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**ADJUSTMENT TO AGING AND SUBJECTIVE WELL-BEING IN AN OLDER  
CROSS-NATIONAL COMMUNITY-DWELLING SAMPLE**

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*“At eighteen it was already too late in my life.”*

Virginia Wolf

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**Palavras-chave:**

Ajustamento ao envelhecimento; envelhecer bem; idosos; bem-estar subjetivo

**Keywords:**

Adjustment to aging; aging well; older adults; subjective well-being

**PsycINFO Classification Categories and Codes:**

2800 Developmental Psychology  
2860 Gerontology

3360 Health Psychology & Medicine  
3365 Promotion & Maintenance of Health & Wellness

## RESUMO

**Objectivos:** O presente trabalho teve como objectivos conceptualizar o ajustamento ao envelhecimento (AaE), e construir um modelo estrutural para as variáveis predictoras do AaE e do bem-estar subjectivo (BES) na adultícia avançada.

**Método:** Este trabalho compreendeu três etapas: a revisão sistemática da literatura; o estudo exploratório qualitativo; e o estudo quantitativo. Na revisão sistemática para o AaE e o BES na idade avançada, uma extensa pesquisa foi realizada, utilizando bases de dados relevantes. Na etapa qualitativa exploratória, um total de 253 participantes foram entrevistados acerca do seu AaE e a sua idade subjectiva. Adicionalmente foram analisadas 154 entrevistas acerca da percepção de espiritualidade dos idosos, no contexto do AaE. Na etapa quantitativa, uma amostra de 1291 idosos, com idades entre 75 e 102 anos, não institucionalizados e de diferentes nacionalidades participaram neste estudo. Os participantes preencheram a escala proposta e os instrumentos validados respeitantes ao AaE, BES e ao sentido interno de coerência.

**Resultados:** Na revisão sistemática do AaE, foram seleccionados 13 artigos a partir de um total de 1291, enquanto no BES, 14 artigos foram seleccionados a partir de 616 artigos. Estes preencheram os critérios de inclusão e englobaram um total de 18.253 participantes no total, em ambas as revisões. Os resultados do estudo qualitativo revelaram que "sentido existencial", foi a resposta de AaE mais frequente. O conceito 'ajustamento e idade' foi explicado por um modelo distinto para cada nacionalidade envolvida. A espiritualidade foi elucidada por um modelo com três factores. Os resultados obtidos pelo estudo quantitativo indicaram uma escala de AaE de cinco factores e 22 itens factores, com boas propriedades psicométricas (em termos de propriedades de distribuição, pesos factoriais estatisticamente significativos, validade factorial, convergente, discriminante, de critério e externa, e fiabilidade). Cinco factores foram apurados para a escala AaE: (a) sentido de propósito e ambições; (b) *zest* e espiritualidade; (c) corpo e saúde; (d) *aging in place* e estabilidade; e (e) suporte social. Adicionalmente, os resultados indicaram que a espiritualidade foi a variável predictoras mais forte em ambos os modelos estruturais do AaE e do BES.

**Conclusões:** Os resultados apresentados no estudo qualitativo enfatizaram a necessidade de um entendimento profundo das percepções do AaE e da idade subjectiva, de um modelo para o 'ajustamento e idade', destacando a pertinência da espiritualidade para o AaE. Os resultados do estudo quantitativo evidenciaram a escala de AaE como um instrumento trans-cultural, originalmente desenvolvido, com validade e fiabilidade e com aplicação na pesquisa e prática clínica na área da saúde. Finalmente, esta investigação destacou a necessidade de explorar as variáveis predictoras do AaE e BES, em especial a espiritualidade. Investigações futuras e abordagens clínicas com esta faixa etária deverão integrar o AaE e o BES como constructos multi-dimensionais pertinentes em diferentes contextos culturais para a promoção de um envelhecimento adequado, num contexto salutogénico de saúde.

## ABSTRACT

**Objectives:** The present research intended to conceptualize adjustment to aging (AtA) and to build a structural model for AtA and subjective well-being's (SWB) predictors, respectively in late adulthood.

**Methods:** This research comprised three stages of work: a systematic literature review; an exploratory qualitative study; and a cross-sectional quantitative study. Concerning the systematic review for AtA and SWB in old age, an extensive search was conducted using relevant databases. Regarding the exploratory qualitative study, a total of 253 participants were initially interviewed about their AtA and subjective age. Additionally, 154 interviews were analyzed concerning older adults' perceptions of spirituality, within AtA. Furthermore, a cross-national older community-dwelling sample of 1291 older adults, aged between 75 and 102 years participated in this study. These participants filled in the proposed scale and validated instruments to assess AtA, SWB and sense of coherence.

**Results:** Regarding AtA, 13 articles from 1,291 records, whilst as to SWB, 14 articles from 616 records, met the inclusion criteria, with a total of 18,253 participants in total for both reviews. Findings from the initial qualitative study showed that 'existential meaning' was the most prevalent AtA response. 'Adjustment and age' was explained by two cross-nationally distinct models. Moreover, 'spirituality' was explained by a three-factor model. The results from the quantitative study indicated that the 22-item 5-factor AtA scale showed good psychometric properties (in terms of distributional properties, statistical significant factor weights, factorial, convergent, discriminant criterion and external related validities, and reliability). Five factors were selected for the AtA Scale: (a) sense of purpose and ambitions (b) zest and spirituality; (c) body and health; (d) aging in place and stability; and (e) social support. Additionally, findings showed that spirituality was the strongest predictor in both structural models of AtA and SWB.

**Conclusions:** The findings presented in the qualitative study emphasized the need for a better understanding of the perceptions of older adults' AtA and subjective age and of an 'adjustment and age' overall model. Additionally, the outcomes highlighted the potential of spirituality to AtA. Results from the quantitative study evidenced AtA Scale as a new, reliable and valid cross-cultural instrument for research and clinical practice in health care. Finally, this research highlighted the need for deepening the predictors for AtA and SWB, in particular spirituality. Future research should address AtA and SWB, as being pertinent cross-national and multi-dimensional constructs for promoting aging well in later life, within a salutogenic context for health.

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**GENERAL INTRODUCTION**

## **General Introduction**

### **1. Aims of the Present Research**

This research intends to answer the following two main research questions: How to conceptualize older adults' adjustment to aging (AtA)? and what predicts AtA and subjective well-being (SWB) in late adulthood?

In order to answer these research questions, this study intends to address eight specific objectives.

Firstly, we aim at exploring the state of the art of AtA, in late adulthood. To accomplish this, a systematic literature review will be conducted using relevant databases, to specifically deepen the construct of AtA.

Secondly, it is our objective to explore the SWB's predictors in old age. For this purpose, a systematic literature review will also be performed using pertinent databases to specifically address variables which influence older adults' SWB.

Thirdly and because the perspectives of age and aging can vary across different populations, we intend to explore the self-perceptions of AtA and SA in a cross-national sample of older community-dwelling adults. Furthermore, bearing in mind that each culture also has unique characteristics, it is reasonable to expect distinctiveness concerning these concepts.

This will be followed by the exploration of older adults' perceived AtA and age, it is our fourth aim to examine the potential explanatory mechanisms of a cross-national comparative model for 'adjustment and age'. We found no previous research for an overall model that joins the concepts of AtA and subjective age (SA).

In the context of a broad approach to AtA and upon the most recent research concerning the pertinence of studying spirituality in late adulthood, it is our fifth aim to assess older adults' perceptions of spirituality within AtA. To date and to our best knowledge, no research has focused on the potential of spirituality to AtA in an older cross-national population. Instead of applying traditional definitions and measurement models, we assert that the use of qualitative methodologies such as in-depth interviews subjected to content analysis provide opportunities for exploration of the multi-dimensional context of AtA. Because elements constituting self-perceptions of aging and age are considered personal, an approach that explores AtA from the perspective of older adults may yield more accurate information about this construct.

Thereafter, and also subsequent to the investigation of older adults' perceptions, it is our sixth aim to develop and validate a scale to measure AtA (and, hence, build an instrument that accurately assesses the degree of AtA, specifically for older adults), since, to our best knowledge, a valid and reliable evaluation of AtA has been absent from the literature on older adults and aging well.

Subsequently, and using the scale previously developed in the context of this study, it is our seventh objective to build a structural model that explores the impact of sense of coherence (SOC), SWB and socio-demographic, lifestyle and health-related factors', simultaneously, on older adults' ATA.

Because SWB is distinct from AtA and its predictors numerous, and still insufficiently explored in late adulthood, simultaneously, our last aim is to build a structural model of older adults' SWB, encompassing SOC, socio-demographic, lifestyle and health-related variables.

Finally, with these research questions, which will be reflected in the subsequent eight studies, we intend to significantly contribute for the understanding of the constructs of AtA and SWB, in late adulthood.

In sum, the pertinence of this research is to provide original data on the conceptualization of AtA and on the prediction of AtA and SWB, in a cross-national older population, given the multi-dimensional and the multi-cultural context of aging and the relevance of these concepts, as becoming a significant means for improving aging well and longevity, in an ageing world. In this way, the present research provides a pertinent research basis for the deepening of the potential of AtA and SWB in health promotion and clinical practice among older populations.

## 2. Dissertation Structure

Hence, given the aims above, the general structure of this dissertation will be now introduced, by outlining the main contents of each section and articulating them with the overall rationale of the research.

This dissertation was written in an article format, comprising eight original papers, which were divided into three parts.

A General Introduction is set to identify the main theoretical references taken on board by the research. It starts with the introduction of the aims of this, followed by the presentation of the dissertation structure and the methods' overview. This section then moves onto a general approach of the global aging of the population, aging well and spirituality in old age and the discussion about the construct of AtA and SWB, its multi-dimensionality, meaning and potential predictors in late adulthood. These constructs will be extensively deepened in two systematic literature reviews, presented in Part I of the dissertation. Overall, this first part of this study introduces the objectives of the dissertation, the dissertation structure, the methods' overview and the core theoretical references of this research.

Because this dissertation was written in an article format, parts I, II and III were organized on the basis of original research papers, each one representing the eight specific objectives of the overall study.

The first part presents the AtA and SWB state of the art; the second part encompasses the AtA exploratory qualitative study; and the third part includes the AtA and SWB quantitative cross-sectional study.

The first part intends to specifically and systematically review the construct of AtA and older adults' predictors of SWB in late adulthood. It includes two papers. The first paper is a systematic literature review for AtA in old age, which is pertinent for the construct exploration, for the construction of the Adjustment to Aging Scale (AtAS) and to build the structural model of AtA' predictors. The second paper comprises a systematic literature review for SWB which is relevant for exploring the structural model of SWB's predictors in old age.

The second part, concerning the AtA exploratory qualitative study integrates three papers, being: (a) the first paper, a qualitative descriptive study of older adults' perceptions of AtA and SA; (b) the second paper, an exploratory qualitative study for a cross-national comparative model for 'adjustment and aging'; and (c) the third paper, a qualitative study of

older adults' perceptions of spirituality within AtA. In detail, the first paper explores the perceptions of AtA and SA in a cross-national sample of Angolan, Portuguese and Romanian older adults. The second paper examines the indicators of AtA and SA reported by Angolan and Portuguese older adults and compares an 'adjustment and age' overall model for both nationalities. The third paper analyzes the indicators of AtA and examines the potential explanatory mechanisms of a model for spirituality for Portuguese and German older adults.

The third part of this dissertation regards the AtA and SWB cross-sectional quantitative studies and incorporates three papers: (a) the AtAS construction and validation for older adults; (b) the structural model of AtA's predictors; and (c) the structural model of SWB's predictors, all of these performed with a cross-national community-dwelling older population. The first paper presents the AtAS that was developed, its psychometric properties and its validity study. The second paper comprises the structural model that explores the impact of SOC, SWB and socio-demographic, lifestyle and health-related factors, simultaneously, on older adults' ATA. Finally, the third paper explores the role of SOC, socio-demographic, lifestyle and health-related factors in predicting older adults' SWB.

The last section of this dissertation, General Discussion, attempts to discuss the main findings put forward along the dissertation in the eight original papers, introduces the main limitations and strengths of this investigation and summarizes the main conclusions of the study. The general structure of this dissertation is presented in Figure 1.

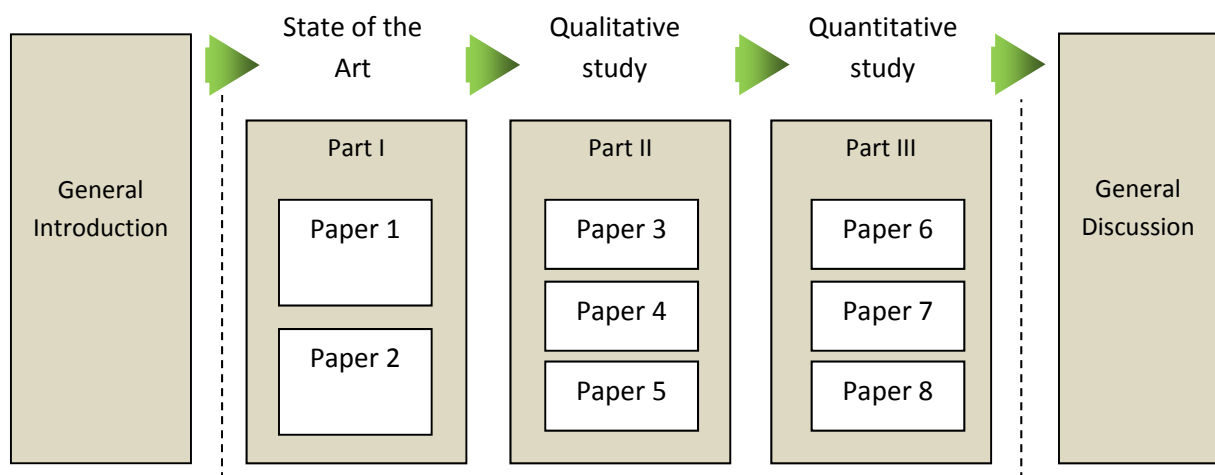


Figure 1.

*General structure of the dissertation*

### 3. Methods' Overview

Considering that this multi-phase research is composed by eight original papers, distinct methods are involved in the three parts of this study. These will now be introduced.

The first part presents the AtA and SWB state of the art, hence it comprises two systematic literature reviews (see Paper 1 and Paper 2). In Paper 1, a computerized literature search was carried out and *PubMed/Medline*, *Psychology and Behavioral Sciences Collection* and *Scielo* databases were searched from 1980 to 2012. Studies must have comprised AtA in old age and the authors interpreted this topic broadly because the aim of this review is to cover the multi-dimensionality of AtA in late adulthood. All the references which met the inclusion criteria were critically appraised. Finally, discrepancies were resolved through discussion and a high agreement rate was obtained between the researchers.

In Paper 2, a broad comprehensive computerized literature search was carried out and *PubMed/Medline*, *Psychology and Behavioral Sciences Collection* and *Scielo* databases were searched from 2001 to 2012. Studies must have mentioned variables that influenced SWB as comprising cognitive and affective facets. The references which met the inclusion criteria were critically appraised and the final summary review of each paper was agreed by both researchers.

The second part of the present research encompasses the AtA exploratory qualitative study and integrates three cross-national qualitative studies (see Papers 3, 4 and 5). In the third paper, 151 older adults aged between 75-101 years ( $M = 84.6$ ;  $SD = 6.91$ ) from Portugal, Romania and Angola were purposefully interviewed and questioned about their perceived AtA and SA. Data was subjected to content analysis, until the point of theoretical saturation was reached. An independent analysis of the interviews was performed by a jury of two psychologists and a final group co-resolution regarding the categories was made.

In the following paper, semi-interviews with 102 community-dwelling older adults aged between 75-99 years ( $M = 80.5$ ;  $SD = 5.76$ ) were performed, focusing on their perspectives of AtA and SA. The sampling was performed purposefully, in order to allow data for comparing two different cultural groups (Angolan and Portuguese). Data was subjected to content analysis, until the point of theoretical saturation was reached. The correlational structure and latent constructs of indicators of AtA and SA were analyzed by a Multiple Correspondence Analysis (MCA). An independent analysis of the interviews was performed by a jury of two psychologists and a final consensus was obtained.

In the fifth paper, semi-structured interviews were performed, addressing one core area: indicators of AtA. Complete data were available for 154 older adults (German and Portuguese), aged between 75-103 years ( $M = 86.6$ ;  $SD = 6.98$ ). Data were subjected to content analysis, until the point of theoretical saturation was reached. An independent analysis of the interviews was performed by a jury of two psychologists and a final group co-resolution regarding the categories was made. Representation of the associations and latent constructs were analyzed by a MCA.

The third part of this research includes the AtA and SWB quantitative cross-sectional study and incorporates three cross-national quantitative studies; with participants representing four different nationalities (Angolan, Brazilian, English and Portuguese) (see Papers 6, 7 and 8). In paper 6, complete data was available for 1,291 older community-dwelling adults, aged between 75-102 years ( $M = 83.9$ ;  $SD = 6.68$ ). Four valid and reliable instruments were included: a) our proposed AtAS; b) the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988); c) the Satisfaction with Life Scale (SwLS) (Diener, Emmons, Larsen, & Griffin, 1985); and d) the Orientation to Life Questionnaire (OtLQ) (Antonovsky, 1993). Exploratory and confirmatory factor analyses were performed for dimension reduction and exploration of the factorial structure of AtAS. To assess the psychometric qualities of this scale, construct-related, content and criterion validity, external validity, reliability and distributional properties were evaluated for the AtAS.

In the following paper, a community-dwelling sample of 1270 older adults aged between 75 and 102 years ( $M = 83.8$ ;  $SD = 6.66$ ) was included. Four instruments (AtAS, PANAS, SwLS and OtLQ), which presented good psychometric properties, were used in this study. Structural equation modeling was employed to explore a structural model of the self-reported AtA, encompassing all variables. A two-step approach was used to evaluate the structural model. The factor's measurement model was evaluated to demonstrate an acceptable fit and the structural model, encompassing the independent (AtA) and the independent variables (sex, age, professional and marital status, education, household, adult children, family's annual income, living setting and self-reported spirituality, perceived health, recent disease, medication and leisure, SOC and SWB) was adjusted. Lastly, the significances of the structural trajectories were evaluated.

Lastly, in Paper 8, a cross-national community sample of 1258 older adults aged between 75-102 years ( $M = 83.9$ ;  $SD = 6.67$ ) was assessed regarding SWB, SOC and socio-demographic (age, gender, marital status, household, professional status, educational level,

family's annual income, social support, living setting and self-reported spirituality), lifestyle and health-related characteristics (leisure, physical activity, recent disease, perceived health and medication). Three instruments (PANAS, SwLS and OtLQ), which presented good psychometric properties were used in this study. Structural equation modeling was employed to investigate a structural model of the self-reported SWB, comprising the above variables. A two-step approach was used to evaluate the structural model. The factor's measurement model was evaluated to demonstrate an acceptable fit and the structural model, encompassing the independent (SWB) and the independent variables cited above, was adjusted and the significances of the structural trajectories were evaluated.

All the stages of this investigation are presented in the research schedule (see Appendix A). Regarding the present multi-phase research, informed consent was received from all the participants of this research (see Appendix B). The American Psychological Association's standards on the ethical treatment of participants were followed and all participants met the eligibility criteria. Data was subjected to content analysis (see Appendix C). One measure of cognitive functioning, the Mini-Mental State Examination (MMSE) and a demographics questionnaire, assessing participants' socio-demographic, lifestyle and health-related information were used in all the studies composing this research. All instruments included in this research, presented good psychometric properties. These are shown in Appendix B and were analyzed in previous literature (Antonovsky, 1993; Diener et al., 1985; Watson, Clark, & Tellegen, 1988). Additionally, psychometric properties of these instruments were evaluated with our sample of older adults and showed to be good, prior to their inclusion in our research (see Appendix D). All data were analyzed using SPSS for Windows (version 19.0; SPSS, An IBM company., Chicago, IL) and Analysis of Moment Structures (AMOS) software for Windows (version 20.0; SPSS, An IBM company., Chicago, IL). The Research Unit in Psychology and Health's coordination from ISPA - Instituto Universitário and the Portuguese Foundation for Science and Technology (FCT) approved all the studies composing this research (see Appendix E). All papers comprised in this research were submitted to peer-reviewed indexed journals and acceptance letters for Papers 3, 4 and 5 are shown in Appendix F. Finally, all statistical outputs resulting from this research are presented in Appendix G.

## **4. Adjustment to the Process of Aging**

### *4.1. Age and Aging*

Perhaps one of the most remarkable demographic developments in modern times is the progressive demographic aging of the older population itself. In virtually all countries, the oldest old segment – the oldest-old (85+ years) and centenarians (100+ years), in particular, is growing faster than its younger segment. The number of people over the age of 60 is projected to reach one billion by 2020 and almost two billion by 2050, representing 22% of the world's population. The proportion of individuals aged 80 or over is projected to rise from 1% to 4% of the global population between today and 2050 (Gavrilov & Heuveline, 2003; United Nations, 2009).

Countries from Europe and North America have the oldest populations in the world, thus placing research into the effects and implications of an aging population in a unique position (Fernández-Ballesteros, 2007). Alongside its incipient decline in numbers, the second strand to Europe's demographic weakness is the shrinking share of young people and growing share of older people in its population (Immerfall & Therborn, 2011). In fact, the ratio of older people to total population is higher in Europe than on any other continent: for EUR25, by 2050 (as of 2005) the population aged 65 and over will have a 68% increase (133 million by 2050; 29% of total population), as for the USA, the estimates show that people aged 65 and over will be 20% of the total population by 2050. Conversely, little attention has been paid to older adults in developing countries, in part because of the fact that older people still make up a relatively small fraction of the total population. However, demographic projections suggest a figure of 20% by 2025 for some of these countries, with a population that is 25% of the world population (Bagchi, 2005).

The point to be made here is that, as the population ages, there will be increased demands on the health system and increased expectations of older people to have control of how and where they live their lives (World Health Organization, 2011). As individuals live longer, the quality of that longer life becomes a central issue for both personal and social well-being (Kinsella & Velkoff, 2001). Likewise, due to this growing number, new approaches focused on aging well, should be developed for the elderly (Aurelia & Baldazzi, 2002).

Considering that self-perception of aging is defined as a personal evaluation of one's own aging, national, cultural and ethnical differences may influence the process of aging

(Barak, 2009; Löckenhoff et al., 2009; Torres, 2003). In particular, in westernized societies, autonomy and independence are emphasized, whereas Eastern societies regard individuals as closely connected and interdependent (Ingersoll-Dayton, Saengtienchai, Kespichayawattana, & Aunguroch, 2004). Moreover, an international comparison study is pertinent to uncover the distinctiveness of older adults' experiences and self-reports concerning the multi-dimensional and cross-cultural context of age and the aging process. In fact, sociocultural factors play a crucial role in affecting the way in which individuals see themselves as changing in later life (Westerhof, Whitbourne, & Freeman, 2011). Furthermore, because the aging of the population is becoming a pressing reality for both developing and developed countries, gerontologists need to expand their horizons of interest to include a multi-dimensional and multi-cultural approach (Löckenhoff et al., 2009; Torres, 2003, von Humboldt, Leal, & Pimenta, 2012a).

Levinson (1978) initially wrote about the seasons of men's lives, taking us to the sexagenarian years. Later, Erikson, Erikson, and Kivnick (1986) wrote about the octogenarian decade. The term 'old age' defines not only an individual's appearance, but often refers to a loss of power, role and position. Loss of full possession of the faculties and a proneness to physical diseases causes an individual to become more dependent on others, a fact that requires consideration when deciding on the manner in which the elderly are approached (Corner, Brittain, & Bond, 2007; Sixma, Van Campen, Kerssens, & Peters, 2000). There are as well alterations in identity and roles, decision-making and choice, which come with retirement (Luborsky & LeBlanc, 2003) and that require consideration when deciding on the manner in which older adults are approached. Yet, being old also means belonging to an age group with specific socio-cognitive-emotional dimensions. In fact, as adults experience their older years many aspects of life (social, financial, physical, and employment) change (Corner, Brittain, & Bond, 2007).

Despite the fact that chronological age is the basic dimension along which physical and psychological outcomes are described and investigated among older adults, a growing body of research has considered that SA, or how young or old individuals experience themselves to be, is an important marker of development (Barak, 2009; Montepare, 2009). Contrasting with the chronological age, the SA is a multi-dimensional construct that indicates how old a person feels and into which age group a person categorizes him or herself (Barrett, 2003; Barrett, 2005; Kastenbaum, Derbin, Sabatini, & Am, 1972; Kaufman & Elder, 2003; Knoll, Rieckmann, Scholz, & Schwarzer, 2004). Thus, SA is understood as a concept that

reflects cultural and personal meanings that a person relates to his or her age (Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008).

The perception of SA or how older adults see themselves, and their age can become a significant challenge to their notions of identity and congruence (Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008). Additionally, Laslett (1989) suggested that awareness of SA often occurs in later life. Moreover, the interpersonal interactions that occur in such a scenario may facilitate positive well-being and also contribute to improved health (Baltes & Smith, 2003).

Perceived age reflects a dynamic and time-linked process, i.e., aging and derives from a process of anchoring and adjusting personal age perceptions that guide the age that individuals across the lifespan perceive themselves to be (Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008). Moreover, success in fulfilling developmental challenges may yield a more positive perceived age (Ward, 2010). Furthermore, when representing age, Coupland, Coupland, Giles, and Henwood (1991) identified two major processes through which older adults make age identities salient: age-related characteristics (e.g., age-related category/role references and experiences) and temporal framing (e.g., adding time-past perspective to present events and association of the self with the past).

Overall, Western cultures have been said to celebrate youth and to devalue old age (Palmore, 2001; Pasupathi & Löckenhoff, 2002). This has also been found to be reflected in expressions of SA while from middle age onwards adults have been shown to resist their chronological age and report a discrepancy between their actual age and SA (Westerhof & Barrett, 2005). In fact, researchers consistently found that the majority of older adults report a youthful SA, i.e., a tendency to perceive themselves as younger than they actually are (Gana, Alaphilippe, & Bailly, 2004; Montepare & Lachman, 1989; Rubin & Berntsen, 2006). Moreover, studies investigating the determinants of successful aging have found that preserving a younger SA, or youthful bias (Gana, Alaphilippe, & Bailly, 2004) promotes important well-being indicators, such as satisfaction with life (SwL) (Gana, Alaphilippe, & Bailly; Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008; Westerhof & Barrett, 2005) and age identity, memory, subjective health and self-efficacy (Levy, 2003; Stephan, Caudroit, & Chalabaev, 2011). This is consistent with studies showing that older individuals' own evaluation of their age is a better predictor of psychological functioning than an objective count of chronological years (Montepare, 2009; Schafer & Shippee, 2010).

Additionally, self-perception of aging is defined as a personal evaluation of one's own aging (Moser, Spagnoli, & Santos-Eggimann, 2011). Positive self-perceptions of aging are viewed as indicators of successful aging, age identity, and self-regulation processes, which can serve to sustain levels of social activity and engagement, enhance resilience, self-esteem and well-being, and boost biophysiological functioning (Baltes & Smith, 2003; Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008; Sneed & Whitbourne, 2005).

#### *4.2. Aging Well*

In past decades, research on aging has tended to focus on the prediction of negative outcomes such as morbidity, mortality, disability and dependence (Boult, Kane, Louis, Boult, & McCaffrey, 1994) or was developed with samples limited to frail individuals (Wolinsky, Stump, Callahan, & Johnson, 1996). Aging is often seen as a process that makes the person less attractive, less intelligent, more asexual and less useful (Hamarat, Thompson, Steele, Matheny, & Simons, 2002). Research findings on the oldest and young old demonstrated that the third and fourth age entailed a level of bio-cultural incompleteness, vulnerability and unpredictability (Baltes & Smith, 2003).

Yet, and despite the high prevalence of negative age-related changes, older people generally are satisfied with their aging (Gana, Alaphilippe, & Bailly, 2004; Rubin & Berntsen, 2006). Elderly people often experience senior years as a period of introspection and self-acceptance that bring more congruence about their internal and external age (Vaillant & Mukamal, 2001). These individuals also show consistently pragmatism about their physical reality and aging, and higher self-esteem (Clarke, 2001). Noticeably, a different view of old age has found expression in aging well (Franklin & Tate, 2009; Vaillant & Mukamal, 2001).

Aging well involves the flexible use of adaptive strategies, to optimize personal functioning and well-being within the constraints of personal competence and resources (Baltes & Baltes, 1990). As Fernández-Ballesteros (2010) pointed out, this concept is called differently by different authors: 'healthy' (World Health Organization, 1990), 'successful' (Rowe & Kahn, 1997; Baltes & Baltes, 1990), 'active' (World Health Organization, 2002), 'optimal' (Palmore, 2001), 'conscious' (Moody, 2003), 'vital' (Erikson, Erikson, & Kivnick, 1986), 'productive' (Kalache & Gatti, 2003), 'positive' (Gergen & Gergen, 2006) or simply 'aging well' (Fries, 1989).

Compression of morbidity is not an option for many older adults, so many instead accept decline when it comes and compensate and adjust to, through selective optimization with compensation (Baltes & Baltes, 1990; Moody, 2009), that is, with losses in functional capacity, many older adults seek new ways of accomplishing things that have become difficult, just as when they were younger, and may also narrow the scope of the capabilities they seek to maintain and optimize to those they find most useful. This prominent model of adult development, selective optimization with compensation (Baltes & Baltes, 1990) maintains that successful aging entails selective investment in goals and environments, and in drawing on accumulated expertise to optimize performance in selected domains to compensate for inevitable limitations. Alternatively, socio-emotional selectivity theory, a life-span theory of motivation, argues that shorter time horizons become an increasingly important source of motivation, leading to the prioritization of emotional goals (Carstensen, 2006).

Some authors used a biopsychosocial model, primarily framed by psychosocial or biomedical perspectives (Bowling, 2007; Kahana & Kahana, 1996). Psychosocial approaches and definitions include constituents of life satisfaction, morale, adjustment, quality of life, and social functioning (Kuh, 2007), whereas biomedical approaches emphasize physical and cognitive functioning in their definitions (Ford et al., 2000; Park, Gutchess, Meade, & Stine-Morrow, 2007). Baltes and Baltes (1990) listed the following characteristics as possible components of this model: length of life, biological health, mental health, cognitive efficiency, social competence and productivity, personal control, and life satisfaction. Another example is Rowe and Kahn's (1997) tripartite definition: low probability of disease and disease-related disability, high cognitive and physical functional capacity, and active engagement with life. Similarly, in a 12-year study of Manitoba elderly, successful aging was defined as being independent in mobility, cognitively intact, and not receiving nursing home or home care services (Roos & Havens, 1991).

Furthermore, biological and cognitive health, social competence, personal control, self-esteem, positive self-perceptions of aging, productivity, active engagement with life, personal and spiritual beliefs are some of the most relevant contributors for aging well (Baltes & Baltes, 1990; Barrett, 2005; Ford et al., 2000; Kim & Moen, 2002; Vaillant & Mukamal, 2001; von Humboldt, Leal, & Pimenta, 2012a, von Humboldt, Leal, & Pimenta, 2012b).

Williamson (2005) emphasized the active role of older adults in determining the trajectory of their own aging via the selection of new activities and roles. Furthermore, significant social support in old age may be in large part a result of the same earlier good habits that preserve healthy and active aging (Vaillant & Mukamal, 2001). The effects

associated with social loneliness are generally associated with poor health and the loss of significant others (Cacioppo, Hughes, Waite, Hawkley, & Thisted, 2006).

The seven protective factors that distinguish the happy-well from the sad-sick older adults are under at least some personal control. Examples of personal control could be: control over weight, exercise, education, and abuse of cigarettes and alcohol. With hard work and/or therapy, one's relationship with their spouse and coping styles can be modified. Such attitudes are akin to those that would be predicted from hypotheses that associate aging well with active engagement with life (Rowe & Kahn, 1987). Conversely, the life span theory (e.g., Baltes & Smith, 2003) and recent evidence about decline in SwL during old age (Gerstorf, Ram, Röcke, Lindenberger, & Smith, 2008; Mroczek & Spiro, 2005) suggest that there may be limits to aging well in very old age.

Additionally, three possible explanations come to mind for this “stability despite loss paradox” (Kunzmann, Little, & Smith, 2000) or “satisfaction paradox” (Walker, 2005). First, this phenomenon can perhaps be explained by the ability of older individuals to adapt to worsening conditions. Second, older individuals may be comparing themselves primarily with individuals in their own age cohort (Kapteyn, Wansbeek, & Buyze, 1980) who are worse off. Related to this latter explanation is the following possibility: happy people may live longer (Danner, Snowdown, & Friesen, 2001).

In brief, losses in later life may be profound, but many older adults cope well and thrive, sustaining personal meaning with satisfaction wisdom and creativity (Moody, 2009). Aging well greatly depends on the capability to find joy and happiness in satisfying personal interests and pursuits, human relationships, and creative mental activities (Luborsky & LeBlanc, 2003).

#### *4.3. Spirituality in Old Age*

A good quality of life incorporates several dimensions, among them, spirituality, physical and psychological health, and an adequate level of independence (World Health Organization, 1997). Spirituality is a broad term encompassing multiple domains of meaning that may diverge among various cultural, national, and religious groups (Nakasone, 2005; Takahashi & Ide, 2003); consequently, a deeper understanding of the aging process can benefit from the inclusion of a cross-cultural diverse approach of spirituality (Cohen, Thomas, & Williamson, 2008).

Furthermore, diverse definitions have been suggested for the concept of spirituality. It can be defined as a source of strength, enabling a sense of purpose, connection, sense of value and meaning in life, facilitating peace with oneself, a feeling of security, inner strength, searching, coping, hoping, relationship, and connectedness (Narayanasamy, 2001). Moreover, it is a multi-dimensional construct defined by non-tradition-centered beliefs, sense of connectedness with a sacred other and involvement in practices, such as meditation, and it was found to be closely related to personal development and inner awareness (Dillon & Wink, 2007). Furthermore, Gouveia, Marques and Pais-Ribeiro (2009) suggested that the assumption that spirituality is linked to health led to the development of the spiritual well-being concept, and Moberg (2002) highlighted that spiritual well-being is the affirmation of life in a relationship with God, self, community, and environment that nurtures and celebrates wholeness. Furthermore, Musick, Traplagan, Koenig, and Larson (2000) suggested that spirituality has been linked to positive physical health and inversely related to physical illnesses.

Consistently, growing literature recognized the centrality of spirituality to well-being of older people (Hybels, Blazer, George, & Koenig, 2012; Jewell, 2004). A strong relation was found between the spirituality's development and age progression and the indication that spirituality may be a well-being resource, in old age (Cohen & Koenig, 2003; Coleman, 2005; Sadler & Biggs, 2006).

The body of literature on spirituality and aging, points to the development of a very specific spirituality as people grow older (MacKinlay, 2001). According to Musick et al., (2000), 88.7% of adults aged 55 and older describe themselves as having moderate to high levels of both religiousness and spirituality. Concerning spiritual beliefs, the results of older adults in the Berlin Aging Study between ages 70 and 95 were enlightening (Baltes & Mayer, 1999), as with increasing age, the relevance of spirituality and serenity also increases. By 'serenity' these authors meant faith, acceptance, and allowing someone else to take over.

Considering that spirituality comprises the pursuing of existential goals (such as, inner potential, meaning, feeling whole and connected with others), and it is based on values regarding the self, others, nature and life, also reflecting the awareness of a transcendent dimension, it might be a protective experience in later adulthood (Zinnbauer & Pargament 2005).

A review of the literature revealed the relation between spirituality and some elements composing adjustment in old age, namely, personal-growth, social support and purpose of life (e.g., Dillon & Wink, 2007; Erikson, 1982/1997; Malette & Oliver, 2006; Tornstam, 2005).

Moreover, research is still scarce in what specifically concerns the relationship between spirituality and psychological adjustment (Fehring, Brennan, & Keller, 1987; Young, Cashwell, & Shcherbakova, 2000). Furthermore, growing research suggests that the concept of spirituality is key to a salutogenic approach focussed on the well-being and adjusted functioning of older adults (Brandtstädter & Rothermund, 2003; Hybels et al., 2012; Jewell, 2004; Staudinger & Kunzmann, 2005).

#### *4.4. Adjustment to Aging*

Aging is an ongoing process which requires continuous adjustment (Brozek, 1966). The scientific study of the development of individually and socially adaptive behavior initially constitutes the subject matter of the psychology of adjustment (Havighurst & Albrecht, 1953; Shaffer, 1936; Williams, Tibbitts, & Donahue, 1966; Young, 1940). Conceptualizations of AtA have evolved significantly over the years. In early research, Havighurst's (1961) activity theory emphasized the maintenance of the activities and attitudes of middle age, whereas Cumming and Henry's (1961) theory of disengagement stipulated that a good AtA involved self-renunciation and acceptance of one's helplessness and Cattell (1950) described adjustment as the goodness of internal arrangements by which an adaptation is maintained.

In further research, Fiske (1980) argued that a complete understanding of mental health and the elderly must include an appreciation of how older persons deal with the demands associated with aging. Warnick (1995) suggested that adjusting to the changes that accompany late adulthood requires that a person is flexible and adjusts to the changes that are mutual to old age.

AtA is achieved when a balance between the cognitive and motivational systems of the person has been attained (Thomae, 1992). A model, in which the three elements – selection, optimization and compensation – constitute the basic component processes for changes regarding aging and adaptive capacity and which represented the nature of development and aging with the focus on adjustment was developed in more recent years, (Baltes & Carstensen, 1996). Moreover, the concept of successful aging includes a process of continuous adjustment (Franklin & Tate, 2009; Kuh, 2007; Lewis, 2011; Vaillant & Mukamal, 2001).

