be operationalized into a questionnaire tool to assess people's understanding of CaringTV®?

4 CONCEPTUAL FRAMEWORK & RESEARCH METHODOLOGY

4.1 CONCEPTUAL FRAMEWORK

Following an extensive literature review, a conceptual framework of experiential meaning of CaringTV® was developed as presented in figures 5 (p.23) and 24 (p.67). A systematic procedure leading to the development of the conceptual framework has been shown under "Data analysis".

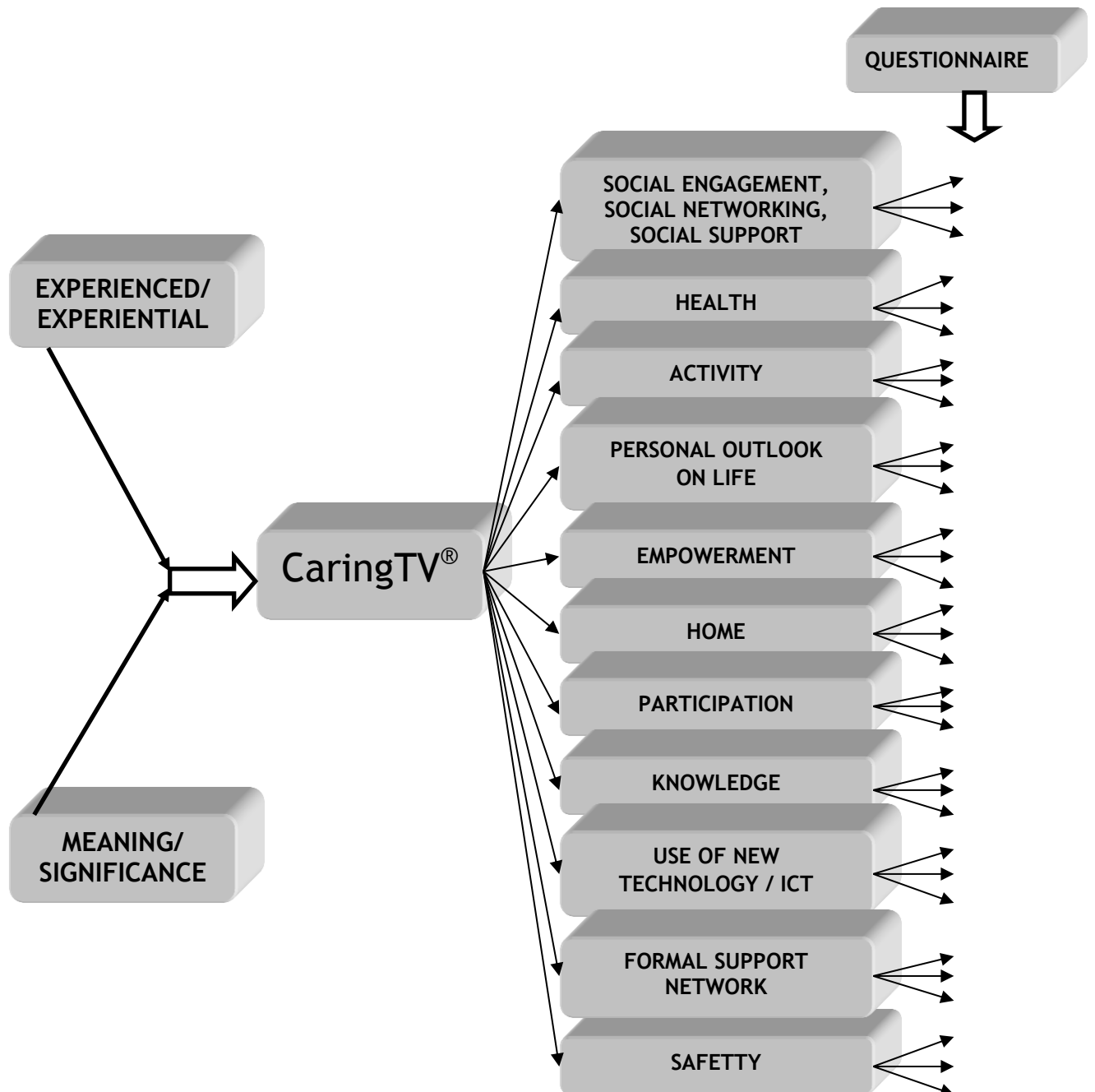


Figure 5. A conceptual framework for Experiential Meaning of CaringTV® - elderly (ICT=Information and Communications Technology)

4.2 RESEARCH METHODOLOGY

The current study addresses three of the initial stages of the tool development process:

Stage 1: Conceptualisation of the constructs of interest.

Stage 2: Identification and description of the behaviours that underlie the constructs.

Stage 3: Development of the initial tool.

It is anticipated that future studies will address stages 4-7 indicated below in order to complete the tool development.

Stage 4: Pilot-testing and validation of the initial tool,

Stage 5: Designing and field-testing a revised tool,

Stage 6: Validation of the revised tool and

stage 7: Evaluation of the tool development process and the resulting product.

4.2.1 Stage 1 -Conceptualization of the constructs of interest: interdisciplinary review of literature

This initial stage of the EMOCTV-elderly tool development was directed towards developing constructs of interest. It involved an extensive and systematic interdisciplinary review of literature to explore how *Experiential*, *Meaning* and *CaringTV*[®] as concepts and their contents have been defined, described, characterized and examined in different literature (figures 6a, b, c, d, 7a, b, 8A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, and table 1 below).

CaringTV[®] as a concept has been developed extensively through the *Coping at Home*, *Going Home and Safe Home* projects as outlined under “literature review”. Literature was reviewed extensively to explore how service users, their significant others, experts and other people who have encountered or have had exposure to *CaringTV*[®] in any ways perceive the concept. Efforts were made to identify other relevant theoretical and conceptual frameworks of interest to the topic, developed by using coherent explanations of certain phenomena and relationships. For further reading on other relevant theoretical and conceptual frameworks of interest to the topic, the reader is referred to Lehto 2008, Piirainen & Sarekoski 2008, Rajj and Lehto 2008, Lehto & Leskelä 2011 and the references accompanying figures 8A-R.

In an earlier study, Lehto (2008; 2009) has developed a *Conceptual Model of Experienced Meaning of CaringTV*[®] (figure 2) based on analyses of feedbacks given by customers, their friends, relatives and experts. Lehto has further identified the major constructs of the said model as; *Meaning of Life*, *Meaning of Activity*, *Meaning of Socialization*, *Meaning of Knowledge and Meaning of Daily Life*. The current study has adopted Lehto’s conceptual model, expanded and incorporated it into the current tool development. In separate studies

within the Safe Home project, Lehto (2011), Lehto & Matero (2011), Isaksson et al. (2011) and Lehto et al. (2011) have identified Meaning of *CaringTV*[®] as a major construct in Conceptual models of *CaringTV*[®] with and for the elderly, the disabled, mental patients and young people respectively (table 1). This construct has also been adopted (especially the elderly people's component), modified and incorporated into the current tool development process.

Extensive literature review indicated that the client-driven *CaringTV*[®] concept with reference to the elderly, seeks primarily to improve the quality of life (QoL) of elderly people living independently at home. Participation, interaction and empowerment (Lehto 2011) have been emphasized as important concepts in the bid to improve elderly people's quality of life through *CaringTV*[®]. Much emphasis was therefore placed on identifying and developing additional constructs that sought to define QoL, Ageing well and Wellbeing, paying attention to participation, interaction and empowerment. Newly developed constructs were pooled together with the ones identified in Lehto's conceptual model (2008; 2009). Overlapping and deviant themes of similar constructs were then identified and excesses eliminated. The resulting list of constructs was short-listed by regrouping into closely related constructs which were used further on for the tool development. In the process of conceptualizing the constructs of interest, attempts were made to listen to the voices of key informants, including elderly people themselves, their relatives, friends and significant others, professionals and experts, indirectly through the reviewed literature. Consultations were held with Dr. Paula Lehto, an expert on *CaringTV*[®]. Other data obtained from focus groups, interviews and observations as indicated in the literature, were also used to acquire additional information. By this way, different constructs of interest were developed (refer to "data analysis" section of the current thesis for further elaborations).

4.2.2 Stage 2 -Identification and description of the behaviours that underlie the constructs of interest

This stage involved the identification and description of behaviours that underlie the constructs of interest identified in stage 1 of the tool development process, using Information obtained from experts, key informant interviews, observational and focus group data through literature review.

Lehto (2009) has further identified attributes and behaviours associated with the 5 constructs in her Conceptual Model of Experienced Meaning of *CaringTV*[®] as; safety, activation, caring for one's self (*Meaning of Daily Life*), enlivening, fitness and functional activity, participation, stimulation, pastimes (*Meaning of Activity*), meaning of social relations, meeting new people, caring for each other, staying in touch (*Meaning of Socialization*), receiving new knowledge, remembering old knowledge (*Meaning of Knowledge*), increased activeness, par-

icipation, sense of humour, enriched life, new life (*Meaning of Life*). These attributes and behaviours were modified, expanded and utilized in the current tool development.

Information obtained from experts, key informant interviews, observational and focus group data through literature review and pertaining to QoL-, Ageing well- and Wellbeing-related indicators, characteristics and attributes underlying the constructs identified in stage 1 above, were pooled together with those identified in Lehto's model mentioned above with overlaps removed. The pooled indicators, characteristics and attributes were then open-coded by grouping them into smaller segments and then assigning a descriptor or code to each segment. The codes were then grouped into similar categories (axial coding). A series of rounds were conducted with each round involving the grouping of data that were increasingly focused until data saturation had been reached (in other words, until no new or relevant information seemed to emerge relating to a category). Once data saturation had been reached, a better position to identify the most representative behaviours underlying the constructs of interest was presumed to have been reached (figures 8-22).

4.2.3 Stage 3- Development of the initial tool: EMoCTV-elderly

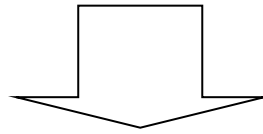
Once all the behaviours had been identified, a position was considered to have been reached to start translating them into operational statements (writing items). The questionnaire items were written using the identified behaviours. A 0-4- point Likert scale was used. The scale in the current questionnaire contained five responses for each item (appendix 1). Both positively and negatively worded items were included. This was done to prevent a respondent from quickly completing the questionnaire by checking one category of responses throughout. The scores on each item ranged from 0-4 as follows: I strongly disagree=0; I disagree =1; I am uncertain =2; I agree =3; I strongly agree =4. Negatively- worded items were reverse-scored. A total of 70 items were identified (figures 22a and b) with overlaps being merged to give an adjusted total of 53 unique items included in the main questionnaire made up of questions ranging from 2-21 to each construct. Some questions simultaneously addressed multiple constructs (see Table 2 and figure 24). Provision was made for respondents' background information to be collected through the questionnaire (figure 24, Appendix 1).

5 DATA ANALYSIS

5.1 Attributes, synonyms, characteristics and definitions of experience / experiencing / experienced / experiential as a concept and some words related to experience

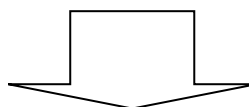
EXPERIENCE / EXPERIENCING / EXPERIENCED / EXPERIENTIAL: *-knowledge of.., skills in.., observation of..* something/some event *gained through involvement in / exposure to.* know-how, -procedural knowledge, -on-the-job training, *perceived event*, *wisdom gained in reflection on some events or interpretation of them*, -physical experience, -mental experience, -emotional experience, -spiritual experience, virtual experience, *first-hand experience*, *second-hand experience*, *third-hand experience*, *subjective experience*, *direct observation of or participation in* events as a basis of knowledge, the *fact or state of having been affected by or gained knowledge through direct observation or participation*, -practical knowledge, -skill or practice derived from direct observation of or participation in events or in a particular activity, -the *conscious events that make up an individual life*, -the events that make up the conscious past of a community or nation or humankind generally, *something personally encountered*, *undergone* or *lived through*, -the act or process of *directly perceiving events or reality*, -expertise, -know-how, -proficiency, -savvy, -skills, command, -mastery, *acquaintance*, *conversance*, *familiarity*, -intimacy, -endure, -feel, -have, *know*, -pass, *see*, -suffer, -sustain, -taste, -undergo, *witness*, *go through*, *encounter*, -meet, -accept, -receive, -assimilate, digest, -the process of doing and seeing things and of *having things happen to you*, *skill or knowledge that you get by doing something*, -the length of time that you have spent doing something, -something that you have done or that has happened to you, -familiarity with a skill or field of knowledge acquired over months or years of actual practice and which presumably has resulted in superior understanding or mastery, -the *apprehension of an object, thought or emotion through the senses of mind*, -active participation in events or activities, leading to the accumulation of knowledge or skill, -the knowledge or skill so derived, -an event or series of events *participated in or lived through*, -the totality of such events in the past of an individual or group, to participate in personally, -undergo, -direct personal participation or observation, *actual knowledge or contact*, -a particular incident, feeling etc. that a person has undergone, -accumulated knowledge especially of practical matters, -the totality of characteristics both past and present that make up the particular quality of a person, place or people, the impact made on an individual by the culture of a people, nation etc., *the content of a perception regarded as independent of whether the apparent object actually exist*, -the faculty by which a person acquires knowledge of contingent facts about the world, as contrasted with reason, *the totality of a person's perceptions*, feelings and memories, -to participate in or undergo, *to be emotionally or aesthetically moved by*, *something personally lived through or encountered*, -the observing, encountering or undergoing of things generally as they occur in the course of time, *knowledge or practical wisdom gained from what one has observed*, -the content of direct observation or participation in an event, *an event as apprehended*, -go or live through, -have first-hand knowledge of states, situations, emotions or sensations, -go through (mental or physical states), *undergo an emotional sensation* or be in a particular state of mind, -undergo, -knowledge, -understanding, -practice, -skill, -evidence, -trial, *contact*, -expertise, -know-how, *involvement*, *exposure*, -observation, -participation, *familiarity*, -practical knowledge, *encounter*, *undergo*, -have, -know, -feel, -meet, -suffer, -face, *taste*, *go through*, *observe*, -sustain, *perceive*, -endure, *participate in*, *run into*, -come up against, *apprehend*, *become familiar with*, (Webster's Encyclopedic Unabridged Dictionary of the English Language, 1994; <http://en.wikipedia.org/wiki/Experience>, 2013; <http://www.merriam-webster.com/dictionary/experience>, 2013; <http://www.learnersdictionary.com>, 2013; <http://www.businessdictionary.com>, 2013; <http://www.freedExceptionary.com>, 2013); <http://dictionary.reference.com>, 2013)

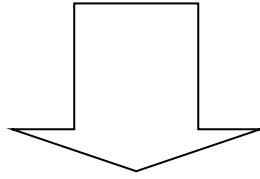
Figure 6a (see page 30 for the text explaining this figure)



EXPERIENCE / EXPERIENCING / EXPERIENCED / EXPERIENTIAL: -knowledge of.., skills in.., observation of.. - gained through involvement in / exposure to. - perceived event, -wisdom gained in reflection on some events or interpretation of them, -first-hand experience, -second-hand experience, -third-hand experience, subjective experience, direct observation of or participation in - fact or state of having been affected by or gained knowledge through direct observation or participation, - the conscious events that make up an individual life, - something personally encountered, undergone or lived through, -act or process of directly perceiving events or reality, -acquaintance, -conversance, - familiarity, -know, -see, -witness, -go through, -encounter, -the process of doing and seeing things - of having things happen to you, -skill or knowledge that you get by doing something, -apprehension of an object, thought or emotion through the senses of mind, -active participation in leading to the accumulation of knowledge or skill, participated in or lived through, -actual knowledge or contact, - a particular incident, feeling etc. that a person has undergone, -the content of a perception regarded as independent of whether the apparent object actually exist, -the totality of a person's perceptions, -to be emotionally or aesthetically moved by, -something personally lived through or encountered, -the observing, encountering or undergoing of things generally as they occur in the course of time, -knowledge or practical wisdom gained from what one has observed, -an event as apprehended, -go or live through, -have first-hand knowledge of states, situations, emotions or sensations, -go through (mental or physical states), -undergo an emotional sensation, -contact, -expertise, -know-how, -involvement, -exposure, -familiarity, -encounter, -undergo, -taste, -go through, -observe, -perceive, -participate in, -run into, -come up against, - apprehend, -become familiar with

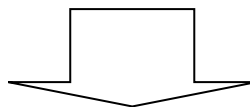
Figure 6b (see page 30 for the text explaining this figure)

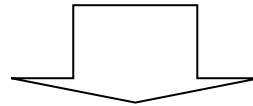




EXPERIENCE / EXPERIENCING / EXPERIENCED / EXPERIENTIAL: -knowledge of.., skills in..., observation of.. - gained through involvement in / exposure to. - perceived event, -wisdom gained in reflection on some events or interpretation of them, -first-hand experience, -second-hand experience, -third-hand experience, subjective experience, -something personally encountered, undergone or lived through, -act or process of directly perceiving events or reality, - acquaintance, -conversance, -familiarity, -know, -see, -witness, -go through, - encounter, -the process of doing and seeing things - apprehension of an object, thought or emotion through the senses of mind, contact, - -the content of a perception regarded as independent of whether the apparent object actually exist, -the totality of a person's perceptions, -to be emotionally or aesthetically moved by, -the observing, encountering or undergoing of things generally as they occur in the course of time, -knowledge or practical wisdom gained from what one has observed, -an event as apprehended, -go through (mental or physical states), -undergo an emotional sensation, -expertise, -know-how, - involvement, -exposure, -familiarity, -encounter, -undergo, -taste, - go through, -observe, -perceive, -participate in, -run into, -come up against, - apprehend, -become familiar with

Figure 6c (see page 30 for the text explaining this figure)





EXPERIENCE / EXPERIENCING / EXPERIENCED / EXPERIENTIAL: -knowledge, -skills -observation, -perception, -expertise, -conversance, -acquaintance, -familiarity with; gained through involvement in / exposure to / encounter with. -wisdom gained in reflection on some events or interpretation of them, -first-hand experience, -second-hand experience, -third-hand experience, subjective experience, undergone, lived through, directly perceiving events or reality, -witness, -apprehension of an object, thought or emotion through the senses of mind, contact, -the content of a perception regarded as independent of whether the apparent object actually exist, -to be emotionally or aesthetically moved by, practical wisdom gained from what one has observed, -an event as apprehended, -go through (mental or physical states), -undergo an emotional sensation, -run into, -come up against,

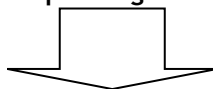
Figure 6d (see below for the text explaining this figure)

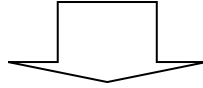
Figures 6a, b, c, d: Pooled attributes, synonyms, characteristics and definitions of experience / experiencing / experienced / experiential as a concept and some words related to experience, narrowed down from 6a through to 6d.