Identity process theory proposed that AtA can be conceptualized as involving the three processes of identity assimilation (maintaining self-consistency), identity accommodation

(making changes in the self), and identity balance (maintaining a sense of self but changing when necessary) (Sneed & Whitbourne, 2003), whereas according to Brandstädter and Greve's (1994) model, adjustment of a person's goals and aspirations in the face of age-related challenges corresponded to what the authors named of 'accommodation'. More recently, Atchley (2003) postulated that idea patterns (e.g., attitudes, values, beliefs) and previous lifestyle represent infrastructures of continuity which facilitate adjustment to the personal and professional changes inherent in retirement and aging. Additionally, Wrosch, Dunne, Scheier, and Schulz (2006) examined the emotional, biological and physical benefits deriving from adaptive self-regulation of common age-related challenges in the process of AtA.

The extensive research conducted on AtA suggested that this is a multi-dimensional interaction of elements such as generativity (Erikson, Erikson, & Kvinick, 1986), autonomy, control, self-acceptance, personal growth, positive social network and purpose in life (Bauer & McAdams, 2004; Keyes, Shmotkin & Ryff, 2002; Slangen-Dekort, Midden, Aarts, & Wagenberg, 2001; Staudinger & Kunzmann, 2005), that may vary with time, age, gender, race, culture, illness, financial status and society (Neri, Cachioni, & Resende, 2002).

AtA is a relevant and proximate concept, yet distinct, from well-being and quality of life (QoL) (Al-Janabi, Flynn, & Coast, 2012; Eriksson & Lindstrom, 2006; Diener et al., 1985; Fernández-Ballesteros, 2010; Low & Molzahn, 2007; Smith, Borchelt, Maier, & Jopp, 2002; Watson, Clark, & Tellegen, 1988). However, the study of AtA specifically remains at the periphery of current gerontological research in recent gerontological literature (Kozma, Stones, & McNeil, 1991; von Humboldt, Leal, & Pimenta, 2012a; von Humboldt, Leal, & Pimenta, 2012b). In this context, please see the systematic literature review for the concept of AtA (Paper 1).

Moreover, the enhancement of AtA and its relevance to improve well-being and longevity can become a significant means for health care interventions (Staudinger & Kunzmann, 2005). It is also a key consideration for policy-makers, research and health practitioners, that aim at further comprehending the implications of old age (Slangen-Dekort et al., 2001; Staudinger & Kunzmann, 2005), as the sole use of health gain measures may neglect potential benefits (Al-Janabi, Flynn, & Coast, 2011).

## 5. Subjective Well-Being in Late Adulthood

A growing body of evidence suggested that a high level of well-being significantly improves life within the areas of health and longevity, work and income, social relations, and societal benefits (Diener & Biswas-Diener, 2008). Initial insight into the importance of maintaining a sense of positive well-being during old age has been gained from findings that satisfaction with aging and emotional vitality predict mortality (e.g., Levy, Slade, Kunkel, & Kasl, 2002; Maier & Smith, 1999; Penninx et al., 2000), and that negative changes in life satisfaction are more associated with distance to death than age per se (Gerstorf et al., 2008).

Subjective well-being is a multi-dimensional construct composed by two cognitive and affective (hedonic) facets: satisfaction with life (SwL), and positive and negative affects, respectively. This latter, is composed by the presence of frequent pleasant affect, and the infrequent presence of unpleasant affect (Cheng, Li, Leung, & Chan, 2011; Diener, Suh, Lucas, & Smith, 1999; Galinha & Pais-Ribeiro, 2011; Kesebir & Diener, 2010; Pavot & Diener, 2004).

While the hedonic component is useful for measuring transient experiences of SWB, SwL is used to indicate relatively long-term feelings (Heo & Lee, 2010). In most populations, both components were at least moderately and sometimes highly correlated (Diener, Napa-Scollon, Oishi, Dzokoto, & Suh, 2000). Although these nuances of definition between the two concepts are important, most authors use the terms almost interchangeably (Fernández-Ballesteros, 2002, 2007; Higgins, Grant, & Shah, 1999).

The gerontological literature abounds in studies of SWB (Bishop, Martin, & Poon, 2006; Cheng, Chan, & Phillips, 2004; Diener, 1984; Efklikes, Kalaitzidou, & Chankin, 2003; Flood & Phillips, 2007; Lyubomirsky, Tkach, & DiMatteo, 2006; Rijken & Groenewegen, 2008; Stock, Okun, & Benin, 1986; Tate, Lah, & Cuddy, 2003; Weiguo & Liu, 2007; Wiesmann & Hannich, 2008). Adding to this, previous cross-national comparisons with older adults reported that there are national differences in reported SWB (Fernández-Ballesteros, 2007; Ferring et al., 2004).

Older adults' efforts to maintain emotional balance between negative affect and positive affect is of great importance (Diener, 2000; Efklikes, Kalaitzidou, & Chankin 2003). Furthermore, older adults that feel a strong SwL, focus on showing that they do not lose their identity because they age and that, sometimes, in spite of their chronological age, they do not feel aged; they expect acknowledgement as citizens; they reinforce that being healthy is

essential and grants them autonomy in their lives; they emphasize the importance of family support, life and care; they value financial independence and avoid focusing on the finite nature of human beings (Silva & Boemer, 2009).

Some studies initially indicated that SWB declines with age (Cutler, 1979; Doyle & Forehand, 1989) whereas some reported that SWB increases or remains stable with age (Costa, McCrae, & Zondermann, 1987; Stacey & Gatz, 1991). These appear to indicate an optimization of the affect process (Baltes, 1997) or a compensational nature of control on self-regulation of emotion in older age (Schulz & Heckhausen, 1998). Yet, affect optimization seems to be a defensive strategy which may foster highly stereotyped thinking and heuristic processing (Labouvie-Vief & Medler, 2002).

The extensive research showed that there is evidence that health-related characteristics like the presence of illness and physical exercise (Gwozdz & Sousa-Poza, 2010; Jones, Rapport, Hanks, Lichtenberg, & Telmet, 2003; Leung, Moneta, & McBride-Chang, 2005; Mollaođlu, Tuncay, & Fertelli, 2010; Smith, Borchelt, Maier, & Jopp, 2002; Stathi, Fox, & McKenna, 2002) as well as environmental (Diener & Suh, 1999; Diener & Seligman, 2004; Inglehart & Klingemann, 2000), sociodemographic (Diener, 2000; George, 2010; Jones et al., 2003), lifestyle characteristics (Sasidharan, Payne, Mowen, & Montoro-Rodriguez, 2006; Sener, Terzioglu, & Karabulut, 2007; Yau & Packer, 2002) and psychological factors (Ackerman, Zuroff, & Moscovitz, 2000; Ferguson & Goodwin, 2010; Herero & Extremera, 2010; Keyes, Shmotkin, & Ryff, 2002), have substantial influence on SWB among older adults.

Additionally, the finding that objective, as opposed to subjective, health has no strong effect on SwL is in line with the results of previous gerontological studies (Berg, Hassing, MCClearn, & Johansson, 2006; Smith et al., 2002). Smith et al. (2002) provided one possible explanation for this findings; namely, that SWB is strongly influenced by social participation. In addition, physical health may only indirectly, and with a time lag, influence functional health (e.g., vision, hearing, physical mobility), which in turn strongly influences social participation. Alternatively, Berg et al. (2006) argue that, the rather weak association between objective health and SWB may be explained by adjusted expectations and aspirations in old age, that is, as morbidity and disability are common in late life, with health-related impairments, prospects on health and functioning are lower.

To fully understand SWB and its development, knowledge about factors predicting SWB is further needed. For this purpose, please see the systematic literature review (Paper 2).

In brief, analyzing SWB is a main issue to look at because it is important in understanding what leads older people to experience long-lasting SWB and it is highly correlated with many positive life outcomes (e.g., less physical and mental illness) in old age (Lyubomirsky, King, & Diener, 2005).

The following section will now present parts I, II and III, which are organized on the basis of eight original research papers.

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**PART I**

**ADJUSTMENT TO AGING AND SUBJECTIVE WELL-BEING IN OLD AGE:  
BACKGROUND**

**Paper 1. Adjustment to aging in late adulthood: A systematic review**

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## 1. Abstract

**Aim:** This systematic review aims at providing a trustworthy overview of the concept of adjustment to aging (AtA) in late adulthood and includes suggestions for future research.

**Methods:** A computerized literature search was carried out and *PubMed/Medline*, *Psychology and Behavioral Sciences Collection* and *Scielo* databases were searched from 1980 to 2012. Studies must have comprised AtA in old age.

**Results:** Thirteen articles from 1,291 records, met inclusion criteria, with a total of 1,156 participants with ages 60 and over. There are rather consistent findings that older adults develop active and adaptive strategies when AtA and that psychological variables, engagement with significant others and social and temporal processes of comparison have a relevant role in AtA among older populations.

**Conclusions:** The aging society requires an understanding of the specific needs of older individuals. The findings presented here contribute to a better understanding of AtA and its multi-dimensionality. These might be a starting point for further research in this insufficiently explored field and for possible future interventions within a multi-disciplinary approach to AtA.

**Key Words:** Adjustment to Aging; Old Age; Older Adults; Systematic Review.

## 2. Introduction

Population aging is progressing rapidly in many industrialized countries, but those developing countries whose fertility declines began relatively early also are experiencing rapid increases in their proportion of elderly people (Gavrilov & Heuveline, 2003). For the world as a whole, the proportion of the population aged 60 or over who live alone is estimated to be 14% (United Nations, Department of Economic and Social Affairs, Population Division, 2009). Moreover, the elderly will grow from 6.9% of the population in 2000 to a projected 19.3% in 2050 (Gavrilov & Heuveline, 2003).

A notable aspect of the global ageing process is the progressive demographic ageing of the older population itself. At the world level, the average annual growth rate of the number of persons aged 80 or over, 4% per year, is currently over 50% higher than the growth rate of the population aged 60 or over, which averages 2.6% (United Nations, Department of Economic and Social Affairs, Population Division, 2009). Population aging has many important socio-economic and health consequences, namely a number of challenges for public health, as well as for economic development (Gavrilov & Heuveline, 2003). As individuals live longer, the quality of that longer life becomes a central issue for both personal and social well-being (Kinsella & Velkoff, 2001). Likewise, due to this growing number, new approaches focused on aging well, should be developed towards the elderly (Aureli & Baldazzi, 2002).

It is generally accepted that as a person ages, his or her experiences acquired over the life time, ways in dealing with the environment, economic and social resources, relationships and support systems could profoundly impact longevity and well-being (Poon et al, 2010). Moreover, as adults attain late adulthood, they are more likely to be challenged with physical, mental, and social changes (Martin et al, 2008). Furthermore, some authors suggested that older adults showed multiple attitudes towards aging (Heidrich & Ryff, 1993; Keyes et al, 2002). Additionally, aging well involves the flexible use of adaptive strategies, to optimize personal functioning and well-being within the constraints of personal competence and resources (Baltes & Baltes, 1990).

Adjustment to aging (AtA) was initially defined by Cattell (1950) as the goodness of internal arrangements by which an adaptation is maintained. Two early theoretical models explained AtA: the activity theory which emphasized the maintenance of the activities and

attitudes of middle age, and the disengagement theory (Havighurst, 1961). McMordie, (1981) suggested that the level of AtA was determined by the intimate relationships with others and by self-concept, which was determined by one's past experiences. Later, identity process theory (Whitbourne, 1986) proposed that AtA can be conceptualized as involving the three processes of identity assimilation (maintaining self-consistency), identity accommodation (making changes in the self), and identity balance (maintaining a sense of self but changing when necessary), whereas Brandtstädter and Renner (1990) found that older cohorts tended to report more accommodative strategies than younger ones.

Atchley (1999) referred to the continuity of the ability of older persons to maintain a strong sense of purpose and of self in the face of the changes associated with aging in his continuity theory. More recently, Wrosch et al. (2006) examined the emotional, biological and physical benefits deriving from adaptive self-regulation of common age-related challenges in the process of AtA.

To date, insufficient attention has been paid to investigating AtA in older adults. Yet, studying AtA in late adulthood is pertinent since older adults experience specific aging challenges. In particular the oldest old are increasingly vulnerable to declines in basic functional capacities resulting in a loss of autonomy (Jeune & Andersen-Ranberg, 2000).

### **3. Aim**

To facilitate a better understanding of the multi-dimensionality concept of AtA, which could inform health promotion and aging well, this review aims to systematically examine studies that comprised the construct of AtA and for the purpose of this review, AtA will be regarded only when in late adulthood. This review will try to deepen AtA by assessing empirical studies comprising this construct. Thus, based on our critical review of gerontological literature, the authors summarize research on perspectives of AtA. This systematic review is concluded by identifying gaps in the current studies, to inform future research that may assist in the promotion of older adults' AtA and in meeting the demands of care interventions and policies specifically directed to the elderly.

## 4. Methods

### 4.1. Search Strategy

Scoping searches were performed initially to identify relevant search terms and key words followed by a broad comprehensive literature search of *Google Scholar*, *PubMed/Medline*, *Psychology and Behavioral Sciences Collection* and *Scielo* databases. These were chosen because they cover a range of perspectives and so were likely to produce a comprehensive set of studies on the topic area and to minimize the chances of missing relevant papers. The search was carried out from January 1981 to December 2012, with terms (adjustment) AND (aging) AND (older OR senior OR later life OR late life OR late adulthood) in the title, abstract or keywords. Studies were included in the review if they met all four of the following criteria: the article was available; the study addressed the subject of AtA; published in English, Portuguese or Spanish; and drew samples clearly above 60 years of age.

Studies were excluded from the review if they met one of the following criteria: where AtA was combined with other constructs and it was not possible to effectively distinguish the concept of AtA; where the age group included participants who were under 60; and where the study included in grey literature.

All criteria were applied independently to the full text of the articles that had passed the first eligibility screening, in order to make a final selection of the studies for the review. The authors interpreted the topic of AtA broadly because the aim of this review is to cover the multi-dimensionality of AtA in late adulthood. Additionally, reference lists of all included articles were reviewed, after being checked against the inclusion criteria. The references which met the inclusion criteria were critically appraised.

Given the absence of a standard quality assessment tool suitable for use with a variety of study designs, the methodological quality of research papers meeting the inclusion criteria was assessed by implementing two scoring systems: one for quantitative studies, and one for qualitative studies. Our scoring systems draw upon existing published tools, trusting particularly upon the instruments developed by Timmer et al. (2003) for quantitative studies, and the guidelines indicated by Mays and Pope (2000) for qualitative studies. Fourteen different items for the quantitative studies and ten different items for the qualitative studies

were scored depending on the degree to which the specific criteria were met (“yes” = 2, “partial” = 1, “no” = 0), with the higher score indicating better quality research.

Discrepancies were resolved through discussion and a final co-resolution for each paper was agreed by both researchers. Reliability between researchers was measured through the Cohen’s Kappa. The final resolutions concerning the articles showed a value above .80 ( $k = .810$ ), indicating a high agreement rate. No missing ratings were reported in this study. Figure 1 summarizes the above literature search process.

The Portuguese Foundation for Science and Technology (FCT) and ISPA - Instituto Universitário, approved the study.

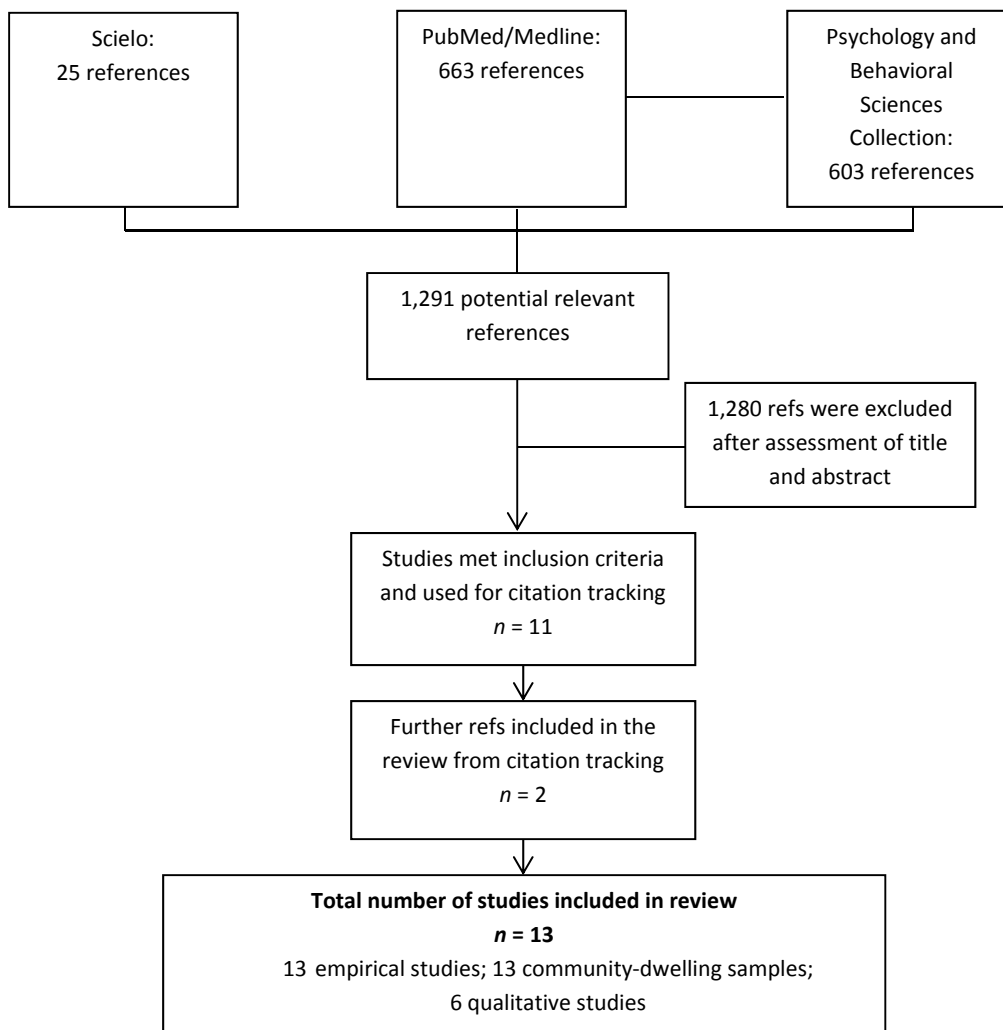


Figure 1

*Overview of literature search and retrieval*

## 5. Results

Literature searches located 663 in *PubMed/Medline* database, 603 references in *Psychology and Behavioral Sciences Collection* database and 25 references in the *Scielo* database. In total, 1,291 potential references for inclusion in the study, were retrieved. Of these, 1,280 references were excluded because the studies did not meet the inclusion criteria. Additionally, reference lists of all included articles were reviewed, and two additional articles (Holahan et al, 1984; Holahan & Holahan, 1987) were identified and included, after being checked against the inclusion criteria.

A total of 13 references met the inclusion criteria, all of them being peer-reviewed empirical studies. These were included in this systematic review (see Table 1).

The quality of the studies varied with eight being rated as good/high quality ( $>0.75$ ) and five as medium/fair quality (0.50-0.75). Scores for all the studies can be seen in Table 1.

Furthermore, six were qualitative studies, making this the most commonly-used study design. Additionally, two were quasi-experimental, one was cross-sectional, one mixed methods, one was a case control study, one was a case study and one was longitudinal.

Moreover, seven studies used a convenience sampling, one an analytic sample and five a purposeful sampling. The majority (7/13) of the selected studies were published before 2000. Most of the studies were conducted in the context of Western culture and in developed regions (Australia, Germany, Israel, Netherlands, USA and Sweden). Only three were conducted in developing regions (Argentina, Brazil and Iran). No study included older adults from diverse racial/ethnic groups. Additionally, one study comprised Holocaust survivors (Fridman, 2011).

In total, 1,156 people of  $\geq 60$  years were included in this review, of which all were community-dwelling non-institutionalized older adults. Four studies included only elderly women (Battini et al, 2006; Fridman et al, 2011; Bagheri-Nesami et al, 2010; Krzemie et al, 2005) and one only elderly men (Bar-Tur et al, 1998).

The approach to the construct of AtA in the studies varied greatly. Strategies for AtA were the most investigated variables in the review, namely, active and adaptive strategies (Krzemie et al, 2005), identity assimilation (Sneed & Whitbourne, 2003), problem-focused and emotion-focused strategies (Bagheri-Nesami et al, 2010). Moreover, older adults

evidenced positive self-views through selective social and temporal comparison processes (e.g., psychological, physical health and situational factors) in their self-rated AtA (Rickabaugh & Tomlinson, 1997).

In one study, seven patterns of AtA emerged (e.g., self-realizing, mature aging, adapting, dependent, resignedly accepting, despairing and withdrawing) (Carlsson et al, 1991a). Frequency of hassles, of negative life events and perceived self-efficacy were related to AtA in two studies (Holahan et al, 1984; Holahan & Holahan, 1987). Additionally, response efficacy and self-efficacy was also found to be related to AtA (Slangen-De kort et al, 2001). In one study, mental and emotional engagements with the present and the past were related to AtA (Bar-Tur et al, 1998). One study that specifically focused on women with childhood trauma, found that these showed more post-traumatic symptoms, less satisfaction with their life, more cognitive impairment and more stress when adjusting in old age (Fridman et al, 2011).

Moreover, Battini et al. (2006) suggested that autonomy, self-acceptance, support network, religious beliefs positively influenced AtA whereas aging denial, isolation, conformist mystical religious posture and present alienation negatively influenced AtA. One study found that older adults with poorer AtA could be most affected by minor impairments (Carlsson et al., 1991b). Finally one study indicated that AtA was achieved when a balance between the cognitive and motivational systems of the persons has been attained (Thomae, 1992).

Table 1

*Characteristics of the empirical studies*

Study	Country	Language	<i>N</i>	Age	Design	Sample	Sampling	Findings	Quality Rating
Bagheri-Nesami, Rafii, & Oskouie, 2010	Iran	English	19	65 +	Qualitative with semi-structured interviews	Community-dwelling older women.	Purposeful and theoretical sample and observation	The participants used problem-focused (e.g., problem solving, spending leisure time, confrontation) and emotion-focused (e.g., self-control, distancing, praying, avoidance, and escape) strategies for their AtA.	0.75
Bar-Tur, Levy-	Australia	English	60	63 +	Mixed methods	Community-dwelling	Convenient sample	Mental and emotional engagements with	0.86

Shiff, & Burns, 1998					design.	older men residents in Sydney	recruited through various civic and social organizations.	significant others were related to well-being and AtA in older men.	
Battini, Maciel, & Finato, 2006	Brazil	Portuguese	1	65	Case study	Community-dwelling older woman	Convenient sample	Psychological variables such as autonomy, self-acceptance, and supportive network and religious beliefs positively related to AtA whilst aging denial, isolation, conformist mystical religious posture and present alienation negatively related to AtA.	0.75
Carlsson, Berg, & Wenestam, 1991a	Sweden	English	129	85	Qualitative study with in-depth interviews	Community-dwelling, non-institutionalized older adults	Purposeful sample recruited in Gothenburg	Seven patterns of AtA in late adulthood were found in this study: self-realizing, mature aging, adapting, dependent, resignedly accepting, despairing and withdrawing.	0.80
Carlsson, Berg, & Wenestam, 1991b	Sweden	English	129	85	Qualitative study with in-depth interviews	Community-dwelling older, non-institutionalized older adults	Purposeful sample recruited in Gothenburg	Older adults with poorer AtA could be more affected by minor physical impairments, while physical impairments were of a subordinate importance to those who were better adjusted to aging.	0.80
Fridman, Bakermans-Kranenburg, Sagi-Schwartz, & Van IJzendoorn, 2011	Israel	English	65	60 +	Case-control study	Community-dwelling elderly female Holocaust survivors.	Convenient sample recruited from population-wide demographic information provided by the	The Holocaust survivors showed that they were unable to integrate their past and present challenges when AtA and showed more post-traumatic symptoms, as expressed in dissociative symptomatology, less	0.82

							population registry administered by Israeli Ministry of Interior.	satisfaction with their life, more cognitive impairment and more stress.	
Holahan, & Belk, 1984	USA	English	64	65	Qualitative study with structured interviews.	Community-dwelling older adults	Purposeful sample	Negative life events and daily hassles were related to maladjustment to aging for men whilst hassles were associated with poor AtA for women. An inverse relationship between self-efficacy and maladjustment was also found.	0.80
Holahan, & Holahan, 1987	USA	English	52	65	Qualitative study with structured interviews	Community-dwelling older adults	Purposeful sample	Frequency of hassles, of negative life events and perceived self-efficacy were related to AtA.	0.80
Krzemieci, & Urquijo, 2005	Argentina	Spanish	60	60	Quasi-experimental study	Community-dwelling older women	Convenient sample recruited from the Universidad de Adultos Mayores (Universidad Nacional de Mar del Plata)	Older adults used active and adaptive strategies (e.g., behavioral, cognitive and self-distraction strategies) for promoting AtA.	0.71
Rickabaugh, & Tomlinson, 1997	USA	English	70	65	Qualitative, descriptive with semi-structured interviews	Community-dwelling residents of Southern California	Convenient sample recruited from two senior center facilities in Southern California	Older participants evidenced self-enhancing social and temporal comparison processes in their perceived AtA, and the majority of these comparisons were positive (i.e., self-enhancing) in nature. Participants perceived themselves to be adjusting well to the	0.75

								changes in adulthood and demonstrated comparatively superior adjustment to the vicissitudes of aging than their friends, neighbors, and most other older adults.	
Slangen-De kort, Midden, Aarts, & van Wagenberg, 2001	Netherlands	English	199	61 +	Quasi-experimental study.	Community-dwelling independent older adults.	Convenient sample recruited from local networks of the Catholic Association of Senior Citizens in the south of the Netherlands	Response efficacy and self-efficacy influenced adaptive strategies within AtA.	0.79
Sneed & Whitbourne, 2003	USA	English	86	60 +	Cross-Sectional	Community-dwelling older adults.	Convenient sample	Reliance on identity assimilation, was found to be higher in older adults, when AtA.	0.91
Thomae, 1992	Germany	English	222	65 +	Longitudinal	Community-dwelling older adults	Analytic sample recruited from the Bonn Longitudinal Study on Aging (BOLSA).	Older adults' AtA was achieved when a balance between the cognitive and motivational systems of the persons was attained.	0.68

## 6. Discussion

This article provides a varied review of the approaches to the construct of AtA in gerontological literature. While a limited number of studies analyzing AtA among the elderly were found, the literature reflected a growing and a widespread interest in understanding what

AtA means to older adults. This is supported by recently published research (within the last decade) from around the world.

The totality of studies in our review was undertaken in the community. Growing research indicates that community-dwelling older people needs are underserved and that the promotion of aging well should be performed within the community (Chen & Berkowitz, 2012).

All of the three studies that analyzed strategies for AtA related positively to AtA. These studies are in line with Wrosch and colleagues' (2006) theoretical model, which demonstrated evidence for the emotional, biological and physical benefits deriving from adaptive self-regulation of common age-related challenges. Additionally, successful aging has been seen as a general process of adaptation, described as the selective optimization with compensation (Baltes & Baltes, 1990).

Furthermore, and considering a variety of adjustment forms, Carlsson et al, (1991a) defined seven patterns of adjustment (e.g., self-realizing, mature aging, adapting, dependent, resignedly accepting, despairing and withdrawing). In line with this, Atchley (1999) referred to the ability of older persons to maintain a strong sense of purpose and self in the face of the changes associated with aging in his continuity theory.

In Sneed and Whitbourne's (2003) study, reliance on identity assimilation (maintaining self-consistency), was found to be higher in older adults, in comparison to identity accommodation (making changes in the self). These results did not corroborate Brandtstädter and Renner's model (1990) which pointed out an accommodative shift in later adulthood.

Six empirical studies examined the role of psychological variables in AtA, such as self-efficacy, autonomy, self-acceptance as well as social and temporal comparisons, and mental and emotional engagement (Bar-Tur et al, 1998; Battini et al, 2006; Holahan et al, 1984; Holahan & Holahan, 1987; Rickabaugh, & Tomlinson, 1997; Slangen-De kort et al, 2001). In fact, older adults' well-being, mental and emotional engagement with significant others have been related to psychological factors in previous studies (Herero & Extremera, 2010; Wiesmann & Hannich, 2008). Additionally, interpersonal intimacy and the self-concept were early seen as key to the AtA in McMordie's (1981) theoretical model.

Previous literature high pointed positive predisposition and personality as main predictors of aging well and well-being in old age (Lucas, 2008). Conversely, in our review,

four studies underlined physical impairment, daily hassles, negative life events and difficulties in integrating the past, as associated with poor AtA (Carlsson et al, 1991b; Fridman et al, 2011; Holahan et al, 1984; Holahan & Holahan, 1987). These results come as no surprise as advanced old age is a time of great challenge, during which older adults may become vulnerable to changes and stress that are associated with the aging process (Bagheri-Nesami et al, 2010; Freedman et al., 2012).

Collaboration between scholars and gerontologists will help shed light on the concept of AtA, as bridging potential for aging well. Thus, future work should avoid some of the limitations to this review. A systematic review is a form of observational research and thus vulnerable to bias. An extensive literature search outside the computerized databases and of other languages besides English, Portuguese and Spanish was not performed. Therefore, our systematic review may suffer from publication and language bias. Most of the studies were qualitative which hampered our ability to draw causal inferences. In addition, longitudinal studies concerning AtA were rare.

There is a pressing need to conduct more theory-driven longitudinal studies to confirm the stability of AtA and to allow for causal attributions. Moreover, because some of these studies were qualitative, this may indicate that these findings are a clear reflection of older people's perspectives, rather than researchers' preference or convenience. However, as these findings are based on a small number of studies, further investigation of these findings, is required.

The totality of the studies was conducted with non-multiple ethnic groups and no study focused on differences among ethnic groups. Additionally, only three studies were conducted in the context of non-Western culture and in developing regions. As these findings are based on a small number of studies, further investigation of cultural and ethnic differences in AtA is required.

Moreover, a diverse array of theoretical and methodological approaches and measurement instruments were found among the studies in this review, which also affected comparing the findings. In addition, empirical evidence is still limited. More rigorous experimental studies testing the causality and multi-dimensionality of AtA are needed. With this in mind, it will be valuable for future research to develop these in combination with AtA's outcomes in health and well-being in late adulthood. Such a comprehensive view could

serve as the basis for further studies on intervention and promotion for AtA and well-being among older populations.

## **7. Conclusions**

This systematic review of older adults' AtA has acknowledged the insufficiently explored state of the field. Based on the included studies, this review provides extensive coverage of older adults' AtA. Outcomes highlight the importance of developing adaptive and active strategies, for adjustment to the process of aging in late adulthood.

Furthermore, the available evidence indicates that psychological variables such as self-efficacy, engagement with significant others and social and temporal processes of comparison are the variables most frequently assessed among these studies as having a relevant role in older adults' AtA. This review also presented evidence of variables that were negatively related to AtA, such as physical impairment, daily hassles, negative life events and difficulties in integrating the past. Furthermore, a pro-active approach to the identification of variables with a relevant role on AtA among older people is necessary to ensure AtA is fully addressed in all its multi-dimensionality.

The potential value of considering all of these factors is stressed by the fact that when diverse dimensions are analyzed with this population, results may indicate the need for a multi-disciplinary approach to older adults' AtA and the lack of preeminence of any one specific variable. With this in mind, it will be valuable for further research to move beyond the traditional analyses to a focus on adaptive and active strategies, psychological variables and engagement with significant others, which deepen the very complex dynamics among older adults' AtA and distinctiveness of their experiences within the shifting demographic reality of older populations.

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**Contributions:** SvH was responsible for the study concept and design, for data collection and analysis and for the elaboration of the manuscript. IL made conceptual contributions, data analysis and revision of the manuscript. All authors read and approved the final manuscript.

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**Paper 2. What influences older adults' subjective well-being? A systematic literature review**

**Submitted to Revista Argentina de Clínica Psicológica**

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## 1. Abstract

**Objectives:** This systematic review aims at providing a reliable overview of the variables that influence older adults' subjective well-being (SWB) and provides suggestions for future research.

**Methods:** A computerized literature search was carried out and *PubMed/Medline*, *Psychology and Behavioral Sciences Collection* and *Scielo* databases were searched from 2001 to 2012. Studies must have mentioned variables that influenced SWB as comprising cognitive and affective facets.

**Results:** Fourteen articles from 616 records, met inclusion criteria, with a total of 17,097 participants with ages 60 and over. There are rather consistent findings that social support, socio-demographic, health, psychological, coping strategies and lifestyle influence older adults' SWB.

**Conclusions:** A number of empirical studies provide support for specific correlates of SWB in later life. Findings in this review might be a starting point for further research and possible future interventions.

**Key Words:** Influence; Correlates; Subjective Well-Being; Older Adults; Systematic Review.

## 2. Introduction

Virtually all nations are now experiencing growth in their numbers of elderly residents, but the current level and pace of population aging vary widely by geographic region. The forecasts suggest 29.2% of elderly and 21.1% in the European and Northern American populations, respectively, in 2050. For the world as a whole, the elderly will grow from 6.9% of the population in 2000 to a projected 19.3% in 2050. In addition, the most rapid growth occurs in the oldest age groups – the oldest-old (85+ years) and centenarians (100+ years) in particular. In other words, population aging is becoming “deeper” with preferential accumulation of particularly old and frail people (Gavrilov & Heuveline, 2003).

While population aging represents, in one sense, a success story for mankind (massive survival to old ages has become possible), it also poses profound challenges to public institutions, researchers, policy makers and societies that must adapt to a changing age structure (Aureli & Baldazzi, 2002; Gavrilov & Heuveline, 2003). Similarly, due to this growing number, new approaches focused on aging well, should be developed toward the elderly (Aureli & Baldazzi, 2002).

Considering the increased risks of losing health, competence, social network and income with age, one can conclude that older adults have lower levels of subjective well-being (SWB) compared to younger individuals. However, contrary to the expectations, studies have demonstrated that SWB does not decrease with age (Sener, 2011). In fact, the SWB of older people is at least as good as that of younger people (Baltes & Baltes, 1990; Brandtstädter & Greve, 1994).

Subjective well-being is an umbrella term used to describe the level of well-being people experience according to their subjective evaluations of their lives. These evaluations, which can be both positive and negative, include judgments and feelings about life satisfaction, interest and engagement, affective reactions such as joy and sadness to life events, and satisfaction with work, relationships, health, recreation, meaning and purpose, and other important domains (Diener & Ryan, 2009). Because SWB is a key component of quality of life, its measurement is crucial to understanding how to improve people’s lives. Although self-report measures are the most common measures in the field of SWB research, scientists also use non-self-report methods, such as observer reports, facial measures, physiological measures, and emotion-sensitive tasks, in order to achieve an objective measure of well-being

(Diener & Ryan, 2009). Furthermore, when it comes to SWB, different dimensions should be distinguished. This construct incorporates two cognitive and affective facets: satisfaction with life (SwL) and affective balance, respectively (Diener, 1984; Pavot & Diener, 2004). SwL is defined as an overall assessment of one's life including the current life, whilst affective balance comprises the frequent presence of positive affect, as well as the infrequent presence of unpleasant affect (Diener, 1984; Diener & Lucas, 1999). This structure of life satisfaction, positive affect, and negative affect has been repeatedly confirmed in numerous studies (Keyes, Shmotkin, & Ryff, 2002). Both cognitive and affective components show inter-correlation (Diener, Napa-Scollon, Oishi, Dzokoto, & Suh, 2000) and for the purpose of this review, SWB will be regarded as comprising both these components, unless otherwise specified.

One of the main objectives of the growing research in the field of SWB has been to identify which variables influenced SWB. Indeed, some authors suggested that SWB is influenced by multiple variables, in a dynamic interaction (Schwarz & Strack, 1999).

In an early review of SWB, Larson (1978) concluded that among elderly people, SWB was strongly linked to socioeconomic factors and that the relationship was strongest at lower levels of income. Later, in a previous meta-analysis, Pinqart and Sørensen (2000) found that socio-economic status, competence and the social network were relevant in explaining SWB among adults aged 65 and above. More recently, growing literature pointed out that socio-demographic factors (e.g., George, 2010), as well as health-related factors (e.g., Jones, Rapport, Hanks, Lichtenberg, & Telmet, 2003 ; Leung, Moneta, & McBride-Chang, 2005), lifestyle characteristics (e.g., Sasidharan, Payne, Mowen, & Montoro-Rodriguez, 2006; Sener, Terzioglu, & Karabulut, 2007) and personality characteristics (e.g., Ferguson & Goodwin, 2010; Herero & Extremera, 2010) influence older adults' SWB.

A growing body of research shows that high levels of SWB are beneficial to the effective functioning of societies beyond the advantages they bestow on individuals. A growing body of evidence suggests that high well-being and life satisfaction significantly improve life within the four areas of health and longevity, work and income, social relations, and societal benefits (Diener & Biswas-Diener, 2008).

To facilitate a better understanding of the variables that effect SWB, which could inform health promotion efforts, this review aims to systematically examine studies on variables that influence older adults' SWB. Clearly, therefore, any attempt to identify the

variables that influence SWB can quickly become bogged down in a mire of complexity. This review will avoid some of this complexity by acknowledging only relations of variables that are simply conceptually viewed as of an objective or subjective nature, which exert an influence on SWB.

Based on our critical review of older adults' SWB literature, the authors summarize empirical evidence on social support, socio-demographic, health, psychological, coping strategies and lifestyle's variables. This study is concluded by identifying gaps in the current studies, to inform future research that may assist in the development of health care policies and interventions specifically directed to the elderly.

### **3. Methods**

#### **3.1 Search Strategy**

Scoping searches were performed initially to identify relevant search terms and key words followed by a broad comprehensive literature search of *PubMed/Medline*, *Psychology and Behavioral Sciences Collection* and *Scielo* databases. These were selected because they cover a range of perspectives and so were likely to produce a comprehensive set of studies on the topic area and to minimize the chances of missing relevant papers. The search was carried out from January 2000 to December 2012, with terms (influence\* OR effect\* OR predict\* OR impact OR correlate\* OR determinant\* OR relation) AND (subjective well-being) AND (older OR elder\* OR senior\* OR later life OR late life) in the title, abstract or keywords. Studies were included in the review if they met all three of the following criteria: the study addressed at least one variable that influence older adults' SWB; published in English or Portuguese; and drew samples clearly above 60 years of age.

Studies were excluded from the review if they met one of the following criteria: the report was a book chapter - unless clearly reporting the findings from a research study or a review of research studies; where SWB was combined with other constructs and it was not possible to isolate the influence in SWB alone; where SWB did not comprise cognitive and affective facets; where a study design could not be identified from the abstract; where the age group included participants who were under 60; where the study included in grey literature; and discussions of methodological issues rather than studies.

All criteria were applied independently to the full text of the articles that had passed the first eligibility screening, in order to make a final selection of the studies for the review. The authors interpreted the topic of “influence on older adults’ SWB” broadly because the aim of this review is to cover the spectrum of factors that influence SWB among older populations. Therefore, the authors included studies with samples aged 60 and older and included any variable that influenced SWB. In addition, reference lists of all included articles were reviewed, after being checked against the inclusion criteria.

The references which met the inclusion criteria were critically appraised and the final summary review of each paper was agreed by both researchers. The Portuguese Foundation for Science and Technology (FCT) and ISPA - Instituto Universitário, approved the study. Figure 1 summarizes the above literature search process.

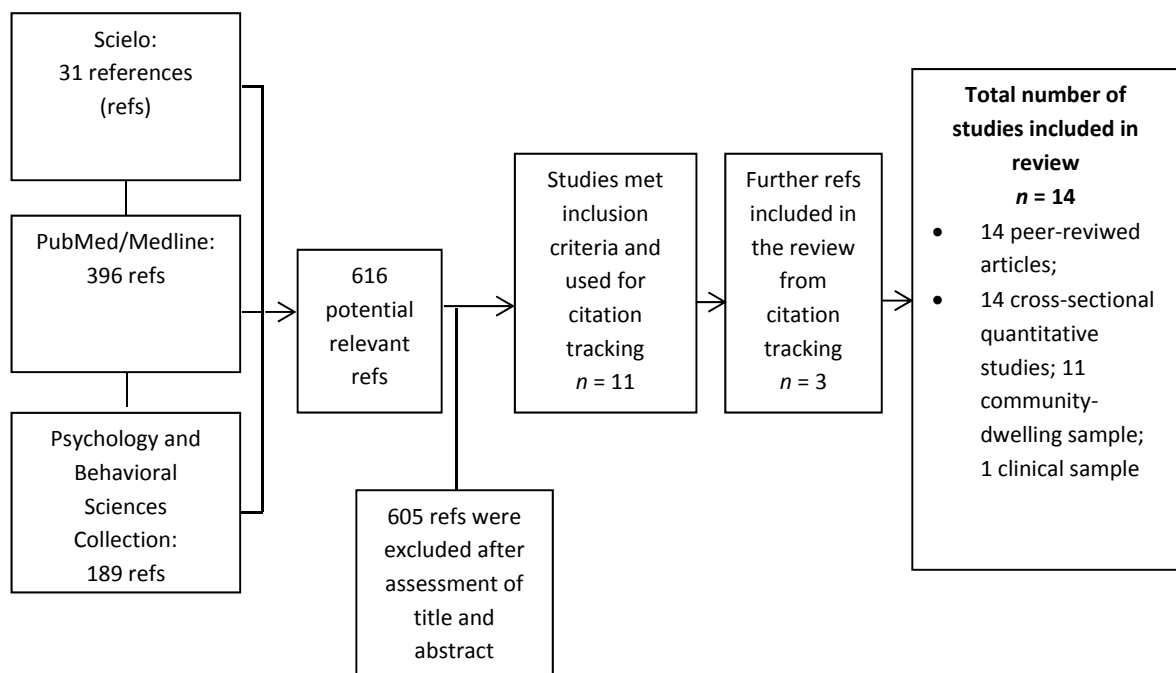


Figure 1

*Overview of literature search and retrieval*

## 4. Results

Literature searches located 396 references in *PubMed/Medline* database, 189 references in *Psychology and Behavioral Sciences Collection* database and 31 references in the *Scielo* database. In total, 616 potential references for inclusion in the study, were

retrieved. Of these, 605 references were excluded because the studies did not meet the inclusion criteria. In addition, reference lists of all included articles were reviewed, and three additional articles (Jones et al., 2003; Schneider et al., 2006; Wiesmann & Hannich, 2008) were identified and included, after being checked against the inclusion criteria.

A total of 14 references met the inclusion criteria, all of them being peer-reviewed articles. These were included in this systematic review (see Table 1).

The majority (10/14) of the selected studies were published within the past 5 years. In total, 17,097 people of  $\geq 60$  years were included in this review, of which all but 56 were community-dwelling seniors. Only one study included older adults from diverse racial/ethnic groups (Litwin & Shiovitz-Ezra, 2011) and only one included the sampling in an internal hospital, yet no patients were suffering from psychiatric disorders or cognitive impairment (Schneider et al., 2006). The studies included in the review were all descriptive, cross-sectional studies, making this the most commonly-used study design. Moreover, most studies (9/14) used a convenience sampling.

The correlates used in the studies varied greatly. Social support was the most investigated variable in the review, followed by socio-demographic, health, psychological and lifestyle-related variables. Finally, coping strategies were also investigated in two studies, as shown in Table 1. Of all 14 studies, nine addressed multiple variables simultaneously and investigated their influence on older people's SWB.

Based on the findings from these studies, the present authors synthesized and reframed the knowledge into seven categories regarding variables that influenced older adults' SWB, as further discussed below: (a) social support; (b) socio-demographic; (c) health; (d) psychological; (e) coping strategies; and (f) lifestyle variables.

In this review, SWB was influenced by psychological variables in five studies; by lifestyle factors in one study; by social support in nine studies; by coping strategies in two studies, by health-related variables in six studies and by socio-demographic variables in seven studies. The study characteristics are presented in Table 1.

Ten of the studies indicated significant influence in SWB and only four of the studies obtained significant influence of factors in the specific cognitive and affective dimensions of SWB (Guedea et al., 2006; Jones et al., 2003; Cardoso & Ferreira, 2009; Resende, 2010). Of all the studies that focused on variables that influenced SWB or its dimensions, eight studies addressed variables that decreased SWB.

Finally, most of the studies were conducted in the context of Western culture and in developed regions (USA, Japan, Switzerland, Germany and Hong Kong). Only six were conducted in developing regions (People's Republic of China and Brazil).

Table 1  
*Characteristics of the included studies*

Study	Country	Language	N	Age	Design	Sample	Sampling	Variables Influencing SWB	Variables Influenci ng Positive Affect	Variables Influenci ng Negative Affect	Variables Influenci ng SWL
Cardoso & Ferreira, 2009	Brazil	Portuguese	256	60 +	Cross-Sectional	Community-dwelling older adults	Convenient sample recruited from religious communities				Subjective religiosity (+)
Chen & Short, 2008	People's Republic of China	English	7534	80 +	Cross-Sectional	Community-dwelling oldest-old adults.	Analytic sample recruited from the Chinese Longitudinal Healthy Longevity Survey (CLHLS)	Co-residence with immediate family (spouse or children) (+); living alone (-)			
Cheng, Lee, Chan, Leung, Lee, 2009	People's Republic of China	English	1005	60 +	Cross-Sectional	Community-dwelling older adults in Hong Kong.	Convenient sample recruited in Hong Kong	Diverse and family-focused networks (+); distant family networks (-)			
Cheng, Li, Leung, & Chan, 2011	People's Republic of China	English	1005	60 +	Cross-Sectional	Community-dwelling older adults in Hong Kong	Convenient sample recruited in Hong Kong	Social exchanges with close and peripheral vertical			

						Kong.		family members (+); close horizontal family members (+)			
Freedman, Stafford, Schwarz, Conrad, & Cornman, 2012	USA	English	751	60+	Cross-Sectional	Community-dwelling older couples in which one or both spouses had a chronic condition that limited their daily activities	Communit	Analytic sample recruited from the 2009 Disability and Use of Time (DUST) supplement to the 2009 Panel Study of Income Dynamics (PSID).	Marital quality (+); volunteering (+); physical activities (+); severity of impairment (not disability per se) (-)		
Guedea, Albuquerque, Tróccoli, Noriega, Seabra, & Guedea, 2006	Brazil	Portuguese	123	60+	Cross-Sectional	Community-dwelling older adults	Communit	Convenient sample recruited from the city of João Pessoa	Satisfaction of the received support (+); direct and re-appraisal coping (+); coping by avoidance (-)	Given support (-); coping by avoidance (+)	Pension income (+); perceived and given support (+); direct coping (+); direct positive reappraisal of situations (+)
Jones, Rapport, Hanks, Lichtenberg, & Telmet, 2003	USA	English	129	65+	Cross-Sectional	Community-dwelling older adults.	Communit	Convenient sample recruited from a urban community.	Task-oriented and avoidance-orientated		Cognitive functioning (+); emotion-

								coping (+)		focused coping strategies (-); poor perceived health (-);
Litwin & Shiovitz-Ezra, 2011	USA	English	1462	65 +	Cross-Sectional	Community-dwelling older adults.	Analytic sample recruited from the first wave of the National Social Life, Health, and Aging Project (NSHAP)	Social network type (+); lower education (-); lower income (-); functional health disabilities (-)		
Nikitin, Burgermeister, & Freund, 2012	Switzerland	English	69	61 +	Cross-Sectional	Community-dwelling independent older adults.	Convenient sample selected from assisted senior residences.	Social approach motives (+); age (+); social avoidance motives (-)		
Resende, Ferreira, Naves, Arantes, Ferreira, Roldão, Galante Sousa, & Abreu, 2010	Brazil	Portuguese	12	68 +	Cross-Sectional	Community-dwelling older adults	Convenient sample recruited from theater groups	Social support (+)	Resilience (-)	Resilience (+)
Robb, Small, & Haley, 2008	USA	English	144	60 +	Cross-Sectional	Community-dwelling older	Analytic sample recruited from the Charlotte	Functional disability in self and in the spouse		

						couples.	County	(-); neuroticism (- );for husbands, extraversion and social support (+)
							Healthy Aging Study (CCHAS communi- ty-based,  cross- sectional study	
Schneide r, Driesch, Kruse, Nehen, & Heuft, 2006	USA	English	56	60 +	Cross- Section al	Patients of an internal hospital.	Convenie nt sample recruited from an internal hospital	Objective conditions of aging (-); functional impairment (- ); individual's subjective evaluation of the present situation (+); sense of coherence. (+)
Shirai, Iso, Fukuda, Toyoda, Takatorig e, &Tatara, 2006	Japan	English	4376	60 +	Cross- Section al	Commun ity- dwelling older adults.	Analytic sample randomly selected from members of the Silver Human Resource s Center (SHRC) in Osaka, Japan	Life-changes through work (+); for males, physical condition and socioeconomi c factors (e.g., the number of rooms in one's residence or annual income  and work for financial benefit (+); for females, family relations (e.g., having spouse ); satisfaction with one's life history (+)

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Wiesman & Hannich, 2008	Germa ny	English	175	60 +	Cross- Section al	Commun ity- dwelling older adults.	Convenie nt sample of psychoph ysically active elderly people living in a north- eastern communi ty in Germany	Self-efficacy (+); sense of coherence (+); self-esteem (+); low fatalistic externality (+); low social externality (+); education (+).
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*Note:* (+) = positive influence; (-) negative influence.

## 5. Discussion

This article provides an integrative review of the variables that influence older adults' SWB literature. While a limited number of studies examining correlates of SWB among the elderly were found, the literature reflected a growing interest in understanding what influenced SWB in later life. This is evidenced by recently published research (within the last decade) from around the world.

Of the nine studies, in which social support was indicated as influencing SWB, all suggested a positive influence in this construct in later life. Growing research analyzed the associations of various types of social support with SWB in later life. Most empirical studies examined marital status and marital transitions, relationships with adult children and friends, and social support (George, 2010). In line with this, Litwin & Shiovitz-Ezra (2011) highlighted the relation of the social network type with SWB, whilst four studies specifically analyzed family-focused relations (Chen & Short, 2008, Cheng, Lee, Chan, Leung, Lee, 2009; Cheng, Li, Leung, & Chan, 2011; Shirai, Iso, Fukuda, Toyoda, Takatorige, & Tatara, 2006).

Besides the structural and functional aspects of the social support, existing studies have not adequately examined correlates such as relationship qualities (e.g. communication patterns and conflicts). Social support networks have been identified as important influences on both the affective and cognitive components of SWB (Lu, Shih, Lin, & Ju, 1997). Additionally, Freedman, Stafford, Schwarz, Conrad, & Cornman (2012) examined the positive influence of marital quality in SWB. Similarly, Pinqart and Sörensen (2000) found in their meta-analysis that older married adults presented higher SWB than their unmarried peers. Furthermore, Fiori, Antonucci, & Cortina (2006) suggested that the diverse social network, having a greater variety of family and friends to provide for different needs, should be most well-being and health enhancing.

Socio-demographic variables clearly influence SWB in half of the studies in this review. Lower income and lower education were associated with lower SWB, in this study. Moreover, education and socio-economic factors significantly predicted SWB in Wiesmann & Hannich (2008) and Shirai et al., (2006) studies, respectively. The previous studies suggested that socio-demographic, lifestyle, psychological and health factors influence SWB. Yet, previous literature present no consensus concerning the level of impact that they had on SWB (Diener, Oishi, & Lucas, 2003; Pinqart & Sörensen, 2000). Additionally, Cardoso and Ferreira (2009) pointed out the relation between subjective religiosity and SwL. Literature highpoints the development of a specific spirituality as people grow older (Malette & Oliver, 2006).

Health was highlighted in six studies as influencing SWB, which corroborated previous studies (Pinqart & Sörensen, 2000). Moreover, Freedman et al. (2012) found a positive relation between volunteering and physical activities, with SWB. The recognition of life change through obtaining work enhanced SWB among people who engaged in productive activities in later life (Shirai, et al., 2006).

Although, previous studies reveal that older adults are happier when they are more active (Inal et al., 2007), interestingly enough, the relationship between physical passivity and well-being remains unclear (Oerlemans, Bakker, & Veenhoven, 2011).

Freedman et al. (2012) suggested that the severity of impairment and not disability per se, predicted lower SWB among older adults. Researchers have considered it important to investigate SWB with older people who are homebound (Hairi, Bulgiba, Cumming, Naganathan, & Mudla, 2010). Indeed, the totality of studies in our review was undertaken in

the community. Growing research indicates that community-dwelling older people needs are underserved and that the promotion of aging well should be performed within the community (Chen & Berkowitz, 2012).

Robb, Small, & Haley (2008) suggested that neuroticism was negatively associated with SWB, whilst extraversion was positively associated with SWB. Furthermore, Shirai, et al. (2006) reported a positive influence of satisfaction with one's life history in SWB whereas Wiesmann & Hannich (2008) found a positive relation between sense of coherence, self-efficacy, self-esteem, low fatalistic externality and SWB. Previous literature indicated positive predisposition and personality and as main predictors of SWB and have suggested that extraversion and neuroticism provide the primary links between personality and SWB (Diener et al., 2000; Lucas, 2008; Lucas & Fujita, 2000). Moreover, researchers have suggested that having a coherent sense of one's personality is positively related to well-being (Sheldon et al. 1997).

Four of the studies pointed out a relation with specific cognitive and affective dimensions of SWB. A few empirical studies showed that the affective dimension is more closely associated with personality variables and that the cognitive dimension of SWB is more closely associated with the environmental variables (Schimmack, Schupp, & Wagner, 2008). In our review, Jones et al. (2003) suggested that task-oriented and avoidance-oriented coping were positively related to affective balance and Guedea (2006) pointed out that negative affect was positively related to coping by avoidance.

A number of limitations in this review and recommendations must be considered for developing this area of research. A systematic review is a form of observational research and thus vulnerable to bias. An extensive literature search outside the computerized databases and of other languages besides English and Portuguese was not performed. Therefore, our systematic review may suffer from publication and language bias. Of the 14 studies, only one was conducted with a sample that included multiple ethnic groups and no study focused on differences among ethnic groups. Additionally, most studies were conducted in the context of Western culture and in developed regions. However, there are substantial individual differences in SWB between cultures. In fact and because culture, values and beliefs influence SWB and aging perceptions, further studies in different cultural contexts and among different ethnic groups are needed (Diener, Oishi, & Lucas, 2003).

Moreover, the totality of the studies was cross-sectional, quantitative and population-level survey studies. In most of the studies, the cross-sectional design hampered our ability to capture SWB dimensions and to draw causal inferences. There is a pressing need to conduct more theory-driven qualitative studies to examine the very complex dynamics among older adults' SWB. In addition, longitudinal studies concerning SWB are rare and are most frequently developed in six-month periods (Diener & Ryan, 2009). Future studies should include alternative forms of influencing older adults' SWB, to reflect the shifting demographic reality and lifestyles among the elderly.

Furthermore, several measurement instruments were found among the studies, which also affect comparing the findings. Although various theoretical approaches have been applied to explain correlates of SWB, empirical evidence is still limited. More rigorous experimental studies testing the causality of SWB are needed. Additionally, these could be further developed in combination with the exploration of SWB's outcomes. Such an approach can serve as the basis for further studies on intervention and promotion for SWB among older populations.

## **6. Conclusions**

This systematic review of the variables that influence older adults' SWB has identified the insufficiently explored state of the field. Based on the included studies, this review provides strong evidence that SWB is influenced by a number of factors in late life. Outcomes highlight the importance of social support, socio-demographic, health, psychological, lifestyle and coping strategies' variables, to the SWB of older adults.

Moreover, the available evidence indicates that social support and socio-demographic, are the variables most frequently assessed among these studies and that this may be the most relevant variables for this population. This may indicate that researchers find it more convenient to study these variables, rather than this being a reflection of older people's preferences. As these findings are based on a small number of studies, further investigation of these trends, is required. Moreover, a pro-active approach to the identification of factors that influence SWB among older people in all settings is necessary to ensure SWB is fully addressed.

The potential value of all of these variables is underlined by the fact that when different factors are analyzed with this population, findings may indicate the need for a multi-disciplinary approach to SWB among older populations and the absence of superiority of any one particular type of variable. With this in mind, it will be valuable for future research to move beyond the traditional analyses to a focus on health behaviors, fundamental character strengths and personal inspirations, which will reflect the uniqueness of their experiences within the aging process and promote well-being in late adulthood.

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**PART II**

**ADJUSTMENT TO THE PROCESS OF AGING: EXPLORATORY CROSS-  
NATIONAL QUALITATIVE STUDIES**

**Paper 3. Beyond age and adjustment: A cross-national qualitative study of older adults' perceptions**

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## 1. Abstract

**Aims:** To explore the older adults' perceptions of age and aging, focusing on adjustment to aging (AtA) and subjective age (SA).

**Methods:** This cross-national and qualitative study comprised demographics and semi-structured interviews. Complete information on 151 older adults aged between 75-101 years ( $M = 84.6$ ;  $SD = 6.91$ ) from Portugal, Romania and Angola was available. Data was subjected to content analysis.

**Results:** The most predominant response of the interviewed participants for indicators of AtA was 'existential meaning' (26.3%), whilst 'balanced' (36.5%) was identified as the most prevalent SA response. In total, five categories were identified to be indicative of AtA: 'sense of purpose and ambitions', 'health and wellness', 'social support', 'stability and accessibility' and 'existential meaning' whereas, four categories were identified for SA: 'balanced', 'old', 'youthful' and 'dissatisfied'.

**Conclusions:** This study highlights the need for a better understanding of what defines AtA and SA among the elderly. Furthermore, health care providers' awareness of older adults' conceptualizations will allow them to communicate more effectively and to reinforce aging well among older populations.

**Key Words:** Adjustment to aging, subjective age, aging well; older adults; content analysis.

## 2. Introduction

The dramatic increases in life expectancy over the past century have created a number of challenges for society as its members age. Countries from Europe and North America have the oldest populations in the world, thus, placing research into the effects and implications of an aging population in a unique position. Conversely, little attention has been paid to African older adults, in part because of the fact that older people still make up a relatively small fraction of the total African population. However, demographic projections bolster a case for greater attention to be given to the situation of older Africans (United Nations Population Division, 1999). Indeed, the older population (60 years and older) of sub-Saharan Africa is projected to increase from 30.4 million to 56.5 million in the next 25 years, hence, reliable research is needed to inform policy planners and health and social welfare service providers (United States Bureau of the Census, 2000).

Additionally, on the basis of increasing life expectancy and the decline in fertility, it is predicted that half century from now, Europe will have in total, 300 millions inhabitants over 60 (Fernández-Ballesteros, 2007; United Nations, Department of Economic and Social Affairs, Population Division, 2011). In particular, the proportion of individuals aged 80 or over is projected to rise from 1% to 4% of the global population between today and 2050 (Gavrilov & Heuveline, 2003; United Nations, 2009).

As adults experience their older years, many aspects of life (social, financial, physical, and employment) change (Corner, Brittain, & Bond, 2007). Moreover, previous literature emphasizes the fact that cultural, national and ethnical differences may influence the process of aging (Barak, 2009; Torres, 2003) and that aging is an ongoing process which requires continuous adjustment (Birren & Schaie, 1996; Brozek, 1966).

Furthermore, the selective optimization with compensation model suggests that successful aging corresponds to a general process of adjustment, in which the three elements – selection, optimization and compensation – constitute the basic component processes for changes regarding aging and adaptive capacity (Baltes & Smith, 2003; Freund & Baltes, 1998). Additionally, Brandtstädter and Renner (1990) found that older cohorts tended to report more accommodative coping strategies than younger ones. In other words, they adjust themselves rather than the environment to cope with problems (Brandtstädter & Renner, 1990; Brandtstädter, Wentura, & Greve, 1993; Filion, Wister, & Coblentz, 1993).

Adjustment to aging (AtA) it is a multi-dimensional and multi-cultural concept (Barak, 2009; Bauer & McAdams, 2004; Keyes, Shmotkin, & Ryff, 2002; Slangen-Dekort, Midden, Aarts, & Wagenberg, 2001; Staudinger & Kunzmann, 2005), which is achieved when a balance between the cognitive and motivational systems of the person has been attained (Thomae, 1992). Specifically, AtA is reached by balancing one's own experience, self-standards, personal aims, core motivations and values with external influences in a possible panoply of issues which shed light on the adaptation to growing old (Headey & Wearing, 1989; Heidrich & Ryff, 1993; Keyes, Shmotkin, 1998; Shmotkin, & Ryff, 2002).

Moreover, in a more recent study, Jopp and Rott (2006) pointed out that basic resources (e.g., cognition, health, extraversion), self-referent beliefs (e.g., self-efficacy) and attitudes toward life (e.g., optimistic outlook) were pertinent for AtA in old age. Additionally, Sneed and Whitbourne (2003) conceptualized it, according to identity process theory. Indeed, it is a proximate, yet distinct, from other well-being concepts previously defined and validated in the gerontological literature, such as psychological well-being and successful aging (Fernández-Ballesteros, 2010; Kesebir & Diener, 2010; Keyes, Shmotkin, & Ryff, 2002; Low & Molzahn, 2007; Pavot & Diener, 2004, von Humboldt, Leal, & Pimenta, 2012).

As regards to psychological well-being, it entails the perception of engagement with existential challenges of life and human development and comprises six psychological components: self-acceptance, environmental mastery, autonomy, purpose in life, personal growth and self-acceptance (Keyes, Shmotkin, & Ryff, 2002; Ryff & Keyes, 1995), whereas successful aging is conceptualized as a multi-faceted construct which includes constituents of life satisfaction, morale, adjustment, quality of life, and social functioning in psychological approaches (Baltes & Baltes, 1993; Kuh, 2007) and physical and cognitive functioning in biomedical approaches (Ford et al., 2000; Park, Gutchess, Meade, & Stine-Morrow, 2007). Furthermore, Knight and Ricciardelli's study (2003), highlights other possible determinants of one' perception of what aging successfully means, such as lifelong personal experiences, religiosity, one's attitude to aging and to life in general, and personality (especially) in respect of rigidity versus openness to change).

Overall, Western cultures have been said to celebrate youth and to devalue old age (Palmore, 2001). This has also been found to be reflected in expressions of subjective age (SA) while from middle age onwards adults have been shown to resist their chronological age and report a discrepancy between their actual and subjective ages (Westerhof & Barrett, 2005). The perception of SA, or how young or old individuals experience themselves to be

(Barak, 2009, Montepare, 2009) can become a significant challenge to their notions of identity and congruence (Baltes & Smith, 2003; Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008). In addition, SA was found to contribute to subjective health, memory self-efficacy and life satisfaction, regardless of chronological age (Stephan, Caudroit, & Chalabaev, 2011).

Despite the fact that AtA and SA are different concepts in gerontological literature, they are related to the multi-dimensional and multi-cultural context of adjustment and age (Barak, 2009; Torres, 2003). We assert that the deepening of these relevant concepts can become a significant means for health care interventions, thus, improving well-being and longevity (Staudinger & Kunzmann, 2005), as the sole use of health gain measures may neglect potential benefits (Al-Janabi, Flynn, & Coast, 2012).

Considering that the experience of age and aging is subjective and may have different meanings for different people, qualitative research allows gaining access to the personal perceptions and experiences of older adults, in alternative to formulating a logical or scientific explanation based on previous theories. Hence, with this paper we aim at contributing with a baseline for further research, focusing on older adults' self-reports concerning AtA and SA. Specifically, this is a qualitative study, designed to: (a) analyze older adults' perceptions of AtA and SA, through major categories that had impact on their conceptualization of AtA and SA and (c) assess differences among the three nationalities, concerning AtA and SA.

### **3. Methods**

#### **3.1. Participants**

One hundred and fifty one eligible non-institutionalized, nationally-diverse individuals, aged 75 and over ( $M = 84.6$ ;  $SD = 6.91$ ; range 75-101) were interviewed and questioned about their perceived AtA and SA. Participants were recruited through senior universities' message boards, local and art community centres member lists, in Lisbon, Bucharest and in the Algarve regions.

The sampling of participants was based on the availability of respondents. Participant eligibility included: (1) 75 years of age or older and (2) participants' score in the normal range on the Mini Mental Status Exam ( $>26$ ) (Folstein, Folstein, & McHugh, 1975). None of the

participants had any history of psychiatric or neurological illness, or history of drug or alcohol abuse, which might compromise cognitive function. Table 1 shows the characteristics of the study's participants.

Table 1.  
*Distribution of the study's participants according to sociodemographic and health-related characteristics*

	Portuguese		Romanian		Angolan		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
<i>N</i>	52	34.4	51	33.8	48	31.8	151	100.0
Age ( <i>M</i> ; <i>SD</i> )	86.0 (7.387)		84.6 (6.806)		83.0 (6.243)		84.6 (6.905)	
Gender								
Male	24	46.2	20	39.2	19	39.6	63	41.7
Female	28	53.8	31	60.8	29	60.4	88	58.3
Education								
Primary school	6	11.5	3	5.9	9	18.8	18	11.9
Middle school	16	30.8	10	19.6	16	33.3	42	27.8
High school	23	44.2	20	39.2	11	22.9	54	35.8
University degree or higher	7	13.5	18	35.3	12	25.0	37	24.5
Marital Status								
Married or in a relationship	38	73.1	34	66.7	30	62.5	102	67.5
Single	7	13.5	6	11.8	2	4.2	15	9.9
Widowed	7	13.4	11	21.5	16	33.3	34	22.6
Professional Status								
Active	22	42.3	22	43.1	21	43.8	65	43.0
Inactive	30	57.7	29	56.9	27	56.2	86	57.0
Family Annual Income								
≤20,000 €	27	51.9	37	72.5	39	81.3	103	68.2
≥20,001 €	25	48.1	14	27.5	9	18.7	48	31.8
Perceived Health								
Good	29	55.8	32	62.7	32	66.7	93	61.6
Poor	23	44.2	19	37.3	16	33.3	58	38.4

*Note:* Total sample,  $n = 151$ ; *SD* = standard deviation.

### 3.2 Measures and Procedure

Face-to-face semi-structured interviews lasting between 30 and 45 minutes were performed with each participant. The initial 10–15 minutes of each interview were used to apply the general questionnaire and to assess demographic and clinical data.

Our interview schedule was general and open-ended. It was composed by two open-ended questions: “How do you feel about your age?” and “I would like to understand what in your point of view, contributes to your adjustment to aging in this phase of your life.” All interviews were digitally-recorded verbatim and then transcribed to typed format for analysis.

All the participants’ responses were subjected to qualitative content analysis, using the following procedure: (a) definition of major emergent categories, mutually exclusive, for each one of the three pre-existing categories (indicators of AtA and SA); (b) creation of a list of coding cues; (c) analysis of verbatim quotes of participants’ narratives that better link to emerging categories; (e) identification of sub-categories, while preserving the principle of homogeneity of the category; (f) derivation of emergent categories, through constant comparison within and across interviews allowing for the clustering of related sub-categories until the point of theoretical saturation was reached (Bardin, 2007).

Our structure of sub-categories and categories was then subjected to an external review and critical feedback was obtained from reviewers with experience with older adults. An independent analysis of the interviews was performed by a jury of two psychologists (both faculty) and a final group co-resolution regarding the categories was made. Data were analyzed using SPSS for Windows (version 19.0; SPSS, An IBM company., Chicago, IL).

The Portuguese Foundation for Science and Technology (FCT) and ISPA - Instituto Universitário, approved the study. Informed consent was received from all participants and the study protocol was approved by the Research Unit in Psychology and Health’s coordination.

## 4. Results

### 4.1. Content Analysis of the Emergent Categories

#### 4.1.1. Adjustment to Aging

Findings indicated a total of five categories of indicators of AtA: (1) ‘fulfilment and ambitions’; (2) ‘health and wellness’; (3) ‘social support’; (4) ‘stability and accessibility’ and (5) ‘existential meaning’. ‘Existential meaning’ (26.3%) was the most mentioned indicator of AtA, as evidenced in Table 2.

Table 2.

*Emergent categories resulting from content analysis of the pre-category ‘indicators of AtA’*

	Portuguese		Romanian		Angolan		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Indicators of AtA								
Sense of Purpose and Ambitions	63	24.3	27	14.3	69	33.1	159	24.2
Health and Wellness	43	16.6	34	18.0	38	18.5	115	17.6
Social Support	34	13.1	35	18.5	40	19.2	109	16.6
Existential Meaning	76	29.3	56	29.6	41	19.5	173	26.3
Stability and Accessibility	43	16.7	37	19.6	20	9.8	100	15.3
Score of pre-category ‘indicators of AtA’	259	100.0	189	100.0	208	100.0	656	100.0

*4.1.1.1. Sense of Purpose and Ambitions.* Participants reported their deeds (e.g., volunteering, teaching) and ambitions, such as future projects as indicators of AtA. Participants also referred that being engaged with a creative work or occupation was relevant for their AtA, as it brought them a sense of purpose.

*“I feel alive every time I go to the hospital. I know that I can contribute with something there.”* (Participant 121)

*“Teaching and communicating with my students makes me think of solutions. This keeps me young.”* (Participant 19)

4.1.1.2. *Health and Wellness.* Participants verbalized being healthy and keeping their cognitive autonomy as pertinent for their AtA. Moreover, body appearance and outdoor sports were relevant for these participants.

*“I feel well about my body but I know that I am already 76 so I have to be careful with everything, such as a simple cold.”* (Participant 32)

*“I walk two kilometers every day. I do it at my own rhythm and it’s a time that I dedicate to my thoughts.”* (Participant 11)

4.1.1.3. *Social Support.* Family, neighbours, friends and professional peers were indicated as the main sources of support and main indicators of AtA.

*“My neighbours help me a lot. They bring me the groceries every week.”* (Participant 39)

*“I enjoy talking to my colleagues. We all know each other for so long that in a way I shared more time with them than with my own family”* (Participant 143)

4.1.1.4. *Existential Meaning.* Older adults expressed their concerns towards death of dear ones and their own. Moreover, they reported their spiritual activities, such as yoga and reiki as relevant for their AtA. Some participants also verbalized their religious beliefs as pertinent for their AtA.

*“Believing in myself and in others makes me feel well about my life and age.”* (Participant 121)

*“I enjoy the fact that I belong to our Christian religious community.”* (Participant 149)

4.1.1.5. *Stability and Accessibility.* Participants considered financial stability and independence as relevant for their AtA. Moreover living in an accessible and comfortable environment was also reported as important for their AtA.

*“I have everything in my neighbourhood. I know that I do not have to drive anywhere.”* (Participant 67)

*“My house is like my nest. I do not depend on anyone.”* (Participant 115)

#### 4.1.2. Subjective Age

Findings suggested five emergent categories of answers for SA: (a) ‘balanced, (b) ‘old’, (d) ‘youthful’ and (e) ‘dissatisfied’. ‘Balanced’ (36.5%) was the most mentioned SA, as seen in Table 3.

Table 3.

*Emergent categories resulting from content analysis of the pre-category ‘subjective age’*

	Portuguese		Romanian		Angolan		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Subjective Age								
Balanced	68	46.9	34	23.6	58	38.9	160	36.5
Old	35	24.1	49	34.0	10	6.7	94	21.5
Youthful	28	19.3	34	23.6	67	45.5	129	29.6
Dissatisfied	14	9.7	27	18.8	13	8.9	54	12.4
Score of pre-category ‘subjective age’	145	100.0	144	100.0	148	100.0	437	100.0

4.1.2.1. *Balanced.* Participants verbalized that their age corresponded to their expectations at the present moment.

*“I am aware that age is a game of gains and losses. We just have to find a real balance between both and make it a win-win process.”* (Participant 43)

4.1.2.2. *Old.* Participants indicated that they were uneasy about their age and exemplified concerns about their age and their future.

*“I feel old. I’m already 86 years, you know.”* (Participant 144)

4.1.2.3. *Youthful.* A cognisant-young posture towards age was indicated by the participants.

*“I do not feel old. I feel the same as I ever was.”* (Participant 39)

*“Being young is an attitude. If I believe that I am young, indeed I am young.”* (Participant 48)

4.1.2.4. *Dissatisfied.* Participants verbalized discontent about their present age and that they felt old.

*“I’m not happy about my age.”* (Participant 44)

*“I don’t like my age. I’m too old. I wish I was younger.”* (Participant 67)

## 4.2. Cross-National Differences Analysis Concerning the Emergent Categories

Because our sample was cross-national, an Asymptotic Chi-Square Test was used to analyze if the three nationality groups diverged significantly concerning indicators of AtA and SA. As regards to the SA and its four categories, the results indicated significant differences between the three nationality groups ( $\chi^2(12) = 22.6, p < .05$ ). Conversely, no significant differences between the three nationality groups were found regarding the total score for indicators of AtA. Yet, significant differences were found in four of the AtA categories: ‘sense of purpose and ambitions’ ( $\chi^2(8) = 24.5, p < .01$ ); ‘health and wellness’ ( $\chi^2(10) = 18.0, p < .05$ ); ‘existential meaning’ ( $\chi^2(6) = 27.4, p < .01$ ) and ‘stability and accessibility’ ( $\chi^2(4) = 17.6, p < .01$ ) (see Table 4).

Concerning the indicators of AtA, Portuguese scored higher in the ‘health and wellness’, ‘existential meaning’ and ‘stability and accessibility’ categories (37.4%, 43.9% and 43.0%, respectively) whilst Angolans indicated the highest results in ‘sense of purpose and ambitions’ (43.3%) and ‘social support’ (36.7%). In opposition, Romanians had the lowest score in ‘sense of purpose and ambitions’ (17.0%) and ‘health and wellness’ (29.6%). Portuguese scored the lowest in ‘social support’ (31.2%), while Angolans had the lowest scores in ‘existential meaning’ (23.7%) and ‘stability and accessibility’ (20.0%).

As regards to SA, Portuguese participants prompted the highest result in the ‘balanced’ category (42.5%) whereas Romanians participants scored the highest in the ‘old’ and ‘dissatisfied’ categories (52.1% and 50.0%, respectively). Angolans indicated the highest result for the ‘youthful’ category. Conversely Romanian displayed the lowest score in ‘balanced’ (21.3%), whilst Angolan indicated the lowest score in ‘old’ (10.6%) and ‘dissatisfied’ (24.1%). Finally, Portuguese scored the lowest in the ‘youthful’ category (21.7%).