5.2 Attributes, synonyms, characteristics and definitions of “Meaning” as a concept and some related words.

MEANING: -something that is conveyed or signified, -sense or significance, -something that one wishes to convey especially by language, -an interpreted goal, intent or end, -inner significance, -expressive, -disposed or intended in a specified manner, -acceptation, -import, -sense, -significance, -signification, -the sense or significance of a word, sentence, symbol etc., -import, -semantic or lexical content, -the purpose underlying or intended by speech, action etc., -the inner symbolic or true interpretation, value or message, -valid content, efficacy, -the sense of an expression, its connotation, -the reference of an expression, its denotation, -expressive of some sense, intention, criticism etc., -what is intended to be or actually expressed or indicated, -the end, purpose or significance of something, -intentioned, -expressive, -intended to be or actually is expressed, -purport, -intended, expressed or signified, -subject matter, content, message, substance, import, significance, -symbolization, -signified, sense, -connotation, intention, -gist, essence, effect, core, -purport, intent, spirit, -moral, lesson, -point, -the idea that is intended, -implication, significance, import, -denotation, reference, -significance, -message, -explanation, -substance, -value, -import, -implication, -interpretation, -essence, -purport, -connotation, -gist, -signification, -definition, -sense, -explication, -elucidation, -denotation, -purpose, -idea, -goal, -aim, -object, -intention, -worth, -consequence, -validity, -usefulness, -efficacy, -thrust, -revealing, -suggestive, -the thing one intends to convey especially by language, -the thing that is conveyed especially by language, -something meant or intended, -significant quality especially implication of a hidden or special significance, -the logical connotation of a word or phrase, -the idea that is represented by a word, phrase etc., -the idea that a person wants to express by using words, signs etc., -the idea that is expressed in a work of writing, art etc., -the true purpose of something, -a quality that gives something real value and importance, -the reason or explanation for something, -content, -denotation, -drift, -import, -intent, -intention, -purport, -sense, -significance, -signification, -clue, -cue, -hint, -implication, -indication, -inkling, -intimation, -suggestion, -message, -tenor, -theme, -essence, -essentiality, -bottom, -definition, -crux, -gist, -core, -heart, -nucleus, -point, -matter, -motif, -motive, -subject, -topic, (Webster’s Encyclopedic Unabridged Dictionary of the English Language, 1994; <http://en.wikipedia.org/wiki>, 2013; <http://www.merriam-webster.com/dictionary> 2013; <http://www.learnersdictionary.com>, 2013; <http://www.businessdictionary.com>, 2013; <http://www.freeditonary.com>, 2013); <http://dictionary.reference.com>, 2013)

Figure 7a (see page 32 for the text explaining this figure)





MEANING: is conveyed or signified, -sense, -significance, wishes to convey -an interpreted goal, intent -inner significance, -expressive, -intended, -acceptation, -import, -signification, content, -the purpose underlying, -the inner symbolic or true interpretation, value or message, -efficacy, -its connotation, its denotation, -expressed or indicated, -purport, -subject matter, -substance, -symbolization, -gist, essence, effect, core, -point, -the idea that is intended, -implication, -explication, -elucidation, -aim, -object, -intention, -worth, -consequence, -validity, -usefulness, efficacy, -revealing, -suggestive, -something meant -significant quality -implication of a hidden or special significance, -the logical connotation of -idea that is represented by -the idea that a person wants to express, -a quality that gives something real value and importance, -the reason or explanation for, -clue, -hint, -indication, -intimation, -suggestion, -essentiality, -definition, -core, -matter, -motif, -motive, -subject,

Figure 7b (see below for the text explaining this figure)

Figures 7a and b: Attributes, synonyms, characteristics and definitions of “Meaning” as a concept and some related words, narrowed down from 7a to 7b.

5.3 Some attributes of quality of life, well-being, ageing-well and CaringTV® **

Figure-8-A

INDICATORS OF
QUALITY OF LIFE AND
HABILITATION
(Raij, et al. 2009: In
Erjanti and Ogasawa-
ra, Eds.2009)

MENTAL HEALTH

- sense of belonging
- absence of fear
- mental stimulation
- memory activation

NUTRITION

- cooking skills
- healthy food

ACTIVITY

- physical balance
- physical workload
- physical activation
- right tools
- empowerment

SOCIAL SUPPORT

- availability of services
- religious services
- significant others
- peer support
- participation

HABITAT

- security
- safety
- obstacle-free

HEALTH

- knowledge of illness
- good sleep
- right medication
- assessment and control
- hygiene

Figure-8-B

THE CONCEPTUAL
MODEL OF THE
EXPERIENCED MEAN-
ING OF CARINGTV®
(Lehto 2008; 2009)

**MEANING OF
DAILY LIFE**

- safety
- activation
- caring for oneself

**MEANING OF
ACTIVITY**

- enlivening
- fitness and functional ability
- participation
- stimulation
- pastimes

**MEANING OF
KNOWLEDGE**

- receiving new knowledge
- remembering old knowledge

MEANING OF LIFE

- increased activeness
- participation
- sense of humour
- enriched life
- new life

**MEANING OF
SOCIALIZATION**

- meaning of social relations
- meeting new people
- caring for each other
- staying in touch

Figure-8-C

AGING WELL
(Malandar-Wikman
et al. 2008a
In Wikman 2008)

**SOCIAL
NETWORKING**

- avoiding being alone / loneliness
- connecting
- being active

**PSYCHOLOGICAL
WELLBEING**

- focusing on here and now / the future
- (Re)construction of reality
- being content
- feeling safe

PHYSICAL CAPACITY

- being mobile
- reflecting on capability

EMPOWERMENT

- feeling independent
- being in control
- using assistant technology
- self-determination
- exert influence

Figure-8-D

Malandar-Wikman et
al. 2006

CLIENT PARTICIPATION**EMPOWERMENT****THE USE OF ICT***

(**see page 40 for the text explaining figures 8A to 8R)

Figure-8-E

CARINGTV SUPPORTIVE SERVICES AT HOME (Raij & Lehto 2008, In Tsihrintzis et al. 2008 (Eds))

PROMOTING ACTIVITIES OF DAILY LIVING

eg.

- nutrition
- sleeping

SUPPORT TO MANAGE WITH SELF-CARE

- eg.
- medication
 - pain

ACTIVATING SITUATIONAL SUPPORT

- eg.
- peer group
 - discussions
 - participation

SUPPORTIVE METHODS

- eg.
- consultation
 - monitoring

SUPPORT TO REHABILITATION

- eg.
- physical exercises
 - breathing exercises
 - relaxation

PROMOTING SAFETY AND MENTAL HEALTH

Figure-8-F

Malander-Wikman et al. 2008b

FEELING SAFE

- free from fear of falling
- free from fear of violence
- fear of not being able to take care of one's self

BEING MOBILE

- freedom of movement
- able to do what you like

BEING POSITIONED AND SUPERVISED

- nothing to be ashamed of
- living in a society of surveillance

REFLECTING ON NEW TECHNOLOGY

- participating in development and design
- acceptance and fascination

Figure-8-G

EUROPEAN MODEL OF AGEING WELL (Ferring et al. 2003)

PHYSICAL HEALTH AND FUNCTIONAL STATUS

- diseases
- medications

MATERIAL SECURITY

- present resources
- future resources

SOCIAL SUPPORT RESOURCES

- social integration
- contact and communication

LIFE ACTIVITIES

- indoor activity
- outdoor activity

COGNITIVE EFFICACY /SELF RESOURCES /SELF WORTH

- self esteem
- resilience

LIFE

- life satisfaction

Figure-8-H

ECOLOGICAL MODEL OF WELL-BEING / QUALITY OF LIFE (Sixsmith et al. 2006)

PERSON / PERSONAL ASPECTS

SUPPORT NETWORK

SOCIAL NETWORK

PHYSICAL ENVIRONMENT

CULTURAL / SPIRITUAL ENVIRONMENT

ACTIVITIES

PERSONAL MEANINGS AND WELL-BEING

(**see page 40 for the text explaining figures 8A to 8R)

Figure-8-1

THE FOLLOWING DOMAINS AND ATTRIBUTES, ACCORDING TO ELDERLY PEOPLE THEMSELVES, ADD QUALITY TO THEIR LIVES

(Gabriel & Bowling 2004; Bowling & Gabriel 2007).

SOCIAL ROLES AND ACTIVITIES AND OTHER ACTIVITIES ENJOYED ALONE

- attends local events/ places of worship for contacts/ activities
- mental pursuit for alertness
- physical activities; walking for exercise/ fitness
- eats, drinks out for enjoyment
- gardening for pleasure
- leisure activities for pleasure
- clubs/ local groups for contacts
- holidays/ outings for pleasure/enjoyment
- pets for enjoyment
- music; by playing instrument/ singing for pleasure
- reading for relaxation/ enjoyment
- TV/video/ music/ wildlife for pleasure
- security
- helps others (through voluntary and committee work) for enjoyment/ feeling valued (purpose of life, social role)/ keeping busy/ preventing loneliness

SOCIAL RELATIONSHIPS

HAS PARTNER/ FRIEND/ FRIENDS FOR:

- closeness/ social contacts/ compatibility/ companionship/ conversation
- doing things together/ doing things with
- empowerment
- intimacy/ love
- pleasure or enjoyment of company
- practical and reciprocal help
- security (to be there if needed)/ sharing responsibilities
- self-esteem/ feeling valued/ "be nice to me"

PSYCHOLOGICAL OUTLOOK /RESOURCES

- positive outlook as leads to focus on: well-being/ satisfaction with/ acceptance of life
- feeling lucky -compared to other people
- freedom from stress/ loneliness
- good memories
- looking forward
- spiritual strength

HAVING HEALTH

- feel empowered in life
- lack of restriction in life
- freedom from discomfort/ pain/ aches/ difficulty sleeping
- ability to: do things, wants to do own personal/ domestic task
- remain in own home
- participate in social activities
- go out for pleasure/enjoyment
- take holidays/ travel for pleasure
- drive car
- eat and drink what one

FINANCES

ADEQUATE TO AFFORD:

- amusements/ hobbies/ pastimes/ pets for pleasure
- holidays/ trips and car/ petrol to enable holidays/ trips for pleasure
- freedom to enjoy oneself
- getting out/ shopping
- basic essentials for security
- house repairs/ upkeep/ bills for security
- luxuries for pleasure

FREEDOM FROM WORRY ABOUT MONEY

EMPOWERMENT

HOME AND NEIGHBOURHOOD

- home/neighbourhood gives pleasure
- home close to friends/ family for social contacts
- local amenities/ transport/ council services for getting out/ security/ convenience
- lack of crime for security
- neighbourliness for pleasure/ social contact/ security

(**see page 40 for the text explaining figures 8A to 8R)

8-I-cont'd

THE FOLLOWING THEMES AND ATTRIBUTES, ACCORDING TO ELDERLY PEOPLE THEMSELVES, ARE CONSTITUENTS OF QUALITY OF LIFE (Gabriel & Bowling, 2004; Bowling & Gabriel 2007).

INDEPENDENCE

pleasure from being able:

- to get out/ have holidays/ social contacts/ activities
- enjoy life as no-one else to consider
- enjoy from having no work restrictions on time

-freedom of time/ work restrictions on life

freedom of independence:

- still living in one's own home/ looking after oneself and or home

SATISFACTION OF LOOKING AFTER ONESELF

Figure-8-J

SELECTED QUALITY OF LIFE CRITERIA PERCEIVED TO WARRANT PRIORITISATION IN DEVELOPING TECHNOLOGIES AIMING AT IMPROVING THE LIVES OF ELDERLY PEOPLE (Sixsmith et al. 2006)

ENHANCEMENT OF:

WELL-BEING

-positive impacts on sense of well-being

INDEPENDENCE

-positive impacts upon functional and emotional independence either self-perceived or perceived by others

SOCIAL PARTICIPATION

-positive impacts on ability to engage with others

Figure-8-K

FACTORS INFLUENCING QUALITY OF LIFE CAN BE SUMMARISED UNDER SEVEN THEMES (Miscellaneous sources, cited from Smith et al. 2004)

SOCIO-DEMOGRAPHIC ATTRIBUTES

-age -marital status -sex
-ethnicity -social class
-educational level

SOCIAL SUPPORT

-relationships with family/relatives/friends
-social activities
-social contacts with others

HEALTH

-satisfaction with health

MATERIAL RESOURCES

-adequacy of financial resources

CRIME

-experience of crime
-fear of crime and lack of personal safety

NEIGHBOURHOOD

-feelings about neighbours
-feelings about neighbourhood safety

HOUSING

-home comfort, size, light
-accessibility,
-independence

Figure-8-L

INDICATORS OF QUALITY OF LIFE AS IDENTIFIED BY ELDERLY PEOPLE (Farquhar 1995)

FAMILY

OTHER SOCIAL CONTACTS

ACTIVITIES

HEALTH / MOBILITY/ ABILITY

(**see page 40 for the text explaining figures 8A to 8R)

Figure-8-M

WHO QUALITY OF LIFE
(WHOQOL) INSTRUMENT
WHO 1997

PHYSICAL HEALTH

- general health
- energy and fatigue
- pain and discomfort
- sleep and rest

PSYCHOLOGICAL

- bodily image and appearance
- negative feelings
- positive feelings
- self-esteem
- thinking, learning, memory and concentration

LEVEL OF INDEPENDENCE

- mobility
- Activities of Daily Living
- dependence on medicinal substances and medical aids
- work capacity

SOCIAL RELATIONSHIPS

- personal relationships
- social support
- sexual activity

ENVIRONMENT

- financial resources
- freedom, physical safety and security
- health and social care: accessibility and quality
- home environment
- opportunities for acquiring new information and skills
- participation in and opportunities for recreation/leisure
- physical environment: pollution/noise/traffic climate
- transport

SPIRITUALITY/RELIGION/

Figure-8-N

CENTRAL DIMENSIONS OF
QUALITY OF LIFE
(George & Bearon 1980)

GENERAL HEALTH AND FUNCTIONAL STATUS

SOCIOECONOMIC STATUS

LIFE SATISFACTION

SELF ESTEEM

Figure-8-O

(Farquhar 1995)

MEASURES OF QUALITY
OF LIFE FOR OLDER
PEOPLE LIVING AT HOME
SHOULD BE SELECTED IF
ONLY THEY INCLUDE:

MEASURES OF SOCIAL CONTACTS AND ACTIVITIES

EMOTIONAL WELL-BEING (including life satisfac- tion)

ADEQUACY OF MATERIAL CIRCUMSTANCES

SUITABILITY OF THE ENVIRONMENT

HEALTH AND FUNCTIONAL ABILITY

Figure-8-P

IMPORTANT COMPO-
NENTS OF QUALITY
OF LIFE (Brown &
Flynn 2004; miscel-
laneous sources)

FAMILY AND OTHER RELATIONSHIPS / CONTACTS WITH OTHERS

EMOTIONAL WELL-BEING

RELIGION / SPIRITUALITY

INDEPENDENCE / MOBILITY / AUTONOMY

SOCIAL / LEISURE ACTIVITIES

FINANCES / STANDARD OF LIVING

OWN HEALTH

HEALTH OF OTHERS

(**see page 40 for the text explaining figures 8A to 8R)

(**see page 40 for the text explaining figures 8A to 8R)

Figure-8-Q

MODELS OF QUALITY OF LIFE
(Bowling 2004; miscellaneous sources)

OBJECTIVE INDICATORS

-standard of living, -health and longevity,
-housing and neighbourhood characteristics

SUBJECTIVE INDICATORS

-life-satisfaction and psychological well-being, -morale, -individual fulfilment,
-happiness (measured by using indicators of life-satisfaction, morale, balance
of affect and self-worth/self-esteem)

SATISFACTION OF HUMAN NEEDS

-objective circumstances (such as housing, security, food, warmth)
-opportunities for self-actualization reminiscent of Maslow's theory of human
needs (physiological, safety, security, social and belonging, ego, status, self-
esteem)

PSYCHOLOGICAL MODELS

-influencing and mediating variables that emphasise: -personal growth, cogni-
tive competence, -efficiency and adaptability, -level of dignity, -perceived
independence, -social competence, -control, -autonomy, -self-efficacy, -self-
mastery

HEALTH AND FUNCTIONING MODELS

-usually based on measures of broader health status: depression scales, scales
of physical functioning (Activities of Daily Living and Instrumental Daily Living)

SOCIAL HEALTH MODELS

-indicators of social network, support and activities

SOCIAL COHESION AND SOCIAL CAPITAL

-societal resources, -environmental resources, -neighbourhood resources

ENVIRONMENTAL MODELS

-concerned with studying aging in one's place of residence and the importance
of designing enabling internal and external environments in order to promote
the independence and active social participation of older people.

IDEOGRAPHIC / INDIVIDUAL HERMENEUTIC APPROACHES

-based in individual's: -interpretations and perceptions, -satisfaction with
their position, circumstances and priorities in life.

Figure 8-R:

MODEL OF AGING WELL TOGETHER (adapted from Rohr & Lang, 2009)

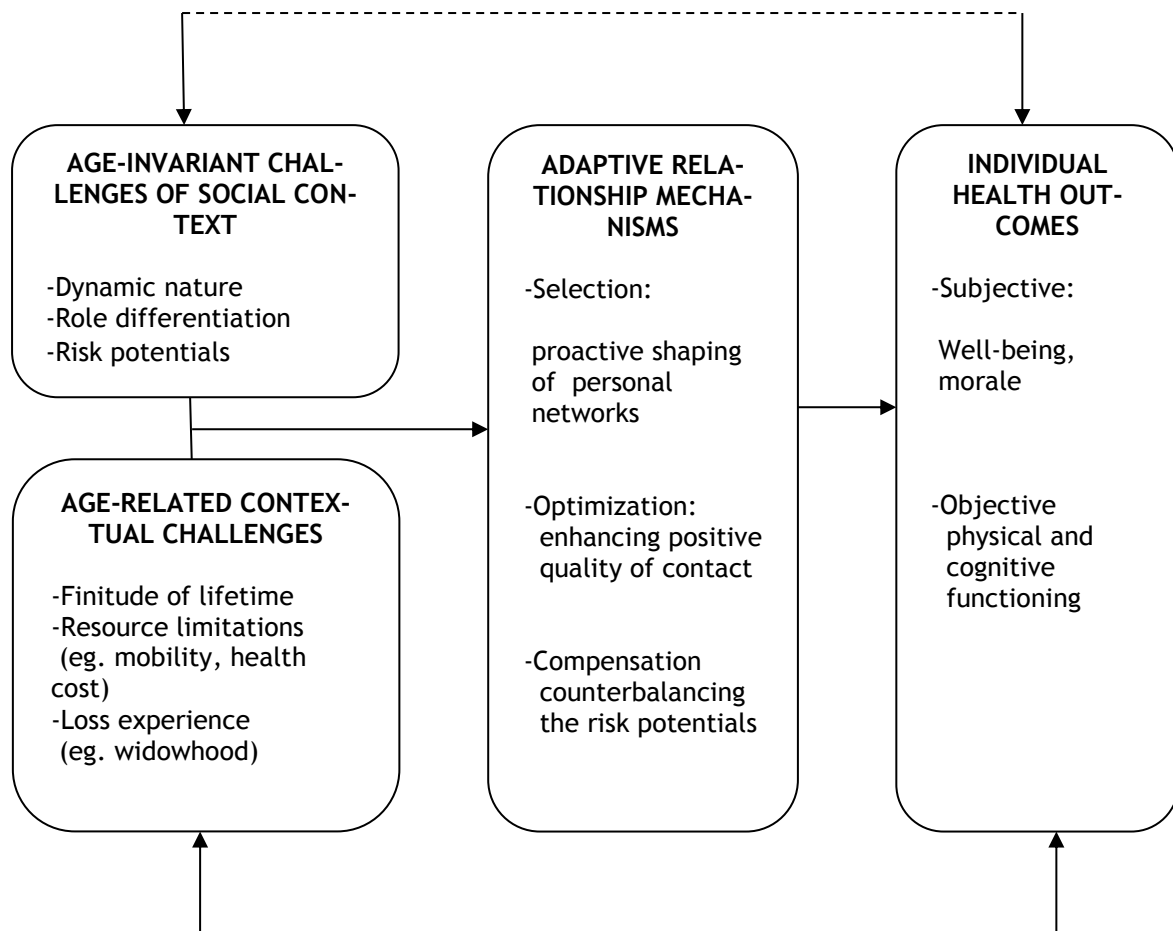


TABLE -1 CONCEPTUAL MODEL OF CARINGTV® WITH AND FOR:

	THE ELDERLY	THE DISABLED	MENTAL HEALTH PATIENTS	YOUNG PEOPLE
SOURCE →	Lehto 2011	Lehto & Matero 2011	Isaksson et al. 2011	Lehto et al. 2011
PROMOTING FACTORS	<ul style="list-style-type: none"> -participation (willingness and enthusiasm) -interaction -peer group -enthusiastic and supportive expert 	<ul style="list-style-type: none"> -active participation -learning how to use <ul style="list-style-type: none"> -voluntary programmes -support from the experts 	<ul style="list-style-type: none"> -meaningful participation -peer support, friends -programme contents -expert support 	<ul style="list-style-type: none"> -enthusiastic client -supportive expert <ul style="list-style-type: none"> - CaringTV® ease of use
INHIBITING FACTORS	<ul style="list-style-type: none"> -client sensitivity and demand -environmental distraction -technical fault -attitudes -programme timing 	<ul style="list-style-type: none"> -location of CaringTV® -sound problems -difficulty using remote monitors -varying expert support -getting a turn to speak 	<ul style="list-style-type: none"> - CaringTV® technical/sound problems -shyness -lack of commitment 	<ul style="list-style-type: none"> -coordinator's skills (inability to coordinate group dynamics) -technical problems -restlessness in the group
CONTENT AND METHODS	<ul style="list-style-type: none"> -interactive programmes -discussions -spontaneous programme sessions e-Welfare services 	<ul style="list-style-type: none"> -interactive programmes (music, exercise, quizzes) -one-to-one e-Chat 	<ul style="list-style-type: none"> -interactive programmes -programmes to support self-esteem -programmes about health -music, -exercise -e-Physiotherapy consultation 	<ul style="list-style-type: none"> -music, -library, -activity programmes -recreational programmes -personal involvement in programme- making
MEANING OF CARINGTV®	<ul style="list-style-type: none"> -personal significance in terms of: <ul style="list-style-type: none"> -social relationships, -everyday life, -functional ability. -empowerment 	<ul style="list-style-type: none"> -activation -sociability -affirmation of belonging in a group -new acquaintances -concentration -punctuality 	<ul style="list-style-type: none"> -new experience -activation -openness -activity programme 	<ul style="list-style-type: none"> -intensive interaction -video contact appeals -use of time (worker has more time for clients),-flexibility -young person is activated

Figures 8 A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R and Table-1: Selected models, indicators, behaviours, characteristics and attributes relating to Quality of life, Well-being, Ageing well and CaringTV® based on experiences of elderly people, their relatives, friends and significant others, caregivers and experts. *ICT=Information and Communications Technology

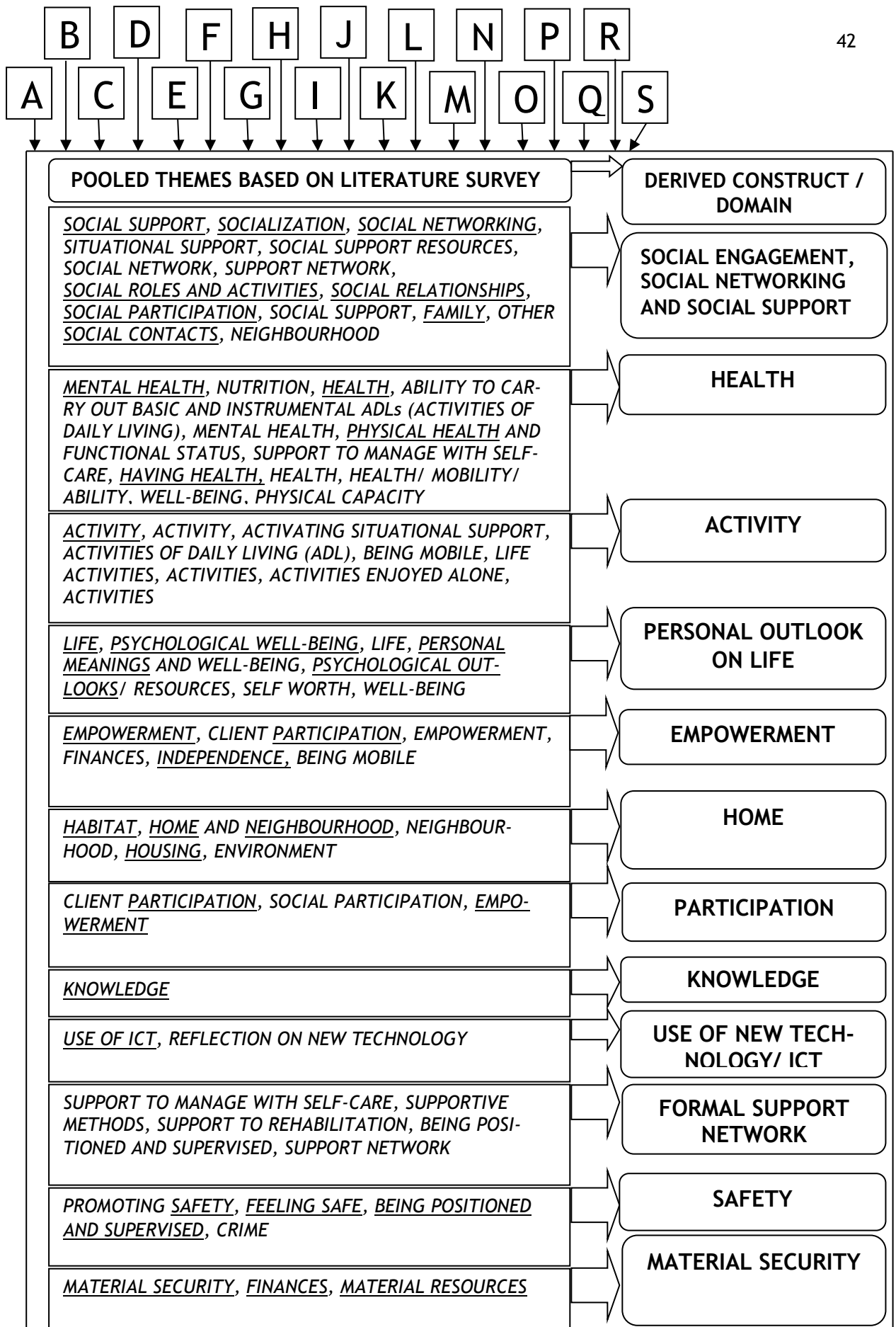


Figure 9: Pooled themes and derived constructs

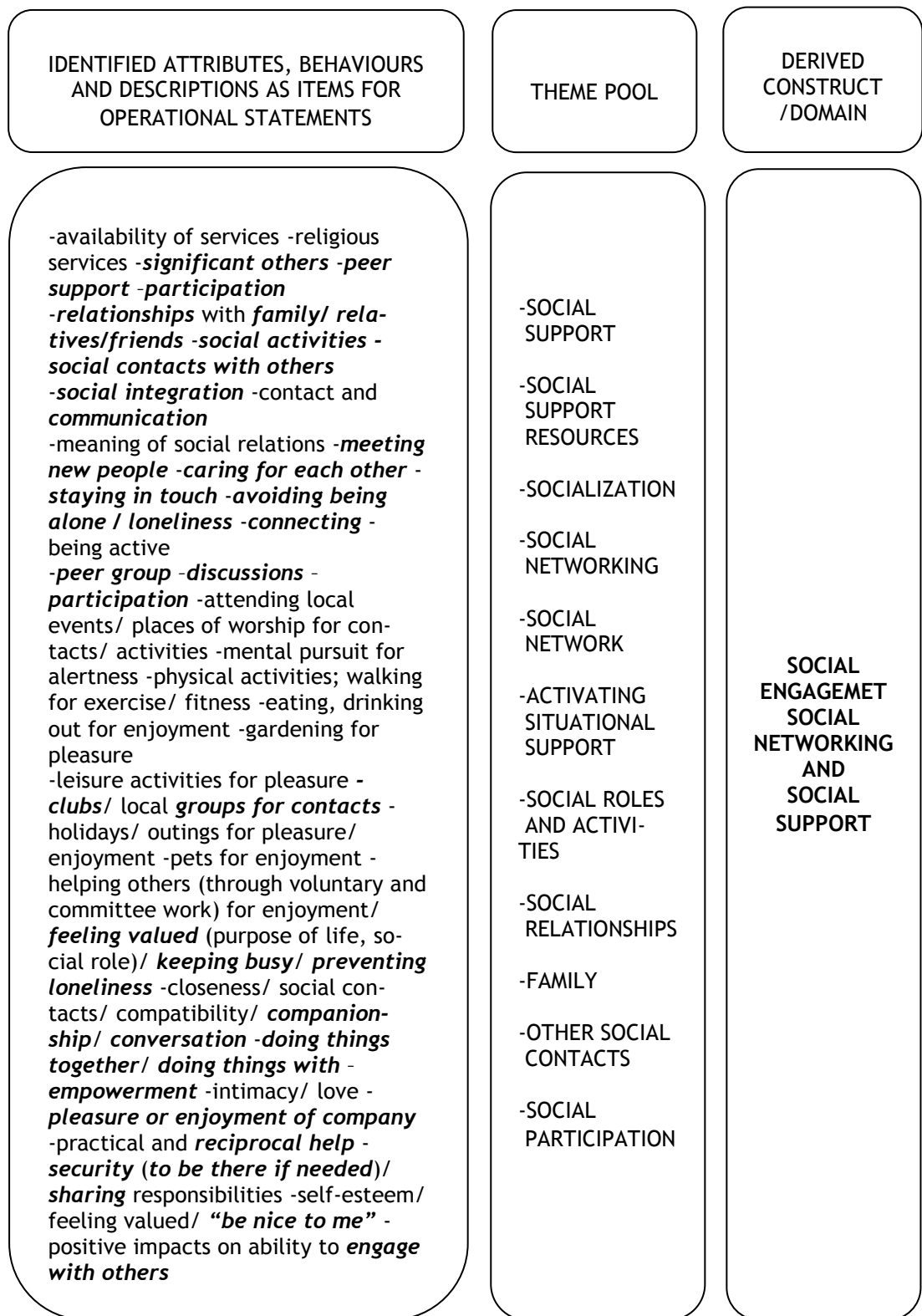


Figure 10a. Attributes, behaviours and characteristics of Social Engagement, Social Networking and Social Support

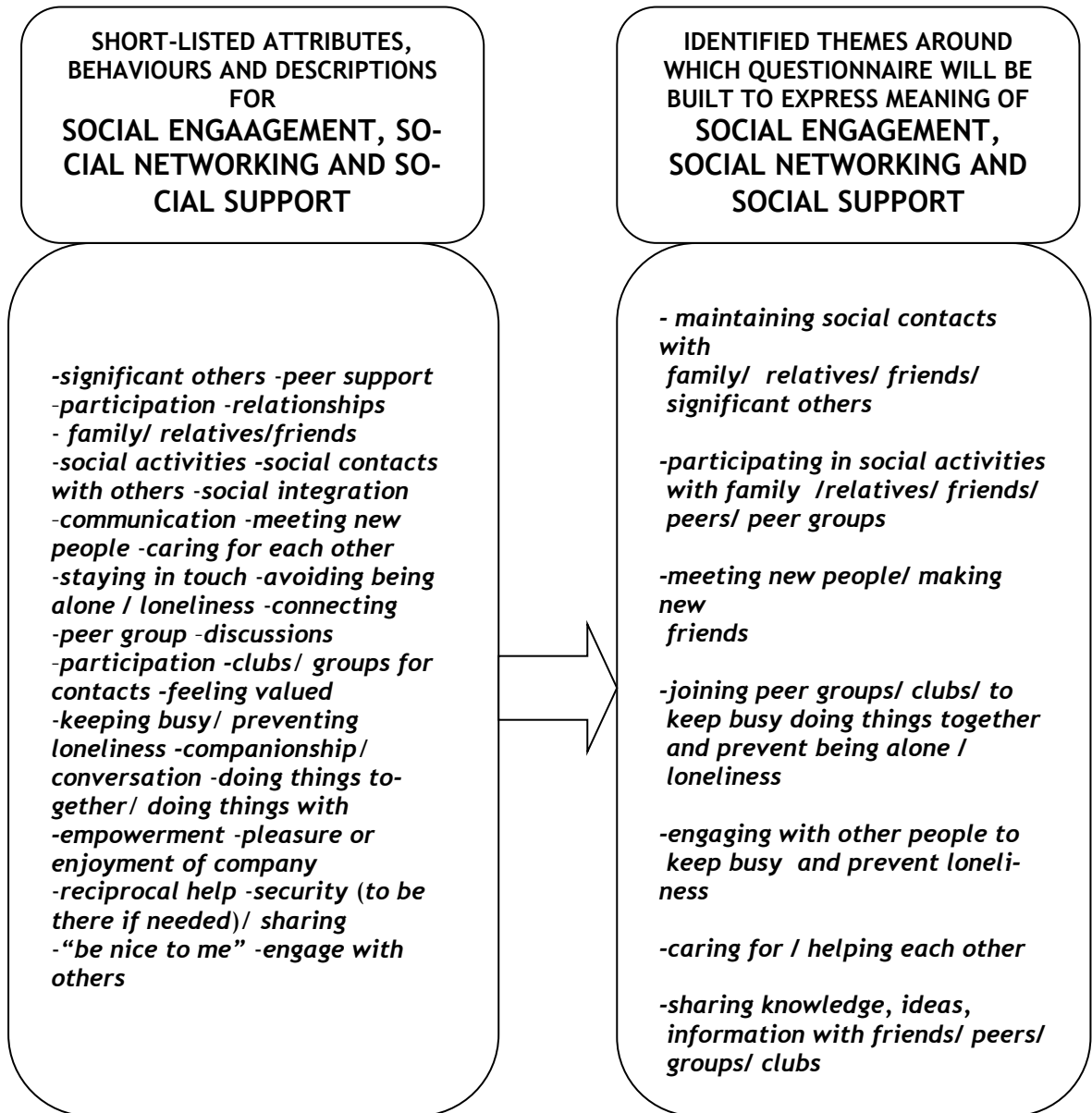


Figure 10b. Identification of themes around which questionnaire will be built to express meaning of Social Engagement, Social Networking and Social Support.

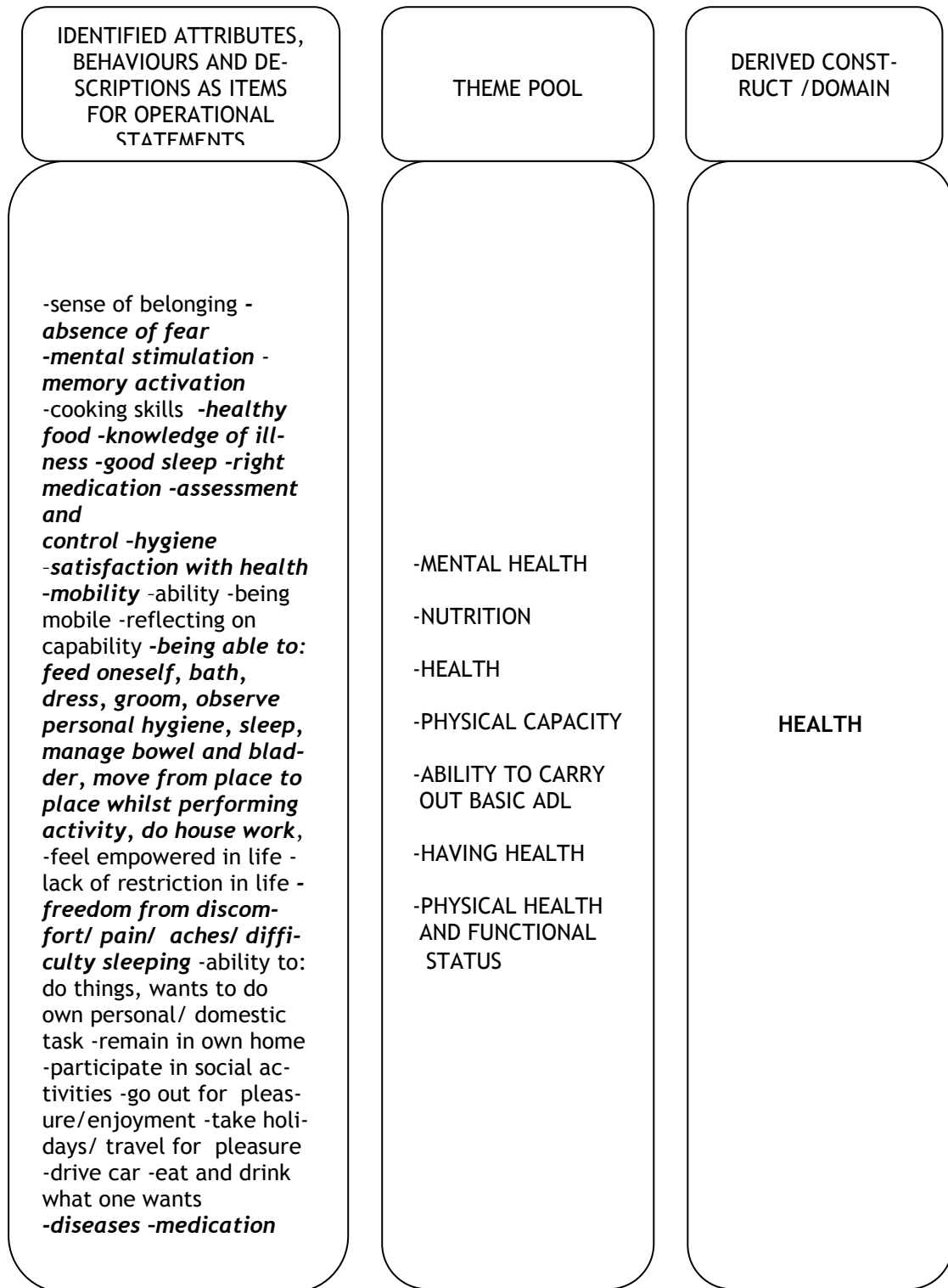


Figure 11a. Attributes, behaviours and characteristics of Health

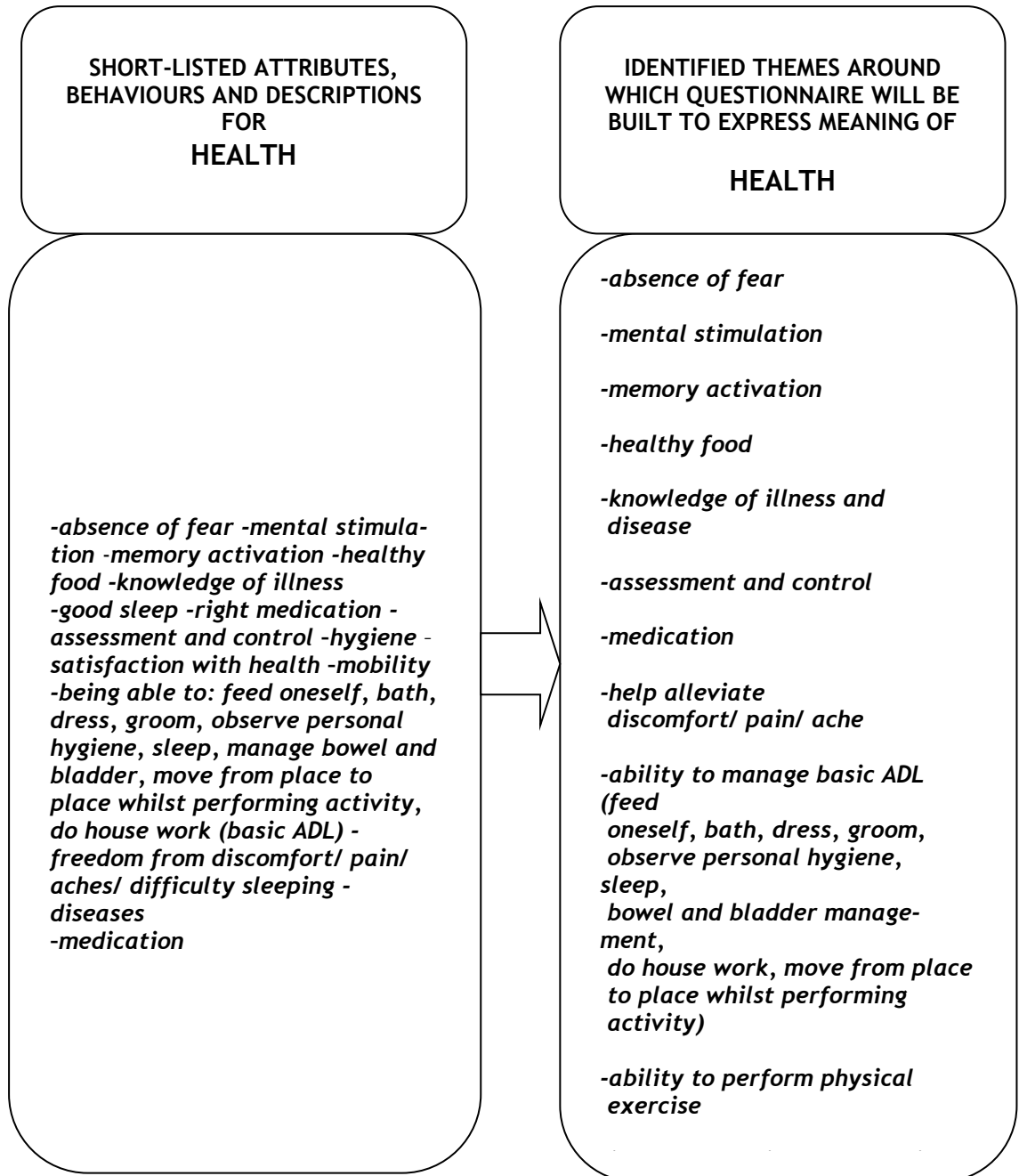


Figure 11b. Identification of themes around which questionnaire will be built to express meaning of Health.