Table 4.  
*Chi-Square test for the cross-national differences among the three groups of participants*

	Pearson Chi-Square Value	<i>df</i>	<i>p</i> <sup>a</sup>
Indicators of AtA	19.959	16	.206
Sense of Purpose and Ambitions	24.514	8	.001
Health and Wellness	18.010	10	.036
Social Support	5.510	4	.240
Existential Meaning	27.398	6	.000
Stability and Accessibility	17.599	4	.001
Subjective Age	22.581	12	.024
Balanced	34.812	4	.000
Old	51.298	4	.000
Youthful	41.422	6	.000
Dissatisfied	10.639	4	.022

<sup>a</sup>Monte Carlo Sig. (2-sided)

## 5. Discussion

This research was focused around two main research objectives: To analyze older adults' perceptions of AtA and SA, and to assess differences among Portuguese, Romanian and Angolan participants concerning the cited concepts.

'Existential meaning' (26.3%) and 'sense of purpose and ambitions' (24.2%) were the most frequent indicators of AtA pointed out by this study's participants. The prompting of objective (e.g. health) and subjective categories (e.g. existential meaning) that emerged from participants' interviews, corroborated the multi-dimensionality of the AtA concept (Bauer & McAdams, 2004; Keyes, Shmotkin, & Ryff, 2002; Neri, Cachioni, & Resende, 2002).

As to SA, overall older adults expressed positive SA in 66.1% of overall narratives. 'Balanced' (36.5%) and 'youthful' (29.6%) were the most referred SA for older adults. As suggested by previous research, success in fulfilling challenges may yield a more positive perceived age (Coupland, Coupland, Giles, & Henwood, 1991; Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008). Moreover, growing literature indicates that "feeling younger" was rated more positively by older adults than younger adults (Giles, McIlrath, Mulac, &

McCann, 2010). Moreover, older adults reported that they felt balanced and more agreeable than middle-aged and younger adults (Allemand, Zimprich, & Hendriks, 2008).

Considering the cross-national and cultural diversity of older adults' perspectives concerning age (Barak, 2009), the highest scores in 'health and wellness', 'existential meaning', 'stability and accessibility' and 'balanced' were prompted by Portuguese participants whilst Angolans were accountable for the highest results in 'sense of purpose and ambitions', 'social support' and 'youthful'. One possible explanation for these results could be the fact that Portuguese benefit from a stabilized social security system (Instituto Nacional Estatística, 2005) which might justify the highest scores for these categories and the focus on existential meaning, given that health, functional and environmental needs are currently met.

Moreover, literature highpoints the development of a specific spirituality as people grow older (MacKinlay, 2001). Alternatively, Angolans mostly felt young-at-heart, and relied on social networking for psychological and social support. In fact, even when family support was not available, more varied forms of support were tapped to meet the needs of these participants (e.g., friends, professional peers, neighbors). Furthermore, we posited that a specific African definition of being old, in partly due to a recent past of war, poverty and subsequent existing young population (World Health Organization, 2003) might have led Angolan participants to higher valorize their sense of purpose and ambitions, as well as reinforcing their sense of social community. Furthermore, Romanians were accountable for the highest scores in 'old' and 'dissatisfied', which is in line with past literature that stresses the fact that Romanian elderly often enfold low prestige and social segregation (Popa, 2000).

'Existential meaning' was the most prevalent response for these participants. Significant differences were found for this category in the three nationalities. In particular, Portuguese and Romanian older adults emphasized this indicator of AtA. Instead, for Angolan participants, 'sense of purpose and ambitions' was the most reported indicator of AtA. Kotter-Grühn, Grühn, and Smith (2010) suggested that particularly very old adults seem to have quite accurate perceptions of their nearness to death. In addition, elderly people emphasize spiritual dimensions (Meuller, Plevak, & Rummans, 2001). In fact, for these older adults, existentialist and spiritual themes such as values and spiritual activities appeared to influence how participants led their lives, which corroborates what Tornstam (2005) named gerotranscendence, i.e., a forward and outward existential development that occurs in old age.

The sense of purpose and ambitions were considered very relevant for these older adults and significantly different for the three different groups. Thus, accomplishment, engagement and activities, particularly when in the company of professional peers, were pertinent for these participants. Previous studies indicated that older adults' happiness variance can be partly attributed to the time seniors spend on various activities (Oerlemans, Bakker, & Veenhoven, 2011). Some cognitive functions—e.g., those involved in social functioning (Washburn, Sands, & Walton, 2003)—appear to augment with age and can compensate for those that may evidence decline. Intellectual and physical engagement have been found to increase the cognitive function of older adults and to provide an opportunity for social interactions and civic life, as well as to develop a sense of personal meaning (Park, Gutchess, Meade, & Stine-Morrow, 2007; Wilson et al., 2002).

Conversely, in old age, with the greater likelihood of declining income and deteriorating health, positive SA and AtA can become difficult to achieve (Davidhizar & Shearer, 1999). Additionally, literature suggests that professional engagement especially with peers and productive creativity, contributes to positive SA and AtA (Brodsky, 1988; Stevens-Ratchford, 2005).

In spite of the high level of education of our participants (60.3% of the participants completed high school or above), health and wellness was not as highly reported as we initially expected. Moreover, we found significant differences for the three nationalities. Prior research points out that education is associated with improved knowledge about healthy behaviors and provides individuals with cognitive and psychosocial skills and material resources that allow them to effectively pursue health (Pampel, Krueger, & Denney, 2010). Furthermore, Hurd (2000) suggests the shift that occurs in priorities as people reach old age and that the emphasis on attractive appearance in the eyes of other people is replaced by one on health.

'Social support' was not highly indicated as contributing to AtA, as initially expected. Moreover and in opposition to the remaining categories, significant differences were not found for this category among the three nationalities. Considering that older adults live within a relatively steady social network which provides regular contact over time, difficulties in social networks is partially attributed to functional loss, health disparities and the discontinuation of personal relationships (Lang, 2001). Additionally, Bowling (2007) and Birren and Schaie (1996) reported health and interpersonal relationships to be relevant for older adults.

Interestingly, ‘stability and accessibility’ was not a predominant response in our study. Conversely, the importance of stability has been previously identified in literature (Birren & Schaie, 1996; Low & Molzahn, 2007). It is likely that the high level of activity of our participants (43%), in combination with the existence of a social pension scheme for older adults, have influenced the participants’ perceptions. Diverse income portfolios suggest long-term financial security and are associated with longer lives because individuals can prosper even if any single income source should fail (Krueger & Burgard, 2011). Moreover, material well-being peaks in individuals’ final years in the labor force and then provides a long-term and relatively stable resource in the remaining decades of life (Haas, Krueger, & Rohlfen, 2012).

Notably, there are significant differences in the SA and in its all categories. As to the indicators of AtA, we found significant differences in all indicators of AtA categories, except for ‘social support’. Taken together, our results lend further support to the cross-national and cultural diversity of older adults’ experiences concerning age, which corroborates prior literature emphasizing the fact that cultural and ethnical differences may influence the process of aging (Barak, 2009; Torres, 2003).

Our study offers a valuable contribution to the aging literature. However, the results need to be interpreted within the context of the following limitations. Despite the fact that a varied sample of participants was recruited, the use of a purposeful method could have resulted in some selection bias. Yet, biased results were minimized by the checking of the findings with external review and with the respondents themselves. Moreover, this study has, enabled an insight into the typologies of categories that had impact on AtA and SA for elderly people. One-on-one interviews have the potential to provide in-depth information. If the researchers had begun by simply collecting rating scale data, they would have risked developing survey items that were grounded more in investigators’ preconceptions about elderly people than in the constructs they actually consider most meaningful (Reichstadt, 2010).

Further research is needed into the conceptual framework of AtA for older adults. The current study extends previous research by giving empirical weight to what actually constitutes one’s personal perception of AtA and SA and to the conceptual links between age and aging. Moreover, our findings support the view that there are cross-national differences regarding SA and AtA. Regardless of the constraints of personal competence and resources among older adults when facing old age, we assert that the findings of this study are a

pertinent input for understanding the importance of the cross-national context of age and aging and for optimizing personal functioning and well-being in older adults from different cultural backgrounds.

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**Paper 4. Analyzing adjustment to aging and subjective age from Angolan and Portuguese community-dwelling older adults' perspectives**

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## 1. Abstract

**Background:** The aging experience influences the ways the aging self adjusts to challenges in late adulthood in various cultural settings. This study aims at examining the indicators of adjustment to aging (AtA) and subjective age (SA) and at investigating the latent constructs that can work as major determinants inAtA and SA in an older Portuguese and Angolan community-dwelling population.

**Methods:** Questionnaires were completed, specifically assessing participants' socio-demographic and health-related information. Semi-interviews with 102 older adults aged between 75-99 years ( $M = 80.5$ ;  $SD = 5.76$ ) were performed, focusing onAtA and SA. Data was subjected to content analysis. The correlational structure and latent constructs of indicators ofAtA and SA were analyzed by a Multiple Correspondence Analysis (MCA).

**Results:** Outcomes from content analysis designated seven categories forAtA: 'accomplishment and future projects', 'occupation and leisure', 'health and well-being', 'valorisation of time and age', 'social support', 'stability and safety' and 'existential meaning and sense of limit' and five emergent categories for SA; 'in harmony', 'fearless', 'with concern', 'youthful' and 'satisfactory'. 'Social support' was the most reported indicator ofAtA (25.4%) and 'in harmony' (22.3%) was indicated as the most frequent SA response. Adjustment and age was explained by a three-factor overall model: 'integrated', 'congruent' and 'concerned' for Angolan participants whereas 'fulfilled', 'reconciliated' and 'driven' was indicated as a best-fit model for Portuguese elderly.

**Conclusion:** The findings presented in this paper emphasized the deepening of the concept ofAtA in this population and its association with SA, in an overall model.

**Key Words:** Aged; Cross-Cultural Comparison; Psychological Adaptation; Self-Report.

## 2. Introduction

Research findings on the oldest and young old demonstrate that the third and fourth age entails a level of bio-cultural incompleteness, vulnerability and unpredictability (Baltes & Smith, 2003). Yet and despite the high prevalence of negative age-related changes, older people feel younger than they actually are and generally are satisfied with their aging (Gana, Alaphilippe, & Bailly, 2004; Montepare & Lachman, 1989; Rubin & Berntsen, 2006).

The Portuguese elderly constitute 18.1% of the total population, surpassing the amount of young people (16%). The expected percentage of old people in Portugal in 2050 is 32% of the population. The life expectancy is nowadays 79.4 years for women and 72.4 years for men and the actual dependency ratios will almost double in Portugal from around 23% to 45% in 2050 (Instituto Nacional de Estatística, 2002; World Health Organization Quality of Life Assessment Group, 2011).

Angolan population is quite young and older people make up a relatively small fraction of the population (2.8% of the total population is 65 years and over). The expected percentage of old people in Angola in 2050 is 6% of the population (United Nations, Department of Economic and Social Affairs, Population Division, 2011). As of 2006, official statistics showed 28,854 legal Angolan residents in Portugal, the population of Angolan legal residents grew by 12.6%, from 2001 to 2003. However, this number is likely an underestimate of the true size of the community, as it counts neither illegal migrants nor people of Angolan origin who hold Portuguese citizenship (Instituto Nacional de Estatística, 2007; Øien, 2007). Moreover, the second most important region of location of the foreign community in Portugal is the Algarve with 13% (Organisation for Economic Co-Operation and Development, 2001). To date, little attention has been paid to older African immigrants in Portugal in the literature.

Two early theoretical models explained adjustment to aging (AtA): the activity theory emphasizing the maintenance of the activities and attitudes of middle age, and the disengagement theory (Havighurst, 1961). Moreover, Thomae (1992) proposed that AtA was achieved when a balance between the cognitive and motivational systems of the person has been attained.

AtA is a proximate concept, yet distinct, from quality of life (World Health Organization Quality of Life Assessment Group, 1995), and well-being (Diener, Suh, Lucas, & Smith, 1999; Kesebir & Diener, 2010; Pavot & Diener, 2004), previously defined and

validated in the gerontological literature. Additionally, a process of continuous adjustment is part of the concept of successful aging (Lewis, 2011). AtA includes components such as control, self-acceptance, personal growth, autonomy, positive social network and purpose in life (Bauer & McAdams, 2004; Keyes, Shmotkin & Ryff, 2002; Ryff, 1989; Slangen-Dekort, Midden, Aarts, & Wagenberg, 2001; Staudinger & Kunzmann, 2005) and generativity (Erikson, Erikson, & Kivnick, 1986), that may vary with time, age, gender, race, culture, financial status and society (Neri, Cachioni, & Resende, 2002).

Furthermore, subjective age (SA) refers to the construct of age as experienced by an individual (Barak, 2009; Barrett, 2005; Montepare, 2009). Overall, the concept of SA offers access to the aging experience, an area of research that is relatively fresh in psychogerontology (Steverink, Westerhof, Bode, & Dittmann-Kohli, 2001).

The associations found between SA and indicators of health, well-being and functioning were in line with previous studies, suggesting that SA is a valid measure of the personal aging experience (Kastenbaum, Derbin, Sabatini, & Artt, 1972; Kuper & Marmot, 2003; Öberg & Tornstam, 2003). Older individuals' own evaluation of their age is, in fact, a better predictor of psychological functioning than an objective count of chronological years (Montepare, 2009; Schafer & Shippee, 2010). Thus, studies on self-perceptions of aging can contribute to our understanding of the aging self (Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008).

Considering the distinctiveness of older adults' experiences concerning the multi-dimensional context of adjustment and age, it is essential to explore older adults' self-reports, resulting from in-depth narrative interviews (Moser, Spagnoli, & Santos-Eggimann, 2011). Moreover, the concept of 'adjustment and age' is key to a salutogenic approach focussed on the well-being, health, and adapted functioning of older adults (Brandtstädter & Rothermund, 2003; Eriksson & Lindstrom, 2006; Schafer & Shippee, 2010; Slangen-Dekort et al., 2001; Staudinger & Kunzmann, 2005; von Humboldt, Leal, & Pimenta, 2012). However, only a few later attempts have been made to explore the potential association between AtA and SA in an overall model for older people. Hence, in the present study, we extend previous research by: (a) eliciting categories that had impact on Angolan and Portuguese older adults' SA and AtA; (b) investigating latent constructs that can work as major determinants in SA and AtA and (c) examining the potential explanatory mechanisms of the 'adjustment and age' overall model.

### 3. Materials and Methods

#### 3.1. Participants

The sample for the present research consisted of one 102 eligible non-institutionalized community-dwelling individuals, aged 75 and over ( $M = 80.5$ ;  $SD = 5.76$ ; range 75-99), 53.9% female, 50% Angolan, 58.8% married, and 56.9% professionally inactive. The sampling of participants was based on the availability of respondents, through senior universities message boards, local and art community centres list-serves, in Lisbon and the Algarve regions.

Because the study attempted to understand the phenomena from the self-reports of these participants, the study was conducted in their setting in order to uncover the uniqueness of perspectives concerning the multi-cultural context of age and adjustment, by talking to them. In this context, the sampling was performed purposefully, in order to allow data for comparing two different cultural groups and to explore their distinct self-reports. Therefore, the participants had two ethnical backgrounds and were recruited in low-income areas, hence not representative of the society as a whole. All the interviews were performed in Portuguese, as it was the predominant primary language spoken by all the participants.

Older adults were included when not diagnosed concurrent severe mental disorders according to DSM-IV criteria and if they scored in the normal range on the Mini Mental Status Exam (MMSE) ( $>26$ ) (Folstein, Folstein, & McHugh, 1975). MMSE was administered to all participants in standardized procedures and the mean score was 28.7 ( $SD = 1.01$ ; range 27-30) (see Table 1). Participants with any history of neurological or psychiatric disease, including major illnesses, anxiety, depression, dementia, sleep disorders, or with known substance abuse disorders, which might compromise cognitive function were excluded. This was done to exclude possible confounding variables that may influence the results.

Of 105 individuals initially meeting study criteria in the study, three were excluded for a number of reasons (e.g., scheduling problems, incomplete background information, incorrect filling-in and inability to commit to the interview). Hence, 102 older adults comprised the study. Table 1 shows the characteristics of the interview participants.

Table 1.

*Distribution of the study's participants according to sociodemographic and health-related characteristics*

	Angolan		Portuguese		Total	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
<i>N</i>	51		51		102	
Age ( <i>M</i> ; <i>SD</i> )	80.1 (5.105)		80.9 (6.380)		80.5 (5.762)	
Mini Mental Status Exam Score ( <i>M</i> ; <i>SD</i> )	28.1 (1.028)		28.7 (1.006)		28.3 (1.063)	
Gender						
Male	24	47.1	23	45.1	47	46.1
Female	27	52.9	28	54.9	55	53.9
Education						
Primary School	6	11.8	3	5.9	9	8.8
Middle School	22	43.1	15	29.4	37	36.3
High School	11	21.6	27	52.9	38	37.3
University Degree or Higher	12	23.5	6	11.8	18	17.6
Marital Status						
Married or in a Relationship	30	58.8	30	58.8	60	58.8
Single	0	0.0	1	2.0	1	1.0
Widowed	21	41.2	20	39.2	41	40.2
Professional Status						
Active	21	41.2	23	45.1	44	43.1
Inactive	30	58.8	28	54.9	58	56.9
Family Annual Income						
≤10,000 €	1	1.9	2	3.9	3	2.9
10,001–20,000 €	14	27.5	14	27.4	28	27.5
20,001–37,500 €	19	37.3	23	45.1	42	41.2
37,501–70,000 €	15	29.4	6	11.8	21	20.6
≥70,001 €	2	3.9	6	11.8	8	7.8
Perceived Health						
Good	29	56.9	32	62.7	61	59.8

Poor	22	43.1	19	37.3	41	40.2
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*Note:* Total sample:  $n = 102$ ;  $SD$  = standard deviation.

## 3.2. Measures and Procedure

### 3.2.1. Data Collection

Semi-structured interviews based on an interview guide were conducted in the participants' own homes. Each interview was performed individually and began with a set of straightforward background questions, to find out about the informant's living arrangements, health, nationality, age, family, education and work, followed by two open-ended questions: "I would like to understand what, in your point of view, contributes to your adjustment to aging in this phase of your life" and "How do you feel about your age?". These questions were elaborated to address two core areas: AtA and SA. Figure 1 shows the design of socio-demographic and health-related questionnaire, as well as the semi-structured interview.

All interviews were conducted and audio-recorded by the same researcher (SVH) who had no previous relationship with the participants. Upon completion of the interview, participants were asked to evaluate the schedule and the interview process. This evaluation included questions about the length of the interview and the appropriateness and relevance of questions asked. Participants were also asked to identify any questions that they found difficult to answer.

### 3.2.2. Data Analysis

Data was analyzed, employing content analysis and using the following procedure: a) development of major emergent categories, mutually exclusive, that reflected the 102 interviews, for each one of the two pre-existing categories: SA and indicators of AtA; b) creation a list of coding cues; c) analysis of verbatim quotes and best fit characterizations for a given emergent category; d) definition of sub-categories, within and across the narratives, while preserving the principle of homogeneity of the category; and e) derivation of major emergent categories until the point of theoretical saturation was reached (Bardin, 2007; Morse, 1995). Our structure of categories was then subjected to an external review and critical feedback was obtained from reviewers with experience with older adults.

An independent analysis of the 102 interviews was performed by a jury of two psychologists (both faculty).

In the sequence of a thorough discussion on the meaning and characterization for each category, a consensus between researchers was obtained. Disagreements were solved by returning to the transcripts and a final group co-resolution, regarding the categories was made only when both researchers reached an agreement concerning the definition of each category with the participants' actual words, or close proximity to their words. Reliability between researchers was measured through the Cohen's Kappa. All AtA and SA categories presented a value above .80 ( $.878 \leq k \leq .953$  and  $.871 \leq k \leq .983$ , respectively), indicating a high agreement rate. No missing ratings were reported in this study.

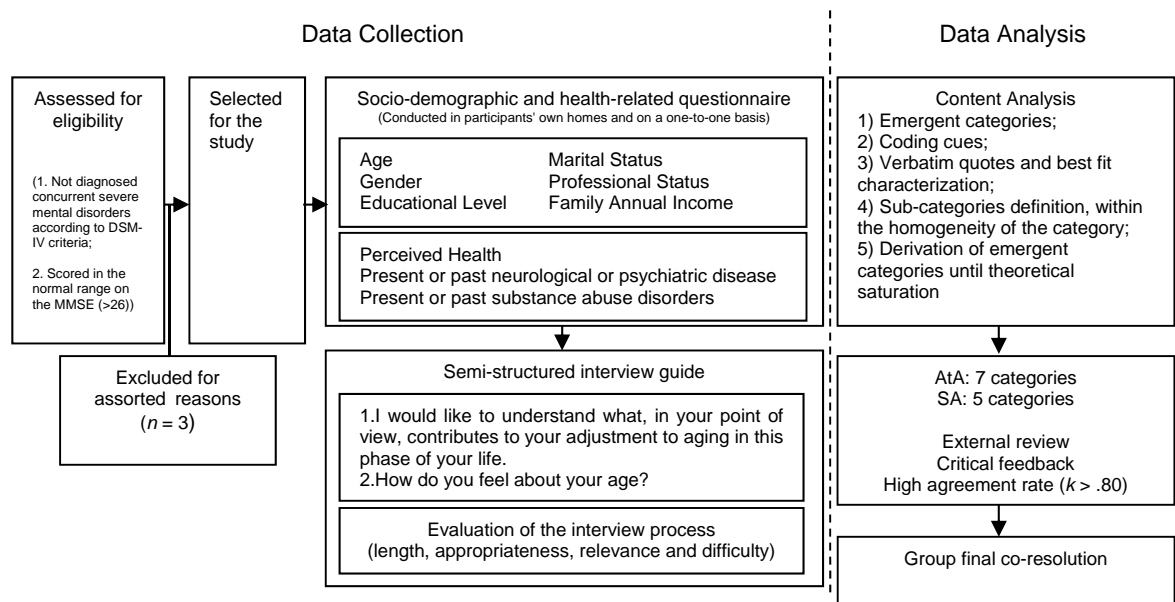


Figure 1.

*Design of the study development: Data collection, data analysis, socio-demographic and health-related questionnaire and semi-structured interview guide*

Representations of the associations between the emergent categories obtained from the narrative analysis, and latent constructs that can work as major indicators in older adults' recognized SA and AtA, were assessed by a Multiple Correspondence Analysis (MCA). Statistic criteria included the following: (a) minimum of 5.0% of the total variance explained by each factor and (b) minimum eigenvalue of 1 for each factor. Data were analyzed using SPSS for Windows (version 19.0; SPSS, An IBM company., Chicago, IL).

The Portuguese Foundation for Science and Technology (FCT) and ISPA - Instituto Universitário, approved the study. Informed consent was received from all participants and the study protocol was approved by the Research Unit in Psychology and Health's coordination.

## 4. Results

### 4.1. Content Analysis of the Emergent Categories

As regards to the results from content analysis, the jury identified a total of seven categories for indicators of AtA: (a) 'accomplishment and future projects', (b) 'occupation and leisure', (c) 'health and well-being', (d) 'valorisation of time and age', (e) 'social support', (f) 'stability and safety' and (g) 'existential meaning and sense of limit'.

#### 4.1.1. Accomplishment and Future Projects

Participants reported accomplishments (e.g., teaching) and future projects as contributing to AtA.

*"I only feel alive when I am writing."* (Participant 92)

*"I am always thinking of my next project."* (Participant 101)

#### 4.1.2. Occupation and Leisure

Occupation (e.g., nursing) and leisure (e.g., driving old cars) were indicated by participants as indicators of AtA.

*"I'm very active professionally. I still get contracts as a technical consultant."*  
(Participant 34)

#### 4.1.3. Health and Well-Being

Participants reported health and well-being as relevant to their AtA.

*“I try to be attentive to my body. I simple cold can be very distressful.”* (Participant 20)

#### 4.1.4. Valorization of Time and Age

Participants indicated time as a valuable resource and that old(er) age made them perceive life as an appreciated time.

*“I try to live my life as if every day was the last day of my life.”* (Participant 95)

#### 4.1.5. Social Support

Participants indicated that social support from their family, friends, colleagues from work and neighbours contributed to their AtA.

*“I am a happily married man. I cannot imagine my life without her.”* (Participant 39)

#### 4.1.6. Stability and Safety

Older adults reported a safe environment and financial stability, as important for their AtA.

*“We are very lucky for living in such a safe area.”* (Participant 86)

#### 4.1.7. Existential Meaning and Sense of Limit

Participants verbalized the awareness of the end of the life cycle as contributing to their AtA. Furthermore, participants reported existential meaning and sense of purpose, as relevant for their AtA.

*“I need to know that I can still believe in me.”* (Participant 75)

‘Social support’ was the most verbalized indicator of AtA for Angolan participants (43.3%) whereas ‘social support’ and ‘health and well-being’ were the most referred indicators of AtA by Portuguese participants (both 16.3%), as seen in Table 2.

*“My family is my fortress. My children are always there for me.”* (Participant 17)

*“I still hear and see very well.”* (Participant 29)

*“Being healthy is very important to me.”* (Participant 33)

Moreover, findings designated a total of five categories for SA: (a) ‘in harmony’, (b) ‘fearless’, (c) ‘with concern’, (d) ‘youthful’ and (e) ‘satisfactory’.

#### 4.1.8. *In harmony*

Participants reported that they felt in harmony with their present age, as it was according to their experiences.

*“I feel in peace about my age.”* (Participant 24)

#### 4.1.9. *Fearless*

Participants verbalized that they did not feel afraid of their age and that did not have concerns about their future

*“I face age without fear and I accept whatever it will bring me.”* (Participant 81)

#### 4.1.10. *With Concern*

Participants reported that they felt aged and concerned about their age.

*“As you can see, I am an old woman...I worry about my age.”* (Participant 19)

#### 4.1.11. *Youthful*

A youthful attitude towards age was indicated by the participants.

*“Nothing changed inside of me. I am an adolescent as I always have been.”*  
(Participant 97)

#### 4.1.12. *Satisfactory*

Age was pointed out by participants as acceptable.

*“I have no complains. I feel well about my age.”*(Participant 17)

‘Youthful’ was the most mentioned SA for Angolan (24.4%) (see Table 2).

*“I do not worry about my age. I still feel young as in my youth.”* (Participant 38)

‘In harmony’ and ‘satisfactory (both 22.9%) were the most referred SA for Portuguese older adults (see Table 2).

*“I feel that age corresponded to all what I expected.”* (Participant 12)

*“Age has been a blessing to me.”* (Participant 75)

Table 2.

*Emergent categories resulting from content analysis of ‘subjective age’ and ‘indicators of AtA’*

	Angolan		Portuguese		Total	
	Category frequency	Category percentage	Category frequency	Category percentage	Category frequency	Category percentage
<b>Subjective age</b>						
In harmony	51	21.8	48	22.9	99	22.3
Fearless	48	20.5	45	21.4	93	20.9
With concern	30	12.8	30	14.3	60	13.5
Youthful	57	24.4	39	18.5	96	21.6
Satisfactory	48	20.5	48	22.9	96	21.6
Score of pre-category ‘subjective age’	234	100.0	210	100.0	444	100.0
<b>Indicators of AtA</b>						
Social support	57	43.3	42	16.3	99	25.4
Health and well-being	39	29.5	42	16.3	81	20.8
Occupation and Leisure	6	4.5	30	11.6	36	9.2
Accomplishment, and Future Projects	6	4.5	30	11.6	36	9.2
Stability and Safety	15	11.4	36	14.0	51	13.1
Valorization of Time and Age	6	4.5	36	14.0	42	10.8
Existential Meaning and Sense of Limit	3	2.3	42	16.2	45	11.5
Score of pre-category ‘indicators of AtA’	132	100.0	258	100.0	390	100.0

Furthermore, an Asymptotic Chi-Square Test was used to analyze if the demographic groups diverged significantly concerning AtA and SA. In detail, significant differences among the groups were found regarding nationality ( $\chi^2(8) = 33.00; p < .05$ ), educational level ( $\chi^2(24) = 73.92; p < .05$ ), professional status ( $\chi^2(8) = 18,94; p < .05$ ) and perceived health ( $\chi^2(8) = 19,50; p < .05$ ), for the AtA total score.

Moreover, significant differences among the groups were also found regarding nationality ( $\chi^2(5) = 20.29; p < .05$ ), educational level ( $\chi^2(15) = 36,14; p < .05$ ), professional status ( $\chi^2(5) = 17.71; p < .05$ ) and marital status ( $\chi^2(10) = 20.43; p < .05$ ), for the SA total score.

#### **4.2. Multiple correspondence analysis of the emergent domains**

MCA assesses the correlational structure the pre-categories in our study: AtA and SA. Therefore, findings indicate a model for the pre-categories, with diverse factors and factor loadings.

When representing an overall model that joins the concepts of “adjustment” and “age”, we considered the correlational structure of the pre-categories in our study (indicators of AtA and SA). Results suggested a three-dimension model (accounting for 72.9% of total variance) composed by: ‘integrated’, ‘congruent’, and and ‘concerned’, as a best-fit solution for Angolan participants (see Table 3) and a three-dimension model (accounting for 90.5% of total variance) composed by: ‘fulfilled’, ‘reconciliated’, and ‘driven’, as a best-fit solution for Portuguese participants and (see Table 4).

Table 3.

*Three-dimensional representation for 'subjective age' and 'indicators of AtA' for Angolan older adults: factor loadings for each dimension, mean loadings and % inertia (variance) explained*

Domains	Dimensions			Mean
	Integrated	Congruent	Concerned	
In harmony	.140	<b>.507</b>	.175	.274
Fearless	<b>.907</b>	.003	.004	.305
With concern	.133	.090	<b>.666</b>	.296
Youthful	.392	<b>.472</b>	.010	.292
Satisfactory	.067	<b>.491</b>	.176	.244
Social Support	<b>.516</b>	.330	.000	.282
Health and Well-Being	.062	.141	<b>.587</b>	.264
Occupation and Leisure	.016	.008	<b>.217</b>	.080
Accomplishment and Future Projects	.016	.008	<b>.214</b>	.079
Stability and Safety	.319	<b>.429</b>	.002	.250
Valorization of Time and Age	<b>.750</b>	.083	.004	.279
Existential meaning and Sense of Limit	.313	<b>.483</b>	.015	.270
Eigenvalue	3.629	3.046	2.070	2.915
Inertia	.302	.254	.173	.243
% of Variance	30.244	25.381	17.253	24.293

Table 4.

*Three-dimensional representation for 'subjective age' and 'indicators of AtA' for Portuguese older adults: factor loadings for each dimension, mean loadings and % inertia (variance) explained*

Domains	Dimensions			Mean
	Fulfilled	Reconciliated	Driven	
In harmony	<b>.642</b>	.155	.002	.266
Fearless	<b>.818</b>	.082	.001	.300
With concern	.002	.417	<b>.447</b>	.289
Youthful	.143	<b>.669</b>	.170	.327
Satisfactory	.256	<b>.408</b>	.220	.295
Social Support	<b>.760</b>	.057	.013	.277
Health and Well-Being	<b>.804</b>	.096	.063	.321
Occupation and Leisure	.000	<b>.437</b>	.429	.289
Accomplishment and Future Projects	.004	.325	<b>.629</b>	.319
Stability and Safety	<b>.804</b>	.096	.063	.321
Valorization of Time and Age	.143	<b>.669</b>	.170	.327
Existential meaning and Sense of Limit	.166	<b>.654</b>	.041	.287
Eigenvalue	4.542	4.065	2.249	3.619
Inertia	.378	.339	.187	.302
% of Variance	37.849	33.876	18.744	30.157

## 5. Discussion

This study indicated the emergence of subjective (e.g. adaptation to change) and objective themes (e.g. safety), as indicators of AtA, which suggested the importance these can have on AtA for the participants and supported the existing literature (Bauer & McAdams, 2004; Brodsky, 1988; Ryff, 1989; Ryff & Keyes, 1995; Keyes, Shmotkin, & Ryff, 2002). As for SA, overall older adults expressed positive subjective age (86.4% of overall narratives) and 'in harmony' was the most referred SA for older adults.

For Portuguese participants, the largest factor ‘fulfilled’ accounted for 37.9% of total variance, whereas for Angolan participants, ‘integrated’ represented 30.2% of total variance. ‘Driven’ was the least representative factor for Portuguese elderly (18.7% of total variance) and ‘concerned’ for the Angolan participants (17.3% of total variance).

Since aging is a multi-dimensional concept, socio-demographic, cultural, national and ethnical differences may influence the process of aging<sup>33</sup>. In line with this literature, significant differences were found concerning nationality, educational level, professional status and perceived health for AtA, and regarding educational level, professional status, nationality and marital status for SA. These results illustrate the diversity of aging perspectives in our sample, in which two distinct national backgrounds are present, 56.9% are professionally inactive, 58.8% are married, 82.4% of the participants completed high school at most and 59.8% perceive their health as good. Yet, and contrary to our initial expectations, participants did not significantly diverge concerning their annual income.

The MCA regarding the correlational structure of the two pre-categories, indicators of AtA and SA, emphasizes that these are largely explained by a three-factor model, for each nationality. Thus, for Angolan participants living in the community, the first factor (‘integrated’) assembled ‘fearless’, ‘social support’ and ‘valorization of time and age’. It must be noted that older adults live within a relatively steady social network which provides regular contact over time (Lang, 2001). Furthermore, participation in social activities can mediate the direct relationship between extraversion and happiness (Oerlemans, Bakker, & Veenhoven, 2011). AtA can be increased by improving the fit between the person and the environment. For Angolan elderly living in Portugal, when family support was not available, more varied forms of support were tapped to meet their needs (e.g., friends and neighbors). Indeed, research shows that negative interactions are more frequent among family members than among friends (Akiyama, Antonucci, Takahashi, & Langfahl, 2003).

‘In harmony’, ‘youthful’, ‘satisfactory’, ‘stability and safety’ and ‘existential meaning and sense of limit’, constituted the second factor (‘congruent’). Previous literature indicated that in lifespan developmental psychology, the perception that one’s life is coming to an end is operationalized, among others, in the concept of future time perspective (Kotter-Grühn, Grühn, & Smith, 2010). Furthermore, admitting to oneself that one is close to dying is likely to be influenced by one’s general acceptance of and attitudes toward death (Neimeyer, Wittkowski, & Moser, 2004).

The third factor ('concerned') assembled 'with concern', 'health and well-being' 'occupation and leisure' and 'accomplishment and future projects'. Yet, the third (.217) and the fourth (.214) categories had a low loading in the third factor, which indicated that these categories are not very significant in this factor. In line with these results, research has shown that happiness increases when older adults combine effortful social, physical, cognitive, and household activities with restful activities (Oerlemans, Bakker, & Veenhoven, 2011). Furthermore, productive activities contributed to well-being of older adults (Wahrendorf & Siegrist, 2010) and that professional engagement especially with peers (Stevens-Ratchford, 2005; Stevens-Ratchford & Diaz, 2003) contributed to aging well.

For Portuguese participants, 'in harmony', 'fearless', 'social support', 'health and well-being' and 'stability and safety', constituted the first factor ('fulfilled'). Gerontologists often emphasize the importance of older adults' embeddedness in dense, kin-centered social networks (Cornwell, 2011) Those who have network members who know each other have more access to social support, companionship, and emotional aid (Haines & Hurlbert, 1992), and embeddedness in a dense network yields "social capital" which increases network members' capacities to monitor and share information about a person (Coleman, 1988). Moreover, age associated attrition in social networks is partially attributed to functional loss, health disparities and the discontinuation of personal relationships (Lang, 2001). Furthermore, some scholars have taken the view that friends may be more contributive to well-being in older adults than the family (Akiyama et al., 2003).

The second factor ('reconciliated') gathered 'youthful', 'satisfactory', 'occupation and leisure', 'valorization of time and age' and 'existential meaning and sense of limit'. Moreover, 'satisfactory' (.408) and 'occupation and leisure' (.437) had a low loading in the second factor, which indicated that these categories are not very significant in this factor. Previous literature suggested that being active in old age may relate positively to happiness because it may regulate people's mood and may satisfy various personal needs. Conversely, "household activities" appear to be detrimental to psychological well-being (e.g. grocery shopping, household finances, cooking) (Oerlemans, Bakker, & Veenhoven, 2011).

Moreover, in our study, the third factor ('driven') comprised 'old' and 'accomplishment and future projects'; hence these older adults were concentrated on their fulfillment by involving themselves in meaningful activities. Frankl (1963) and Maslow (1968) saw existential meaning, or personal meaning, as a universal human need. Moreover, three major sources of meaning include meaningful work or good deeds, authentic encounters

with others, and the attitude one chooses to adopt when faced with an uncontrollable situation (Malette & Oliver, 2006). Moreover, growing literature suggest that success in fulfilling challenges may yield more positive perceived age (Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008; Ward, 2010).

Despite the relevant findings from this study, a number of limitations must be considered. While a diverse sample of participants was recruited, the use of a selection procedure based on the availability of the participants could have resulted in some selection bias. Even though the interviews were conducted with a view to being bias free, two core areas were predefined to be addressed. Thus, interviews tended to be steered to these areas which could have biased the results. Additionally, there is no certainty that different researchers would not come up with different categories. Qualitative research thus, was necessary to maximize validity and to emphasize the need for researchers and health professionals to be perceptive to the varying perceptions of older adults. Finally, our findings cannot be generalized to other samples and only reveal the perceptions of our participants. It indicated only relevant clues to take into account in broad assessment for older adults, clinical practice and future research.

Additional research is needed into the conceptual framework of adjustment and age for older adults. Furthermore, we consider that these user-driven outcomes can form part of a broad assessment for older adults and that can be useful in clinical practice and health care planning. In this context, an ‘adjustment and age’ overall model yields information on the ways the older adult in various cultural settings adapts to challenges that are related to late adulthood. In sum, the support on variety of aging well presented in this paper is an important contribution to the unexplored multi-dimensional and cross-cultural context of AtA in this population and its association with SA, in an overall model.

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**Paper 5. Does spirituality really matter? – A study on the potential of spirituality to older adults' adjustment to aging**

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## 1. Abstract

This study intended to analyze the indicators of adjustment to aging (AtA) and to investigate the latent constructs that can work as major determinants in spirituality for a cross-national older community-dwelling population. Questionnaires were completed, assessing participants' background information. Interviews were performed, addressing one core area: indicators of AtA. Complete data were available for 154 older adults from two nationalities (German and Portuguese), aged between 75-103 years ( $M = 86.6$ ;  $SD = 6.98$ ). Data were subjected to content analysis. Representation of the associations and latent constructs were analyzed by a Multiple Correspondence Analysis (MCA). The most prevalent response of the interviewed participants for indicators of AtA was 'spirituality' (43.2%). 'Spiritual activities' was the most reported response regarding 'spirituality' (20.0%). A significant moderate association was found between 'spiritual activities' and nationality ( $V = .365$ ;  $p < .001$ ). Spirituality for older adults was explained by a three-dimension overall model: 'spiritual and existential meaning', 'limit-related awareness' and 'community embeddedness'. The findings presented in this paper emphasized the need to explore the potential of spirituality to AtA and the need for improving the spiritual dimension of health care for the older cross-national population.

Key Words: Spirituality; Adjustment to Aging; Multiple Correspondence Analysis; Community-Dwelling Older Adults.

## 2. Introduction

Europe is the oldest with a total of 75 million older adults in 2004 (Fernández-Ballesteros, 2007). By 2025, about one third of Europe's population will be aged 60 or over with greatest increase being among its oldest citizens (75+ years) (World Health Organization, 2002). The proportion of older adults in Portugal (16.4%) exceeded, for the first time, the proportion of youth (16.0%) (Instituto Nacional Estatística, 2005). Furthermore, the proportion of persons younger and older than 75 years of age in Germany was 1:12.8 in the year 2000 and it will be 1:6.2 in 2040 (Lehr, 2003).

The number of German individuals living in Portugal corresponded to 7.5% of the total foreign community in this country. Several foreign communities reside in Portugal, being the most representative groups from Brazil, Portuguese-speaking African countries, Germany and United Kingdom. Approximately two thirds of the foreign community reside in the Lisbon Metropolitan area. The Algarve is the second most important region of location of the foreign community, namely Europeans, with 13% (Organization for Economic Co-Operation and Development, 2001). Yet, little is known about these older inhabitants' psychological condition.

Growing literature recognizes the centrality of spirituality to well-being of older people (Hybels, Blazer, George, & Koenig, 2012; Jewell, 2004). Spirituality is a broad term encompassing multiple domains of meaning that may diverge among various cultural, national, and religious groups (Takahashi & Ide, 2003). Previous research investigated older adults of different ethnic and cultural backgrounds trying to cope with their spirituality within a different dominant culture (Nakasone, 2005). In this context, Nakasone, (2005) analyzed the spirituality of older adults in the San Francisco Japanese community. Results found in Japan (Takahashi & Ide, 2003), suggested that those high in spirituality have a compassionate attitude toward others whereas in South Korea, spirituality activities and spirituality well-being were significantly and positively associated with older adults' general health (You et al., 2009).

Furthermore, diverse definitions have been suggested for the concept of spirituality. It can be defined as a source of strength, enabling a sense of purpose, connection, sense of value and meaning in life, facilitating peace with oneself, a feeling of security; inner strength, searching, coping, hoping, relationship, and connectedness (Narayanasamy, 1993).

Moreover, it is a multi-dimensional construct defined by non-tradition-centered beliefs, sense of connectedness with a sacred other and involvement in practices, such as meditation, and it was found to be closely related to personal development and inner awareness (Dillon & Wink, 2007). Furthermore, Moberg (2002) highlighted that spiritual wellbeing is the affirmation of life in a relationship with God, self, community, and environment that nurtures and celebrates wholeness. Further, Musick, Traplagan, Koenig and Larson (2000) suggested that spirituality has been linked to positive physical health and inversely related to physical illnesses. The body of literature on spirituality and aging, points to the development of a very specific spirituality as people grow older (MacKinlay, 2001). According to Musick et al., (2000), 88.7% of adults aged 55 and older describe themselves as having moderate to high levels of both religiousness and spirituality and Takahashi et al. (2000) suggested that older adults may associate religious descriptors with the concept of spirituality.

Adjustment to aging (AtA) was initially proposed by Williams, Tibbitts, and Donahue (1966) as dependent on the individual's state of mind and subjective psychological reactions. Moreover, a model that represented the nature of development and aging with the focus on adjustment was developed in more recent years (Baltes & Baltes, 1990). AtA is achieved when a balance between the cognitive and motivational systems of the person has been attained (Thomae, 1992) and is a multi-dimensional concept composed by the dynamic interaction of elements such as generativity (Erikson, Erikson, & Kvinick, 1986), autonomy, control, self-acceptance, personal growth, positive social network and purpose in life (Bauer & McAdams, 2004; Staudinger & Kunzmann, 2005), that may vary with time, age, gender, race, culture, illness, financial status and society (Neri, Cachioni, & Resende, 2002).

Although AtA is a relevant and proximate concept, yet distinct, from subjective well-being (Kesebir & Diener, 2010; Pavot & Diener, 2004) and psychological well-being (Ryff & Keyes, 1995), some authors suggested that when adjustment in old adulthood occur, some elements of well-being, quality of life and generativity may also be present (Neri, Cachioni, & Resende, 2002). Apart from the findings described above, the study of AtA specifically remains at the periphery of current gerontological research (Kozma, Stones, & McNeil, 1991).

A review of the literature revealed the relation among spirituality and some elements composing AtA, namely, personal-growth, social support and purpose of life (e.g., Dillon & Wink, 2007; Malette & Oliver, 2006; Tornstam, 2005). Moreover, only one study specifically investigated the relationship between spirituality and psychological adjustment (Fehring, Brennan, & Keller, 1987).

The concept of spirituality is key to a salutogenic approach focussed on the well-being, AtA, and adapted functioning of older adults (Brandstädter & Rothermund, 2003; Hybels et al., 2012; Jewell, 2004; Staudinger & Kunzmann, 2005).

National, cultural and ethnical differences may influence the process of aging (Löckenhoff et al., 2009). In particular, in westernized societies, autonomy and independence are emphasized, whereas Eastern societies regard individuals as closely connected and interdependent (Ingersoll-Dayton, Saengtienchai, Kespichayawattana, & Aunguroch, 2004). Considering that spirituality can be experienced differently by older adults from diverse cultural backgrounds, a deeper understanding of the aging process can benefit from a cross-national comparison and the inclusion of a cross-cultural diverse approach of spirituality (Cohen, Thomas, & Williamson, 2008). In addition, to date, no research has focused on the potential of spirituality to AtA in an older cross-national population.

This study aims at making a significant contribution to the gerontological literature by: (a) analyzing main categories that contributed to cross-national community-dwelling older adults' AtA; and (b) examining the potential explanatory mechanisms of a model for spirituality to AtA for Portuguese and German older adults.

### 3. Methods

#### 3.1. Participants

The total sample comprised 154 eligible non-institutionalized individuals from two different nationalities (German and Portuguese), aged 75 and older ( $M = 86.6$ ;  $SD = 6.98$ ; range 75-103). Germans were 64.9% women and 66.2% married whereas Portuguese were 58.4% women and 55.8% married. All these participants had a minimum ten-year long term lawful residence in Portugal. The sampling of participants was performed purposefully through senior universities message boards and local community centres list-serves, in Lisbon and the Algarve regions, in Portugal, between May and July 2012. Participants eligibility criteria were the following: (a) absence of concurrent severe mental disorders according to DSM-IV and (b) participants' scoring in the normal range on the Mini Mental Status Exam ( $>26$ ) (Folstein, Folstein, & McHugh, 1975). Table 1 shows the characteristics of the participants.

Table 1.  
*Distribution of the study's participants according to sociodemographic and health-related characteristics*

	German		Portuguese		Total	
	<i>N</i>	%	<i>N</i>	%	<i>n</i>	%
<i>N</i>	77		77		154	
Age ( <i>M</i> ; <i>SD</i> )	87.0 (5.757)		86.2 (8.036)		86.6 (6.979)	
Sex						
Male	27	35.1	32	41.6	59	38.3
Female	50	64.9	45	58.4	95	61.7
Education						
Primary school	14	18.2	15	19.5	29	18.8
Middle school	26	33.8	21	27.3	47	30.5
High school	22	28.6	25	32.5	47	30.5
University degree or higher	15	19.4	16	20.7	31	20.2
Marital Status						
Single	13	16.9	12	15.6	25	16.2
Married or in a relationship	51	66.2	43	55.8	94	61.0
Widowed	13	16.9	22	28.6	35	22.8
Professional Status						
Active	33	42.9	25	32.5	58	37.7
Inactive	44	57.1	52	67.5	96	62.3
Family Annual Income						
≤10,000 €	17	22.1	18	23.4	35	22.7
10,001–20,000 €	30	39.0	37	48.1	67	43.5
20,001–37,500 €	17	22.1	12	15.6	29	18.8
37,501–70,000 €	4	5.2	4	5.2	8	5.2
≥70,001 €	9	11.6	6	7.7	15	9.8
Perceived Health						
Good	47	61.0	48	62.3	95	61.7
Poor	30	39.0	29	37.7	59	38.3

Note: Total sample: *n* = 154; *SD* = standard deviation.

### 3.2. Materials

Semi-structured interviews were based on an interview guide. Each interview began with a set of straightforward background questions, to find out about the participant's living arrangements, health, nationality, age, family, education and work, followed by one open-ended question: "*I would like to understand what, in your point of view, contributes to your adjustment to aging in this phase of your life.*" This question was elaborated to address one core area: AtA.

### 3.3. Procedure

#### 3.4. Data Collection

Each interview was performed individually in the participants' own homes and lasted between 20–35 minutes in average. All interviews were audio-recorded and interviewers had no previous relationship with the participants.

#### 3.5. Data Analysis

The content analysis was conducted for data analysis and the following phases were used: a) creation of emergent categories, mutually exclusive, that comprised participants' responses, for the pre-category: indicators of AtA; b) development of a list of coding cues; c) examination of the totality of the participants' verbatim quotes and the best fit characterizations for a given category; d) creation of sub-categories from the narrative responses, while maintaining the homogeneity of the category; and e) definition of emergent categories until the point of theoretical saturation was obtained (Bardin, 2007).

Since no categorical differences in AtA were found between German and Portuguese participants, (that is, the same categories resulting from content analysis were found for each nationality group), we analyzed cross-national data collectively. The bottom-up approach to the analysis was based on an overarching concern for reflecting the participants' perspectives (Zinnbauer, Pargament, & Scott, 1999). To this end, each category was defined by the participants' actual words, or close proximity to their words.

Once the process of developing of the categories for AtA indicators was completed, participants' spirituality-related responses were submitted to content analysis and emergent

categories for spirituality were developed, until the point of theoretical saturation was reached, following the procedure as described above.

Our structure of sub-categories and categories was then subjected to an external review, and critical feedback was obtained from reviewers with experience with the older populations from research and health care areas. An independent analysis of the 154 interviews was performed by a jury of two psychologists (both faculty) and a final group co-resolution, regarding the categories was made.

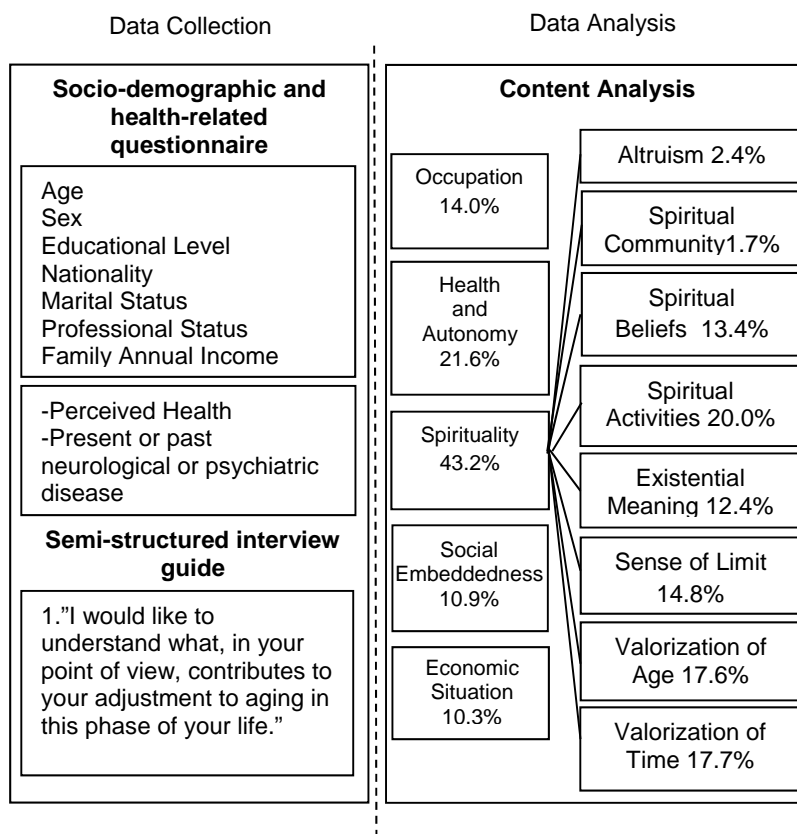


Figure 1. Data collection, data analysis, semi-structured interview guide and categories obtained from content analysis

Reliability between researchers was measured through the Cohen's Kappa. All AtA and *spirituality* categories presented a value above .80 ( $.917 \leq k \leq .973$  and  $.807 \leq k \leq .958$ , respectively), indicating a high agreement rate. No missing ratings were reported in this study.

Representations of the associations between the emergent categories obtained from the narrative analysis, and latent constructs that can work as major determinants in older adults' verbalized spirituality, were assessed by a Multiple Correspondence Analysis (MCA). In detail, MCA is an exploratory/descriptive technique that allows us to study the association among the eight qualitative sub-categories that comprised 'spirituality' in an overall

‘spirituality’ model and the configuration of each dimension of this model. Statistic criteria included the following: (a) minimum of 5.0% of the total variance explained by each dimension and (b) minimum eigenvalue of 1 for each dimension. Data were analyzed using SPSS for Windows (version 19.0; SPSS, An IBM company., Chicago, IL).

The present study, as well as the studies von Humboldt, Leal, and Pimenta (2012a) and von Humboldt, Leal, and Pimenta (2012b), constitute part of a multi-phase project entitled, “Older adults’ adjustment to aging and subjective well-being” for which support was given by the Portuguese Foundation for Science and Technology (FCT) and ethical approval was given by the ISPA - Instituto Universitário. Informed consent was received from all participants and the study protocol was approved by the Research Unit in Psychology and Health’s coordination.

## 4. Results

### 4.1. Content Analysis of the Emergent Categories

Findings designated a total of five categories for AtA: (a) ‘spirituality’; (b) ‘health and autonomy’; (c) ‘occupation’; (d) ‘social embeddedness’; and (e) ‘economic situation’. ‘Spirituality’ was the most verbalized indicator of AtA for the participants (43.2%), whereas ‘economic situation’ was the least referred indicator of AtA (10.3%) (see Figure 1). Moreover, ‘spirituality’ accounted for the highest number of statements (845), as seen in Table 2.

‘Spirituality’ was the most verbalized indicator of AtA for German participants (44.6%) and Portuguese participants (42.8%) whereas ‘economic situation’, was the least mentioned indicator of AtA by German participants (9.7%). Additionally, ‘social embeddedness’ was the least mentioned indicator of AtA by Portuguese participants (8.4%) (see Table 2).

#### 4.1.1. Spirituality

Eight emergent categories for ‘spirituality’ were developed from content analysis of the participants’ responses to indicators of AtA, namely: (a) ‘altruism’; (b) ‘spiritual

community’; (c) ‘spiritual beliefs’; (d) ‘spiritual activities’; (e) ‘existential meaning’; (f) ‘sense of limit’; (g) ‘valorization of age’; and (h) ‘valorization of time’.

Participants verbalized spiritual and existential beliefs such as hope, purpose and the meaning of life in a comprehensive and holistic contribution for their AtA. Moreover, participants reported that sense of limit (e.g., biological finitude) and valorization of age and time were relevant as indicators of AtA. Furthermore, having a connection and devotion to life were verbalized as indicating for their AtA.

‘Spiritual activities’ was the most verbalized sub-category for the participants (20.0%), whereas ‘spiritual community’ was the least referred category (1.7%), as seen in Table 3.

‘Valorization of time’ was the most mentioned sub-category by German participants (18.3%) and ‘spiritual activities’ was the most reported sub-category by Portuguese participants (23.6%), whilst ‘spiritual community’ was the least verbalized sub-category for German participants (1.9%) and Portuguese participants (1.4%) (see Table 3).

‘Altruism’ was verbalized as relevant for the spirituality of these participants. Moreover, the concern for sharing and gratitude was reported as the focus of the spirituality for these participants. As an example, participant 42 indicated that “life is a matter of giving and receiving.”

‘Spiritual community’ was pointed out as central for the spirituality of these participants. Being in interaction with other individuals in spiritual settings was indicated as important for their spirituality. “As a person, I feel welcomed and valued in my spiritual community.” was reported by participant 119.

‘Spiritual beliefs’ was indicated as fundamental to the spirituality of these participants. Additionally participants verbalized the need for harmony and beauty such as in music and nature, as relevant for their spirituality. In this context, participant 134 indicated that “*I believe in respecting life in all forms, in trusting others, in trusting myself.*”

Practicing spiritual activities such as meditation and yoga was pointed out as relevant to the spirituality for older persons. As an illustration, participant 154 indicated that “*I don’t feel old. I’ve been practicing yoga for 32 years now. It’s not just exercise, I’s a way of being.*”

Participants verbalized *existential meaning* as an important component of their spirituality. For these participants, spirituality was defined by having a purpose in life and by having a faith in themselves and in humankind. Participant 12 exemplified this by verbalizing

that *“the awareness that I have a direction and a purpose in my life is what makes me feel good with my age and with myself.”*

Participants reported the perspective of the end of their lives and the effect of the absence of dear ones, as important spiritual aspects. Moreover, older adults verbalized the notion of life after death. Participant 7 indicated that *“aging made me understand that I will not be here forever.”*

Valuing age was considered important by these participants for their spirituality. Moreover they verbalized that age brought them the maturity to balance the importance of their age. Participant 48 clarified this sub-category by indicating that *“I balance everything in my life and I can only feel a sense of fulfillment and quietude.”*

Participants indicated that old(er) age brought them the understanding of life as a valuable time. As an example, participant 48 reported that *“I am aware now that I will not live forever, therefore I want to make the most of my time.”*

Furthermore, to analyze if nationality, sex and age were associated with spirituality, Cramers' V, Phi and Pearson correlation coefficient were used, respectively. Cramer' V was used for nationality since it is a categorical variable. Phi was employed for sex as it is a quantitative binary variable, and Pearson was used for age since it is a quantitative continuous variable (Maroco, 2011). In detail, no associations were found between these demographic variables and the *spirituality* total score. However, a significant moderate association was found between *spiritual activities* and nationality ( $V = .365$ ;  $p < .001$ ) and between *spiritual beliefs* and sex ( $\Phi = .263$ ;  $p = .020$ ). Finally, a negligible association was found between *sense of limit* and age ( $r = -.166$ ;  $p = .040$ ).

#### 4.1.2. Health and Autonomy

Participants reported the importance of being healthy and physically well, as contributing to their AtA. As an example, participant 43 expressed that *“my body well-being is essential for me. A simple cold can be very distressful for me.”*

#### 4.1.3. Occupation

Occupation (e.g., working, traveling) and accomplishments (e.g., artistic projects) were verbalized by participants as contributing to AtA. Participant 113 indicated that *“I'm still working as a homoeopathic doctor and I have plenty to do.”*

#### 4.1.4. Social Embeddedness

Friends, family, professional peers and neighbours were indicated as relevant indicators of AtA. Participant 12 reported that “*My children are always there for me.*”

#### 4.1.5. Economic Situation

‘Economic situation’ and financial autonomy (e.g., income from their own work) was verbalized as contributing to these participants’ AtA. Participant 29 expressed that “*I earn my own money.*”

Table 2.

*Emergent categories resulting from content analysis of the pre-category ‘indicators of AtA’*

	German		Portuguese		Total	
	Category frequency	Category percentage	Category frequency	Category percentage	Category frequency	Category percentage
Indicators of AtA						
Occupation	115	12.0	160	16.0	275	14.0
Health and Autonomy	202	21.1	221	22.1	423	21.6
Spirituality	417	43.6	428	42.8	845	43.2
Social Embeddedness	130	13.6	84	8.4	214	10.9
Economic Situation	93	9.7	108	10.7	201	10.3
Score of pre-category ‘indicators of AtA’	957	100.0	1001	100.0	1958	100.0

Table 3.  
*Emergent categories resulting from content analysis of the pre-category 'spirituality'*

	German		Portuguese		Total	
	Category frequency	Category percentage	Category frequency	Category percentage	Category frequency	Category percentage
Spirituality						
Altruism	11	2.6	9	2.1	20	2.4
Spiritual Community	8	1.9	6	1.4	14	1.7
Spiritual Beliefs	62	14.9	51	11.9	113	13.4
Spiritual Activities	68	16.3	101	23.6	169	20.0
Existential Meaning	56	13.4	49	11.4	105	12.4
Sense of Limit	61	14.6	64	15.0	125	14.8
Valorization of Age	75	18.0	74	17.3	149	17.6
Valorization of Time	76	18.3	74	17.3	150	17.7
Score of pre-category 'spirituality'	417	100.0	428	100.0	845	100.0

#### 4.2. Multiple Correspondence Analysis of the Emergent Domains

MCA assessed the correlational structure of the category in our study: spirituality. Therefore, findings indicated a model for spirituality, with diverse dimensions and dimension loadings.

Results suggested a three-dimension model (accounting for 88.6% of total variance explained by the three dimensions) composed by: 'spiritual and existential meaning', 'limit-related awareness' and 'community embeddedness', as a best-fit solution (see Table 4) for the participants.

Table 4.  
*Three-dimensional representation for the 'spirituality': factor loadings for each dimension, mean loadings and % inertia (variance) explained*

Sub-categories	Dimensions			Mean
	Spiritual and Existential Meaning	Limit-Related Awareness	Community Embeddedness	
Altruism	.063	.013	<b>.841</b>	.305
Spiritual Community	.116	.040	<b>.762</b>	.306
Spiritual Beliefs	<b>.790</b>	.074	.053	.306
Spiritual Activities	<b>.824</b>	.095	.046	.322
Existential Meaning	<b>.791</b>	.106	.050	.316
Sense of Limit	.005	<b>.545</b>	.003	.185
Valorization of Age	.281	<b>.647</b>	.005	.311
Valorization of Time	.281	<b>.647</b>	.005	.311
Eigenvalue	3.150	2.168	1.766	2.361
Inertia	.394	.271	.221	.295
% of Variance	39.381	27.095	22.077	29.517

## 5. Discussion

‘Spirituality’ was the most verbalized indicator of AtA for the participants. This result was in line with previous studies (Hybels et al., 2012; Jewell, 2004). Conversely, ‘economic situation’ was the least referred indicator of AtA. Previous literature stressed the importance of a stable economic environment for older adults (Birren & Schaie, 1996).

‘Spiritual activities’ was the most reported theme regarding spirituality whereas ‘spiritual community’ was the least reported theme. Growing literature emphasizes a specific spirituality as people grow older (MacKinlay, 2001). In fact, previous studies pointed out spirituality as comprising non-tradition-centered beliefs and practices such as meditation (Dillon & Wink, 2007) or without following any particular set of religious beliefs (Davidhizar, Bechtel, & Cosey, 2000). Conversely, in a recent study with Japanese older adults, spirituality was associated with religion (Krause, et al., 2010).

Furthermore, valorization of age and time and sense of limit were also frequently pointed out categories. Conversely, altruism was one of the least indicated categories.

Literature suggested that older adults include a limited or near-future focus, when perceiving aging and spirituality (Fung, Lai, & Ng, 2001). Additionally, altruism was linked to spiritual experiences, generativity and longevity in late adulthood (Post, 2005).

Concerning the cross-national data, 'spirituality' was the most verbalized indicator of AtA for both nationality groups. Moreover, no significant association was found between nationality, sex and age, and spirituality, for the spirituality total score. Yet, the existing associations of 'spiritual beliefs' with sex, of 'spiritual activities' with nationality, and of 'sense of limit' with age corroborate the fact that the dimensions of spirituality can be experienced differently among the older populations from different nationality, sex and age (Cohen et al., 2008).

The association of spiritual activities with nationality led us to hypothesize that this was due to cross-cultural differences between Germans and Portuguese. Germans highly consider autonomy and independence whereas Portuguese valorize family values and interdependence. Additionally, considering that, the first ones are mainly Protestants and the second essentially Catholics, we posited that the diverse cultural and religious backgrounds may have had a relevant role in both German and Portuguese groups' spiritual activities (Cohen & Saroglou, 2011). Furthermore, national, cultural, age and gender differences may influence the process of aging (Löckenhoff et al., 2009; Neri, Cachioni, & Resende, 2002).

Regarding 'spirituality', the largest dimension, 'spiritual and existential meaning', accounted for 39.4% of total variance. 'Community embeddedness' was the least representative dimension for these participants (22.1% of total variance).

The MCA regarding the correlational structure of the pre-category: 'spirituality', stressed that this was largely explained by a three-dimension model. Hence, for these participants, 'spiritual beliefs', 'spiritual activities' and 'existential meaning' constituted the first dimension ('spiritual and existential meaning'). Increasing number of persons identified themselves not as religious in a traditional sense but rather as spiritual in their orientation to life (McFadden, 1996). Furthermore, previous literature highlighted the holistic nature of older individuals' spirituality (Snodgrass, 2009) and the development and fulfillment when the life cycle is nearly complete (Tornstam, 2005).

Moreover, three major sources of meaning include meaningful work or good deeds, authentic encounters with others, and the attitude one chooses to adopt when faced with an

uncontrollable situation (Malette & Oliver, 2006). In fact, feeling significant and attributing existential meaning to events were associated with well-being (Wong, 2000).

The second dimension ('limit-related awareness') gathered 'sense of limit', 'valorization of age' and 'valorization of time'. Spiritual dimensions were positively related with recovery from grief following bereavement (Edmonds & Hooker, 1992) and negatively correlated with fear of death and death avoidance (Tomer & Eliason, 2000). Wong (2000) suggested that the challenge of successful aging was to discern the transcendental meaning of life and death. Moreover, admitting to oneself that one is close to dying is likely to be influenced by one's general acceptance of and attitudes toward death (Neimeyer, Wittkowski, & Moser, 2004). Furthermore, awareness of mortality and of limit for living was associated to older adults' concerns about end-of-life issues (Lockhart et al., 2001).

Moreover, in our study, the third dimension ('community embeddedness') comprised 'altruism' and 'spiritual community'; hence these participants were focused on their selflessness values and on involving themselves in their spiritual communities. Involvement in spiritual activities such as public spiritual participation might offer social support in spiritual settings, connectedness with other people and sense of community, a positive influence on life style and an available interpretation of the meaning of life events (Dillon & Wink, 2007).

Gerontologists often emphasize the importance of older persons' embeddedness in dense, kin-centered social and purposeful networks (Cornwell, 2011). Furthermore, some scholars have taken the view that friends may be more contributive to well-being of older adults than the family (Krause & Rook, 2003). It must be noted that older adults live within a relatively steady social network which provides regular contact over time (Lang, 2001). Furthermore, participation in social activities can mediate the direct relationship between extraversion and happiness (Oerlemans, Bakker, & Veenhoven, 2011).

Several limitations of this study merit discussion. While a diverse sample of participants was recruited, considering the non-probabilistic nature of this study and its proneness to sampling bias, the sample is not representative of the entire population and cannot lead to generalizations and inference making about the entire older population (Bogdan & Biklen, 2006) but only reveal the perceptions of our participants.

The sampling of participants was performed purposefully (Miles & Huberman, 1994), with the objective of facilitating the understanding of the indicators of AtA and the under-developed potential of spirituality to AtA.

Even though the interviews were conducted with a view to being bias free, one core area was predefined to be addressed. Thus, interviews tended to be steered to this area which could have biased the results.

Notwithstanding these limitations, the present study represents an important first empirical step in understanding the potential of spirituality to AtA. We consider that these user-driven outcomes can form part of a broad assessment for older adults and that can be useful in clinical practice and health care planning. The support on variety of aging well presented in this paper is an important contribution to the under-developed potential of a model of spirituality to AtA in this population.

Also, because an increasing number of older adults identify themselves as spiritual in their orientation to life, rather than religious in a traditional sense, gerontologists need to expand their horizons of interest to include spiritual practices and ritual expressions that are not necessarily associated with religion. In conclusion, we consider the questions about spirituality to be key aspects for the adjustment to the process of aging of older people and that spirituality can be perceived differently in different nationalities, thus by exploring these issues in greater depth, gerontologists will at least be better able to enlighten the value of aging well.

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**PART III**

**ADJUSTMENT TO AGING AND SUBJECTIVE WELL-BEING IN LATE  
ADULTHOOD: CROSS-SECTIONAL QUANTITATIVE STUDIES**

**Paper 6. Assessing adjustment to aging: A validation study for the Adjustment to Aging Scale (AtAS)**

**Submitted to Social Indicators Research**

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Submitted to Social Indicators Research

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## 1. Abstract

**Purpose of the study:** Adjustment to aging (AtA) is a multi-factor adjustment process with implications on aging well among older adults. The aim of this study was to develop and validate a scale to assess the factors that older adults recognized as indicators of their AtA, with a cross-national comparative perspective towards aging well.

**Design and Methods:** Convenience sampling was used to gather questionnaire data, including demographics and the proposed scale. Complete data was available for 1,291 older community-dwelling adults, aged between 75-102 years ( $M = 83.9$ ;  $SD = 6.68$ ), who represented four different nationalities. Exploratory and confirmatory factor analyses were performed for dimension reduction and exploration of the factorial structure.

**Results:** Data gathered with the 22-items AtA 5-factor scale showed overall good psychometric properties (in terms of distributional properties, statistical significant factor weights, factorial, convergent, discriminant criterion and external-related validities, as well as reliability). Five factors were selected for the Adjustment to Aging Scale (AtAS): (a) sense of purpose and ambitions (SPA) (b) zest and spirituality (ZS); (c) body and health (BH); (d) aging in place and stability (APS); and (e) social support (SS).

**Implications:** We present a 22-item scale with five factors for AtA estimation in a cross-national elderly population which produced valid and reliable data for elder persons from four different nationalities. Results evidence that this scale is an adequate cross-cultural instrument for research, clinical practice and program development in the health care context. These may benefit from clearly understanding AtA as an important component for reducing health disparities and for aging well, across nationalities.

**Key Words:** Adjustment to aging; aging well; older adults; instrument; psychometric validation.

## 2. Introduction

Population aging has become a worldwide reality. Indeed, the United Nations estimated that, by 2050, 16.5% of the total population will be 65 years old and older (Gavrilov and Heuveline 2003). Developed countries have relatively high proportions of elderly populations, however the most rapid increases are taking place in the developing countries (Kinsella & Velkoff, 2001). Still, Europe has the highest proportion of population aged 65 and over. By 2050 (as of 2005) the population aged 65 and over will have a 68% increase (133 million by 2050; 29% of total population) (Gavrilov & Heuveline, 2003).

Aging is an enduring process, which requires continuous adjustment (Birren & Schaie, 1996; Brozek, 1966). Moreover, cultural and national changes may influence the process of aging (Barak, 2009; Torres, 2003). To assess adjustment, psychometric scales and inventories, namely the Your Activities and Attitudes Questionnaire and the Cavan Adjustment Scale were developed (Cavan et al., 1949). These included items such as feelings of happiness, usefulness, activities, health and economic status. It has been argued that the process of adjustment to aging (AtA) results from the dynamic interaction of elements such as autonomy, control, self-acceptance, personal growth, social network and purpose in life (Bauer & McAdams, 2004; Keyes et al., 2002; Slangen-Dekort et al., 2001; Staudinger & Kunzmann, 2005).

Developments on the scientific study of this process, conceptualized AtA as a psychometric construct, according to the identity process theory, which involved three processes: identity assimilation (maintaining self-consistency); identity accommodation (making changes in the self); and identity balance (maintaining a sense of self but changing when necessary) (Sneed & Whitbourne, 2005).

However, different models have been proposed for the AtA construct. For example, according to Brandstädter and Greve's model, the adjustment of a person's goals and aspirations in the face of age-related challenges corresponds to what the authors named 'accommodation' (Brandstädter & Rothermund, 2003).

In Sneed and Whitbourne's study, reliance on identity assimilation was found to be higher in older adults, in comparison to identity accommodation. However, these results did not corroborate Brandstädter and Renner's model, which pointed out an accommodative shift in later adulthood.

Thomae (1992) suggested that AtA was achieved when a balance between the person's cognitive and motivational systems is attained. Furthermore, the 'selective optimization with compensation model' suggests that a successful aging corresponds to a general process of adjustment, in which the three elements – selection, optimization and compensation – constitute the basic component processes for changes regarding aging and adaptive capacity (Baltes & Smith, 2003; Freund & Baltes, 1998). More recently, Jopp and Rott (2006) also suggested that basic resources (e.g., cognition, health), self-referent beliefs (e.g., self-efficacy) and attitudes toward life (e.g., optimistic outlook) were pertinent for AtA in older ages.

In brief, the previous theoretical models highlight the importance of identity processes, socio-demographic resources (e.g., health, economic situation), attitudes towards life, psychological characteristics, and processes for changes regarding aging and adaptive capacity. Yet, findings present no consensus in literature concerning their role on AtA.

Furthermore, variables such as emotional engagement with significant others and interpersonal intimacy have not been stressed in these models. However, previous qualitative studies specifically highlighted the importance of significant social interaction for the process of adjustment in late adulthood (Bar-Tur et al., 1998; von Humboldt et al., 2012).

Similarly, older adults' spirituality was not specified in previous research as contributing to AtA. Yet, the concept of spirituality was found to be relevant to well-being in late adulthood (Staudinger & Kunzmann, 2005). Moreover, aging in place has had an important environmental role (Bowling & Dieppe, 2005) in older adults' aging well. Surprisingly, this factor was not identified in previous models, although basic resources, such as economic status, have been pointed out. Despite the findings described above, a valid and reliable evaluation of the AtA construct has been absent from the literature on older adults. Finally, to date, we found no studies that explored older adults' AtA, simultaneously, in a multi-dimensional and cross-cultural perspective.

Considering that the concept of health implies the attempt of maximum functionality of the individual (Eriksson & Lindstrom, 2006), the construct of AtA is pertinent for a salutogenic approach focused on the well-being, health, and adapted functioning in older adults (Brandtstädter & Rothermund, 2003; Schafer & Shippee, 2010). However, little attention has been paid to the AtA construct, as proximate, yet distinct from well-being (Al-Janabi et al., 2012; Diener et al., 1999; Kesebir & Diener, 2010; Kozma, Stones, & McNeil, 1991; Lohman, 1977; Pavot & Diener, 2004), sense of coherence (Antonovsky, 1993), quality

of life (Fernández-Ballesteros, 2010; Low & Molzahn, 2007) and successful aging (Reichstadt et al., 2010; Ryff, 1982, 1989).

Furthermore, AtA is also a key consideration for policy-makers, research and health practitioners that aim at further comprehending the implications of older ages and aging well (Lohman, 1977; Slangen-Dekort et al., 2001; Staudinger & Kunzmann, 2005).

Because this study attempted to conceptualize AtA from the older adults' perspectives, a qualitative study was previously conducted, in order to uncover the uniqueness of the multicultural context of aging and adjustment (von Humboldt et al., 2012). Furthermore, we assert that the development of a reliable and valid measure to assess AtA is a pertinent research subject. Therefore, this study aimed at making a relevant contribution to the existing literature by: (a) identifying the structural dimensions of AtA in older adults; (b) developing a cross-national instrument specifically for estimating older adults' AtA; and (c) evaluating the psychometric properties of the gathered data with the proposed scale in a cross-national sample of older adults.

### 3. Design and Methods

#### 3.1. Participants

A total of 1,291 eligible, community-dwelling participants were recruited from lifelong learning centres' message boards, local and art community centres' list-servers in Lisbon metropolitan area and in the Algarve region (in Portugal). The recruitment of participants was based on the availability of respondents, with the objective of facilitating the assessment of AtA in a cross-national sample. We used the same recruitment strategy for the four nationalities.

The average age of the sample was 83.9 ( $SD = 6.68$ ; range = 75-102). Participants (58.2% female, 56.2% married, 52.6% living in rural areas) were nationally diverse (Angolan, Brazilian, English and Portuguese) and resided in Portugal for more than 10 years. The participant's nationality was assessed based on their place of birth. Angolan, Brazilian and English individuals were included since these three are part of the most represented foreign nationalities with residence in Portugal (Instituto Nacional Estatística, 2011). Because Lisbon and the Algarve are the two most important regions of residence of the foreign community,

our participants were recruited in the cited locations (Instituto Nacional Estatística, 2011). Table 1 shows the socio-demographic characteristics of the participants.