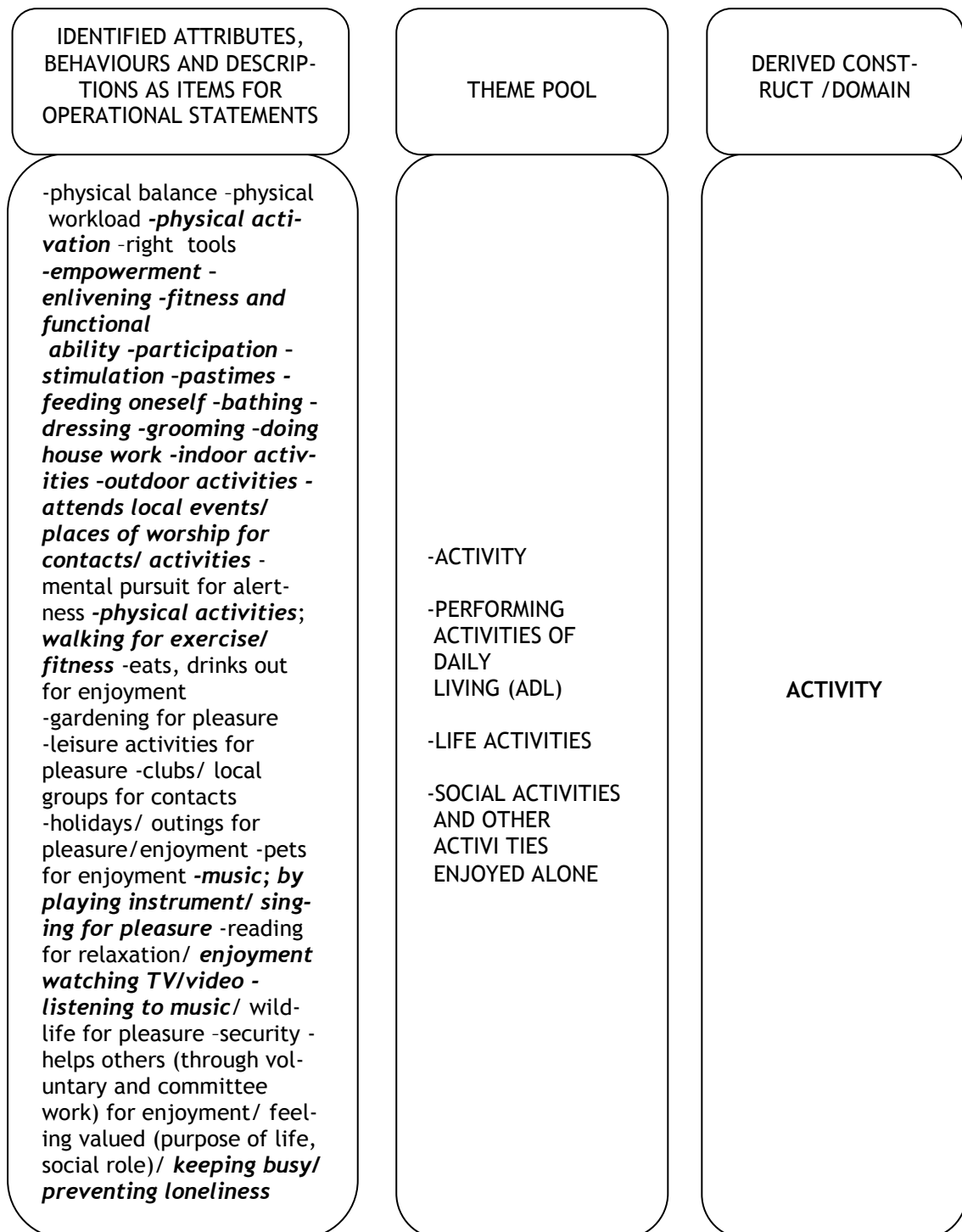


Figure 12a. Attributes, behaviours and characteristics of Activity

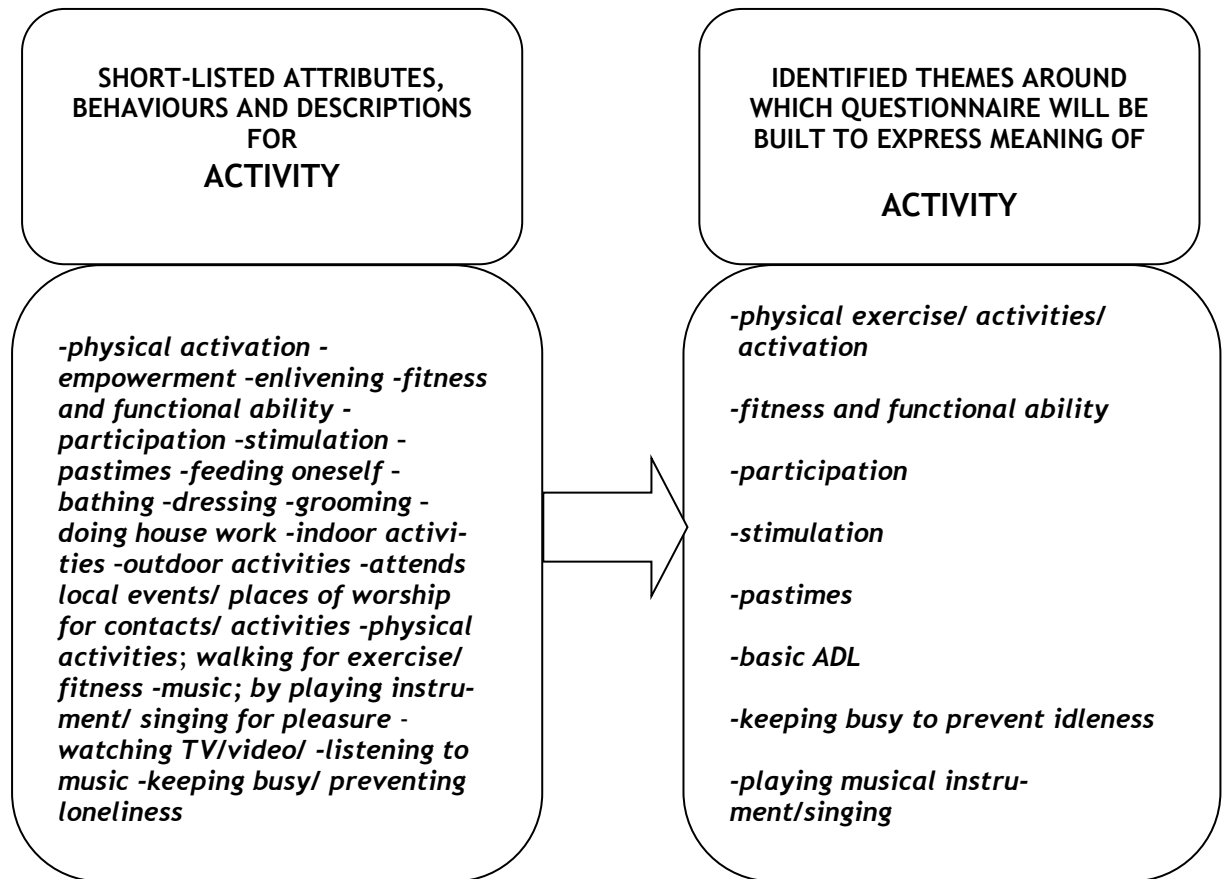


Figure 12b. Identification of themes around which questionnaire will be built to express meaning of Activity

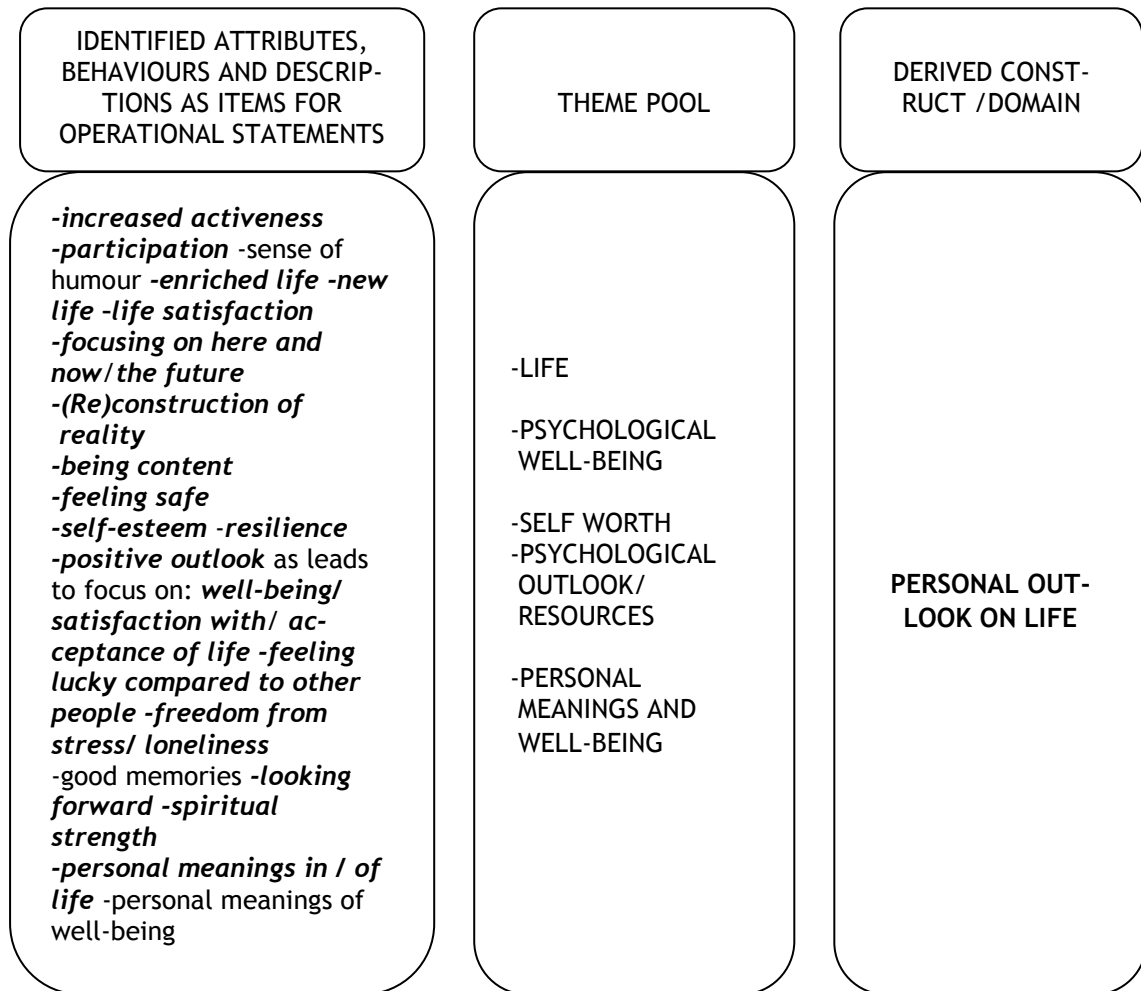


Figure 13a. Attributes, behaviours and characteristics of Personal Outlook on Life

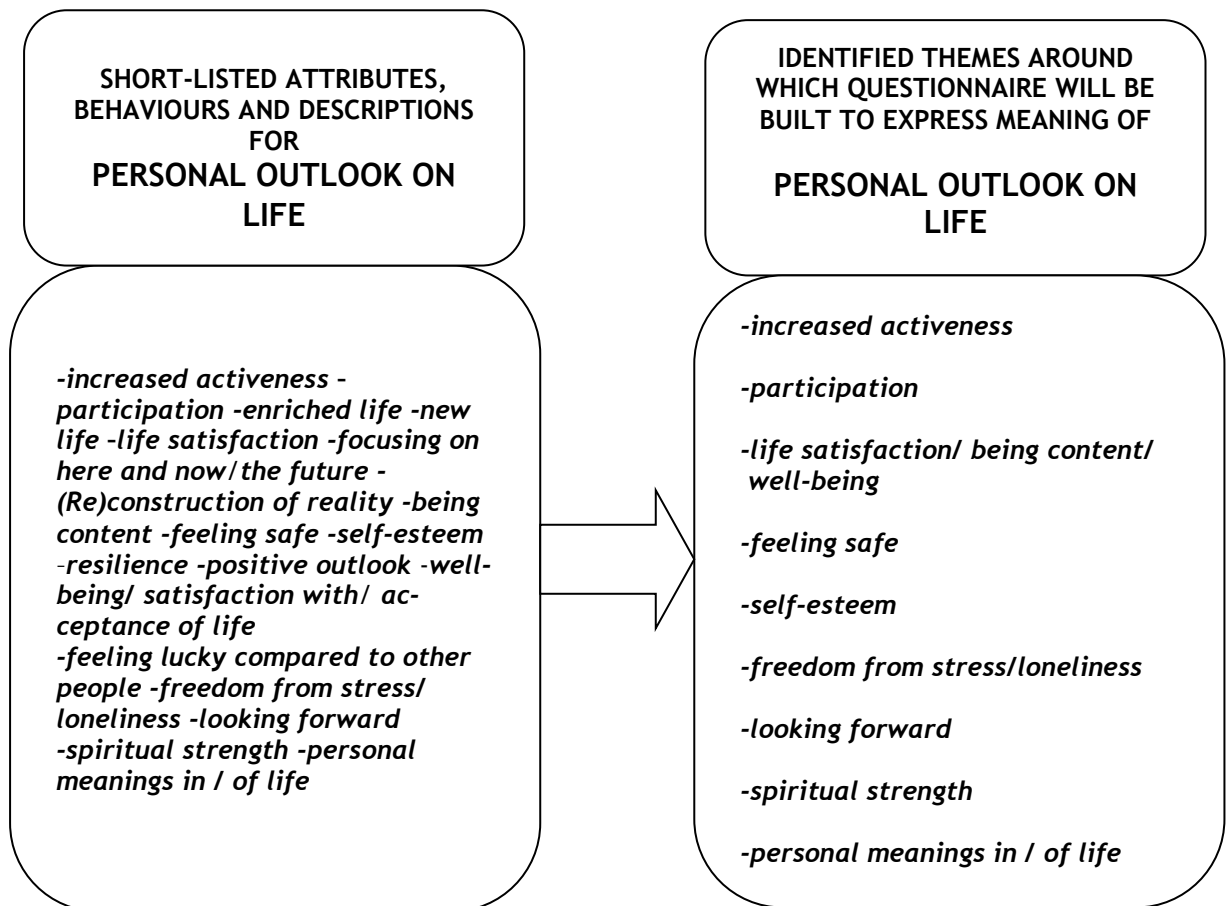


Figure 13b. Identification of themes around which questionnaire will be built to express meaning of Personal Outlook on Life

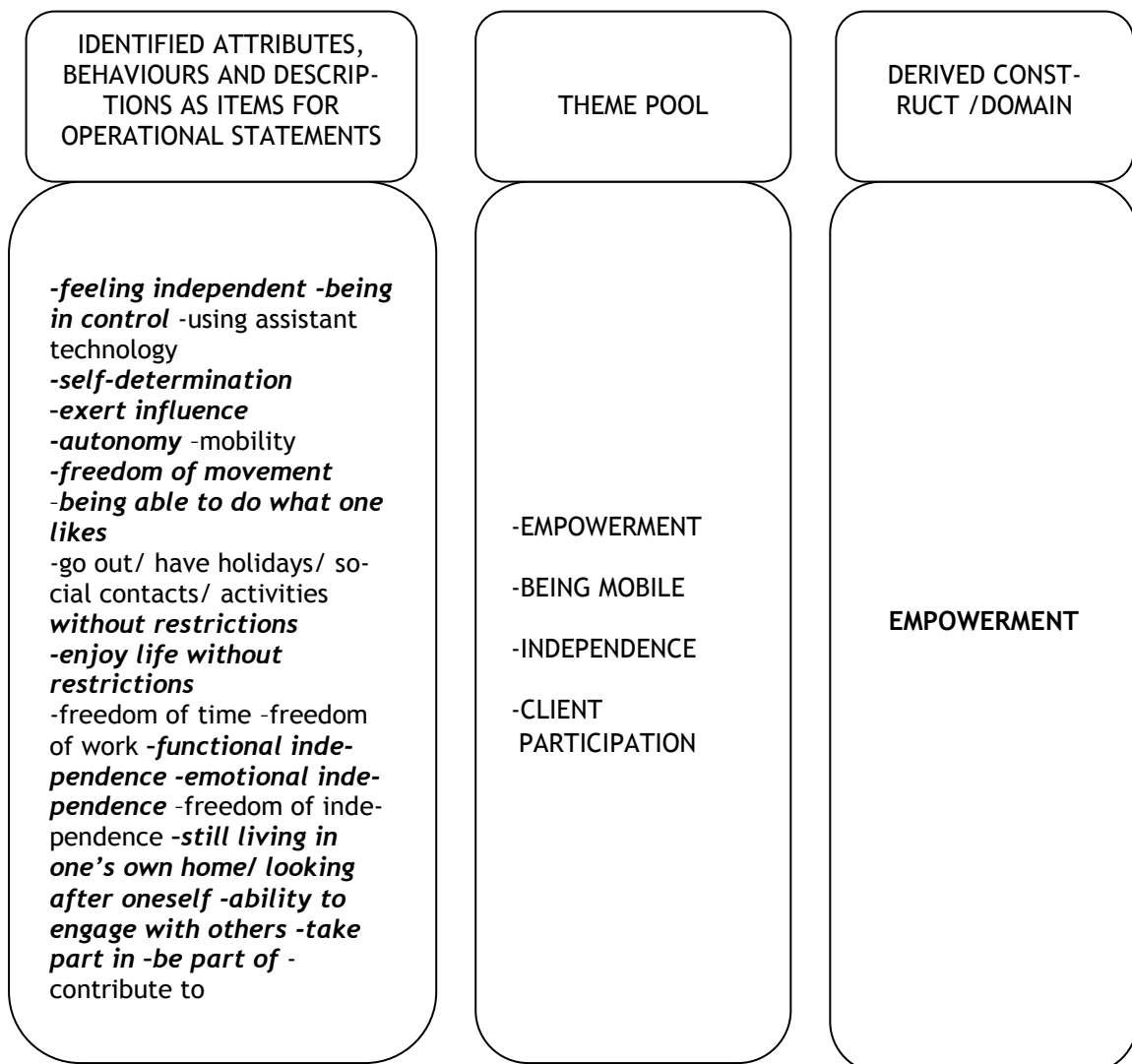


Figure 14a. Attributes, behaviours and characteristics of Empowerment

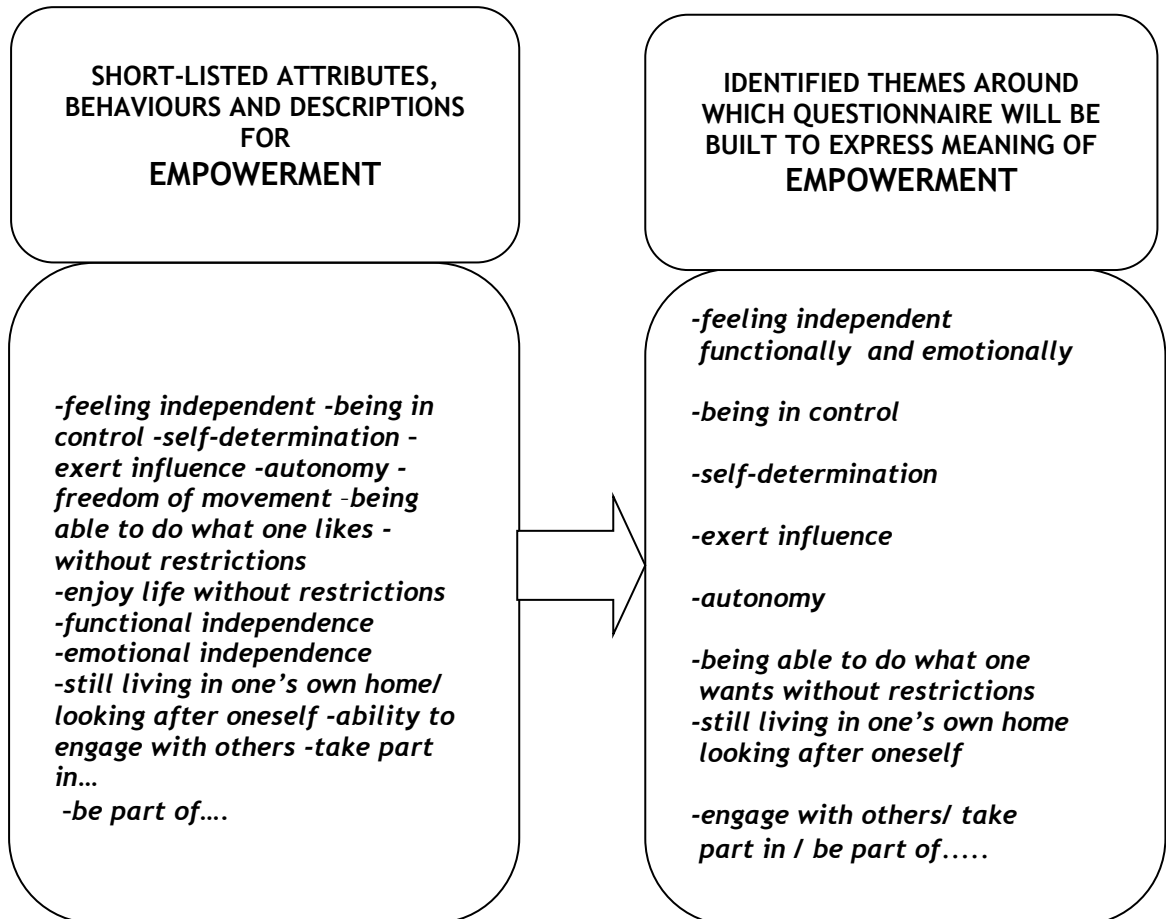


Figure 14b. Identification of themes around which questionnaire will be built to express meaning of Empowerment