Participants eligibility criteria were the following: (1) 75 years of age or older; and (2) participants' scoring in the normal range on the Mini-Mental State Examination (MMSE) (>26) (Folstein, Folstein, & McHugh, 1975). None of the participants had any history of psychiatric or neurological illness, or history of drug or alcohol abuse, which might compromise cognitive functioning.

Considering that for many healthy adults, middle age is lasting longer than it did in the past and that there has been no general agreement among cultures on the age at which a person becomes old (Deeg, 2005; United Nations, 2007), this research comprised a community sample of individuals aged 75 years or older, in which the multi-dimensionality of AtA may be fully assessed.

Although Portuguese was the predominant primary language spoken by all the participants, 26.4% (corresponding to the English participants) had a primary language other than Portuguese. The English participants completed the measures under the supervision of a researcher fluent in both Portuguese and English, in case they needed to seek clarification with regards to any aspect of the study.

Table 1.  
*Distribution of the study's participants according to socio-demographic and health-related characteristics*

	Angolan		Brazilian		English		Portuguese		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<i>N</i>	285	22.1	314	24.3	341	26.4	351	27.2	1291	100.0
Age	83.5		84.3		84.0		83.6		83.9	
( <i>M</i> ; <i>SD</i> )	(6.755)		(6.408)		(6.586)		(6.933)		(6.677)	
Gender										
Female	162	56.8	201	64.0	191	56.0	197	56.1	751	58.2
Male	123	43.2	113	36.0	150	44.0	154	43.9	540	41.8
Education										
Primary	50	17.5	56	17.8	48	14.1	53	15.1	207	16.0
Middle	84	29.5	91	29.0	91	26.7	94	26.8	360	27.9
High	108	37.9	120	38.2	149	43.7	138	39.3	515	39.9
University degree or higher	43	15.1	47	15.0	53	15.5	66	18.8	209	16.2
Marital Status										
Married or in a relationship	172	60.4	176	56.1	179	52.5	198	56.4	725	56.2
Not married or in a relationship	113	39.6	138	43.9	162	47.5	153	43.6	566	43.8
Professional Status										
Inactive	147	51.6	149	47.5	195	57.2	179	51.0	670	51.9
Active	138	48.4	165	52.5	146	42.8	172	49.0	621	48.1
Family Annual Income										
≤10,000 €	142	49.8	172	54.8	150	44.0	176	50.1	640	49.6
>10,000 €	143	50.2	142	45.2	191	56.0	175	49.9	651	50.4
Religion										
Yes	211	74.0	219	69.7	227	66.6	257	73.2	914	70.8
No	74	26.0	95	30.3	114	33.4	94	26.8	377	29.2
Perceived Health										
Good	148	51.9	151	48.1	194	56.9	162	46.2	655	50.7
Poor	137	48.1	163	51.9	147	43.1	189	53.8	636	49.3

*Note:* Total sample, *n* = 1,291; *SD* = standard deviation.

### 3.2. Measures

For the purposes of this study, four instruments were included: a) our proposed Adjustment to Aging Scale (AtAS); b) the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988); c) the Satisfaction with Life Scale (SwLS) (Diener et al., 1985); and d) the Orientation to Life Questionnaire (OtLQ) (Antonovsky, 1993). Additionally, one measure of cognitive functioning, the MMSE and a demographics questionnaire, were used.

The ‘Satisfaction with Life Scale’ is a 5-item Likert-type scale (sample item: “I am satisfied with life”) and rated from 1 = *strongly disagree* to 7 = *strongly agree*. The internal consistency proved to be good ( $\alpha = .78$ ) (Diener et al. 1985). The 20-item Positive and Negative Affect Schedule is rated from 1 = *very slightly or not at all* to 5 = *extremely* and is composed by two subscales, one measuring positive affect (sample item: “Excited”) and the other measuring negative affect (sample item: “Afraid”), both with a high internal consistency ( $\alpha = .88$  and  $\alpha = .87$ , respectively) (Watson, Clark, & Tellegen, 1988).

The ‘Orientation to Life Questionnaire’ is a 29-item Likert-type scale, rated from 1 = *never* to 7 = *always* and composed by three subscales: comprehensibility (sample item: “When you talk to people, do you have the feeling that they don’t understand you?”); manageability (sample item: “Has it happened that people whom you counted on, disappointed you?”); and meaningfulness (sample item: “Do you have the feeling that you don’t really care about what goes on around you?”). The internal consistency proved to be high ( $\alpha = .82$ ) (Antonovsky, 1993).

The ‘Mini-Mental State Examination’ is a 11-question measure that tests five areas of cognitive function: orientation, registration, attention and calculation, recall and language (sample item: “What is today’s date?”). The authors recommended that the following cut-off levels be used for classification purposes: normal cognitive function = 27-30, mild cognitive impairment = 21-26, moderate cognitive impairment = 11-20, and severe cognitive impairment = 0-10. This measure has been validated and extensively used in both clinical practice and research. The test-retest reliability proved to be high (0.89), as well as the inter-rater reliability (0.82) (Folstein, Folstein, & McHugh, 1975; Foreman et al., 1996).

### 3.3. Procedure

Participants were provided with a brief description of the study over the phone or in person and were invited to participate in the study, emphasizing that the participation in this research was voluntary and that participants could interrupt their collaboration at any time, without any consequences. Informed consent was received from all participants. The American Psychological Association's standards on the ethical treatment of participants were followed.

A preliminary pilot study was conducted with five respondents, to ensure the full and accurate understanding of the items. The choice of words was then changed accordingly, in order to be easily understood by a broad range of respondents. The scale was applied to the respondents in the final sample. Nine participants were excluded due to incorrect completion of the instruments. The Portuguese Foundation for Science and Technology (FCT) and ISPA – Instituto Universitário approved this study.

### 3.4. Item generation

Items assessing the AtA were compiled from three distinct sources: (a) Semi-structured interviews on the subject of AtA; (b) AtA and well-being literature and pre-existing AtA-related instruments (Cavan et al., 1949; Havighurst & Albrecht, 1953); and (c) researchers' clinical experience and specific knowledge on aging of three consultants (one gerontologist and two psychologists).

Semi-structured interviews were initially used to explore the different conceptualizations of AtA, as described by a cross-national purposeful sample of 151 older adults aged 75 and older, living in the community. The transcripts of these interviews were subjected to content analysis, and then reviewed by two independent judges (psychologists). A final group co-resolution regarding the five categories which were indicative of AtA in this preliminary study, was made: 'sense of purpose and ambitions', 'health and wellness', 'social support', 'stability and accessibility' and 'existential meaning' (von Humboldt et al., 2012).

Following the qualitative content analysis, 127 items were initially generated for our proposed AtAS (sample item: "Having spiritual, religious and existential values."). These items were then appraised by our sample of 1,291 older adults.

### **3.5. Question format**

For each AtAS' item participants were asked how important the indicator was for them in the present moment in their lives. Responses were organized in a seven-point rating scale ("Not important at all", "Moderately not important", "Slightly not important", "Neutral", "Slightly important", "Moderately important" and "Absolutely important").

### **3.6. Item Reduction**

After conducting an exploratory factor analysis, 105 items from the 127 were eliminated, because they were absent in at least 50% of the sample, presented poor association with the factor to which they were predictably associated in the exploratory factor analysis, did not show adequate internal consistency or presented absolute values of kurtosis higher than 7 and/or skewness higher than 3.

### **3.7. Statistical and Psychometric Analysis**

To assess the psychometric qualities of the measures assessed by the scale, construct-related, content and criterion validity, reliability and distributional properties were evaluated for the Adjustment to Aging Scale (AtAS). Moreover, external validity in two independent samples was also assessed.

An exploratory factor analysis (EFA) was performed to explore the scale's factor structure, using the principal components method with varimax rotation. Data were analyzed using SPSS for Windows (version 19.0). This analysis was made in 60% of the total sample, randomly selected. To verify the external validity of the EFA model, a confirmatory factor analysis was conducted using SPSS - AMOS for Windows (version 20.0) on the remaining 40% of the total sample (Byrne, 2001; Maroco, 2010). The invariance of the factorial model for the four nationalities was tested through multi-group analysis comprising the sample (Maroco, 2010).

The convergent validity of the AtA factors was demonstrated through the average variance extracted (AVE). AVE higher than .50 is indicative of convergent validity (Fornell & Larcker, 1981; Maroco, 2010).

The discriminant validity was explored comparing the inter-factors' squared correlation with the AVE of each individual factor. In order to have discriminant validity the

squared correlation between factors should be smaller than each factors' individual AVE (Fornell & Larcker, 1981; Maroco, 2010).

Content validity was verified through a jury of seven gerontology professionals who individually rated the 22 items. An item has content validity when more than half the raters indicate that it is essential (Laswhe, 1975).

Criterion validity was explored using Pearson's correlation with similar constructs. Because, AtA construct, is a proximate, yet distinct from subjective well-being (Diener et al., 1999; Lohman, 1977; Pavot & Diener, 2004) and sense of coherence (Antonovsky, 1993), three scales measuring the above constructs were used, namely, PANAS, SwLS and OtLQ.

Distributional properties were explored through the analysis of minimum and maximum values, mean, skewness and kurtosis. Values are expected to range from 1 to 7, and skewness and kurtosis are expected to have values below 3 and 7 respectively. Reliability was studied applying the Cronbach's alpha and composite reliability. For exploratory research, alpha values should be above .70 (Maroco, 2010).

## **4. Results**

### **4.1. Distributional Properties**

To address the distributional properties, the range and distributions of the Likert-type items were explored, as well as the skewness and kurtosis values. To evaluate the distributional properties of the total scale and subscales, minimum and maximum values, as well as skewness and kurtosis were also explored for the five sets of items (see Table 2). No skewness and kurtosis values were indicative of severe departures from the normal distribution which could recommend against further statistical inference analysis.

Table 2

*Mean and standard deviation, minimum and maximum values, skewness, kurtosis, average variance extracted and internal consistency*

	<i>M</i> ( <i>SD</i> )	<i>Min</i>	<i>Max</i>	Skewness	Kurtosis	Average variance extracted	Composite reliability	Cronbach' s alpha
Sense of Purpose and Ambitions	5.27 (1.247)	1	7	-.529	.096	.684	.894	.874
1. Being active and working at something that I like	5.38 (1.336)	1	7	-.626	.001			
2. Having curiosity and an interest in learning	5.07 (1.655)	1	7	-.690	-.226			
3. Creating and being creative	5.35 (1.436)	1	7	-.775	.268			
4. Leaving a mark and seed the future	5.29 (1.412)	1	7	-.587	-.140			
Zest and Spirituality	3.91 (1.441)	1	7	.406	-.061	.768	.941	.927
1. Laughter and having fun	3.97 (1.525)	1	7	.333	-.046			
2. Having spiritual, religious and existential values	3.98 (1.515)	1	7	.347	-.027			
3. Accepting changes	3.87 (1.832)	1	7	.150	-.755			
4. Making the best of my age	3.92 (1.535)	1	7	.355	-.050			
122. Feeling relaxed about the future	3.81 (1.756)	1	7	.106	-.618			
Body and Health	4.32 (1.480)	1	7	.081	-.556	.683	.912	.904
1. Being healthy, without pain or disease	4.32 (1.629)	1	7	.086	-.585			
2. Sports and outdoor activities	4.28 (1.837)	1	7	-.223	-.902			
3. Living autonomously and at my own rhythm	4.52 (1.804)	1	7	-.253	-.772			
4. Not being dependent on medication or treatments	4.31 (1.642)	1	7	.093	-.620			
5. Appreciating my body and appearance	4.16 (1.789)	1	7	.091	-.703			
Aging in Place and Stability	4.32 (1.396)	1	7	.017	-.724	.582	.871	.862
1. Having mobility and getting out of the house	4.41 (1.561)	1	7	.015	-.408			
2. Supportive neighbors	4.15 (1.881)	1	7	-.147	-1.039			
3. Good climate	4.28 (1.790)	1	7	-.160	-.889			
4. Safety	4.40 (1.680)	1	7	-.116	-.619			

5. Having comfort and economic stability	4.37 (1.761)	1	7	-0.226	-0.874			
Social Support	4.16 (1.653)	1	7	-0.174	-0.732	.840	.939	.932
1. Sharing intimacy with a partner	4.08 (1.740)	1	7	-0.110	-0.830			
2. Having a good partner in life	4.32 (1.816)	1	7	-0.323	-0.937			
3. Being cherished by my family	4.09 (1.728)	1	7	-0.103	-0.791			
Total score AtAS	4.38 (.9212)	1	7	.159	-0.474		.980	.891

## 4.2. Construct Related Validity

The exploratory factor analysis was performed on 60% of randomly selected data, from the total sample of older adults. Factors extracted were those with eigenvalue greater than one and theory-supported. The best-fit solution was a five-factor structure, excluding 105 items from an original set of items. The sampling adequacy for EFA was confirmed by the Kaiser-Meyer-Olkin test ( $KMO = .867$ ) and the total variance explained by this five-factor structure was 75.6%. The total score included twenty-two items and the final structure was arranged in the following five factors: (a) ‘sense of purpose and ambitions’ (SPA) (sample item: “Being active and working at something that I like”) (b) ‘zest and spirituality’ (ZS) (sample item: “Accepting changes”) (c) ‘body and health’ (BH) (sample item: “Appreciating my body and appearance”); (d) ‘aging in place and stability’ (APS) sample item: “Supportive neighbors”); and (e) ‘social support’ (SS) (sample item: “Being cherished by my family”).

Table 3 shows the range of all items’ loadings in each of the five proposed factors.

Table 3.  
*Range of items' loadings, variance explained and eigenvalue for each factor*

Factors	Items	Range of items loadings	Variance explained by factor (%)	Eigenvalue
1. Sense of Purpose and Ambitions	1. Being active and working at something that I like	.657-.914	13.478	1.996
	2. Having curiosity and an interest in learning			
	3. Creating and being creative			
	4. Leaving a mark and seed the future			
2. Zest and Spirituality	1. Laughter and having fun	.721-.949	18.755	7.162
	2. Having spiritual, religious and existential values			
	3. Accepting changes			
	4. Making the best of my age			
	122. Feeling relaxed about the future			
3. Body and Health	1. Being healthy, without pain or disease	.711-.915	16.766	3.426
	2. Sports and outdoor activities			
	3. Living autonomously and at my own rhythm			
	4. Not being dependent on medication or treatments			
	5. Appreciating my body and appearance			
4. Aging in Place and Stability	1. Having mobility and getting out of the house	.700-.816	14.802	2.263
	2. Supportive neighbors			
	3. Good climate			
	4. Safety			
	5. Having comfort and economic stability			
5. Social Support	1. Sharing intimacy with a partner	.860-.930	11.823	1.789
	2. Having a good partner in life			
	3. Being cherished by my family			
Total score AtAS		.657-.949	75.623	

#### 4.2.1. Convergent Validity

All factors presented good AVE scores (i.e., equal or above .50), thus demonstrating the convergent related validity of the factors (see Table 2).

#### 4.2.2. Discriminant Validity

Of the ten paired-factors' possible comparisons, for the existent five factors, the totality showed AVE greater than the corresponding squared correlations between each two pairs of factors. This is evidence of the factors' discriminant related validity.

#### 4.3. Content Validity

All the 22 items presented content related validity (i.e., more than half the raters indicated that the item is essential).

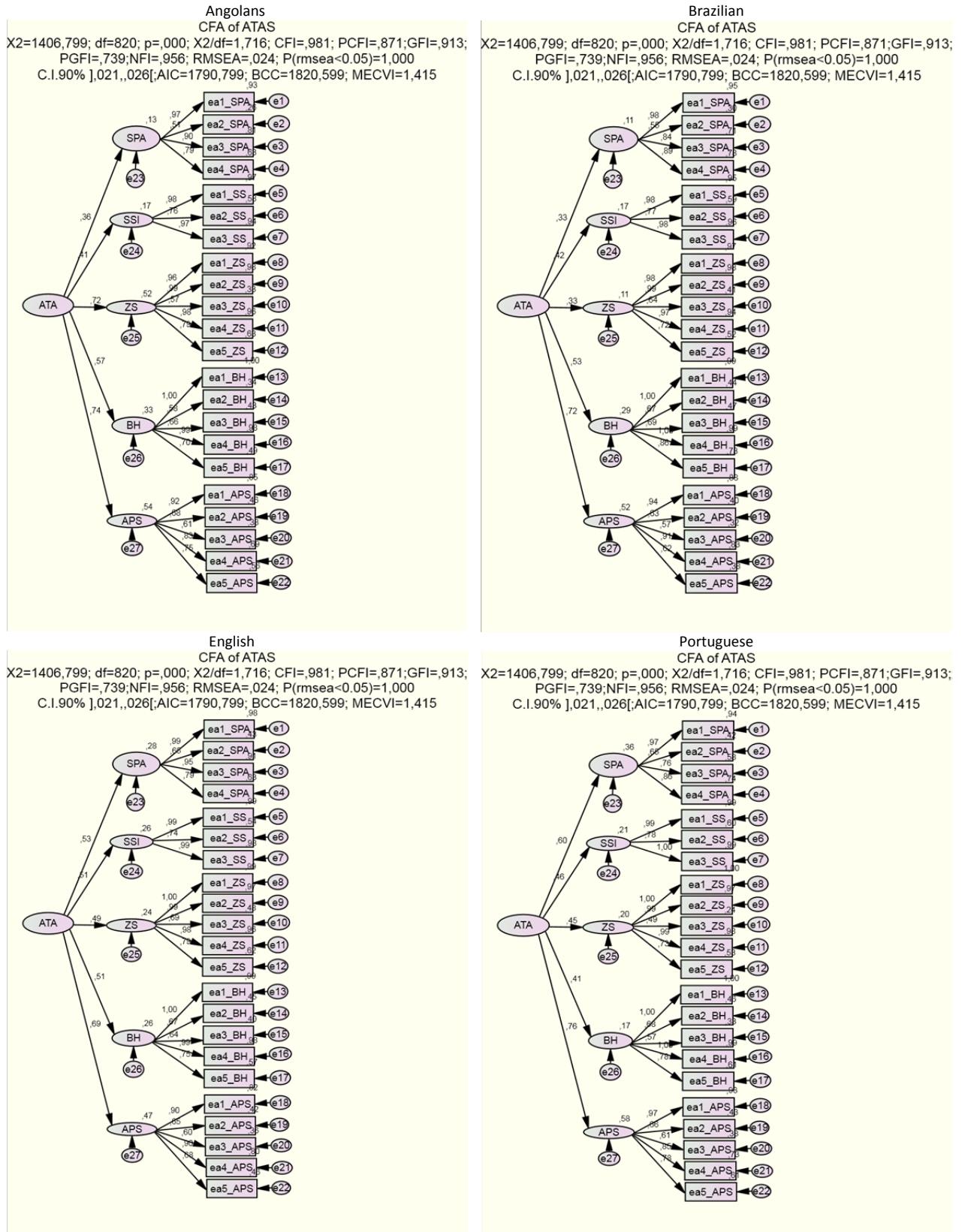
#### 4.4. External Validity

To assess the stability of the five-factor structure obtained in 60% of the sample, a confirmatory factor analysis of the five factors was performed in the remaining 40% of the study sample. The five-factor model showed a good fit to the items' variance-covariance matrix ( $X^2/df = 1.574$ ;  $CFI = .990$ ;  $GFI = .946$ ;  $RMSEA = .034$ ,  $p = 1.000$ ,  $C.I. 90\% [.027; .041]$ ). Since the factorial structure found was stable in both samples (configurational invariance) ( $\Delta X^2(17) = 26.310$ ;  $p = .069$ ) all subsequent analysis were performed in the global sample, obtained by merging the two previous samples.

Considering the 5-possible dimensions of AtA and based in the medium correlations between factors, a second-order construct, the AtAS, was tested. The goodness of fit of the second-order model was practically equal to the goodness of fit indices of the 5-factor model.

The factorial invariance of the AtAS model was also tested through multi-group analysis for the four nationalities comprising the sample. The model showed a good fit to the items' variance-covariance matrix ( $X^2/df = 1.716$ ;  $CFI = .981$ ;  $GFI = .913$ ;  $RMSEA = .024$ ,  $p = 1.000$ ,  $C.I. 90\% [.021; .026]$ ). The factorial structure showed cross-national invariance of the first-order factor weights ( $\Delta X^2(51) = 66.190$ ;  $p = .075$ ) but not of the second-order structural weights ( $\Delta X^2(63) = 108.463$ ;  $p = .000$ ), hence, only weak invariance was observed in the four samples. Figure 1 shows the fit among the four groups.

Figure 1. Multi-group analysis for the four nationalities comprising the sample (Angolans, Brazilian, English and Portuguese)



#### 4.5. Criterion Validity

Divergent criterion validity was shown in the PANAS, SwLS and OtLQ. AtAS' total score was negatively and weakly correlated with PANAS' total score ( $r = -.099$ ;  $p < .001$ ) and with OtLQ total score ( $r = -.202$ ;  $p < .001$ ). Regarding the subscales, divergent validity was observed in the association of all the subscales. The association between zest and spirituality subscale and positive affect was both negative and weak ( $r = -.269$ ;  $p < .001$ ). All the remaining correlations were inferior in absolute value to the correlation reported above. This is evidence that AtAS is measuring a construct different from the ones assessed with PANAS, SwLS and OtLQ. Table 4 shows the correlation matrix for the criterion validity.

Table 4.  
*Bivariate associations for the AtAS, PANAS, SwLS and OtLQ' subscales*

Subscale	Sense of Purpose and Ambitions	Zest and Spirituality	Body and Health	Aging in Place and Stability	Social Support
Positive Affect	-.167***	-.269***	-.118***	-.240***	-.084**
Negative Affect	.119***	.130***	.196***	.009	.167***
Satisfaction with Life	-.010	-.070*	-.030	-.081**	.132***
Comprehensibility	-.016	-.082**	.014	.000	-.052
Management	.000	-.023	.015	.012	-.054
Significance	.054	-.003	-.039	-.032	-.074**

Note: \* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$

#### 4.6. Reliability

The internal consistency of AtAS and its five subscales were also explored. Those measures presented a high composite reliability (.980) and Cronbach's alpha (.891), as presented in Table 2.

### 5. Discussion

The central aim of this study was to develop and validate a scale to assess the items that older adults recognized as indicators of their AtA. In doing so, this study contributes to the literature in two ways. Firstly, the AtAS inventory can form part of a multi-dimensional

assessment of AtA for older people. Secondly, our results added a cross-national comparative perspective of AtA.

AtAS provided data with good psychometric properties. Thus, it may be used to accurately measure the level of adjustment of older adults to aging in cross-national studies with five dimensions of AtA. Together with daily living and health status measures, user-driven outcomes can form part of a comprehensive assessment for older people, as they allow the exploration of pertinent information regarding health policies, service planning and evaluation for this population (Sperlinger et al., 2004). Self-perceptions of aging can be viewed as indicators of successful aging, age identity, and self-regulation processes (e.g., Baltes & Smith, 2003; Heckhausen & Krüger, 1993; Sneed & Whitbourne, 2005). Furthermore, the configurational and weak invariance of the measure in a cross-national older adults sample, points out its cross-cultural suitability for this population. Indeed, growing literature suggests that cultural and national differences may influence the process of aging (Barak, 2009; Löckenhoff et al., 2009; Torres, 2003).

Furthermore, it has been suggested that a healthy, productive and pleasurable lifestyle contributes for aging well (Silverstein & Parker 2002; Smith et al., 2002; Strawbridge et al., 1996; Wahrendorf & Siegrist, 2010). This suggestion was corroborated by this study, given that a large number of participants indicated a perceived good health (50.7% of the total sample). Furthermore, the nature of our community-dwelling sample aims at overcoming a limitation that is usually seen in gerontological research. Many studies are often limited to frail individuals, excluding the extrapolation to a non-clinical population (Manton et al. 1995; Wolinsky et al., 1996), others tend to focus on the prediction of negative outcomes such as morbidity, mortality and disability (Boult et al., 1994; Maddox & Clark, 1992; Nagi, 1976).

‘Social support’ presented the highest internal consistency (.939) and average variance extracted (.840). Growing evidence suggests that social support is relevant for older adults (Bowling, 2007; Low & Molzahn, 2007). In particular, our participants solely pointed out their family and partner as relevant for their AtA. Despite the fact that both family and friends play important support functions (Adams & Blieszner, 1995), some authors argue that friends may contribute more to well-being than family (Cheng et al., 2011; Krause & Rook, 2003).

Growing gerontological literature highlights occupation, sense of purpose and accomplishment as pertinent for older populations (Brodsky, 1988; Kleinspehn-Ammerlahn et al., 2008; Wahrendorf & Siegrist, 2010; Ward, 2010). Our results are in line with this

literature. Specifically in our study, ‘sense of purpose and ambitions’ is a 4-item with a composite reliability of .894. Moreover, since almost half of our participants have an active professional status (48.1% of the total sample) and a large number of participants completed high school (56.1% of the total sample), it is possible that this may have influenced our results.

Recent research focused on the role of environmental (Bowling & Dieppe, 2005) and lifestyle characteristics (Williamson, 2005) for older adults’ well-being and aging well. In line with this, our participants highlighted the relevance of aspects such as a supportive neighborhood, climate, safety, mobility and economic stability, which encompassed ‘aging in place and stability’ as a 5-item factor.

It has been observed that health and lifestyle promotion (e.g. physical activity) contribute for aging well (Bowling, 2007; Smith et al., 2002); given that approximately half of participants reported a good perceived health, this might also explain ‘body and health’ as one of the five factors that emerged from our analysis. Interestingly enough, in particular, the relationship between physical passivity and well-being in older age still remains unclear (Oerlemans et al., 2011). Furthermore, older individuals search for existential meaning and conscious aging (Cornwell, 2011; Malette & Oliver, 2006). Indeed, ‘zest and spirituality’ indicated the highest composite reliability (.941). Such a finding comes as no surprise, as it converges with prior research (Hybels et al., 2012; Mowat 2004). In fact, literature highpoints the development of a specific spirituality as people grow older (MacKinlay, 2001; Malette & Oliver, 2006).

Items included in AtAS were previously generated from the qualitative study implemented with older adults (von Humboldt et al., 2012) and gerontological literature, and therefore, are specifically developed for an older population. Furthermore, this scale comprises an aggregative unique cluster of indicators of AtA, which were, to date, spread in the literature of aging well. Additionally, the cross-national weak invariance of this measure highlights its cross-cultural nature.

In brief, this instrument has been proven to produce data that showed factorial, convergent, discriminant and content related validities. Moreover, divergent criterion validity for data gathered from all the scales and subscales was shown, indicating that AtAS is measuring a construct different from the ones assessed with PANAS, SwLS and OtLQ. Good distributional properties for AtAS and all subscales have been shown. Internal consistency of

the scale and its five subscales substantiated good reliability of the data gathered with this instrument. External validity of the five-factor structure has been found in both groups (60% and 40% of the sample of older adults) and in the four nationality groups.

Future work should avoid some of the limitations to the study. The use of a convenience sampling method could have resulted in some selection bias. Furthermore, more studies are needed to confirm this structure with other samples, ethnicities and nationalities.

Although a cross-national diverse sample of participants was recruited, these lived in Portugal and thus, the propensity for this study to be generalized is limited by the use of a convenience sampling method. Indeed, we could not assume that our participants were representative of those who lived in their native countries.

Although the scale was applied to older adults from 75 to 102 years old, it is believed that this instrument will also be useful in assessing AtA in older adults younger than 75. One limitation to this study is the fact that the psychometric evaluation is limited by the single-point-in-time assessment of AtA. Thus, longitudinal and sequential designs are further needed to explain the stability of the proposed items, scales and subscales. Furthermore, there is an urgent need for good-quality psychometric data, supported by the use of appropriate, valid and reliable measures in clinical settings (Sperlinger et al., 2004). This study is an important contribution to the under-developed potential of this concept in older populations (Jopp & Rott, 2006; Kozma, Stones, & McNeil, 1991; Thomae, 1992). Furthermore, we intend with this research to stress AtA as paramount within future research and health interventions with older adults. In brief, we consider the questions about adjustment to the process of aging to be critical aspects for the aging well of older adults and we propose a valid and reliable cross-national instrument to evaluate AtA.

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**Paper 7. What predicts older adults' adjustment to aging in later life? The impact of sense of coherence, subjective well-being and socio-demographic, lifestyle and health-related factors**

**Submitted to Educational Gerontology**

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## 1. Abstract

**Objective:** The aim of this study was to build a structural model to explore the predictors of adjustment to aging (AtA) in a community-dwelling older population.

**Methods:** A community-dwelling sample of 1270 older adults aged between 75 and 102 years answered a questionnaire to determine socio-demographic (sex, age, professional and marital status, education, household, adult children, family's annual income, living setting and self-reported spirituality), lifestyle and health-related characteristics (perceived health, recent disease, medication and leisure). Several instruments were used to assert psychological variables, namely AtA, sense of coherence (SOC) and subjective well-being. Structural equation modeling was used to explore a structural model of the self-reported AtA, encompassing all variables.

**Results:** Significant predictors are self-reported spirituality ( $\beta = .816$ ;  $p < .001$ ), perceived health ( $\beta = .455$ ;  $p < .001$ ), leisure ( $\beta = .322$ ;  $p < .001$ ), professional status ( $\beta = .283$ ;  $p < .001$ ), income ( $\beta = .230$ ;  $p = .035$ ), household ( $\beta = -.208$ ;  $p = .007$ ), SOC ( $\beta = -.202$ ;  $p = .004$ ) and adult children ( $\beta = .164$ ;  $p = .011$ ). The variables explain respectively 60.6% of the variability of AtA.

**Conclusions:** Self-reported spirituality is the strongest predictor of AtA. Other predictors are perceived health, leisure, professional status, income, household, SOC and adult children. This study emphasizes the need for deepening the variables that influence older adults' AtA, in particular perceived health and further lifestyle-related characteristics, as being relevant for promoting aging well in later life, within a salutogenic context for health care.

**Keywords:** Adjustment to aging; older adults; predictors; subjective well-being; sense of coherence; structural equation modeling.

## 2. Introduction

The world is graying. In fact, the number of people over the age of 60 is projected to reach almost two billion by 2050, representing 22% of the world's population (World Health Organization, 2002). The proportion of the population over the age 80 is also increasing. Moreover, estimated at 180,000 worldwide in 2000, centenarians could reach 1 million by 2030 (Gavrilov & Heuveline, 2003; World Health Organization, 2002). Population aging is also influenced by immigration of elderly retirees from other countries, and return migration of former emigrants who are above the average population age (Gavrilov & Heuveline, 2003). Considering that self-perception of aging is defined as a personal evaluation of one's own aging (Moser, Spagnoli, & Santos-Eggimann, 2011), the increase of the elderly in the population has emphasized the need to value what older adults consider it is to live this phase of life with a sense of well-being and happiness (Fernández-Ballesteros, 2010).

According to Staudinger and Kunzmann (2005), personal adjustment was defined as positive developmental changes that have adaptive value for the individual as well as the community. Adjustment to aging (AtA) was initially defined by Cattell (1950) as the goodness of internal arrangements by which an adaptation is maintained. Thomae (1992) suggested that AtA was achieved when a balance between the person's cognitive and motivational systems has been attained. Furthermore, a model that represented the nature of development and aging with the focus on adjustment was developed in more recent years (Baltes & Baltes, 1990; Baltes & Carstensen, 1996).

The identity process theory (Sneed & Whitbourne, 2005; Whitbourne, 1986) proposes that AtA can be conceptualized as involving the three processes of identity assimilation (maintaining self-consistency), identity accommodation (making changes in the self), and identity balance (maintaining a sense of self but changing when necessary), whereas according to Brandstädter and Greve's (1994) model, adjustment of a person's goals and aspirations in the face of age-related challenges corresponds to what the authors named 'accommodation'.

In addition, Jopp and Rott (2006) suggested that basic resources (e.g., cognition, health), self-referent beliefs (e.g., self-efficacy) and attitudes toward life (e.g., optimistic outlook) were pertinent for AtA in older ages. Moreover, AtA is a relevant and proximate multidimensional concept, yet distinct, from well-being, successful aging and quality of life

(Fernández-Ballesteros, 2010; Kesebir & Diener, 2010; Reichstadt, Sengupta, Depp, Palinkas, & Jeste, 2010) that can vary with age, gender, race, culture and society (Löckenhoff et al., 2009; Neri, Cachioni, & Resende, 2002).

The enhancement of AtA and its relevance to improve well-being in old age can become a significant means for health care interventions (Staudinger & Kunzmann, 2005), as the sole use of health gain measures may neglect potential benefits (Al-Janabi, Flynn, & Coast, 2011). Earlier research showed that enduring personality disposition predicted AtA (Costa, McCrae, & Norris, 1981). Moreover, life hassles and perceived self-efficacy were found to be strong predictors of AtA in a different study (Holahan & Holahan, 1987). More recently, Jopp, Rott, and Oswald (2008) highlighted that age-differential predictive values of the resources seem to indicate positive adaptation to aging.

For the young-old, the role of health factors was especially strong, whereas specific social variables became more important in the old-old participants (Jopp, Rott, & Oswald, 2008). However, to date, data about this construct in later life is still scarce (von Humboldt, Leal, & Pimenta, 2012). In addition, insufficient attention has been paid to the variables that influence AtA among older adults. Moreover, to our best knowledge there are no previous studies that explore the impact of sense of coherence (SOC), subjective well-being (SWB) and socio-demographic, lifestyle and health-related factors', simultaneously, on the AtA of a cross-national sample of older adults. In fact, to deepen AtA within the multi-dimensional context of later life, knowledge about variables influencing this construct, is further required. Hence, the objective of this research was to explore a structural model of AtA's predictors in a community-dwelling older population.

### 3. Methods

#### 3.1. Participants

Participants were a community-dwelling sample of eligible 1270 older adults, aged between 75 and 102 years ( $M = 83.84$ ;  $SD = 6.66$ ) from four different nationalities (Angolan, Brazilian, English and Portuguese). Participants were 58.2% female, 55.9% married and 52.6% living in rural areas (see Table 1).

Table 1.

*Characterization of participants according to socio-demographic, lifestyle and health-related variables*

Characteristics	<i>n</i>	%
<i>N</i>	1270	100
Age ( <i>M</i> ; <i>SD</i> )	83.84 (6.660)	
Sex		
Female	739	58.2
Male	531	41.8
Nationality		
Angolan	279	22.0
Brazilian	312	24.6
English	345	27.2
Portuguese	334	26.3
Education		
< High school	558	43.9
≥ High school	712	56.1
Marital Status		
Married or in a relationship	710	55.9
Not married nor in a relationship	560	44.1
Household		
Living with others	806	63.5
Living alone	464	36.5
Adult Children		
Yes	590	46.5
No	680	53.5
Professional Status		
Inactive	654	51.5
Active	616	48.5
Family Annual Income		
≤10,000 €	630	49.6
≥10,001 €	640	50.4
Living Setting		
Rural	668	52.6
Urban	602	47.4
Leisure		
Yes	820	64.6

No	450	35.4
Self-Reported Spirituality		
Yes	568	43.9
No	712	56.1
Perceived Health		
Good	645	50.8
Poor	625	49.2
Recent Disease		
No	789	62.1
Yes	481	37.9
Medication		
No	117	9.2
Yes	1153	90.8

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*Note:* Total sample,  $n = 1270$ ;  $M$  = mean;  $SD$  = standard deviation

### 3.2. Measures

To assess AtA, SWB, SOC, socio-demographic (sex, age, professional and marital status, education, household, adult children, family's annual income, living setting and self-reported spirituality), lifestyle and health-related characteristics (perceived health, recent disease, medication and leisure), a questionnaire and four instruments, which presented good psychometric properties, were used.

#### 3.2.1. Adjustment to Aging

This variable was assessed in 22 items through the Adjustment to Aging Scale (AtAS) (von Humboldt, Leal, Pimenta, & Maroco, 2013). Responses were given in a 7-point Likert-type scale with scores ranging from 1 = *not important at all* to 7 = *absolutely important*. The measure presented a high a high internal consistency ( $\alpha = .89$ )

### 3.2.2. Subjective Well-Being

As in previous studies (e.g., Cheng, Li, Leung, & Chan, 2011; Kesebir & Diener, 2010), SWB was operationalized in terms of a composite from the affective and cognitive facets. This latter was measured with the Satisfaction with Life Scale (SwLS) (Diener, Emmons, Larsen, & Griffin, 1985), a 5-item semantic differential scale (sample item: “I am satisfied with life”) and rated from 1 = *strongly disagree* to 7 = *strongly agree*. The internal consistency proved to be very good ( $\alpha = .78$ ). The affective facet was assessed by the 20-item Positive and Negative Affect Schedule, which is rated from 1 = *very slightly or not at all* to 5 = *extremely*. This instrument is composed by two subscales, one measuring positive affect (sample item: “Excited”) and the other measuring negative affect (sample item: “Afraid”), both with a high internal consistency ( $\alpha = .88$  and  $\alpha = .87$ , respectively) (Watson, Clark, & Tellegen, 1988).

### 3.2.3. Sense of Coherence

SOC was measured by Orientation to Life Questionnaire (OtLQ) (Antonovsky, 1993), a 29-item semantic differential scale, rated from 1 = *never* to 7 = *always*, which presented a high internal consistency ( $\alpha = .82$ ). This scale is composed by three subscales: comprehensibility (sample item: “When you talk to people, do you have the feeling that they don’t understand you?”); manageability (sample item: “Has it happened that people whom you counted on, disappointed you?”); and meaningfulness (sample item: “Do you have the feeling that you don’t really care about what goes on around you?”).