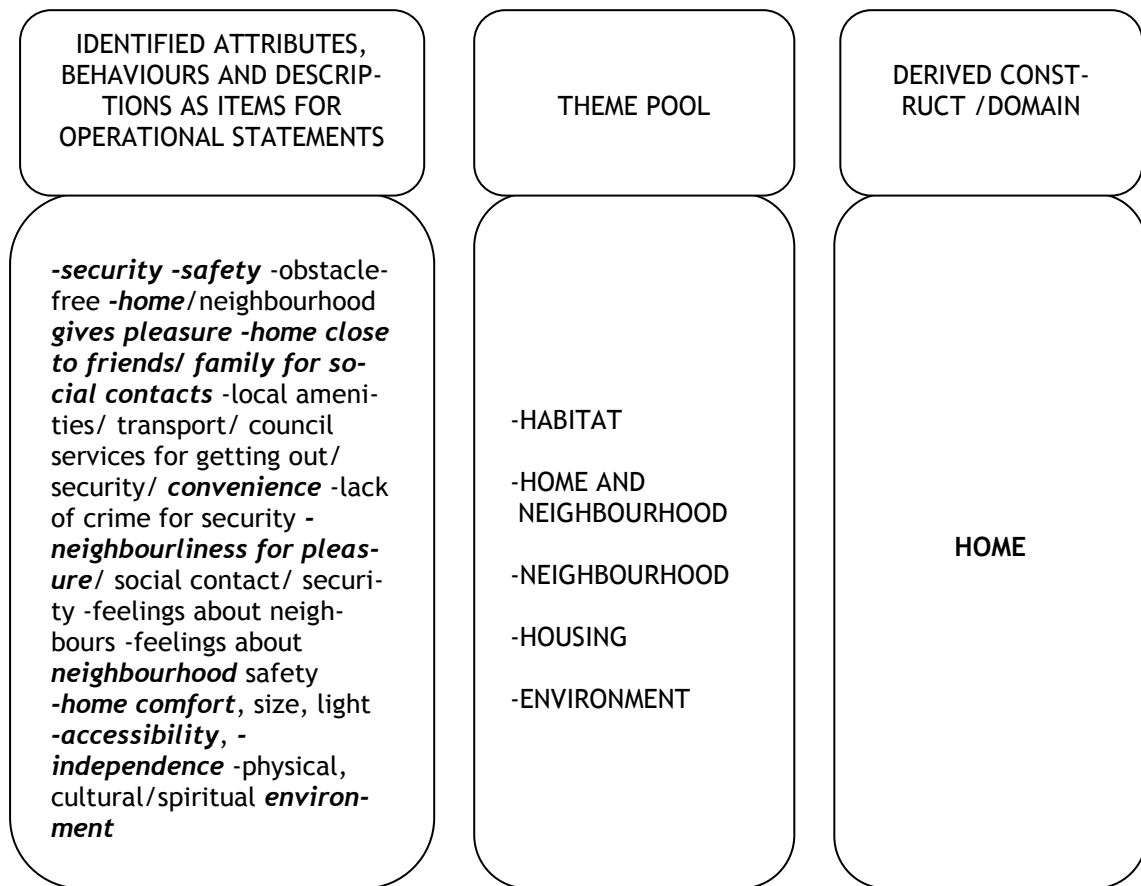


Figure 15a. Attributes, behaviours and characteristics of Home

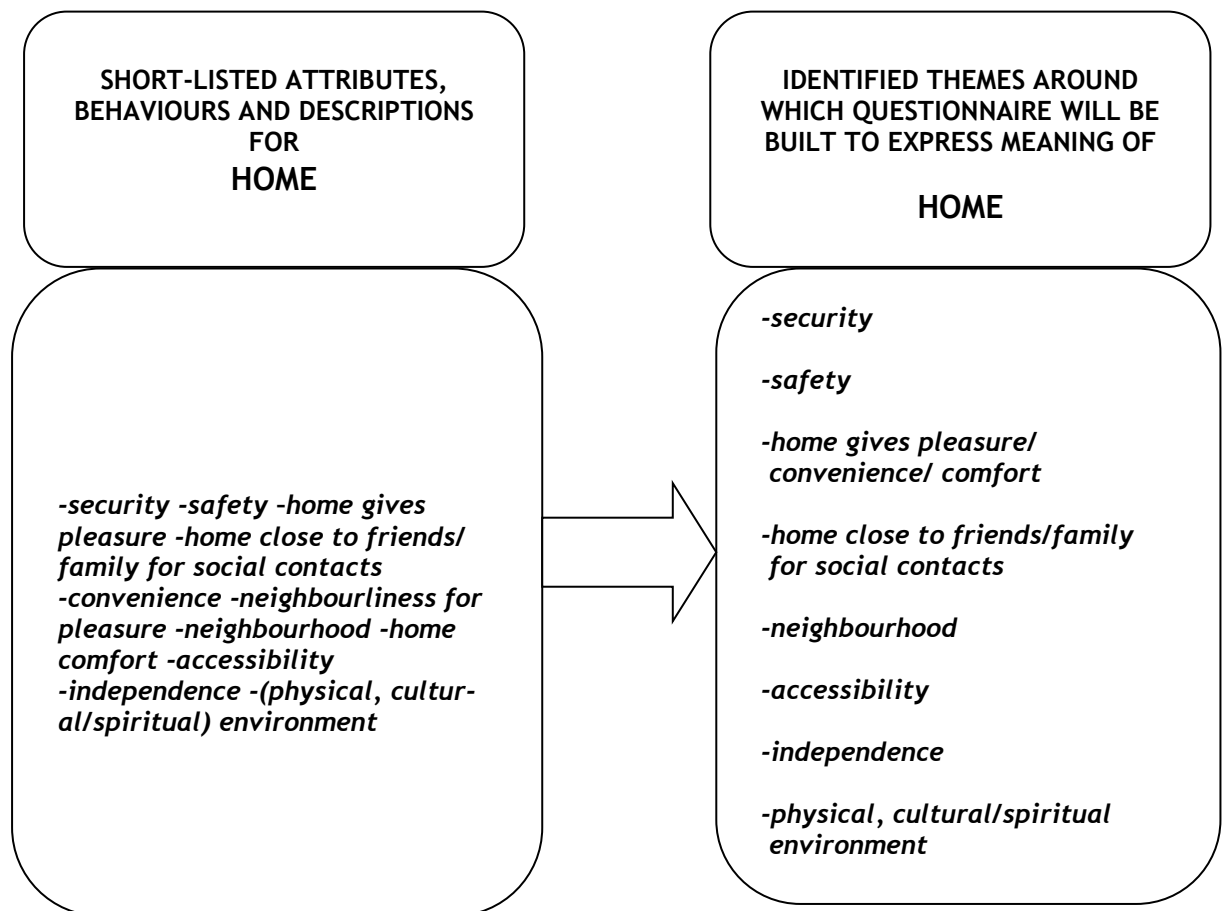


Figure 15b. Identification of themes around which questionnaire will be built to express meaning of Home

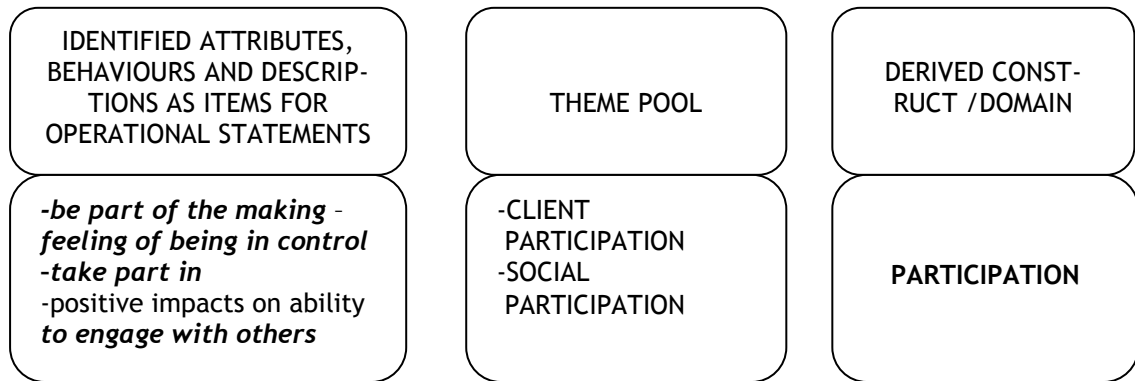


Figure 16a. Attributes, behaviours and characteristics of Participation

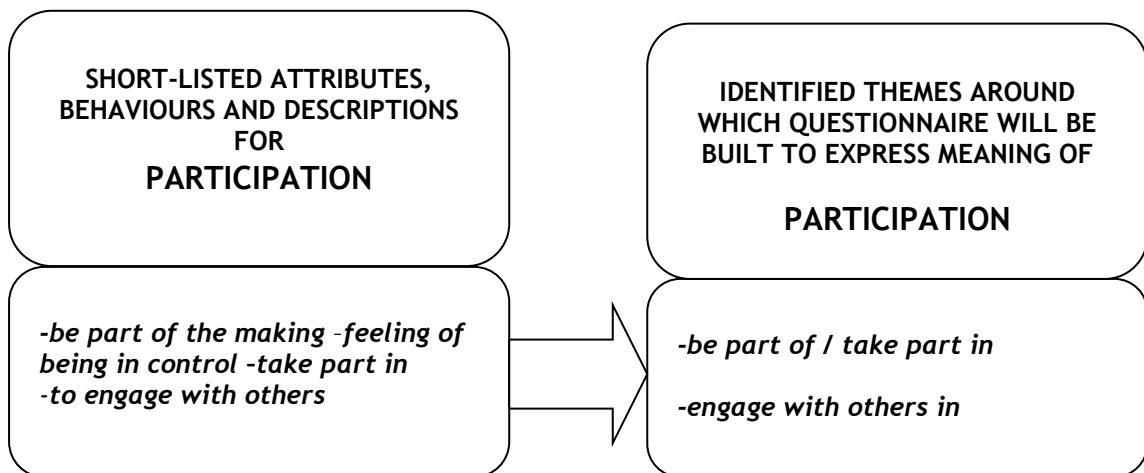


Figure 16b. Identification of themes around which questionnaire will be built to express meaning of Participation

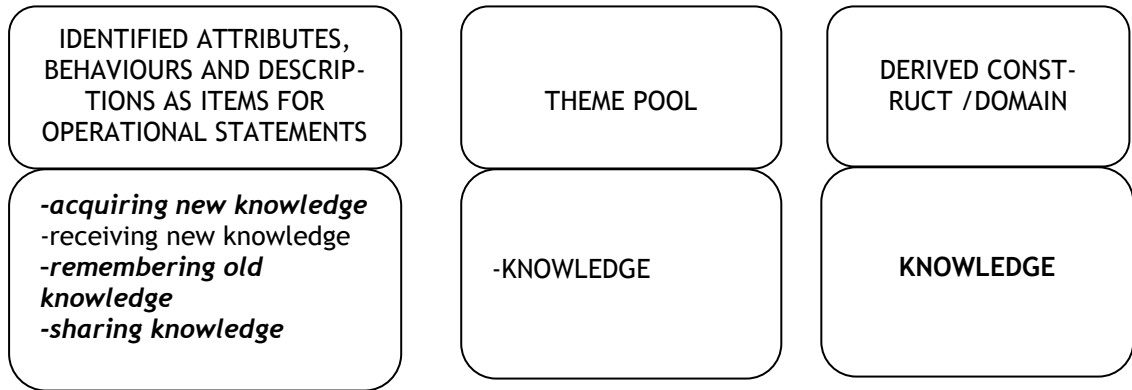


Figure 17a. Attributes, behaviours and characteristics of Knowledge

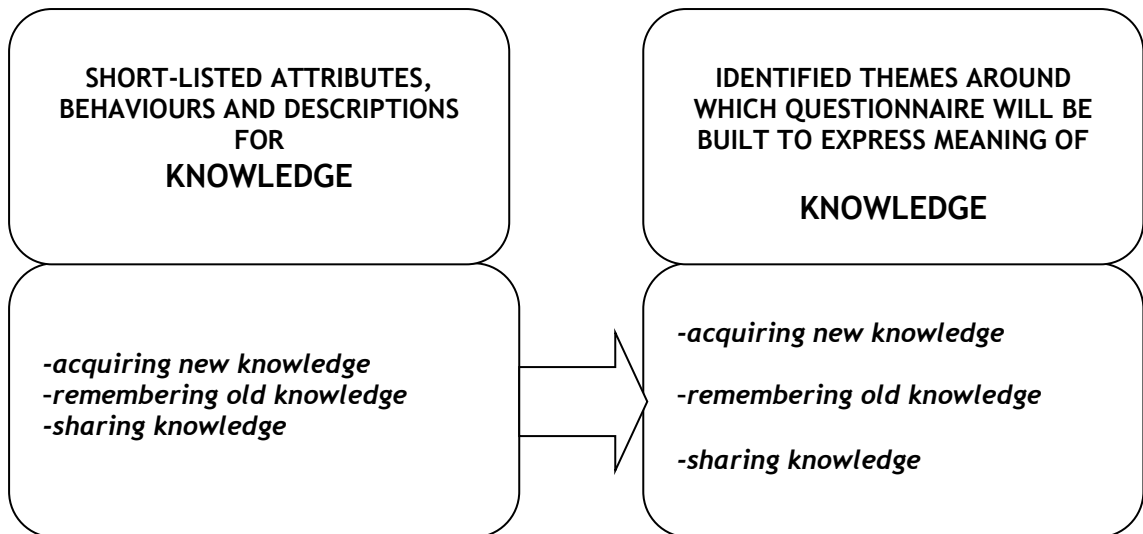


Figure 17b. Identification of themes around which questionnaire will be built to express meaning of Knowledge

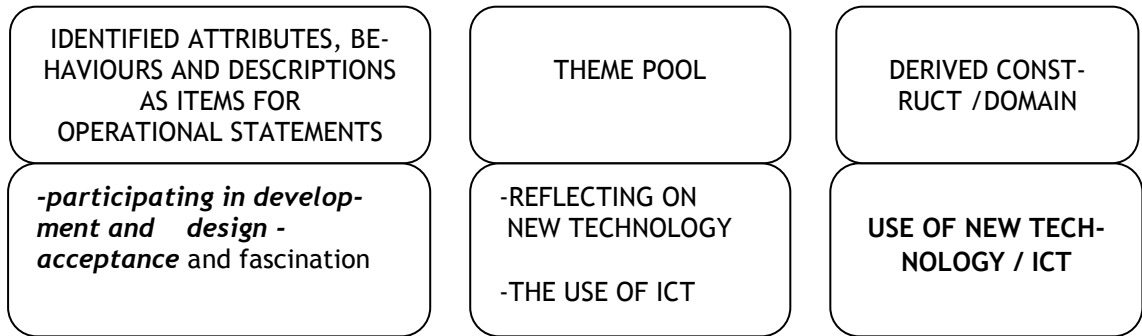


Figure 18a. Attributes, behaviours and characteristics of Use of New Technology / ICT

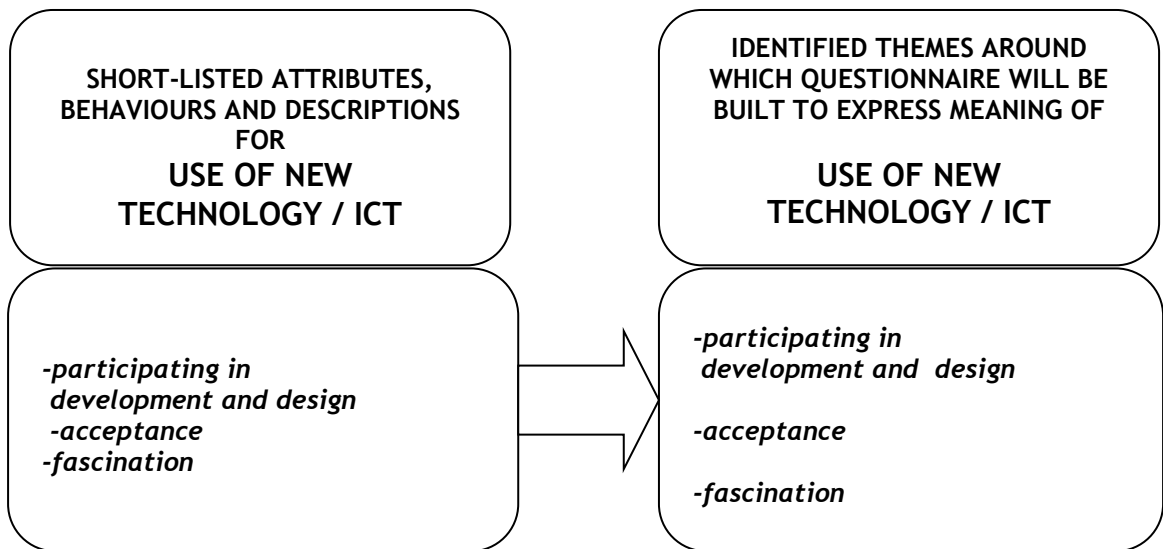


Figure 18b. Identification of themes around which questionnaire will be built to express meaning of Use of New Technology / ICT

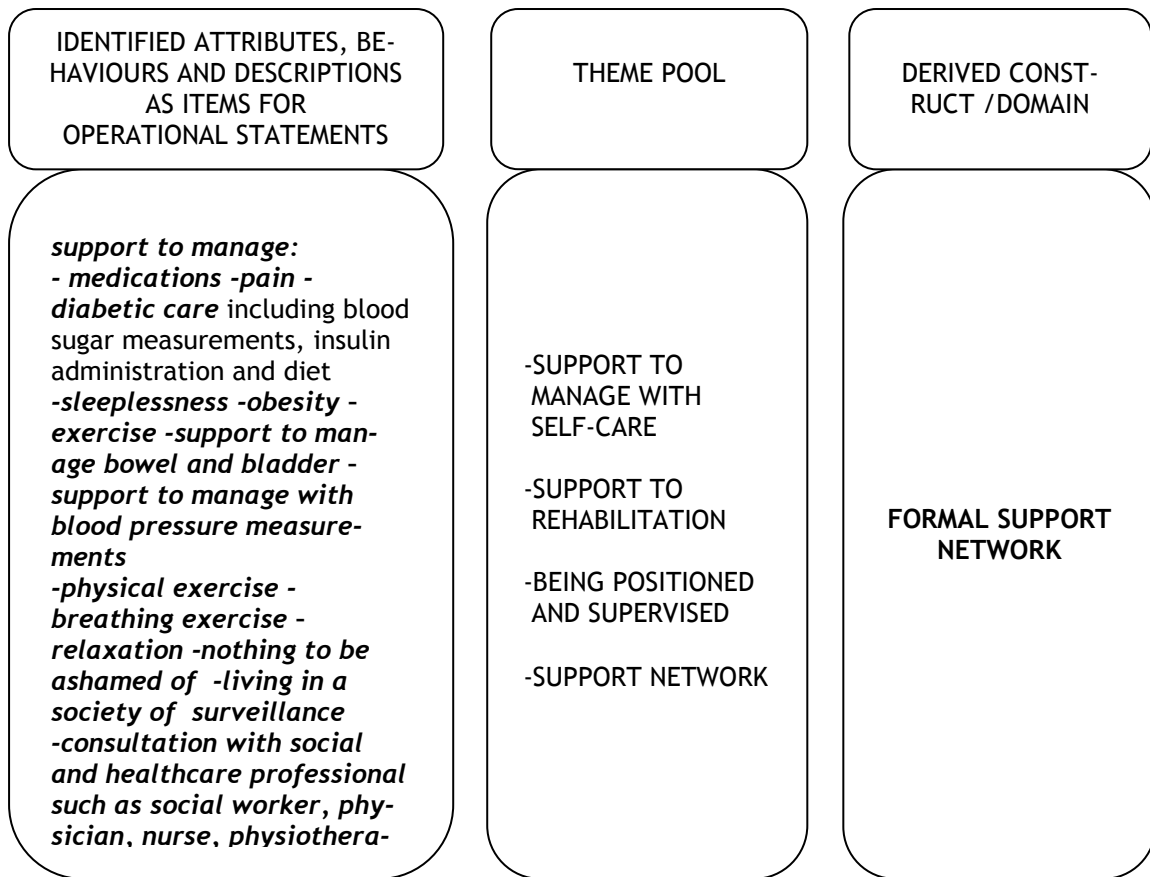


Figure 19a. Attributes, behaviours and characteristics of Formal Support Network

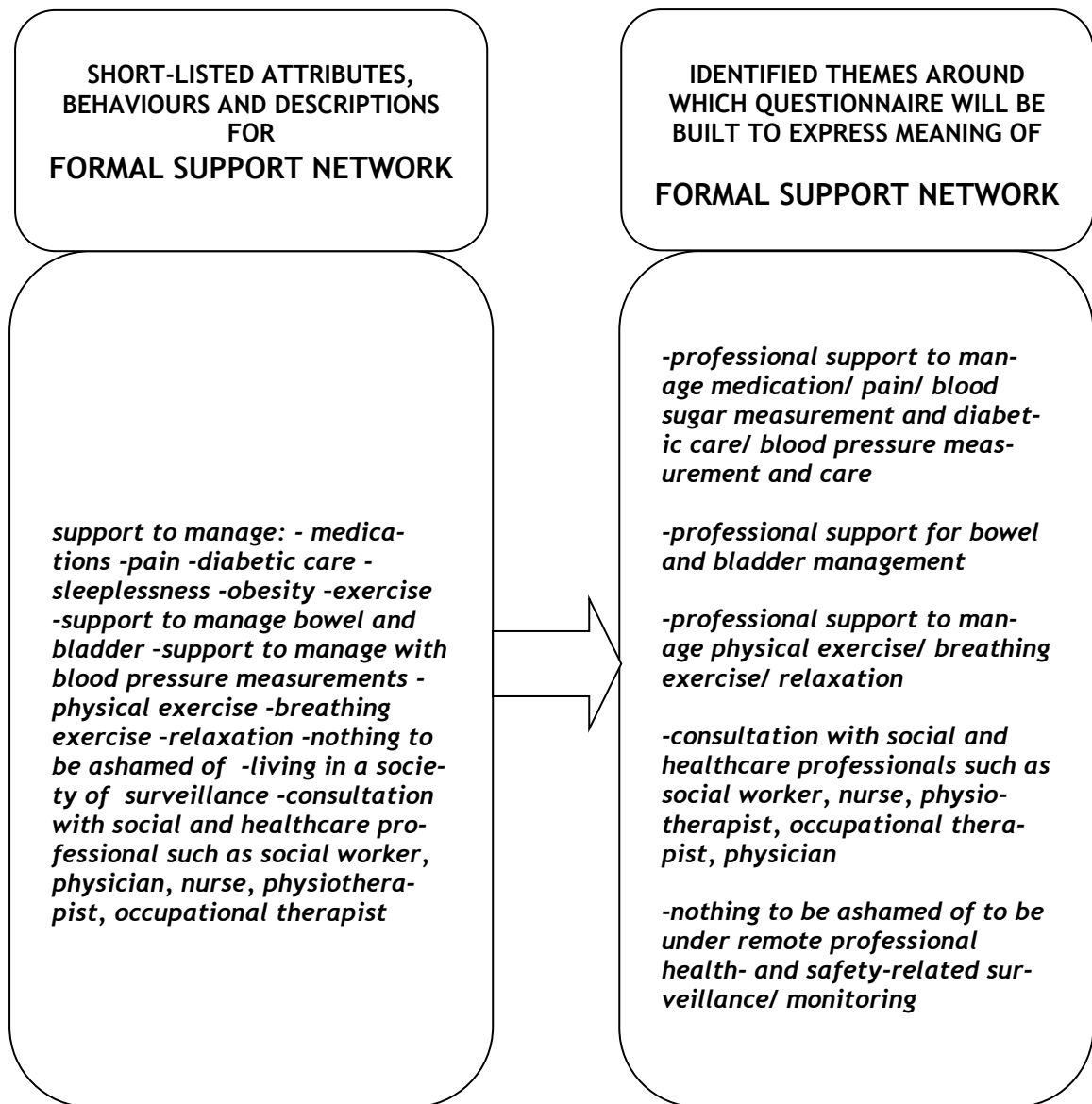


Figure 19b. Identification of themes around which questionnaire will be built to express meaning of Formal Support Network

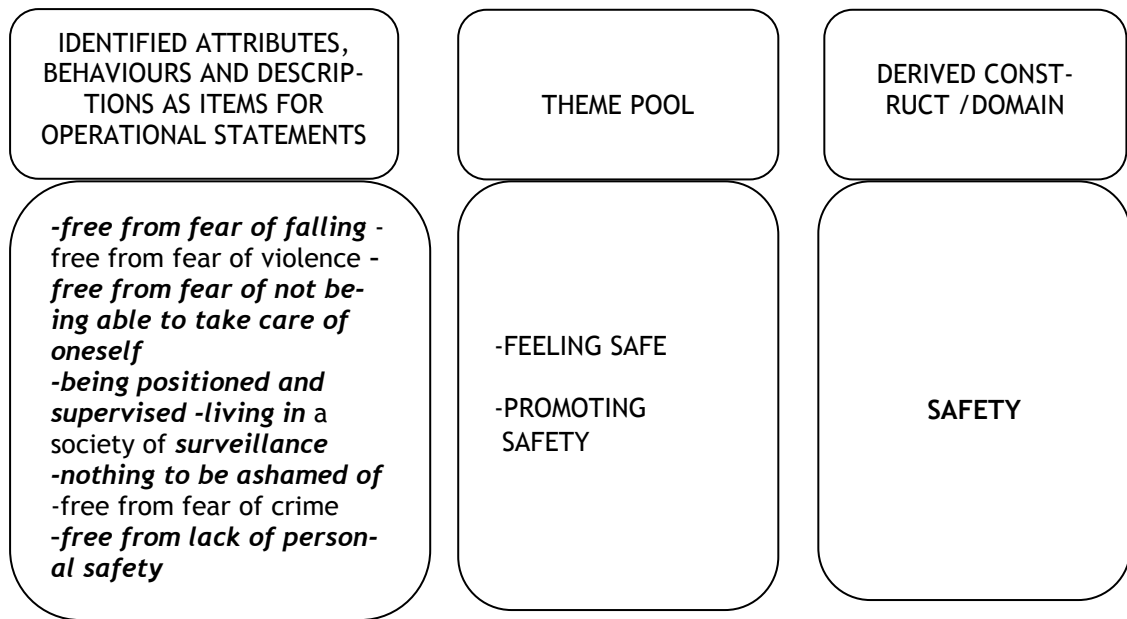


Figure 20a. Attributes, behaviours and characteristics of Safety

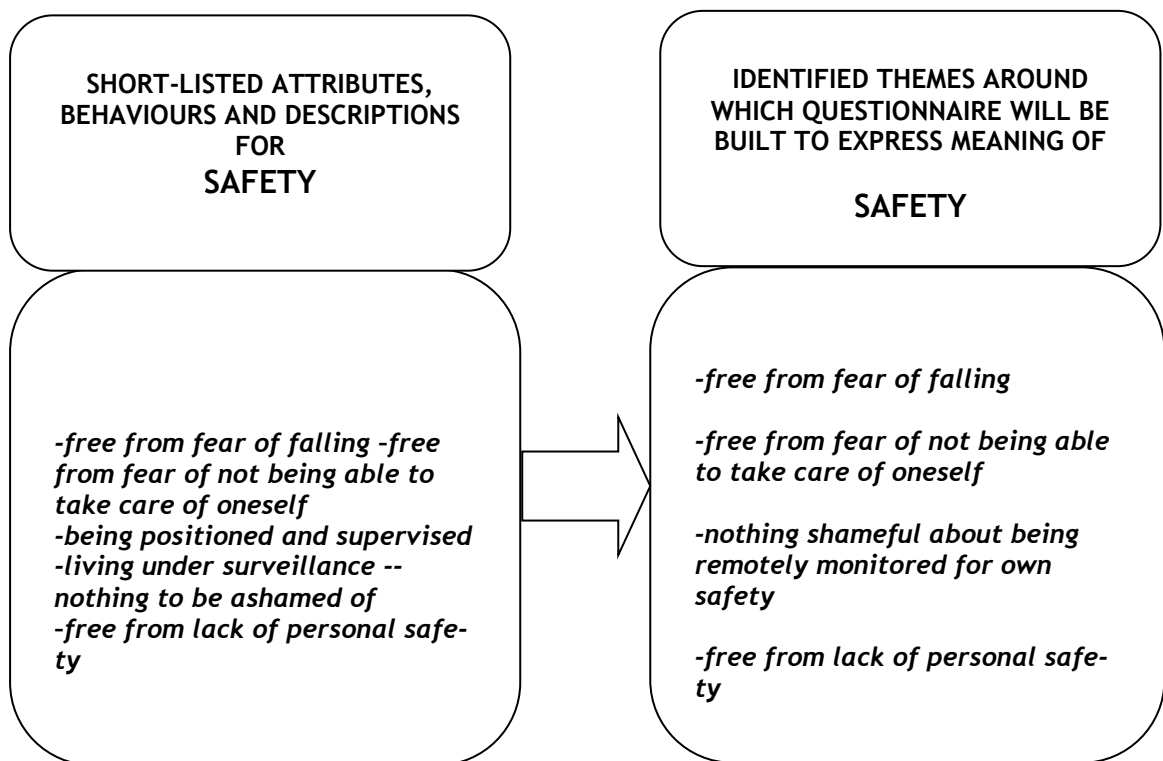


Figure 20b. Identification of themes around which questionnaire will be built to express meaning of Safety

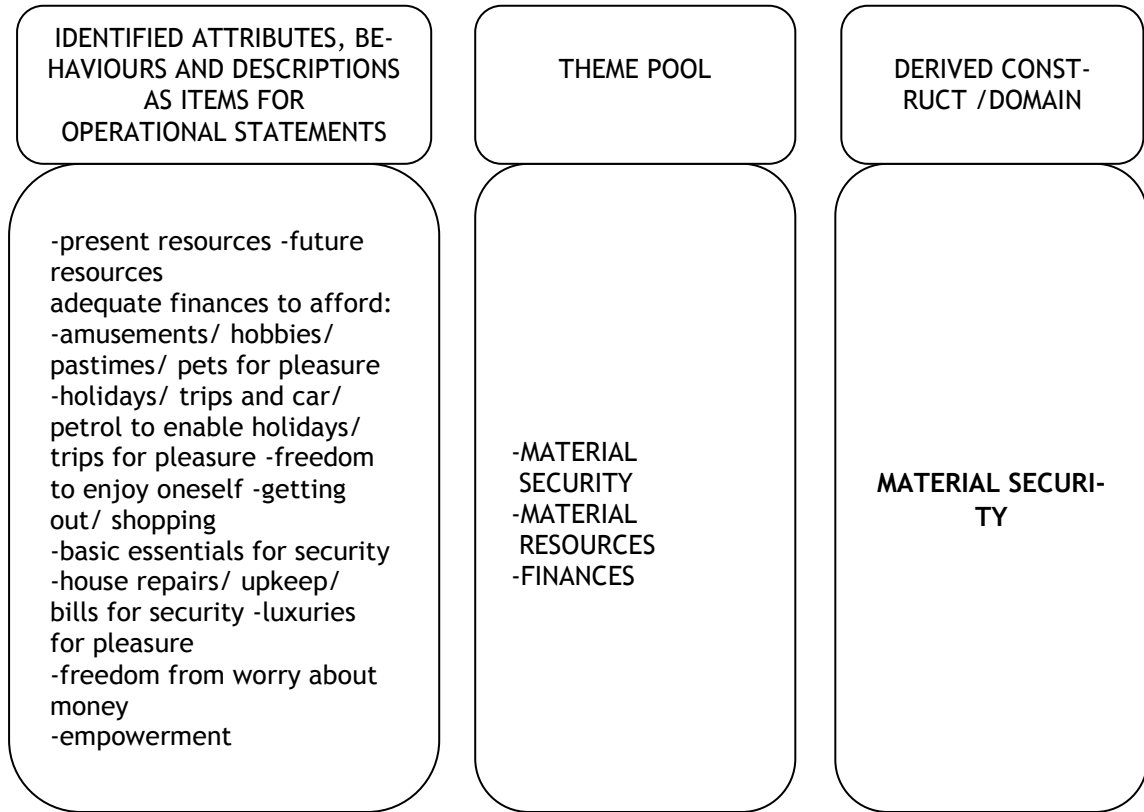


Figure 21. Attributes, behaviours and characteristics of Material Security

6 RESULTS

A Conceptual Model of Experiential Meaning of CaringTV[®]-elderly resulting from the study has been presented in figure 23 (p.65). The model is composed of 11 constructs/domains namely; Experiential Meaning of Social Engagement, Social Networking and Social Support, Experiential Meaning of Health, Experiential Meaning of Activity, Experiential Meaning of Personal Outlook on Life, Experiential Meaning of Empowerment, Experiential Meaning of Home, Experiential Meaning of Participation, Experiential Meaning of Knowledge, Experiential Meaning of the Use of New Technology/Information and Communications Technology, Experiential Meaning of Formal support Network and Experiential Meaning of Safety.

Seventy 70 items generated for further operationalization into the questionnaire of the tool have been presented in figures 22a and b. The breakdown of the items are as follows: Experiential Meaning of Social Engagement, Social Networking and Social Support -8, Experiential Meaning of Health -11, Experiential Meaning of Activity -8, Experiential Meaning of Personal Outlook on Life -9, Experiential Meaning of Empowerment -8, Experiential Meaning of Home -8, Experiential Meaning of Participation -2, Experiential Meaning of Knowledge -3, Experiential Meaning of the Use of New Technology/Information and Communications Technology -3, experiential Meaning of Formal support Network -5 and Experiential Meaning of Safety -5.

Some of the items mentioned above overlapped and were merged giving an adjusted total of 53 items used in writing questions for the questionnaire. The resulting EMOCTV-elderly tool has been presented in Appendix 1. The tool has 59 questions, six of which are designed to collect background information of the respondent whilst the remaining 53 address the identified constructs of the model. Questions 13, 22, 26, 36, 45, 48 and 52 have been negatively-worded for reasons given under “methodology” above. A number of items simultaneously address multiple constructs/domains as shown in table 2.

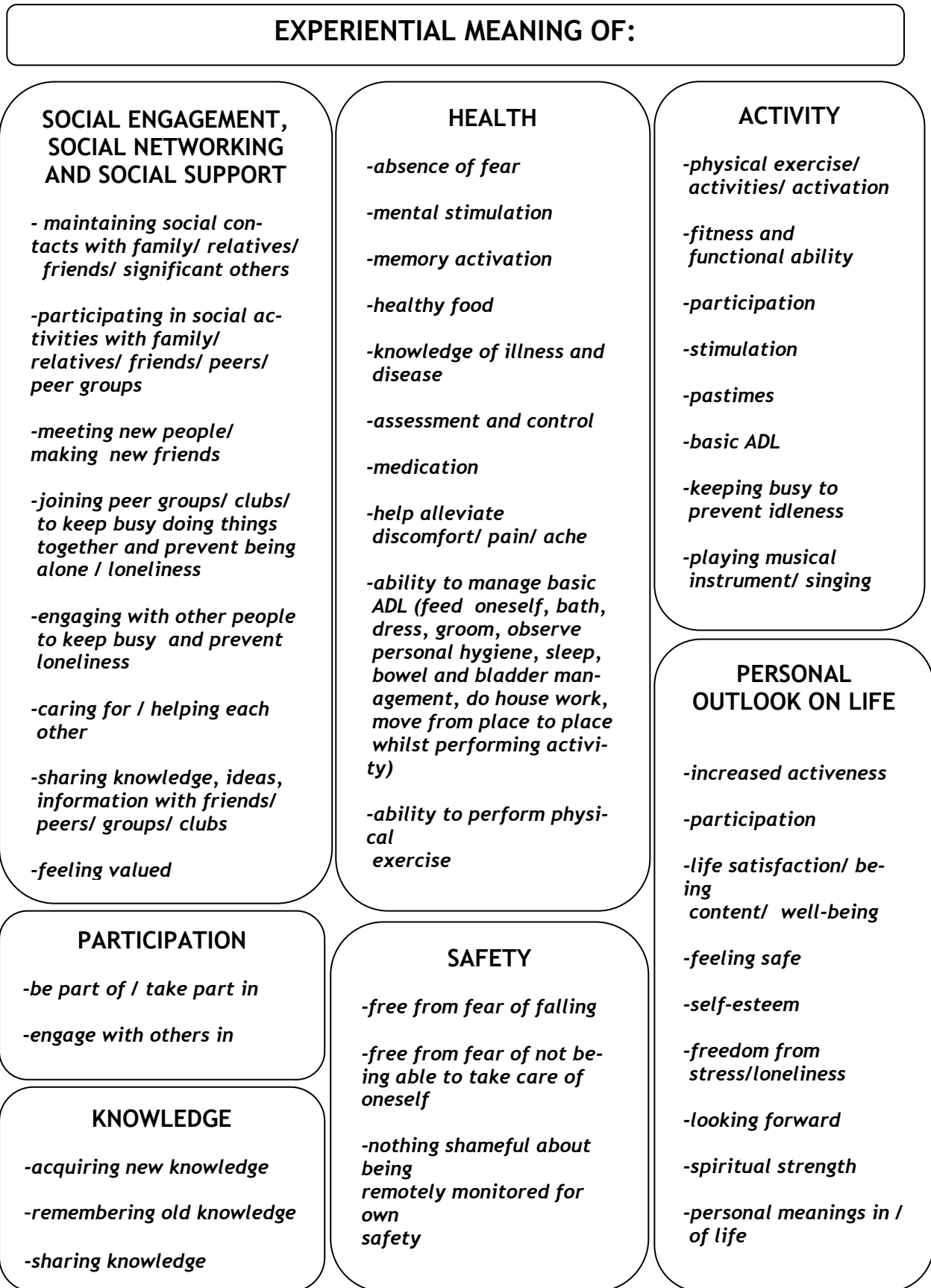


Figure 22a (see page 63 for the text explaining figures 22a and 22b)