## 3.3. Procedure

The sampling of the participants was performed through lifelong learning centres’ message boards and local community centres’ list-serves in the Lisbon metropolitan area and in the Algarve region (in Portugal). Participants were provided with a brief description of the study over the phone or in-person and invited to participate in the study, stressing that the participation in this research was voluntary and that participants could interrupt their collaboration at any time, without any consequences. The American Psychological Association’s standards on the ethical treatment of participants were followed. Once informed consent had been received, participants went through a cognitive screening assessment.

Participant eligibility included: (1) 75 years of age or older and (2) participants' score in the normal range on the Mini-Mental Status Exam ( $>26$ ) (Folstein, Folstein, & McHugh, 1975).

None of the participants had any history of psychiatric or neurological illness, or history of drug or alcohol abuse, which might compromise cognitive function. The measures were filled in by 1277 older adults. However, from these, 7 were excluded for incorrect filling-in. Thus, 1270 older adults filled in the self-report measures mentioned above. The Research Unit in Psychology and Health's coordination from ISPA - Instituto Universitário and the Portuguese Foundation for Science and Technology (FCT) approved this study. Data were analyzed using the Statistical Package for Social Sciences (SPSS) (version 19.0; SPSS, An IBM company., Chicago, IL) and Analysis of Moment Structures (AMOS) software for Windows (version 20.0; SPSS, An IBM company., Chicago, IL).

### 3.4. Statistical Analysis

Data was analyzed to check for outliers and distribution forms. No missing value imputation was made. Moreover, data was analyzed through descriptive statistics for the socio-demographic, lifestyle and health-related variables, AtA, SWB and SOC.

The quantification of SOC, SWB, socio-demographic, health and lifestyle-related variables integrated the structural equation model to assert their influence on the participants' AtA.

Multicollinearity between the independent variables was evaluated with the variance inflation factor (VIF) given by SPSS Statistics (version 19.0; SPSS, An IBM company., Chicago, IL). All variables presented a value below 5, indicating the absence of collinearity (Maroco, 2010; Weisberg, 1985). The distributions of the studied variables were explored with SPSS Statistics (version 19.0; SPSS, An IBM company., Chicago, IL). To test the structural model for AtA, a structural equation model was built relating the dependent variable (AtA) with the 16 independent variables socio-demographic (sex, age, professional and marital status, education, household, adult children, family's annual income, living setting and self-reported spirituality), lifestyle and health-related characteristics (perceived health, recent disease, medication and leisure), SOC and SWB, through SPSS - AMOS for Windows (version 20.0, SPSS. An IBM company., Chicago, IL).

The quality of the fit of the structural model was given by chi-square statistics ( $X^2/df$ ), comparative fit index (CFI), goodness of fit index (GFI) and root mean square error of

approximation (RMSEA), and the reference values currently practiced in structural equation modeling (Byrne, 2001; Maroco, 2010) were used. A two-step approach was used to evaluate the structural model. First, the factor's measurement model was evaluated to demonstrate an acceptable fit. Thereafter, the structural model, encompassing the independent and the 16 independent variables, was adjusted, and the significances of the structural trajectories were evaluated.

### 4. Results

The fit of the measurement model was very good ( $X^2/df = 2.390$ ;  $CFI = .990$ ;  $GFI = .966$ ;  $RMSEA = .033$ ;  $p = 1.000$ ;  $C.I. 90\% [.029; .037]$ ), as it was the one of the structural model ( $X^2/df = 2.441$   $CFI = .943$ ;  $GFI = .858$ ;  $RMSEA = .034$ ;  $p = 1.000$ ;  $C.I. 90\% [.033; .035]$ ). The structural model is shown in Figure 1.

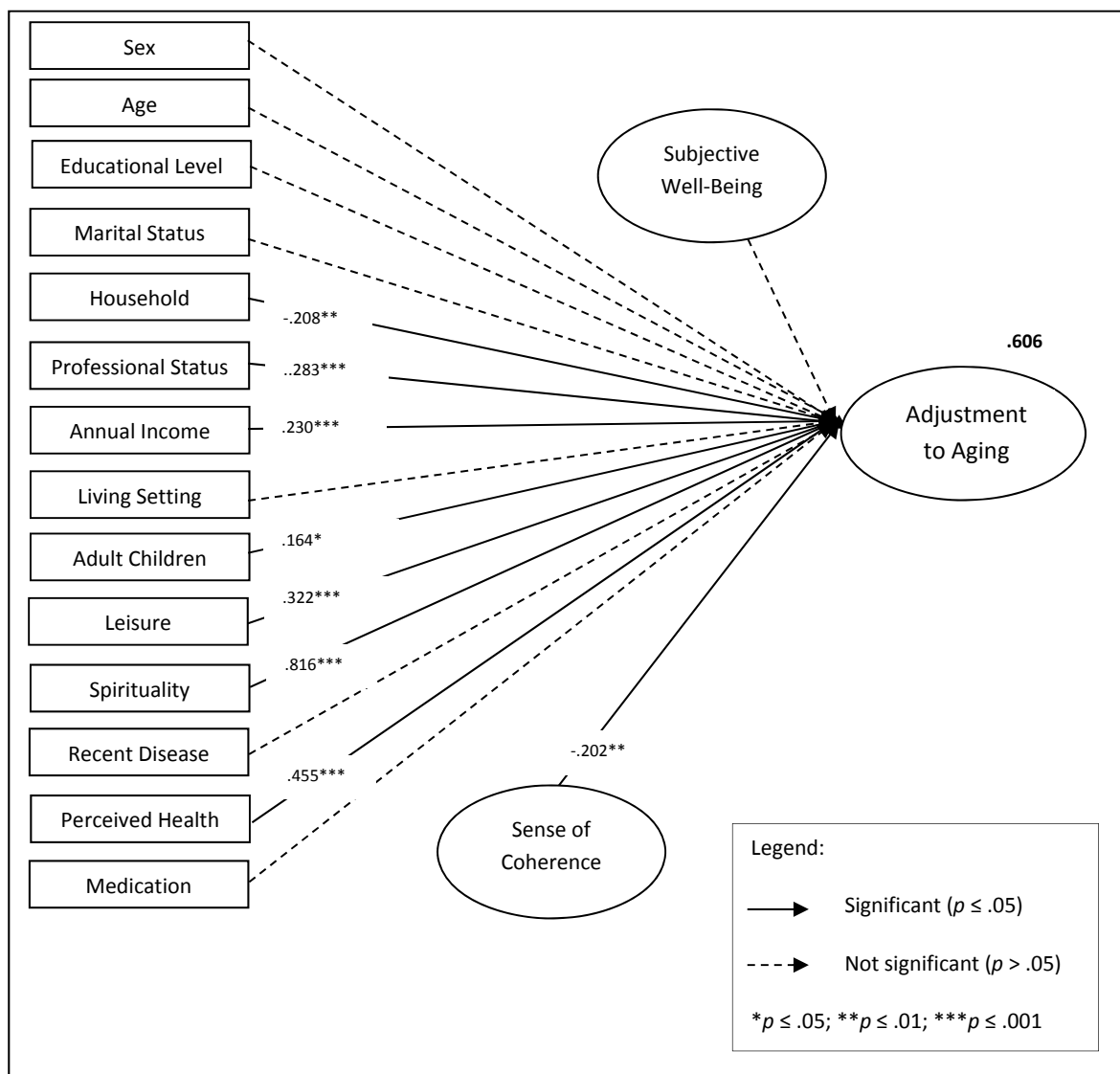


Figure 1

*Structural model for adjustment to aging: Its relation with sense of coherence, subjective well-being, socio-demographic, lifestyle and health-related variables*

The assessed variables account for 60.6% of the AtA variability. Table 2 shows the significant structural weights (standardized estimates, standard error, and significance level).

Table 2

*Significant structural weights of the independent variables (sense of coherence, subjective well-being, socio-demographic, lifestyle and health-related characteristics) regarding adjustment to aging*

Trajectories	$\beta(SE)p$
Adjustment to Aging $\leftarrow$ Age	-.004(.003).223
Adjustment to Aging $\leftarrow$ Sex	-.021(.043).624
Adjustment to Aging $\leftarrow$ Education Level	.031(.060).607
Adjustment to Aging $\leftarrow$ Marital Status	.100(.057).077
Adjustment to Aging $\leftarrow$ Household	-.208(.078). <b>007</b>
Adjustment to Aging $\leftarrow$ Adult Children	.164(.065). <b>011</b>
Adjustment to Aging $\leftarrow$ Professional Status	.283(.047)***
Adjustment to Aging $\leftarrow$ Family's Annual Income	.230(.069)***
Adjustment to Aging $\leftarrow$ Living Setting	.080(.052).124
Adjustment to Aging $\leftarrow$ Leisure	.322(.055)***
Adjustment to Aging $\leftarrow$ Self-reported spirituality	.816(.069)***
Adjustment to Aging $\leftarrow$ Perceived Health	.455(.058)***
Adjustment to Aging $\leftarrow$ Recent Disease	-.123(.068).069
Adjustment to Aging $\leftarrow$ Medication	-.026(.020).196
Adjustment to Aging $\leftarrow$ Subjective Well-Being	-.089(.099).368
Adjustment to Aging $\leftarrow$ Sense of Coherence	-.202(.070). <b>004</b>

Note:  $B$  = standardized estimates;  $SE$  = standard error; \*\*\* $p \leq .001$

## 5. Discussion

The main objective of this study was to explore a structural model of AtA's predictors in a community-dwelling sample of older adults. In doing so, this study contributes to the literature in two ways. Firstly, our results show a model comprising AtA, SWB, SOC, and

socio-demographic, lifestyle and health factors within the multi-dimensional context of the aging process. Secondly, our findings point out the importance of self-reported spirituality, perceived health, leisure and professional status, as the major predictors for older adults' AtA in this sample. The findings, as well as the strengths and limitations of this study, are discussed in more detail subsequently.

Recent literature highlighted the role of socio-demographic, health and lifestyle variables, as relevant for positive adaptation to aging (Jopp, Rott, 2006; Jopp, Rott, & Oswald, 2008). Our findings show that self-reported spirituality, perceived health, leisure, professional status, family's annual income, household, SOC and adult children, are significant predictors of the AtA.

Although the presence of recent disease and medication were not significant predictors of AtA in our study, the perceived health was a strong predictor of AtA. Previous literature has frequently indicated health as contributing for aging well in later life (Bowling 2007; Chen, 2001; Jopp, Rott, & Oswald, 2008; Smith, Borchelt, Maier, & Jopp, 2002).

Previous research highlighted psychological variables as related to AtA (Bauer & McAdams, 2004; Costa, McCrae, & Norris, 1981; Holahan & Holahan, 1987; Jopp & Rott, 2006; Slangen-Dekort, Midden, Aarts, & Wagenberg, 2001). Contrary to our initial expectations, SWB did not predict AtA. These results did not corroborate previous literature, in which, personal adjustment is indicated as related to well-being in old age (Staudinger & Kunzmann, 2005). Moreover, SOC negatively predicted AtA in our sample. We hypothesized that SOC did not positively influence the AtA of these participants, by engendering conditions, behaviors, and life events that facilitated or moderated AtA (Wiesmann & Hannich, 2008).

Marital status was not a significant predictor of AtA and household negatively predicted AtA in this sample. However, the presence of adult children was significantly related to AtA. It is possible that for these participants, living with their partner and with others at home (e.g., extended family and nonfamily with extended kinship) was not linked to meaningful relationships. Hence, we hypothesized that adult children, more than spouses, provided supportive network and assistance, in particular when health and mobility declined. Gerontological literature highlights the pertinence of social support for older adults, namely from the adult children (Grundy & Read, 2012), from the spouses (Volanen, Lahelma, Silventoinen, & Suominen, 2004), and from the extended family and friends (Litwin, 2010)

and stresses in particular, the quality and type of significant social relationships (Charles & Carstensen, 2010; Cheng, Li, Leung, & Chan, 2011). In fact, social support can predict AtA (Jopp & Rott, 2006; Jopp, Rott, & Oswald, 2008) and promote health by providing persons with positive experiences, socially rewarding roles, or improved ability to cope with stressful events (Seeman, 2000). However it must be noted that partly contrasting findings regarding, for example, negative interactions in close relationships such as family have been obtained and present no consensus in literature (Akiyama, Antonucci, Takahashi, & Langfahl, 2003; Krause & Rook, 2003; Li & Liang, 2007).

Leisure and professional status were significant predictors of AtA among our participants, as well as income. Lifestyle promotion has been pointed out as contributing for aging well (Bowling 2007; Smith, Borchelt, Maier & Jopp, 2002). Literature also highlights productive and meaningful activities (Stevens-Ratchford, 2005; von Humboldt et al., 2012; Wahrendorf & Siegrist, 2010) and income (Rijken & Groenewegen, 2008), as contributing to the well-being of older adults. It is possible that leisure and professional activities, as well as income, may influence AtA instrumentally by engendering conditions and resources that facilitate or moderate AtA.

Although the relationship between physical passivity and well-being still remains unclear, recent research has shown that happiness increases when older adults combine effortful social, physical, cognitive, and household activities with restful activities and that participation in social activities can mediate the direct relationship between extraversion and happiness (Oerlemans, Bakker, & Veenhoven, 2011).

Unexpectedly, living setting did not have an impact on AtA among these older adults. Yet, previous literature pointed out to a higher degree of well-being in urban areas (Rudinger & Thomae, 1990) and to the importance of environmental factors among older populations (Bowling & Dieppe, 2005).

Although more than half of our sample (56.1%), completed high school and above, the educational level was not related to AtA among our participants, which did not corroborate existing gerontological literature (Bergsma & Ardelt, 2012; Chen, 2001). We hypothesized that the educational level did not influence differential access to resources, and knowledge for these participants. Literature pointed out that older wiser people know how to cope with crises and hardships in life, to sustain their emotional well-being even in difficult circumstances and to enable an appreciation of the good things in life (Ardelt, 2005). Additionally, age was not

related to AtA in this sample. It is possible that for the oldest old, challenges in adjustment increase and thus, negatively influence their AtA. Despite these results, longevity was previously associated with being conscientious, emotionally stable, and active among older adults (Terracciano, Löckenhof, Zonderman, Ferrucci, & Costa, 2008).

Self-reported spirituality was the strongest predictor of AtA. Considering that only 43.9% of our sample reported spiritual beliefs, this result comes as a surprise, although it corroborates growing literature (Hill, 2008; Hybels, Blazer, George, & Koenig, 2012). Moreover, previous studies indicated that older individuals search for existential meaning and conscious aging in later life (Malette & Oliver, 2006; von Humboldt et al., 2012; Wong, 2000). Yet, it is possible that the strong predictive effect of this factor is partially associated with social support, which was not controlled in this research and could promote the increase of AtA. In particular, involvement in spiritual activities might offer social support in spiritual settings, sense of community and an available interpretation of the meaning of life events (Yoon and Lee, 2007).

In sum, the outcomes of this study evidence that self-reported spirituality, perceived health, leisure and professional activities, income, household, SOC and adult children are significantly related to AtA among older adults. However, these results need to be interpreted within the following limitations. The use of a convenience sampling method could have resulted in some selection bias. Although the sample was heterogeneous, older adults with higher educational attainment and active professional status were overrepresented, which might have influenced the results.

Another limitation is that respondents knew they were completing AtA, SWB and SOC questionnaires, which might have biased their answers in a more socially desirable direction. The sample size (1270 participants) was adequate for this type of statistical analysis, accordingly with the common rule of thumb of five subjects per manifest variable, which is current practice in structural equation modeling (Kline, 2005). Given the absence of multicollinearity, good psychometric properties of the instruments used, and the good fit of both measurement and structural models, these outcomes are statistically valid and reliable. Nevertheless, the fact that this research has a cross-sectional design limits the generalization of these results. Given that AtA is fluid and changeable over time, future longitudinal research will need to examine the stability of the found predictors. Although the variables studied account for 60.6% of the total variability of AtA in this sample of older adults, the hypothesis that other factors, not approached in this study, such as significant social relationships, sense

of community and environmental factors might also influence AtA should be further explored. In addition, in the structural model, we have only considered direct effects of the predictor variables in AtA. It is however possible that some predictors can interact (e.g. education, age, professional status and income) and possible mediation and moderation effects of the predictors may well need to be address in future research. Considering the existence of various cultural influences among the aging context (Löckenhoff et al., 2009; Neri, Cachioni, & Resende, 2002), the inclusion of cross-cultural comparisons in future research could benefit the understanding of specific factors when predicting older adults' AtA.

Given the results of the present study, the improvement of AtA in later life is expected to be beneficial for aging well. In particular, health care planning and intervention programs, which highlight predictors of AtA for older populations, such as spiritual and lifestyle dimensions, are recommended. These should take into account older population groups, namely, the oldest old not involved in significant relationships, and presenting poor perceived health, with less professional and leisure activities, lacking children and lower income.

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**Paper 8. What influences subjective well-being among older adults? The role of sense of coherence, socio-demographic, lifestyle and health-related factors**

**Submitted to International Journal of Gerontology**

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## 1. Abstract

**Objectives:** This research explores a structural model of subjective well-being's (SWB) predictors in a community-dwelling older population.

**Methods:** A community sample of 1258 older adults was assessed regarding SWB, sense of coherence (SOC) and socio-demographic, lifestyle and health-related characteristics. Structural equation modeling was used to investigate a structural model of the self-reported SWB, comprising SOC, socio-demographic characteristics (age, gender, marital status, household, professional status, educational level, social support, living setting and self-reported spirituality), as well as lifestyle and health-related characteristics (leisure, physical activity, recent disease, perceived health and medication).

**Results:** Self-reported spirituality ( $\beta = .395$ ;  $p < .001$ ), SOC ( $\beta = -.128$ ;  $p < .001$ ), social support ( $\beta = .089$ ;  $p = .008$ ), living setting ( $\beta = .083$ ;  $p < .001$ ), household ( $\beta = -.072$ ;  $p < .001$ ), perceived health ( $\beta = .049$ ;  $p = .007$ ) and medication ( $\beta = -.015$ ;  $p = .033$ ), predicted SWB. The variables accounted for 82.9% of the variability of SWB.

**Conclusions:** Self-reported spirituality is the strongest predictor of SWB. Other predictors are SOC, social support, living setting, household, perceived health and medication. Results emphasize that health care approaches may benefit from clearly understanding SWB and its predictors, as essential for promoting older adults' health and well-being.

**Keywords:** Adjusted-Life Years; Aged; Statistical Model

## 2. Introduction

Worldwide, it is estimated by the United Nations that, by 2050, the population aged 65 and over will be 16.5% of the total population (Gavrilov & Heuveline, 2003). By 2025, about one third of Europe's population will be aged 60 or over with greatest increase being among its oldest citizens (75+ years) (Bagchi, 2005; World Health Organization, 2002). Alongside with the aging of the population, the well-being of older people has been recognized as one of the most pressing and universal social issues of our time (Fernández-Ballesteros, 2007; Westerhof, Whitbourne, & Freeman, 2011).

The gerontological literature abounds in studies of subjective well-being (SWB) (Bishop, Martin, & Poon, 2006; Efklides, Kalaitzidou, & Chankin, 2003; Lyubomirsky, Tkach, & DiMatteo, 2006; Rijken & Groenewegen, 2008). Analyzing SWB is a key issue to look at since it is highly correlated with several positive life outcomes in old age (Lyubomirsky, King, & Diener, 2005).

SWB is a multidimensional construct composed of two cognitive and affective (hedonic) facets: satisfaction with life and affective balance, respectively (Cheng, Li, Leung, & Chan, 2011; Diener, Suh, Lucas, & Smith, 1999; Kesebir & Diener, 2010). This latter, is composed by the presence of frequent pleasant affect, and the infrequent presence of unpleasant affect (Diener & Lucas, 1999; Heo & Lee, 2010).

Older adults' efforts to maintain emotional balance between increased negative affect and decreasing positive affect is of great importance (Efklides, Kalaitzidou, & Chankin, 2003). Moreover, previous literature indicated that SWB decline with age (Doyle & Forehand, 1989) whereas some reported that SWB increase or remain stable with age (Larson, 1978; Stacey & Gatz, 1991) These appear to indicate an optimization of the affect process (Baltes, 1997) or a compensational nature of control on self-regulation of emotion in older age (Schulz & Heckhausen, 1998).

There is evidence that socio-demographic factors (Diener & Seligman, 2004; George, 2010), as well as health-related factors such as the presence of illness (Gwozdz & Sousa-Poza, 2010), lifestyle characteristics (Sener, Terzioglu, & Karabulut, 2007) and psychological variables, such as the sense of coherence (SOC) (Ferguson & Goodwin, 2010; Wiesmann & Hannich, 2008), influence SWB among older adults.

In sum, the previous studies suggest that socio-demographic, lifestyle, psychological and health factors contribute to SWB. Yet, findings present no consensus in literature concerning the level of impact that they had on SWB. To date, we found no studies that explored the cited factors, simultaneously on the SWB of older adults.

This research aims to develop a deeper understanding of the role of SOC and socio-demographic, lifestyle and health-related factors in predicting SWB, by exploring a structural model of SWB's predictors in a community-dwelling older population.

### 3. Materials and Methods

#### 3.1. Participants

One thousand two hundred and fifty eight eligible, non-institutionalized older adults from four different nationalities (Angolan, Brazilian, English and Portuguese), were recruited from lifelong learning centres' message boards, local and art community centres list-serves. The average age of the sample was 83.89 ( $SD = 6.67$ ; range = 75-102). Participants (58.2% female) were nationally diverse, with 56.0% married (see Table 1).

Table 1.

*Characterization of participants according to socio-demographic, lifestyle and health-related variables*

Characteristics	<i>n</i>	%
<i>N</i>	1258	100.0
Age ( <i>M</i> ; <i>SD</i> )	83.89 (6.667)	
Gender		
Female	732	58.2
Male	526	41.8
Nationality		
Angolan	278	22.1
Brazilian	302	24.0
English	344	27.3
Portuguese	334	26.6
Education		

< High school	554	44.0
≥ High school	704	56.0
Marital Status		
Married or in a relationship	704	56.0
Not married nor in a relationship	554	44.0
Household		
Living with others	806	64.1
Living alone	452	35.9
Professional Status		
Inactive	654	52.0
Active	604	48.0
Social Support		
Yes	907	72.1
No	351	27.9
Living Setting		
Rural	660	52.5
Urban	598	47.5
Leisure		
Yes	814	64.7
No	444	35.3
Self-Reported Spirituality		
Yes	550	43.7
No	708	56.3
Physical Activity		
Yes	545	43.3
No	713	56.7
Recent Disease		
Yes	480	38.2
No	778	61.8
Perceived Health		
Good	636	50.6
Poor	622	49.4
Medication		
Yes	1145	91.0
No	113	9.0

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*Note:* Total sample,  $n = 1258$ ;  $M$  = mean;  $SD$  = standard deviation

### 3.2. Materials

Measures were completed using a variety of appropriate methods. As in previous studies (Cheng et al., 2011; Kesebir & Diener, 2010) SWB was operationalized in terms of a composite from the affective and cognitive facets. This latter was measured by the Satisfaction with Life Scale (SwLS) (Diener, Emmons, Larsen, & Griffin, 1985), a 5-item Likert-type scale (sample item: “I am satisfied with life”) and rated from 1 (*strongly disagree*) to 7 (*strongly agree*). The internal consistency proved to be very good ( $\alpha = .78$ ). The affective facet of SWB was measured by the 20-item Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988) rated from 1 (*very slightly or not at all*) to 5 (*extremely*) and composed of two subscales, one measuring positive affect (sample item: “Excited”;  $\alpha = .88$ ) and the other measuring negative affect (sample item: “Afraid”;  $\alpha = .87$ ).

Sense of Coherence was measured by Orientation to Life Questionnaire (Antonovsky, 1993), a 29-item Likert-type scale, rated from 1 (*never*) to 7 (*always*), which presented a high internal consistency ( $\alpha = .82$ ) and composed of three subscales (comprehensibility; sample item: “When you talk to people, do you have the feeling that they don’t understand you?”; manageability; sample item: “Has it happened that people whom you counted on, disappointed you?” and meaningfulness; sample item: “Do you have the feeling that you don’t really care about what goes on around you?”).

### 3.3. Procedure

Participants were provided with a brief description of the study over the phone or in-person and invited to participate in the study. The American Psychological Association’s standards on the ethical treatment of participants were followed. Participant eligibility included: (1) 75 years of age or older and (2) participants’ score in the normal range on the Mini-Mental Status Examination ( $>26$ ) (Folstein, Folstein, & McHugh, 1975). The measures were initially filled in by 1270 older adults. Yet, from these, 12 were excluded for not providing complete information regarding the socio-demographic, health and lifestyle-related characteristics or incorrect

The Research Unit in Psychology and Health’s coordination from ISPA - Instituto Universitário and the Portuguese Foundation for Science and Technology (FCT) approved this study. Data were analysed using the Statistical Package for Social Sciences (SPSS)

(version 19.0; SPSS, An IBM company., Chicago, IL) and Analysis of Moment Structures (AMOS) software for Windows (version 20.0; SPSS, An IBM company., Chicago, IL).

### 3.4. Statistical Analysis

Data was first analyzed to check for outliers and distribution forms. No missing value imputation was made. Second, the quantification of SOC, socio-demographic, health and lifestyle-related variables integrated the structural equation model to assert their influence on the participants' SWB.

Multicollinearity between the independent variables was evaluated with the variance inflation factor (VIF) given by SPSS Statistics (version 19.0; SPSS, An IBM company., Chicago, IL). All variables presented a value below 5, indicating the absence of collinearity (Maroco, 2010). The distributions of the studied variables were explored with SPSS Statistics (version 19.0; SPSS, An IBM company., Chicago, IL). To test the structural model for SWB, a structural equation model was built relating the dependent variable (SWB) with the 15 independent variables (age, gender, education, marital and professional status, household, social support, living setting, leisure, self-reported spirituality, physical activity, presence of a recent disease, perceived health, medication and SOC), through AMOS software (version 20.0; SPSS, An IBM company., Chicago, IL).

The quality of the fit of the structural model was given by chi-square statistics ( $X^2/df$ ), comparative fit index (CFI), goodness of fit index (GFI) and root mean square error of approximation (RMSEA), and the reference values currently practiced in structural equation modeling (Maroco, 2010) were used. A two-step approach was used to evaluate the structural model. First, the factor's measurement model was evaluated to demonstrate an acceptable fit. Thereafter, the structural model, encompassing the independent and the 15 independent variables, was adjusted, and the significances of the structural trajectories were evaluated.

## 4. Results

The fit of the measurement model was very good ( $X^2/df = 3.534$ ;  $CFI = .970$ ;  $GFI = .944$ ;  $RMSEA = .045$ ;  $p = .997$ ;  $C.I. 90\% [.042; .048]$ ) as it was the one of the structural model

( $\chi^2/df = 2.977$ ;  $CFI = .935$ ;  $GFI = .874$ ;  $RMSEA = .040$ ;  $p = 1.000$ ;  $C.I. 90\% [.039; .041]$ ).

The structural model is shown in Figure 1.

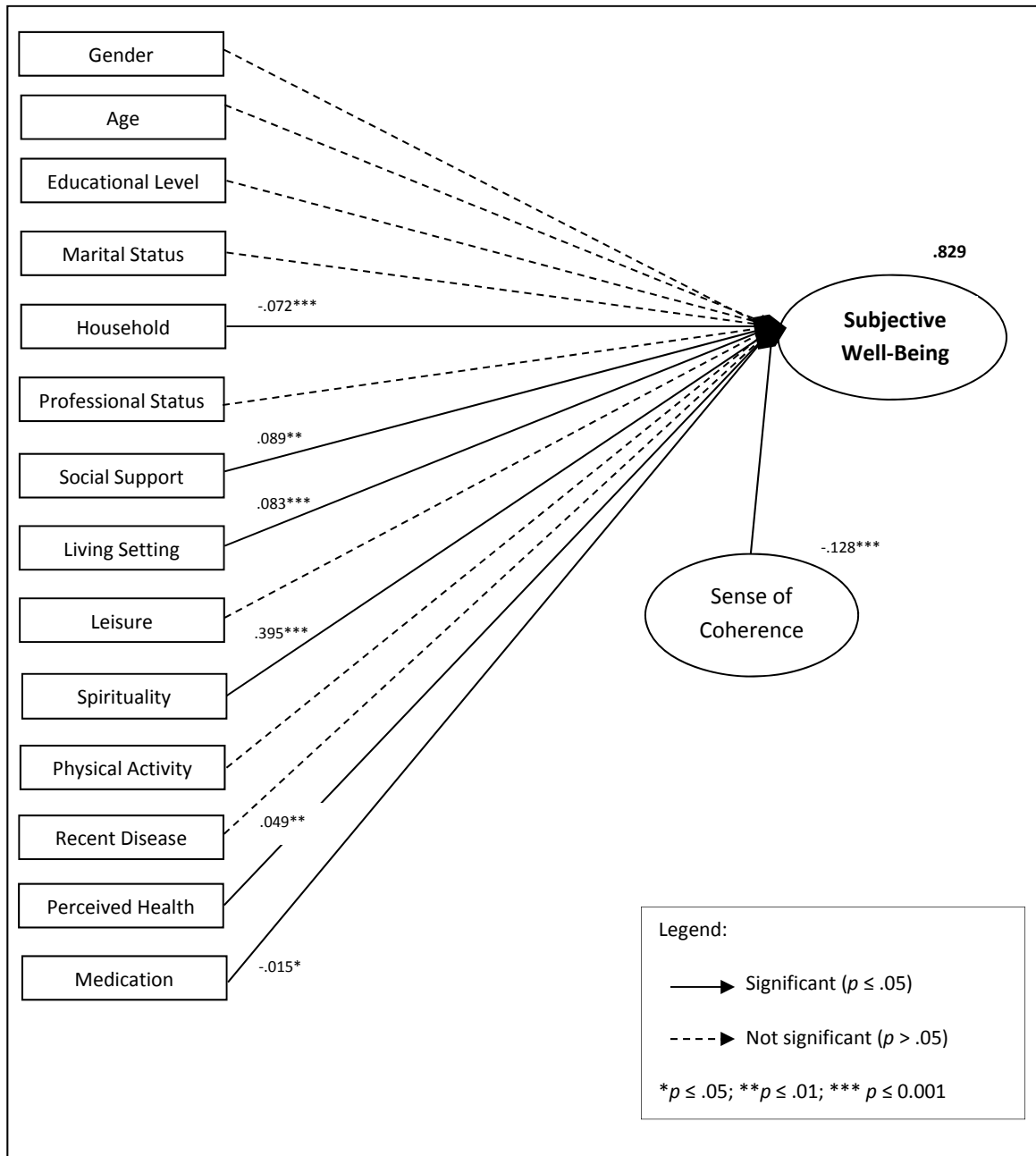


Figure 1

*Structural model for subjective well-being: Its relation with sense of coherence, socio-demographic, lifestyle and health-related variables*

As shown, the assessed variables account for 82.9% of the SWB variability. Table 2 evidences the significant structural weights (standardized estimates, standard error, and significance level).

Table 2

*Significant structural weights of the independent variables (sense of coherence, socio-demographic, lifestyle and health-related characteristics) regarding subjective well-being*

Trajectories	$\beta(SE)p$
Subjective Well-Being ← Age	-001(.001).395
Subjective Well-Being ← Gender	-.023(.015).118
Subjective Well-Being ← Education Level	.027(.017).113
Subjective Well-Being ← Marital Status	-.025(.019).179
Subjective Well-Being ← Household	-.072(.020)***
Subjective Well-Being ← Professional Status	-.029(.016).066
Subjective Well-Being ← Social Support	.089(.034). <b>008</b>
Subjective Well-Being ← Living Setting	.083(.019)***
Subjective Well-Being ← Leisure	.012(.018).494
Subjective Well-Being ← Self-reported spirituality	.395(.044)***
Subjective Well-Being ← Physical Activity	-.018(.026).483
Subjective Well-Being ← Recent Disease	.039(.021).063
Subjective Well-Being ← Perceived Health	.049(.018). <b>007</b>
Subjective Well-Being ← Medication	-.015(.007). <b>033</b>
Subjective Well-Being ← Sense of Coherence	-.128(.024)***

*Note:*  $B$  = standardized estimates;  $SE$  = standard error; \*\*\* $p \leq .001$

## 5. Discussion

The central aim of this study was to explore a structural model of SWB's predictors in a community-dwelling sample of older adults. Firstly, our results pointed out the relevance of self-reported spirituality as a robust predictor for older adults' SWB. Secondly, the results showed that the model comprising SOC and socio-demographic, lifestyle and health factors are suitable to shed light into the mixed findings of previous research into SWB predictors.

Existing literature pointed out that socio-demographic, psychological, lifestyle and health-related characteristics were associated with SWB among older adults (Ferguson & Goodwin, 2010; George, 2010; Gwozdz & Sousa-Poza, 2010; Sener, Terzioglu, & Karabulut, 2007). Our structural model supports these observations as self-reported spirituality, SOC,

social support, living setting, household, perceived health, as well as medication, are significant predictors of the SWB.

Beyond gender and age-related influences on well-being, literature also emphasizes how education and work relates to differential access to resources and opportunities in life influences health and well-being (Adler, McEwen, & Marmot, 1999). Furthermore, as suggested in previous studies, productive activities contribute to the well-being of older adults (Wahrendorf & Siegrist, 2010). Conversely, our findings showed that age, gender, educational level and professional status did not significantly predict SWB. It is, thus, possible that alternative socio-demographic forms of influencing older adults' SWB which were not controlled in this study, may also reflect the shifting demographic reality and lifestyle among these older adults.

Leisure and physical activity were not significant predictors of SWB among our participants. These outcomes did not corroborate previous literature which indicated that a healthy and pleasurable lifestyle contributed to aging well (Leutwyler, Hubbard, Jeste, & Vinogradov, 2013). Interestingly enough, the relationship between physical passivity and well-being remains unclear (Oerlemans, Bakker, & Veenhoven, 2011). For instance, studies have demonstrated that physical passivity was not related to well-being (Csikszentmihalyi & Hunter, 2003), negatively related to well-being (Tkach & Lyubomirsky, 2006), or positively related to well-being (Sonntag, 2001).

In this study, self-reported spirituality strongly predicted SWB among our participants. These older adults presented a higher SWB score than the remaining participants. Such a finding is not unexpected, as it converges with prior research which has associated spirituality with well-being (Yoon & Lee, 2007). In fact, literature highpoints the development of a specific spirituality as people grow older (Malette & Oliver, 2006).

It is possible that there are other variables mediating the strong predictive effect of spirituality on SWB. Indeed, researchers often emphasize the importance of older adults' embeddedness in dense, kin-centered social and purposeful networks (Cornwell, 2011). Additionally, Williams and Sternthal (2007) suggested that the positive effect of spirituality in SWB can be mediated by social relationships. Indeed, participation in spiritual activities might offer social support in spiritual settings, connectedness with other people and sense of community and a positive influence on life style (Yoon & Lee, 2007).

Furthermore, a previous review of the literature indicated that psychological factors, despite their potent impact, can explain only a limited variance relating to the vicissitudes of SWB (Diener et al., 1999). Contrary to our expectations, in this study, SOC was a negative predictor of the SWB. We hypothesized that older adults' SOC did not stimulate behavioral adaptation (e.g., effective management of daily life) which might have facilitated SWB (Schneider, Driesch, Kruse, Nehen, & Heuft, 2006; Williamson, 2005).

As expected, social support showed a significant positive impact in SWB, in this sample. This outcome emphasized the significant influence of strong emotional rewarding relationships on the older adults' SWB. Such a finding is not surprising, as it converges with extensive prior research (Charles & Carstensen, 2010; Cheng et al., 2011; Okun & Keith, 1998). Additionally, previous studies indicated mixed findings (Cheng et al., 2011) with positive social exchanges being more predictive of SWB than negative social exchanges (Okun & Keith, 1998).

It must be noted that marital status did not significantly predict SWB and that household was negatively related to SWB, in our sample. Thus, we hypothesized that for these older adults, the fact of living with their spouse or others at home (e.g., vertical family) was not clearly linked to meaningful relationships. In line with this, some scholars have taken the view that friends and non-family with extended kinship may be more contributive to well-being among older adults than the family (Akiyama, Antonucci, Takahashi, & Langfahl, 2003). In fact, previous literature pointed out that relationship type and closeness need to be considered together when trying to make sense of the relationship between social exchanges and well-being (Cheng et al., 2011).

Perceived health was positively related to SWB and medication was negatively related to SWB, thus, corroborating previous literature (Leung, Wu, Lue, & Tang, 2004). Unexpectedly, the presence of recent disease was not a significant predictor of older adults' SWB. Indeed, being healthy may enhance well-being in old age, as well as, social support is frequently related to healthy aging (Schafer, 2011). Considering that social support strongly predicts SWB in our sample, it comes with no surprise that health factors positively influence SWB.

Furthermore, the living setting predicted SWB among our participants. Older adults that lived in an urban environment presented a higher SWB score than the ones living in rural settings. These results are in line with recent research that focused on the role of

environmental (Bowling, 2007) and lifestyle characteristics (Williamson, 2005) for older adults' well-being and aging well, in part for enabling social participation. It is, thus possible that in urban settings, there are other variables, such as aging in place and sense of community, mediating the predictive effect of the living setting on SWB.