EXPERIENTIAL MEANING OF:

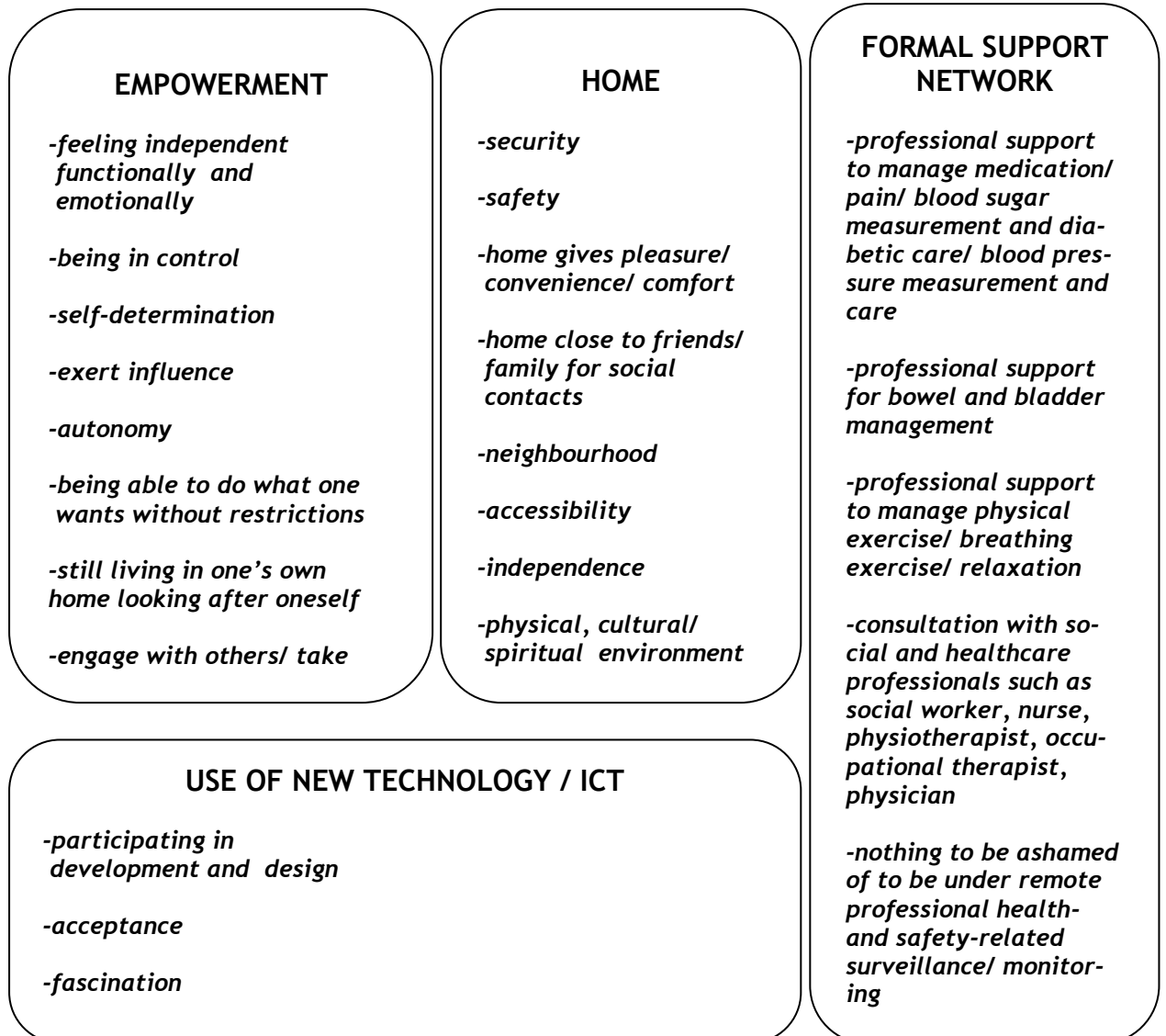


Figure 22b (see below for the text explaining figures 22a and 22b)

Figures 22a and 22b. Summary of identified themes around which questionnaire will be built for the EMoCTV-elderly tool

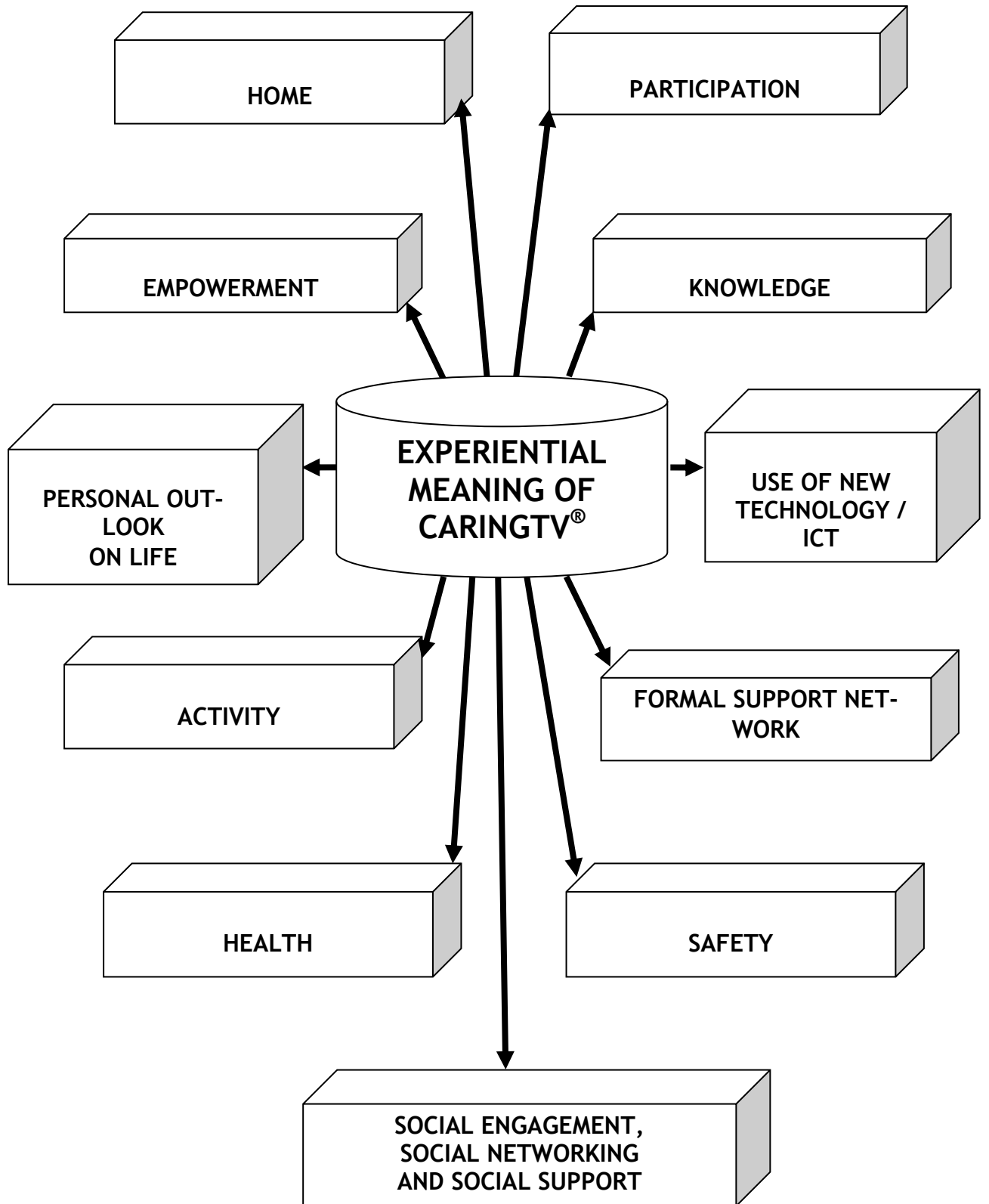


Figure 23. A Conceptual Model of Experiential Meaning of CaringTV®- elderly (EMoCTV-elderly)

Table 2. A table showing constructs or dimensions and the questions that address them

CONSTRUCT OR DIMENSION	QUESTION NUMBERS ADDRESSING CONSTRUCT OR DIMENSION	TOTAL NUMBER OF QUESTIONS
BACKGROUND INFORMATION	1 - 6	6
EXPERIENTIAL MEANING OF SOCIAL ENGAGEMENT, SOCIAL NETWORKING AND SOCIAL SUPPORT	7 - 16 + 27, 28, 32, 35	14
EXPERIENTIAL MEANING OF HEALTH	17 - 24 + 8, 9, 26, 30, 34, 35, 36, 38, 53, 54, 55, 56, 58	21
EXPERIENTIAL MEANING OF ACTIVITY	25 - 30 +10, 12, 14, 23, 24, 32, 56	13
EXPERIENTIAL MEANING OF PERSONAL OUTLOOK ON LIFE	31 - 39 + 16, 31	11
EXPERIENTIAL MEANING OF EMPOWERMENT	40 - 45 + 8, 9, 15, 46, 55	11
EXPERIENTIAL MEANING OF HOME	46 - 47	2
EXPERIENTIAL MEANING OF PARTICIPATION	48 + 10, 12, 14, 20, 27, 32, 44, 49, 50	10
EXPERIENTIAL MEANING OF KNOWLEDGE	49 + 15, 19, 20	4
EXPERIENTIAL MEANING OF USE OF NEW TECHNOLOGY / ICT	50 - 52	3
EXPERIENTIAL MEANING OF FORMAL SUPPORT NETWORK	53 - 58 + 20, 21, 22, 24, 25	11
EXPERIENTIAL MEANING OF SAFETY	59 + 17, 34, 47, 57, 58	6

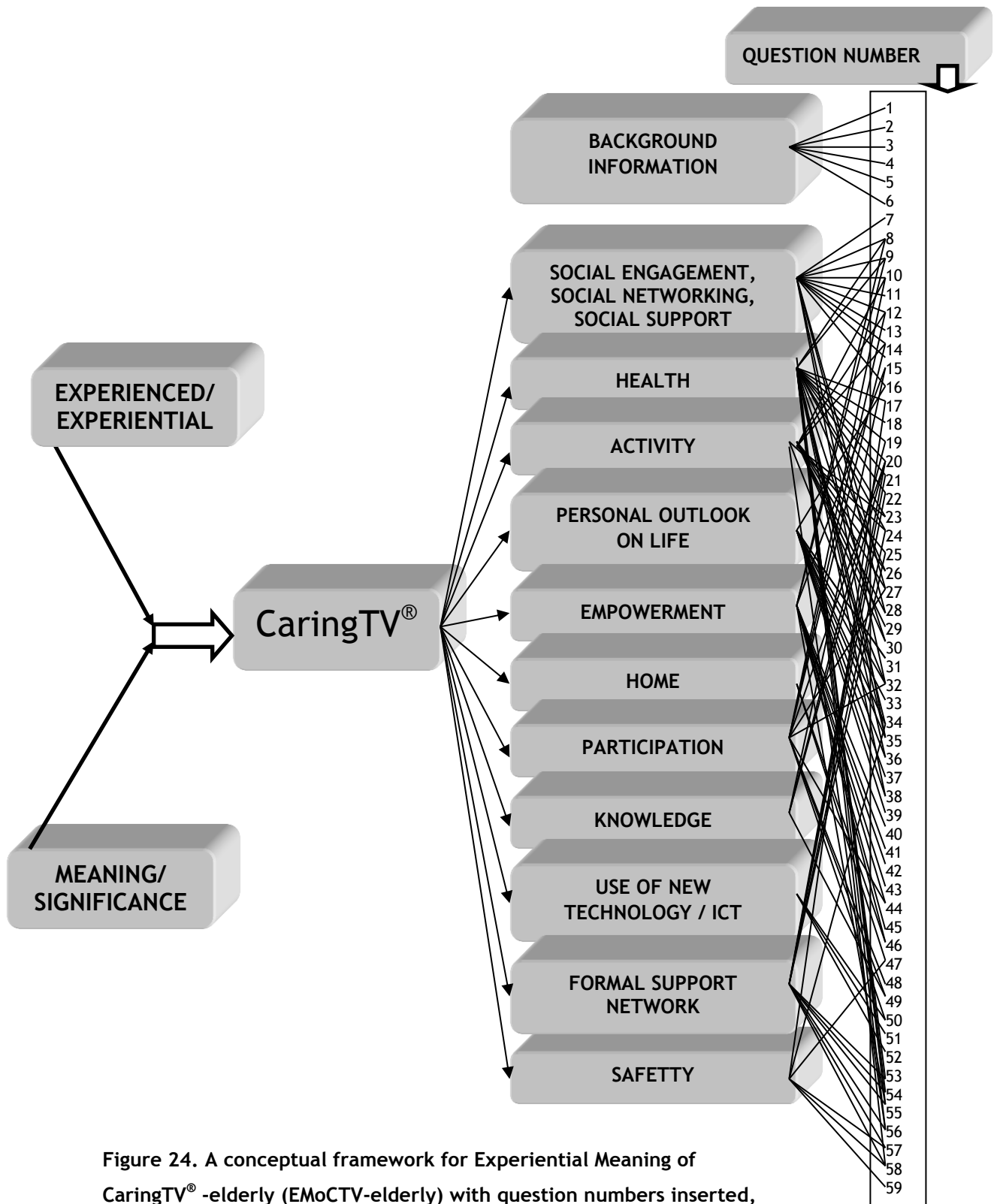


Figure 24. A conceptual framework for Experiential Meaning of CaringTV® -elderly (EMoCTV-elderly) with question numbers inserted, giving the structure of the tool. ICT=Information and Communications Technology

7 DISCUSSION

With persistent attempts to find ways to ease pressure on healthcare systems and simultaneously improve the quality of life of elderly people, interest in the CaringTV[®] concept has grown in recent years. The purpose of the current study as stated earlier on, was to find a way to evaluate the extent to which elderly people, their significant others, professionals, other care-givers and any people with exposure to or encounter with the CaringTV[®] concept understand CaringTV[®] as a means of providing supportive services for the elderly. Knowing how people perceive or understand the concept as it stands at any time, can help policy-makers, researchers, product and service developers to identify areas that need further attention and accordingly institute the necessary interventions to help improve the quality of the resulting product(s) and concept. As one of the means to address the purpose, the current study aimed at developing a tool with the help of which one could assess how elderly people, their significant others, professionals and other care-givers with prior exposure to or encounter with the CaringTV[®] idea understand the concept. A tool development process can be quite challenging, especially in this instant where there is currently no tool known to the author that has been designed to measure specifically, Experiential Meaning of CaringTV[®] for the elderly to serve as reference upon which a new tool could be developed. A successful initiation of the development of such a tool as in the current study, should therefore serve as an encouraging progress in the CaringTV[®] concept-development story. This initial EMOCTV-elderly tool is primarily a product of an extensive and carefully undertaken literature review. At this stage, it comprises 53 items reflecting 11 CaringTV[®] concept-related domains: social engagement, social networking and social support, health, activity, personal outlook on life, empowerment, home, participation, knowledge, use of new technology/ICT, formal support network and safety.

Even though the CaringTV[®] concept has been developed for different target groups such as the elderly, the disabled, mental health patients and young people, the current tool focuses attention on elderly people living independently at home. Focusing on all the target groups simultaneously at this stage of the tool development would have covered quite a wide area, possibly leading to ambiguities and weaknesses in the tool's applicability to some of the groups since each group has its own group-specific characteristics. Having said this, it is also worth noting that the target groups have a lot in common in terms of the dimensions used in the tool development and therefore the current tool can serve as a template upon which other target-group-specific tools can be developed following a few group-specific-sensitive adjustments. Alternatively, the current tool can be developed further in future to cater for all the target groups simultaneously by focusing only on the dimensions that are common to all the groups, in which case the group-specific sensitivity would be weakened.

Since the ultimate goal of the CaringTV® concept is to maintain QoL, improve QoL or prevent the deterioration of QoL, placing much emphases on indicators and dimensions of quality of life and related concepts such as Wellbeing and Ageing well in the current tool development process was justified.

Even though Material Security was identified through the literature reviewed as an important construct/domain in determining elderly people's quality of life, it was not included as a construct/domain in the conceptual model of Experiential Meaning of CaringTV® and for that matter not included in the construct areas of the EMoCTV-elderly tool since the author considered that the domain did not have enough prominence in the CaringTV® concept to warrant identifying it as a separate construct in the tool development.

Both positively and negatively worded items were included in the questionnaire to prevent a respondent from quickly completing the questionnaire by checking one category of responses throughout. In its current version, negatively-worded items constitute less than 20% of the questions in the construct-related part of the questionnaire. This proportion could be increased in future for a better balance.

Open-ended questions were added at the end of the questionnaire to see if responses could yield additional characteristics, behaviours or items of concern that may have been missed or overlooked earlier on in the study.

The Likert scale, named after its developer Rensis Likert, usually contains five or seven responses for each item ranging from strongly agree to strongly disagree (Nieswiadomy 1987). In the middle of the scale is the "uncertain" category which some researchers prefer to eliminate in order to force respondents into some form of agreement or disagreement with the items whilst other researchers would prefer to retain since elimination may force respondents to select answers that do not represent their true choices (Nieswiadomy 1987). The current EMoCTV-elderly tool utilizes the five-response scale retaining the "uncertain" category for the same reason as given above.

7.1 Ethical Considerations

Ethics or morality has been defined as a set of beliefs that society, individuals or subgroups of society hold about good and bad, right and wrong, justice and injustice, fairness and unfairness (Rollin 2006). Specific codes, rules and policies relating to research ethics have been adopted by different professional associations, universities, government agencies and other institutions. These codes, rules and policies address among other things, ethical principles such as; *principle of honesty* (one should be honest in all scientific communications, one

should honestly report data, results, methods, procedures and publication status, one should not fabricate, falsify or misrepresent data), ***principle of objectivity*** (one should avoid biasness in experimental design, data analysis, data interpretation, peer review, personal decisions, grant writing, expert testimony and other aspects of research where objectivity is expected or required, one should disclose personal or financial interests that may affect research), ***principle of integrity*** (one should keep promises and agreements, one should act with sincerity, one should act with consistency of thought and action), ***principle of carefulness*** (one should avoid careless errors and negligence, one should carefully and critically examine one's own work and that of one's peers', one should keep good records of research activities such as data collection, research design and correspondence with agencies or journals), ***principle of openness*** (one should be prepared to share data, results, ideas, tools and resources, one should be open to criticism and new ideas), ***principle of respect for intellectual property*** (one should honour patents, copyrights and other forms of intellectual property, one should give credit where credit is due, one should give proper acknowledgement or credit to for all contributions to research, one should not plagiarize), ***principle of confidentiality*** (one should protect confidential communications), ***principle of responsible publication*** (one should publish in order to advance research and scholarship, not to advance just one's own career), ***principle of responsible mentoring*** (one should help educate, mentor and advise students, promote their welfare and allow them to make their own decisions), ***principle of respect for colleagues*** (one should respect colleagues and treat them fairly), ***principle of social responsibility*** (one should strive to promote social good and prevent or mitigate social harms through research, public education and advocacy), ***principle of non-discrimination*** (one should avoid discrimination against colleagues on the basis of sex, race, ethnicity or other factors that are not related to their scientific competence and integrity), ***principle of competence*** (one should maintain and improve one's own professional competence and expertise through lifelong education and learning, one should take steps to promote competence in science as a whole), ***principle of legality*** (one should obey relevant laws and institutional and government rules and policies), ***principle of animal care*** (one should show proper respect and care for animals when using them in research, one should not conduct unnecessary or poorly designed animal experiments) and ***principle human subjects protection*** (when conducting research on human subjects, one should minimize harm and risks and maximize benefits, one should respect human dignity, privacy and autonomy, one should strive to take special precautions with vulnerable populations)(Shamoo & Resnik 2009; Resnik 2011).

Attempts have been made to adhere to all ethical principles applicable to the current study, such ones as honesty, objectivity, integrity, carefulness, openness, respect for intellectual property, confidentiality, responsible publication, respect for colleagues, social responsibility, competence and legality.

7.2 Reliability and Validity

One of the most critical aspects of evaluation and appraisal of reported research is to consider the quality of the devices used to gather the research data (Fox 1982). The study was primarily literature-based. Part of the materials came from reports on well-sponsored, well-planned and well-executed projects. Good sponsors would usually study project and research protocols and are likely to invest in ones which stand greater chances of producing reliable results. Another bulk of the materials used was from peer-reviewed articles published in journals with relatively good impact factors. Peer-reviewed papers would usually be accepted for publication in good journals only after a thorough scrutiny for among other things, reliability. The sources of the literature used in the current study can therefore be adjudged reliable, implicitly making the materials used in the study reliable.

Reliability means the accuracy of the data in the sense of their stability or repeatability such that a perfectly reliable tool would be one which if administered twice under the same circumstances, would provide identical data (Fox 1982). Even though the materials used to create the tool came from reliable and trustworthy sources, the reliability of the current tool itself will have to be determined by subsequent studies.

Validity has been defined as the extent to which the tool actually does what it purports to do (Fox 1982). Further studies would be needed to assess characteristics of the tool such as content-related validity (face-validity, sampling-validity, item-validity), sensitivity, appropriateness, objectivity and generalizability as described by Fox (1982). Face-validity is the extent to which the items in the tool appear relevant, important and interesting to the respondent, sampling-validity is the extent to which the full set of items sample the total content area and item-validity is the extent to which specific items represent measurements in the intended content area. Sensitivity has been defined as the ability of the tool to make the discriminations required for the research problem, appropriateness has been defined as the extent to which the respondent group can meet the demands imposed by the tool, objectivity has been defined as the extent to which the data obtained are a function of what is being measured and generalization is the extent to which meaning and use associated with a set of data can be generalized to other populations (Fox 1982).

7.3 Limitations of the study

Most of the literature used in the current study was European- and North-American-based with a few Asian-based studies. Geographic and cultural sensitivities have therefore not been specifically addressed in the current study but may not be overlooked.

Elderly people do not constitute a homogeneous layer of the population. An average 65-70 year-old elderly person may not for instance have identical physical and cognitive abilities as an average 85-90 year-old elderly person and their needs and preferences may also be vastly different. The EMOCTV-elderly tool in its current state, however, seems to assume indirectly, homogeneity among elderly people living independently in their own homes and does not specifically address the possibility of vast differences in needs and preferences.

The questionnaire in the current tool looks a bit too long and respondents may not be comfortable with answering long questionnaire. The dilemma here, however, is that a long questionnaire stands a better chance of throwing more light on the question the questionnaire is trying to solve than a short questionnaire would. Attempts should therefore be made to strike a balance between quality of response and respondent convenience in future studies by shortening the questionnaire a bit but not making it too short.

Until content and construct validation studies have been conducted to validate the tool EMOCTV-elderly in its current state would have limited use.

7.4 Recommendations for future studies

For a roadmap to completing the EMOCTV-elderly tool development, it would be recommended that future studies be directed towards:

1. Pilot-testing and validation of the initial tool,
2. Designing and field-testing of a revised tool
3. Validation of the revised tool and
4. Evaluation of the whole tool development process and the resulting product.

7.5 Conclusions

In an attempt to find ways to evaluate the extent to which elderly people, their significant others, professionals other care-givers and people with exposure to or encounter with the CaringTV[®] concept understand CaringTV[®] as a means of providing supportive services to the elderly, an initial tool called Experiential Meaning of CaringTV[®]-elderly and captioned EMOCTV-elderly has been developed.

The EMOCTV-elderly measurement tool addresses 11 construct domains which the author believes will best reflect people's understanding or perception of CaringTV[®]. These 11 constructs are: **experiential** meaning of social engagement, social networking and social support, experiential meaning of health, **experiential** meaning of activity, **experiential** meaning of

personal outlook on life, **experiential** meaning of empowerment, **experiential** meaning of home, **experiential** meaning of participation, **experiential** meaning of knowledge, **experiential** meaning of the use of new technology/information and communications technology, **experiential** meaning of formal support network and **experiential** meaning of safety. Items best related to the constructs mentioned above, have been identified and operationalized into a 53-item questionnaire of the EMOCTV-elderly tool as in appendix 1. The EMOCTV-elderly tool would need to be validated in future studies to improve its usefulness.

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APPENDIX 1

**A TOOL TO MEASURE EXPERIENTIAL MEANING OF CaringTV® FOR THE ELDERLY
(EMoCTV-elderly)**

Dear respondent, the questionnaire that follows is intended to determine what CaringTV® means to you, based on your involvement in, encounter with or exposure to the CaringTV® service concept. It would be much appreciated if you could take some time to answer the questions carefully. Please indicate your answers by circling, ticking or marking the options that best represent your opinion, situation or circumstance. Where open-ended questions have been asked, lines have been provided for you to write your answers freely. Thank you for your attention and co-operation.

BACKGROUND INFORMATION

**encounter with / exposure to CaringTV® would also include circumstances such as first-hand / second-hand / third-hand experience with; being familiar with it; having been told about it; having read about it.*

1. SEX:

A. Male	B. female
---------	-----------

2. AGE:

A. 20-30 yrs	B. 31-40 yrs
C. 41-50 yrs	D. 51-60 yrs
E. 61-70 yrs	F. 71 yrs and above

3. HIGHEST LEVEL OF EDUCATION ATTAINED
 - A. Primary school certificate
 - B. Middle school certificate
 - C. Junior secondary school certificate
 - D. Higher secondary school certificate
 - E. Vocational school certificate
 - F. University / Polytechnic -Bachelor's degree
 - G. University / Polytechnic -Master's degree
 - H. University doctoral degree
 - I. Other, specify.....

4. HOW WOULD YOU DESCRIBE YOUR FAMILIARITY WITH TECHNOLOGY IN GENERAL?
 - A. I would consider myself as being very familiar with technology in general
 - B. I would consider myself as being familiar with technology in general
 - C. I would consider myself as being only fairly familiar with technology in general
 - D. I would consider myself as being very poorly familiar with technology in general
 - E. I would consider myself as not being familiar with technology at all

5. EXISTENCE OF EXPOSURE TO CaringTV® (you can make multiple choices if necessary)*
 - A. I am an elderly person currently receiving CaringTV® services as a client
 - B. I am an elderly person and have received CaringTV® services as a client before
 - C. A close elderly relative of mine or my significant other is currently receiving CaringTV® services as a client and I am familiar with the concept to some extent
 - D. A close elderly relative of mine or my significant other has received CaringTV® services as a client before and I am familiar with the concept to some extent
 - E. I am an expert / professional / student / trainee who has been involved with, been exposed to or encountered CaringTV® in one way or another
 - F. I do not belong to any of the categories mentioned in A-E but I have all the same had some exposure to the CaringTV® concept
 - G. I have not encountered nor had any exposure whatsoever to the CaringTV® concept

In case your answer to question 5 above is G (no encounter with or no exposure to CaringTV®) then please do not continue answering the questionnaire any further since this assessment tool questionnaire has not been designed for you on this occasion. Your kind readiness to participate in the survey is appreciated. Thank you very much for your effort, attention and co-operation.

On the other hand if your answer to question 5 above is any other option than G, then please continue answering on from question 6.

6. EXTENT OF EXPOSURE TO CaringTV® *
 I would consider my encounter with / exposure to the CaringTV® concept as:
- A. Very extensive
 - B. Extensive
 - C. Moderate
 - D. Little
 - E. Very little

Please answer the following questions as carefully as you can by ticking or marking the options that best represent your opinion, situation or circumstance. QoL = Quality of Life

SA = I Strongly Agree A = I Agree U = I am Uncertain
 D = I Disagree SD = I Strongly Disagree

<u>EXPERIENTIAL MEANING OF SOCIAL ENGAGEMENT, SOCIAL NETWORKING AND SOCIAL SUPPORT</u>	SA	A	U	D	SD
7. Maintaining social contacts with family or relatives or friends or significant others can improve elderly people’s well-being and quality of life (QoL) and in my opinion, CaringTV® programs, activities or services can help to achieve that.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Being kept aware of distant relatives’ day-to-day activities can provide a peace of mind to the elderly and help them live independently in their own homes. CaringTV® activities, programs and services can help elderly people remain aware of their distant relatives’ day-to-day activities and provide them with a peace of mind to live independently in their own homes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Being kept aware of a distant relative’s day-to-day activities can create a peace of mind for close relatives and help their elderly relatives to live independently in their homes by choice. In my opinion, CaringTV® activities, programs and services can help close relatives to remain aware of their distant elderly relatives’ day-to-day activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Participating in social activities with family / friends / peers / peer groups can help improve elderly people’s QoL and well-being and in my opinion, CaringTV® services can help achieve that.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- | | SA | A | U | D | SD |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 11. Meeting new people / making new friends can help improve elderly people’s QoL and well-being and in my opinion, CaringTV® can help to facilitate that. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. If elderly people join peer groups or clubs to keep themselves busy doing things together, they can prevent loneliness or being alone and improve their QoL and well-being. In my opinion, this can be achieved with CaringTV® services | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. In my opinion, CaringTV® activities, programs and services cannot help elderly people create new bonds with others nor strengthen old ones. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. If elderly people engage themselves with other people to keep themselves busy, they can avoid loneliness or being alone and improve their QoL and well-being. In my opinion, CaringTV® can help them achieve this. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. By sharing knowledge, ideas, information with friends, peers groups or clubs, elderly people can care for or help each other and improve their QoL and well-being. In my opinion, this can be facilitated through CaringTV® services. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. If elderly people felt valued, their self-esteem and psychological well-being could be improved. This would in turn help improve their QoL. In my opinion, active participation in CaringTV® activities such as peer group discussions, expressing one’s opinions, being listened to, receiving care can all help elderly people feel valued. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

EXPERIENTIAL MEANING OF HEALTH

- | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 17. Absence of fear can improve the mental health of elderly people and their well-being and QoL. CaringTV® services such as health surveillance activities and programs as well as activities and programs designed to monitor falls and accidents can increase elderly people’s sense of security and reduce the fear that they sometime experience. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18. Mental stimulation or memory activation can improve the mental health of elderly people and their well-being and QoL. Some CaringTV® activities, programs and services have the potentials to improve elderly people’s mental stimulation or memory activation and help therefore to improve their QoL | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 19. Eating healthy food can improve people’s health, well-being and QoL. CaringTV® interactive activities, programs and services can counsel, tutor or direct elderly people to eat or prepare and eat healthy food to improve their health. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- | | SA | A | U | D | SD |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 20. In some cases, if elderly people have some knowledge about their diseases or illnesses eg. diabetes, they could contribute to the management and improve their own health and prevent fast deterioration of their health. Knowledge about some diseases, their symptoms and management s can be imparted to elderly people through CaringTV® programs and activities leading to improvements in their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 21. Receiving help to manage with medication can help improve the health and therefore QoL and well-being of elderly people. Through CaringTV® services, elderly people can receive assistance to manage with their medications | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 22. Alleviation of discomfort / pain / ache does not improve the health nor QoL of elderly people. CaringTV® services, programs and activities cannot be used in any way to help elderly people alleviate their discomfort / pain / ache | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 23. Ability to manage and managing of basic Activities of Daily Life (feeding oneself, bathing, dressing, observing personal hygiene, sleeping, managing bladder and bowel, doing house work) can help to improve elderly people’s QoL. CaringTV® programs, activities or services can be used to to guide and help elderly people manage their basic Activities of Daily Living | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 24. Ability to perform physical exercises can help improve the health and QoL of elderly people. In some situations, with the help of CaringTV® programs, activities or services, elderly people can be guided to perform some physical exercises. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

EXPERIENTIAL MEANING OF ACTIVITY

- | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 25. Physical exercise / activities / activation can help improve people’s health, QoL and well-being. Through CaringTV® programs, activities or services, elderly people can be guided or assisted to perform physical exercises / activities or get some physical activation. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 26. Fitness and functional ability are not important for health nor QoL. CaringTV® programs, activities or services cannot help elderly people stay fit nor improve their functional abilities in any way whatsoever. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 27. Participating in physical and social activities organized for elderly people can help them improve their QoL. With the help of CaringTV® programs, activities or services, elderly people can participate in physical and social activities organized for elderly people. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 28. Elderly people can be stimulated through social and physical activities and this can help them improve their QoL. CaringTV® can help stimulate elderly people through social and physical activities. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- | | SA | A | U | D | SD |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 29. Keeping elderly people busy doing things such as recreational activities to pass time can prevent idleness and improve QoL. CaringTV® programs, activities or services can help elderly people pass time and prevent idleness. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 30. playing a musical instrument or singing for instance, can be relaxing and can help people stay lively. This in turn can help improve QoL. In my opinion, CaringTV® can promote singing activities to help improve QoL for elderly people. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

EXPERIENTIAL MEANING OF PERSONAL OUTLOOK ON LIFE

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 31. Increased activity is an important aspect of life and can help improve QoL. In my opinion, CaringTV® is capable of promoting increased activity in elderly people and can help improve their QoL and well-being. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 32. Participation in physical and social activities is an important aspect of life which can help improve QoL and well-being of elderly people. In my opinion, CaringTV® promotes / can help promote participation among elderly people and help improve their QoL and well-being | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 33. Well-being or life satisfaction or being content in life is an important aspect of life and can help improve QoL. In my opinion CaringTV® programs, activities or services can promote a feeling of well-being among elderly people and lead to a feeling of life satisfaction and improvement in QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 34. It is important that people feel safe in life or are free from lack of personal safety. Feeling safe is psychologically desirable in life. It can promote good mental health and improve QoL and well-being. In my opinion, CaringTV® programs, activities or services can be used to create a feeling of safety among elderly people and help improve their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 35. It is helpful to have self-esteem in life. Self-esteem can promote psychological well-being and improve QoL. In my opinion, CaringTV® programs, activities or services can psychologically help enhance elderly people’s self-esteem and help improve their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 36. Willingness to achieve freedom from stress or loneliness is not an important aspect of life. CaringTV® programs, activities or services cannot help elderly people achieve freedom from stress or loneliness in any way whatsoever. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 37. It is good to look forward in life. In my opinion, CaringTV® programs, activities or services can help elderly people to look forward in life and this can enhance their QoL in one way or another. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- | | SA | A | U | D | SD |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 38. Having spiritual strength of some sort is desirable in life. I believe that CaringTV® programs or activities such as e-church, service / e-religious services can help elderly people enhance their spiritual strength and stay psychologically strong in life. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 39. For life to make sense in general, everybody should have personal meanings in life. CaringTV® programs, activities or services can help elderly people to build their personal meanings in life. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

EXPERIENTIAL MEANING OF EMPOWERMENT

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 40. Given the option, people would like to remain functionally and emotionally independent as much as possible. In my opinion, CaringTV® can make it possible for elderly people to do whatever they want without restrictions or remain functionally or emotionally independent / autonomous, making them feel empowered which in turn enhances their content in life and QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 41. Self-determination can help improve QoL and well-being. In my opinion, CaringTV® can help promote self-determination among elderly people and empower them thereby enhancing their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 42. Some elderly people feel empowered if they are in control of their own lives or exert influence in managing activities that go on in their lives. In my opinion, CaringTV® can help elderly people to have control over their own lives as well as exert influence over activities that go on in their lives, thereby empowering them and enhancing their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 43. Some elderly people feel empowered when they live in their own homes and look after themselves instead of being institutionalized in old people's home for instance. In my opinion, CaringTV® programs, activities or services can help elderly people live independently in their own homes looking after themselves. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 44. Engaging with others, taking part in the creation of activities, participating in drawing programs, contributing to product design all make elderly people feel empowered and valued. In my opinion, CaringTV® can help promote participation through some or all of these means and empower elderly people. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 45. In my opinion, CaringTV® programs or services cannot offer elderly people good opportunities to control their QoL nor independence. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

**EXPERIENTIAL MEANING OF
HOME**

SA A U D SD

46. Some elderly people would prefer to live in their own homes rather than institutions because home to them gives pleasure / convenience / comfort and independence. CaringTV® can help elderly people to live in the comfort of their own homes.
47. For some reason(s), some elderly people feel psychologically more secured and safe in their own homes. In my opinion, CaringTV® can promote activities and services that will help promote safety and security for elderly people to live in their own homes.

**EXPERIENTIAL MEANING OF
PARTICIPATION**

48. In my opinion, CaringTV® programs, activities or services can lead to elderly people feeling excluded.

**EXPERIENTIAL MEANING OF
KNOWLEDGE**

49. Acquiring new knowledge, remembering old knowledge or sharing knowledge can help enhance QoL. CaringTV® programs, activities or services can help elderly people acquire new knowledge, retrieve old knowledge and share knowledge.

**EXPERIENTIAL MEANING OF
USE OF NEW TECHNOLOGY /INFORMATION COMMUNICATIONS TECHNOLOGY**

50. It would be rational to expect that elderly people would feel pleased to be part of the development and design of a product or technology that serves their interest. Elderly people are active participants in the development of CaringTV® programs and services.
51. It seems to me that elderly people are fascinated by and / or accept the CaringTV® concept.
52. In my opinion, CaringTV® programs, activities and services cannot help maintain nor improve elderly people's QoL

**EXPERIENTIAL MEANING OF
FORMAL SUPPORT NETWORK**

53. Professional consultation and support to manage certain diseases such as diabetes through blood sugar measurements diet and medication or to manage cardiac diseases through blood pressure monitoring and feedback can help elderly people stay healthy and improve their QoL. CaringTV® services can make it possible for elderly people to receive professional consultation and support from healthcare personnel such as nurses, physiotherapists, physicians and other care givers to monitor and manage some of their diseases whilst staying independently in their own homes.

- | | SA | A | U | D | SD |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 54. CaringTV® can make it possible for elderly people to receive professional guidance in bowel and bladder management and this can help them stay healthy and enhance their QoL | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 55. CaringTV® services can make it possible for elderly people to receive professional support from social workers to cope with health and social-related problems whilst staying independently in their own homes. This can help them stay healthy and improve their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 56. CaringTV® services can make it possible for elderly people to receive professional support to manage physical exercise, breathing exercise or relaxation whilst staying independently in their own homes. This will help them stay healthy and enhance their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 57. Caring TV® services can make it possible for elderly people to be professionally and remotely monitored for falls, accidents and their risks whilst staying independently in their own homes. This will help them stay healthy and enhance their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 58. In my opinion, most elderly people do not / would not / should not feel ashamed to be under remote professional health- and safety-related surveillance / monitoring. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

EXPERIENTIAL MEANING OF SAFETY

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 59. In my opinion, CaringTV® programs, activities or services can free elderly people from the fear of not being able to take care of themselves whilst living independently in their own homes. This can let them feel safe and enhance their QoL. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|

Total index of experiential meaning of CaringTV®

0 - 212

OPEN-ENDED QUESTIONS

- (i) In less than 50 words, mention or describe what in your opinion would add quality to the lives of elderly people or what would help improve the well-being of elderly people.
- (ii) In less than 50 words, mention or describe what in your opinion would cause a reduction in elderly people's quality of life or what would worsen the well-being of the elderly.
- (iii) In less than 50 words, describe how you perceive or understand CaringTV® as a service concept for the elderly.

- (iv) In less than 50 words, mention words, phrases or concepts that spontaneously come into your mind when one says “CaringTV® for the elderly”.

THANK YOU VERY MUCH FOR PARTICIPATING IN THE SURVEY, FOR YOUR ANSWERS AND FOR YOUR KIND CO-OPERATION.

Footnote for the evaluator:

-All questions have been positively worded except questions 13, 22, 26, 36, 45, 48 and 52 which have been negatively worded.

-With the exception answers to negatively worded questions all answers should be scored as follows: SA=4, A=3, U=2, D=1, SD=0

-Answers to negatively-worded questions (i.e. 13, 22, 26, 36, 45, 48 and 52) should be reverse-scored as follows: SA=0, A=1, U=2, D=3, SD=4

Recommendation for score interpretation: For any construct in which a respondent scores less than or equal to 50% ($\leq 50\%$) of the maximum attainable score for that construct in question, an extensive intervention would be needed to improve that respondent’s understanding of the CaringTV® concept with respect to that construct.