These results need to be interpreted within the context of the following limitations. Although a diverse sample of participants was recruited, the propensity for this study to be generalized is limited by the use of a convenience sampling method. The cross-sectional nature of the study is a concern, given that SWB changes over time. Hence, further longitudinal studies are needed to confirm the stability of these predictors.

The sample size (namely, 1258 participants) was adequate for this type of statistical analysis given it was applied a rule of thumb of ten subjects per manifest variable, as is current practice in structural equation modeling (Maroco, 2010).

Considering the importance of spirituality as a strong predictor of SWB in this study, specific dimensions such as spiritual beliefs and practices should be further deepened, as well as self-reported religiousness in old age. Furthermore, social and psycho-emotional factors, such as, meaningful relationships, embeddedness in social and purposeful networks and aging in place need to be explored in future studies, as they seem to be mediating the impact of SOC and of the socio-demographic, health and lifestyle-related factors. Lastly, this study did not take into account any other well-being outcome than SWB, disregarding such outcomes as psychological well-being, happiness, physical health, or longer life.

Notwithstanding these limitations, the findings of this study contribute to a better understanding of SWB's predictors. Firstly, the data come from a varied cross-national sample of the European older population. Secondly, besides the data, the study examined a broad range of factors, which helped to clarify the mixed findings on SWB predictors by highlighting the predictive nature of spirituality, SOC, social support, living setting, household, perceived health and medication for older adults' SWB, in the outlined model of SWB.

Even though we have suggested that SWB is contoured, in part, by the cited factors, it should not be seen as immutably the product of large forces beyond the control of the individual or the health professional. Accordingly, this structural model improves our capacity to foresee which predictors will increase the SWB experienced by seniors so that

these factors and other' effects can be included, when specifically designing and implementing effective, intervention programs for older populations.

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**GENERAL DISCUSSION**

## General Discussion

The central aims of this research were to conceptualize older adults' AtA and to explore the predictors of AtA and SWB in late adulthood. In doing so, this study contributed to the literature in the following ways. Firstly, both our systematic literature reviews of older adults' AtA and SWB contributed to a better understanding of the still unexplored construct of AtA and its multi-dimensionality, and to deepen the variables that influenced older adults' SWB in existing literature. Secondly, the outcomes of the qualitative studies pointed out the relevance of self-reported AtA, the conceptual links between age and aging in an overall model of 'adjustment and age' in late adulthood, and stressed the idea that spirituality is a key aspect for the AtA in a cross-cultural context. Thirdly, the findings of our quantitative studies showed AtAS as a new valid and reliable scale with five factors for AtA estimation, in a cross-national elderly population, a measure that up to date, was absent in the gerontological literature. Additionally, two structural models were presented, comprising a broad range of factors, including SOC, SWB and socio-demographic, lifestyle and health factors, within the multi-dimensional context of the aging process. These models pointed out the importance of self-reported spirituality, perceived health, leisure and professional status, income, household, SOC and adult children, as predictors of older adults' AtA, and the pertinence of self-reported spirituality, SOC, social support, living setting, household, perceived health and medication as predictors of older adults' SWB. The findings, as well as the limitations and strengths of this research, are discussed below.

The systematic literature review in Paper 1 provided a varied review of the approaches regarding the construct of AtA in gerontological literature and acknowledged the insufficiently explored state of the field (see Paper 1). Thirteen articles from 1,291 records, met inclusion criteria, with a total of 1,156 participants with ages 60 and over. There were consistent findings that highlight the importance of developing adaptive and active strategies, for adjustment to the process of aging in late adulthood. These studies are in line with Wrosch and colleagues' (2006) theoretical model, which demonstrated evidence for the emotional, biological and physical benefits deriving from adaptive self-regulation of common age-related challenges. Additionally, successful aging has been seen as a general process of adaptation, described as the selective optimization with compensation, in which older adults optimize personal functioning and well-being within the constraints of personal competence and resources (Baltes & Baltes, 1990).

Furthermore, the available evidence indicated that psychological variables such as self-efficacy, engagement with significant others and social and temporal processes of comparison are the variables most frequently assessed among these studies as having a relevant role in older adults' AtA. In fact, older adults' well-being, mental and emotional engagement with significant others have been related to psychological factors in previous studies (Herero & Extremera, 2010; Wiesmann & Hannich, 2008). Additionally, interpersonal intimacy and the self-concept were early seen as key to the AtA in McMordie's (1981) theoretical model. This review also presented evidence of variables that were negatively related to AtA, such as physical impairment, daily hassles, negative life events and difficulties in integrating the past. These results come as no surprise as advanced old age is a time of great challenge, during which older adults may become vulnerable to changes and stress that are associated with the aging process (Freedman, Stafford, Schwarz, & Conrad, 2012). Overall, and based on the included studies, this systematic literature review of older adults' AtA contributed to a better understanding of AtA and its multi-dimensionality, by providing an extensive coverage of older adults' AtA.

The second systematic literature review delivered an integrative assessment of the variables that influence older adults' SWB (see Paper 2). Although a limited number of studies examining correlates of older adults' SWB were found, the literature reflected a growing interest in understanding what influenced SWB in later life. Specifically, 14 articles from 616 records met inclusion criteria, with a total of 17,097 participants with ages 60 and over. Based on the included studies, this review provides strong evidence that SWB is influenced by social support, socio-demographic, health, psychological, coping strategies and lifestyle factors in late life.

Moreover, this review indicated that social support and socio-demographic characteristics are the variables most frequently assessed in these studies, and that these may be the most relevant variables for this population. This may also indicate that researchers find it more convenient to study these variables, rather than this being a reflection of older people's preferences. Fiori, Antonucci, and Cortina (2006) suggested that the diverse social network, having a greater variety of family and friends to provide for different needs, should be most well-being and health enhancing. Additionally, findings in this review also highlighted the importance of health, psychological, lifestyle and coping strategies' variables to SWB. Yet, previous literature presented no consensus concerning the level of these factors had on SWB (Diener, Oishi, & Lucas, 2003; Pinquart and Sörensen, 2000). The potential

value of this systematic review is underlined by the fact that when different factors are analyzed with this population, findings may indicate the need for a multi-disciplinary approach to older adults' SWB and the absence of superiority of any one particular type of variable.

Outcomes in the cross-national qualitative study of older adults' perceptions of AtA and SA (see Paper 3), suggested that 'existential meaning' (26.3%) and 'sense of purpose and ambitions' (24.2%) were the most frequent indicators of AtA pointed out by this study's participants. The prompting of objective (e.g. health) and subjective categories (e.g. existential meaning) that emerged from participants' interviews, corroborated the multi-dimensionality of the AtA concept (Bauer & McAdams, 2004; Keyes, Shmotkin, & Ryff, 2002; Neri, Cachioni, & Resende, 2002).

Overall older adults expressed positive SA in 66.1% of overall narratives. 'Balanced' (36.5%) and 'youthful' (29.6%) were the most referred SA for older adults. As suggested by previous research, success in fulfilling challenges may yield a more positive perceived age (Coupland, Coupland, Giles, & Henwood, 1991; Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008).

Considering the cross-national and cultural diversity of older adults' perspectives concerning age (Barak, 2009), the highest scores in 'health and wellness', 'existential meaning', 'stability and accessibility' and 'balanced' were prompted by Portuguese participants whilst Angolans were accountable for the highest results in 'sense of purpose and ambitions', 'social support' and 'youthful'. One possible explanation for these results could be the fact that Portuguese benefit from a stabilized social security system (Instituto Nacional Estatística, 2005), which might justify the highest scores for these categories and the focus on existential meaning, given that health, functional and environmental needs are currently met.

Moreover, literature highpointed the development of a specific spirituality as people grow older (MacKinlay, 2001). Alternatively, Angolans mostly felt young-at-heart, and relied on social networking for psychological and social support. Furthermore, Romanians were accountable for the highest scores in 'old' and 'dissatisfied', which is in line with past literature that stresses the fact that Romanian elderly often enfold low prestige and social segregation (Popa, 2000). This study extended previous research by giving empirical weight to what actually constituted one's personal perception of AtA and SA and to the conceptual

links between age and aging. Furthermore, our results supported the view that there are cross-national differences regarding older adults' SA and AtA.

In the qualitative study that analyzed AtA and SA from Angolan and Portuguese community-dwelling older adults' perspectives (see Paper 4), 'social support' was the most reported indicator of AtA (25.4%) and 'in harmony' (22.3%) was indicated as the most frequent SA response. Overall older adults expressed positive SA (86.4% of overall narratives). These results supported the existing literature (Bauer & McAdams, 2004; Brodsky, 1988; Keyes, Shmotkin, & Ryff, 2002; Ryff, 1989; Ryff & Keyes, 1995) and the systematic literature review on AtA, presented in Paper 1.

For Portuguese participants, the largest factor 'fulfilled' accounted for 37.9% of total variance, whereas for Angolan participants, 'integrated' represented 30.2% of total variance. 'Driven' was the least representative factor for Portuguese elderly (18.7% of total variance) and 'concerned' for the Angolan participants (17.3% of total variance). Because aging is a multi-dimensional concept, socio-demographic, cultural, national and ethnical differences may influence the process of aging (Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008). In line with this literature, significant differences were found concerning nationality, educational level, professional status and perceived health for AtA, and regarding educational level, professional status, nationality and marital status for SA.

'Adjustment and age' was explained by a three-factor overall model: 'integrated', 'congruent' and 'concerned' for Angolan participants. For Angolan elderly living in Portugal, when family support was not available, more varied forms of support were tapped to meet their needs (e.g., friends and neighbors). Previous literature suggested that participation in social activities could mediate the direct relationship between extraversion and happiness (Oerlemans, Bakker, & Veenhoven, 2011). Indeed, research shows that negative interactions are more frequent among family members than among friends (Akiyama, Antonucci, Takahashi, & Langfahl, 2003). Additionally, research has shown that happiness increases when older adults combine effortful social, physical, cognitive, and household activities with restful activities (Oerlemans, Bakker, & Veenhoven, 2011).

'Fulfilled', 'reconciliated' and 'driven' was indicated as a best-fit model for Portuguese elderly. Frankl (1963) and Maslow (1968) saw existential meaning, or personal meaning, as a universal human need. Moreover, three major sources of meaning include meaningful work or good deeds, authentic encounters with others, and the attitude one

chooses to adopt when faced with an uncontrollable situation (Malette & Oliver, 2006). Moreover, growing literature suggested that success in fulfilling challenges may yield more positive perceived age (Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008; Ward, 2010) and emphasized the importance of older adults' embeddedness in dense, kin-centered social networks (Cornwell, 2011; von Humboldt, Leal, & Pimenta, 2012).

The outcomes obtained in this study with Angolan and Portuguese older adults' AtA and SA, are a pertinent contribution to the unexplored multi-dimensional and cross-cultural context of AtA in this population and its association with SA, in an overall model.

'Spirituality' was the most verbalized indicator of AtA for the participants regarding the potential of spirituality towards older adults' AtA (see Paper 5). This result was in line with previous studies (Hybels, Blazer, George, & Koenig, 2012; Jewell, 2004), and with our findings from the qualitative study of older adults' perceptions of AtA (see Paper 3). In opposition, 'economic situation' was the least referred indicator of AtA, which corroborated prior literature (Birren & Schaie, 1996).

In detail, 'spiritual activities' was the most reported theme regarding 'spirituality' whereas 'spiritual community' was the least reported theme. Growing literature stressed a specific spirituality as people grow older (MacKinlay, 2001). Indeed, previous studies highlighted spirituality as comprising non-tradition-centered beliefs and practices such as meditation (Dillon & Wink, 2007) or without following any particular set of religious beliefs (Davidhizar, Bechtel, & Cosey, 2000). Furthermore, 'valorization of age' and 'time and sense of limit' were also frequently pointed out categories. Conversely, 'altruism' was one of the least indicated categories. Literature suggested that older adults include a limited or near-future focus, when perceiving aging and spirituality (Fung, Lai, & Ng, 2001). In addition, altruism was linked to spiritual experiences, generativity and longevity in late adulthood (Post, 2005).

Regarding the cross-national data, 'spirituality' was the most verbalized indicator of AtA for both Portuguese and German groups. Moreover, no significant association was found between nationality, sex and age, and the 'spirituality' total score. However it must be noted the existing associations of 'spiritual beliefs' with sex, of 'spiritual activities' with nationality, and of 'sense of limit' with age, which corroborated the fact that certain dimensions of spirituality can be experienced differently among the older populations from different nationality, sex and age (Cohen, Thomas, & Williamson, 2008). In particular, the association

of 'spiritual activities' with nationality, led us to hypothesize, this was due were due to cross-cultural differences, between Germans and Portuguese. In fact, national, cultural, age and gender differences may influence the process of aging (Löckenhoff et al., 2009; Neri, Cachioni, & Resende, 2002). Additionally, considering that, the first ones are mainly Protestants and the second essentially Catholics, we posited that the diverse cultural and religious backgrounds may have had a relevant role in both German and Portuguese groups' spiritual activities (Cohen & Saroglou, 2011).

Regarding the model for 'spirituality', the largest dimension, spiritual and existential meaning, accounted for 39.4% of total variance. 'Community embeddedness' was the least representative dimension for these participants (22.1% of total variance).

Spirituality for older adults was explained by a three-dimension overall model: 'spiritual and existential meaning', 'limit-related awareness' and 'community embeddedness'. Increasing number of persons identified themselves not as religious in a traditional sense but rather as spiritual in their orientation to life (McFadden, 1996). Furthermore, previous literature highlighted the holistic nature of older individuals' spirituality (Snodgrass, 2009) and the development and fulfillment when the life cycle is nearly complete (Tornstam, 2005). Additionally, spiritual dimensions were positively related with recovery from grief following bereavement (Edmonds & Hooker, 1992) and negatively correlated with fear of death and death avoidance (Tomer & Eliason, 2000).

Moreover, involvement in spiritual activities such as public spiritual participation might offer social support in spiritual settings, connectedness with other people and sense of community, a positive influence on life style and an available interpretation of the meaning of life events (Dillon & Wink, 2007). Overall, the results obtained in this study focused in older adults' spirituality, reinforced the previous idea that spirituality is a key aspect for the adjustment to the process of aging of older people and that it can be perceived differently by different nationalities.

In the following quantitative stage of our study, we developed a new 22-item scale with five factors for AtA estimation in a cross-national elderly population, which produced valid and reliable data for elder persons from four different nationalities (see Paper 6). Data gathered with AtAS showed overall good psychometric properties (in terms of distributional properties, statistical significant factor weights, factorial, convergent, discriminant, criterion and external-related validities, as well as reliability). Early studies highlighted the importance

of identity processes, socio-demographic resources (e.g., health, economic situation), attitudes towards life, psychological characteristics, and processes for changes regarding aging and adjustment capacity. Yet, findings present no consensus in literature concerning their role on AtA (Freund & Baltes, 1998; Brandtstädter & Rothermund, 2003; Sneed & Whitbourne, 2005; Thomae, 1992). Moreover, a valid and reliable evaluation of the AtA construct has been absent from the literature on older adults. To our best knowledge, we found no studies that explored older adults' AtA, simultaneously, in a multi-dimensional and cross-cultural perspective.

Results from our cross-sectional study pointed out a second-order factor, which is the construct AtA and evidenced that AtAS is an adequate cross-cultural instrument for research, clinical practice and program development in the health care context. All the subscales were positively correlated, and each one was strongly correlated with the total score, thus, the goodness of fit of the second-order model was practically equal to the goodness of fit indices of the 5-factor model.

Five factors were selected for the AtAS: sense of purpose and ambitions; zest and spirituality; body and health; aging in place and stability; and social support. 'Social support' presented the highest internal consistency (.939) and average variance extracted (.840). Prior research suggested that social support is relevant for older adults (Bowling, 2007; Low & Molzahn, 2007; McMordie, 1981) and stressed occupation, sense of purpose and accomplishment as pertinent for older populations (Brodsky, 1988; Kleinspehn-Ammerlahn, Kotter-Grühn, & Smith, 2008; Wahrendorf & Siegrist, 2010; Ward, 2010). Our results are in line with this literature, as well as with the systematic literature review, presented in Paper 1. Recent studies focused on the role of environmental (Bowling & Dieppe, 2005) and lifestyle characteristics (Williamson, 2005) for older adults' well-being and aging well. In line with this, it has been observed that health and lifestyle promotion (e.g. physical activity) contribute for aging well (Ayranci & Ozdag, 2005; Bowling, 2007; Smith, Borchelt, Maier, & Jopp, 2002; Wilson et al., 2002). Additionally, our systematic review on AtA evidenced physical impairment was negatively related to AtA (see paper 1).

Considering that feeling significant and attributing existential meaning to events is associated with well-being (Wong, 2000), older individuals search for existential meaning and conscious aging (Cornwell, 2011; Malette & Oliver, 2006). Indeed, 'zest and spirituality' indicated the highest composite reliability (.941) and variance explained by factor (18.8%).

This is in line with the potential of spirituality to AtA, as suggested in the qualitative study in Paper 5.

The observed correlations between the AtAS and the PANAS, SwLS and OtLQ were low. These findings provide evidence for divergent validity, possibly demonstrating the independence of the constructs in aging well literature. Furthermore, the configurational and weak invariance of the measure in a cross-national older adults sample, pointed out its cross-cultural suitability for this population. Indeed, growing literature stresses the importance of cultural and national differences in the process of aging (Barak, 2009; Löckenhoff et al., 2009; Torres, 2003). Furthermore, the nature of our community-dwelling sample aims at overcoming a limitation that is usually seen in gerontological research. Many studies are often limited to frail individuals, excluding the extrapolation to a non-clinical population (Wolinsky et al., 1996).

Considering that up to date, a multi-dimensional instrument for measuring AtA was absent in the existing literature, this study is an important contribution to the under-developed potential of this concept in older populations (Jopp & Rott, 2006; Kozma, Stones, & McNeil, 1991; Thomae, 1992), as it presented a new valid and reliable scale which measures older adults' AtA in cross-national studies with five dimensions of AtA.

In the study that analyzed the predictors of older adults' AtA in later life, findings indicated that self-reported spirituality was the strongest predictor of AtA ( $\beta = .816$ ;  $p < .001$ ), followed by perceived health ( $\beta = .455$ ;  $p < .001$ ), leisure ( $\beta = .322$ ;  $p < .001$ ), professional status ( $\beta = .283$ ;  $p < .001$ ), income ( $\beta = .230$ ;  $p = .035$ ), household ( $\beta = -.208$ ;  $p = .007$ ), sense of coherence ( $\beta = -.202$ ;  $p = .004$ ) and adult children ( $\beta = .164$ ;  $p = .011$ ) (see Paper 7). This is in line with recent literature, which highlighted the role of spirituality, health and social factors as relevant for positive adaptation to aging (Jopp & Rott, 2006; Jopp, Rott, & Oswald, 2008).

These variables explained respectively 60.6% of the variability of AtA. Self-reported spirituality was the strongest predictor of AtA in this sample. The outcomes of our previous study focused on the potential of spirituality to older adults' AtA suggested that spirituality is a key aspect for older adults' AtA (see Paper 5), as well as previous literature (Hybels et al., 2012). The perceived health was also a strong predictor of AtA. Growing literature has frequently indicated health as contributing for aging well in later life (Smith et al., 2002).

We initially expected AtA to be related to SWB and SOC. However, SWB did not predict AtA. These results did not corroborate previous literature, in which, personal adjustment is indicated as related to well-being in old age (Staudinger & Kunzmann, 2005). Moreover, SOC negatively predicted AtA in our sample. We hypothesized that SOC did not positively influence the AtA of these participants, by engendering conditions, behaviors, and life events that facilitated or moderated AtA (Wiesmann & Hannich, 2008).

Leisure and professional status were significant predictors of AtA among our participants, as well as income. Previous studies also highlighted productive and meaningful activities (von Humboldt, Leal, Pimenta, & Niculescu, 2012; Wahrendorf & Siegrist, 2010) and income (Rijken & Groenewegen, 2008), as contributing to the well-being of older adults. Additionally, it was found a positive relation between performing innovation and a sense of internal continuity in later life (Nimrod & Kleiber, 2007).

Outcomes from our previous qualitative study of older adults' perceptions of AtA and SA (see Paper 3) suggested that 'existential meaning' and 'sense of purpose and ambitions' were the most frequent indicators of AtA. Similarly outcomes were shown in the systematic literature review on AtA, presented in Paper 1. Conversely, 'economic situation' was previously the least referred indicator of AtA in our study on the potential of spirituality to older adults' AtA (see Paper 5).

Marital status was not a significant predictor of AtA and household negatively predicted AtA in this sample. Yet, the presence of adult children was significantly related to AtA. It is possible that adult children, more than spouses, provided supportive network and assistance, in particular when health and mobility declined. Gerontological literature highlighted the pertinence of social support for older adults (Volanen, Lahelma, Silventoinen, & Suominen, 2004), namely from the adult children (Grundy & Read, 2012). Additionally, Angolan and Portuguese older adults reported 'social support' as the most reported indicator of AtA (see Paper 4) and this dimension presented the highest internal consistency and average variance extracted in AtAS validation (see Paper 5). Moreover, social support can predict and promote health by providing persons with positive experiences, socially rewarding roles, or improved ability to cope with stressful events (Jopp, Rott, & Oswald, 2008; Seeman, 2000).

On the whole, the results of this cross-sectional study contributed to the gerontological literature by showing a model comprising AtA, SWB, SOC and socio-demographic, lifestyle

and health factors within the multi-dimensional context of the aging process, and by pointing out the importance of self-reported spirituality, perceived health, leisure and professional status, as the major predictors for older adults' AtA in our sample.

Our structural model indicated that self-reported spirituality ( $\beta = .395$ ;  $p < .001$ ), SOC ( $\beta = -.128$ ;  $p < .001$ ), social support ( $\beta = .089$ ;  $p = .008$ ), living setting ( $\beta = .083$ ;  $p < .001$ ), household ( $\beta = -.072$ ;  $p < .001$ ), perceived health ( $\beta = .049$ ;  $p = .007$ ) and medication ( $\beta = -.015$ ;  $p = .033$ ) were significant predictors of older adults' SWB (see Paper 8). These variables accounted for 82.9% of the variability of SWB in our cross-national sample and corroborated existing literature which pointed out that socio-demographic, psychological, lifestyle and health-related characteristics were associated with SWB among older adults (Ferguson & Goodwin, 2010; George, 2010; Gwozdz & Sousa-Poza, 2010; Sener, Terzioglu, & Karabulut, 2007).

Self-reported spirituality strongly predicted SWB among our participants. Such an outcome is not surprising, as it converges with prior research, which has associated spirituality with well-being in late adulthood (Yoon & Lee, 2007). It is also possible that there are other variables mediating the strong predictive effect of spirituality on SWB. In this context, Williams and Sternthal (2007) suggested that the positive effect of spirituality in SWB could be mediated by social relationships. In line with this, social support showed a significant positive impact in SWB, in this sample. This finding emphasized the significant influence of strong emotional rewarding relationships on older adults' SWB and it corroborated previous literature (Charles & Carstensen, 2010; Cheng, Li, Leung, & Chan, 2011, Okun & Keith, 1998). Social support was also indicated as a relevant predictor of SWB in the systematic review presented in Paper 2.

Conversely, household was negatively related to SWB. Hence, we hypothesized that for these older adults, the fact of living with their spouse or others at home was not clearly linked to meaningful relationships. In fact, previous studies suggested that friends and non-family with extended kinship might be more contributive to well-being among older adults than the family (Akiyama, Antonucci, & Takahashi, 2003). Older adults that lived in an urban environment presented a higher SWB score than the ones living in rural settings. It is, thus, possible that in urban settings there are other variables, such as aging in place and sense of community, mediating the predictive effect of the living setting on SWB, which converges with growing literature (Bowling, Dieppe, 2005; Williamson, 2005). Additionally, in our

previous systematic review, we found strong evidence that SWB was influenced by lifestyle factors in late life, as well (see Paper 2).

Contrary to our expectations, in this study, SOC was a negative predictor of the SWB. We hypothesized that older adults' SOC did not stimulate behavioral adaptation (e.g., effective management of daily life) which might have facilitated SWB (Schneider, 2006; Williamson, 2005). Perceived health was also positively related to SWB and medication was negatively related to SWB, thus, corroborating previous literature (Leung, Wu, Lue, & Tang, 2004).

In sum, the outcomes of this study on SWB predictors, highlighted the predictive nature of self-reported spirituality, SOC, social support, living setting, household, perceived health and medication for older adults' SWB, in the outlined structural model of SWB.

Our dissertation offers a valuable contribution to the existing literature. However, a number of limitations in this research and recommendations must be considered for future work.

Regarding both the systematic literature reviews, because an extensive literature search outside the computerized databases and of other languages besides English, Portuguese and Spanish was not performed, both may suffer from publication and language bias. Most of the studies were qualitative in the AtA systematic literature review, which hampered our ability to draw causal inferences. In addition, longitudinal studies concerning AtA were rare. There is a pressing need to conduct more theory-driven longitudinal studies to confirm the stability of AtA and to allow for causal attributions.

Conversely, the totality of the studies in the systematic literature review on the SWB's predictors was cross-sectional, quantitative and population-level survey studies. There is a demanding necessity to develop more theory-driven qualitative studies to examine the very complex dynamics among older adults' SWB. Most of the studies were conducted with non-multiple ethnic groups and no study focused on differences among ethnic groups. Additionally, a small number of studies were conducted in the context of non-Western culture and in developing regions. Hence, further investigation of cultural and ethnic differences in SWB is required.

Moreover, a diverse array of theoretical and methodological approaches and measurement instruments were found among the studies in both reviews, which also affected comparing the findings. In brief, our systematic reviews suggested that empirical evidence is

still limited. More rigorous experimental studies testing the causality and multi-dimensionality of AtA and SWB are needed. Furthermore, the findings are based on a small number of studies, thus further investigation of these findings, is required. With this in mind, it will be valuable for future research to develop these in combination with AtA and SWB's outcomes in late adulthood. Such a comprehensive view could serve as the basis for further studies on intervention and promotion for AtA and SWB among older populations.

Concerning the qualitative studies, although a varied sample of participants was recruited, considering the use of a purposeful method and its proneness to sampling bias (Miles & Huberman, 1994), the samples were not representative of the entire population and cannot lead to generalizations and inference making about the entire older population but only reveal these older adults' perspectives. Even though the interviews were conducted with a view to being bias free, a number of core areas were predefined to be addressed. Hence, interviews tended to be steered to these areas which could have biased the results. In addition, there is no certainty that different researchers would not come up with different categories. Qualitative research therefore, was necessary to maximize validity and to emphasize the need for researchers to be perceptive to the truly varying perspectives of older adults.

Concerning the quantitative studies, the use of a convenience sampling method could have resulted in some selection bias. Although a cross-national diverse sample of participants was recruited, the propensity for this study to be generalized was limited. Given the existence of various cultural influences among the aging context (Löckenhoff et al., 2009; Neri, Cachioni, & Resende, 2002), more studies are needed to confirm our outcomes, with other samples, ethnicities and nationalities. Although the scale was applied to older adults from 75 to 102 years old, it is believed that this instrument will also be useful in assessing AtA in older adults younger than 75. Given that our study is also limited by the single-point-in-time assessment of AtA and SWB, future longitudinal research will need to examine the stability of the proposed items for AtAS, its subscales and found predictors.

Another limitation is that respondents knew they were completing AtA, SWB and SOC questionnaires, which might have biased their answers in a more socially desirable direction. The samples size was adequate for this type of statistical analysis, accordingly with the common rule of thumb of five subjects per manifest variable, which is current practice in structural equation modeling (Kline, 2005). Given the absence of multicollinearity, good psychometric properties of the instruments used, and the good fit of both measurement and

structural models, these outcomes are statistically valid and reliable. Further research may be improved by using larger sample sizes in order to increase the strength of the investigation.

The hypothesis that other factors, not included in this research, might also influence AtA and SWB, should be further explored. In fact, in the structural models, we only considered direct effects of the predictors of these two constructs. It is possible that some predictors can interact (e.g. education, professional status and income) and possible mediation and moderation effects of the predictors may well need to be addressed in future research.

In line with this, specific dimensions such as spiritual beliefs and practices should be further deepened, as well as self-reported religiousness in old age. Furthermore, social and psycho-emotional factors, such as, meaningful relationships, embeddedness in social and purposeful networks and aging in place need to be explored in future studies, as they seem to be mediating the impact of the included predictors. The relationship type, centrality of kinship, and closeness also needs to be further investigated in older populations. Finally, our research did not take into account any other aging well outcome either than AtA, SWB and SOC, disregarding outcomes such as, psychological well-being, happiness, or health.

Notwithstanding these limitations, the findings of this study contributed to the conceptualization of older adults' AtA and to the understanding of AtA and SWB's predictors.

The strengths of this study included the systematic literature reviews which provided an up-to-date extensive coverage of older adults' AtA and SWB. The data of our research came from a varied cross-national sample of older population. Qualitative research allowed gaining access to the uniqueness of older adults' self-perceptions and to the conceptual framework of adjustment and age for older adults, underlining the potential of spirituality to older adults' AtA. Furthermore, a new reliable and valid measure to assess AtA among older adults was presented for research purposes, routine use in service planning and evaluation, therapeutic, case-management or clinical practice.

This instrument is a pertinent contribution to the under-developed potential of this concept and fills a gap in existing literature. It presented several advantages, namely, short administration time, and minimal training required. It is focused (i.e. non-generic), it does not duplicate information collected elsewhere, and it is easily completed by older people (who can have difficulty completing some generic scales). Finally, the structural models of AtA and SWB's predictors encompassed a broad range of examined factors, including psychological,

socio-demographic, lifestyle, health-related factors, which uncovered the under-developed potential of self-reported spirituality as predictor of older adults' AtA and SWB.

In conclusion, this research shed light into the distinctness of older adults' AtA and SWB in late adulthood. Overall, we assert that the findings of this study are a pertinent input for the conceptualization of the unexplored construct of AtA in a cross-national context and for the deepening of the predictors of AtA and SWB of older adults from different cultural backgrounds.

We intend with this research to stress AtA as paramount within future research and health interventions with older adults. With this in mind, it will be valuable for further research to move beyond the traditional analyses to a focus on a salutogenic approach, in which the multi-dimensionality of older adults' AtA is fully addressed. Considering that there is an urgent need for good-quality psychometric data, supported by the use of appropriate, valid and reliable measures among older populations, these user-driven outcomes can form part of future AtA assessments for older adults in health care settings.

Finally, this study stressed the need for deepening the factors that influenced older adults' AtA and SWB. Hence, by exploring these predictors in greater depth, researchers will at least be better able to enlighten the value of aging well, while adapting to the shifting demographic reality of older populations.

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## **APPENDICES**

## **APPENDIX A**

### Research Schedule

## RESEARCH SCHEDULE

Timeline Tasks	Sept 2009	Mar 2010	Sept 2010	Mar 2011	Sept 2011	Mar 2012	Sept 2012	Mar 2013	Sept 2013	Jan 2014
1.Literature review										
1.1.Systematic literature review										
2.Qualitative Studies										
2.1. Data Collection										
2.2. Data Analysis										
2.3 Discussion of the results										
3. Quantitative studies										
3.1. Data Collection										
3.2. Data Analysis										
3.3 Discussion of the results										
4. General Discussion and Conclusions										
5. Presentation and discussion of the PhD Thesis										

## **APPENDIX B**

Informed consent and study's questionnaires and instruments

**PhD STUDY:  
OLDER ADULTS' ADJUSTMENT TO AGING AND SUBJECTIVE WELL-BEING**

Informed Consent

This is a PhD study in the field of Psychology and it is being performed under the supervision of Professor Doctor Isabel Leal (ISPA-Instituto Universitário) and was funded by the Portuguese Foundation for Science and Technology (reference: SFRH/BD/44544/2008).

This research aims to study **older adults' adjustment to aging and the subjective well-being**.

We intend to explore the perspectives of 75-year old and older adults concerning adjustment to aging and which factors contribute for this adjustment and subjective well-being in late adulthood. We invite you to participate in this research, by answering the questions in the following pages.

You are free to withdraw from the research at any time without penalty.

Your collaboration is of high importance so that we can objectively and broadly deepen the concepts of **adjustment to aging and subjective well-being in older adults' perspective**.

This questionnaire is anonymous and confidential. There are no right and wrong answers. The best answer is your truly genuine personal answer.

Many thanks for your valuable contribution!

The leading researcher,

Sofia von Humboldt

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If you wish to participate, please sign this page and the following and, keep for yourself the first page (they are both the same and the first page is for you to keep)

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_

\_\_\_\_\_  
(Participant's signature)

**PhD STUDY:  
OLDER ADULTS' ADJUSTMENT TO AGING AND SUBJECTIVE WELL-BEING**

Informed Consent

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1149-041 Lisboa  
e-mail: sofia.humboldt@gmail.com

If you wish to participate, please sign this page with the today's date.

**Date:** \_\_\_\_/\_\_\_\_/\_\_\_\_

\_\_\_\_\_  
(Participant's signature)

**Code Number:** \_\_\_\_\_ (to fill by the researcher)

## Mini Mental State Examination

The following are a series of questions and tests, each of which scores one point if answered correctly. If every answer is correct, a maximum score of 30 points is possible.

### A. Orientation

1.

What is today's date? \_\_\_\_\_

What is today's year? \_\_\_\_\_

What is the month? \_\_\_\_\_

What day is today? \_\_\_\_\_

Can you also tell me what season it is? \_\_\_\_\_

**Score:** \_\_\_\_\_

2.

What county are we in? \_\_\_\_\_

What state are we in? \_\_\_\_\_

What city are we in? \_\_\_\_\_

What house are we in? \_\_\_\_\_

What floor are we on? \_\_\_\_\_

**Score:** \_\_\_\_\_

### B. Immediate Recall

1.

Ask the subject if you may test his/her memory. Say "ball, "flag," "tree" clearly and slowly, about on second for each. Then ask the subject to repeat them. Check the box at right for each correct response. The first repetition determines the score. If he/she does not repeat all three correctly, keep saying them up to six tries until he/she can repeat them.

Ball

Flag

Tree

**Score:** \_\_\_\_\_

### **C. Attention and Calculation**

1.

Ask the subject to begin with 100 and count backwards by 7. Record each response. Check one box at right for each correct response. Any response 7 or less than the previous response is a correct response. The score is the number of correct subtractions. For example, 93, 87, 80, 72, 66 is a score of 4; 93, 86, 78 70, 62, is 2; 92, 87, 78, 70, 65 is 0.

93  86  79  72  65

**Score:** \_\_\_\_\_

### **D. Recall**

1.

Ask the subject to recall the three words you previously asked him/her to remember. Check the box at right for each correct response.

Ball

Flag

Tree

**Score:** \_\_\_\_\_

### **E. Language**

1.

Show the subject a wrist watch and ask him/her what it is. Repeat for a pencil.

Wrist watch

Pencil

**Score:** \_\_\_\_\_

2.

Ask the subject to repeat "No, ifs, ands, or buts."

**Score:** \_\_\_\_\_

3.

Establish the subject's dominant hand. Give the subject a sheet of blank paper and say: "Take the paper in your right/left hand, fold it in half and put it on the floor."

Takes paper in hand

Folds paper in half

Puts paper on floor

**Score:** \_\_\_\_\_

4.

Hold up the card that reads, "Close your eyes." So the subject can see it clearly. Ask him/her to read it and do what it says. Check the box at right only if he/she actually closes his/her eyes.

Closes his eyes

**Score:** \_\_\_\_\_

5.

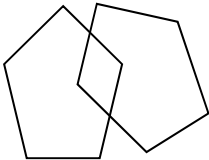
Give the subject a sheet of blank paper and ask him/her to write a sentence. It is to be written spontaneously. If the sentence contains a subject and a verb, and is sensible, check the box at right. Correct grammar and punctuation are not necessary.

Writes sentence

**Score:** \_\_\_\_\_

6.

Show the subject the drawing of the intersecting pentagons. Ask him/her to draw the pentagons (about one inch each side) on the paper provided. If ten angles are present and two intersect, check the box at right. Ignore tremor and rotation.



**Score:** \_\_\_\_\_

**Total score:** \_\_\_\_\_

## Socio-Demographic Questionnaire

1. Gender: Female  Male
2. Nationality: \_\_\_\_\_
3. Date of birth \_\_/\_\_/\_\_ (day/month/year)
4. Residence: Post Code: \_\_\_\_\_
5. Urban area  Rural area
6. Marital Status: Married or in a relationship  Not married nor in a relationship   
Widow
7. Household: Living alone  With spouse  With other family members  With non-family members
8. Number of children: \_\_\_\_\_
9. Sexual Orientation: Heterosexual  Homosexual  Bisexual
10. Education: Years in school: \_\_\_\_\_
11. Education: Maximum achieved academic level: \_\_\_\_\_
12. Professional Status: Active  Not active
13. Present profession or former profession (if pensioner): \_\_\_\_\_
14. Do you receive any form of social support: Yes  No
15. In case you receive a form of living support, which from these apply? Family support  Friends support  Senior nursing home  Assisted residence  Day care center  Home assistance
16. Family Annual Income:  
Below 10.000€  Between 10.001 and 20.000€  Between 20.001 and 37.500€   
Between 37.501 and 70.000€  Above 70.000€
17. Religion: No religion  Catholic  Protestant  Muslim  Other: \_\_\_\_\_
18. Do you consider yourself a spiritual person? Yes  No

## Questionnaire of Health and Lifestyle

1. Did you have any recent disease? Yes  No

If so, which one? \_\_\_\_\_

2. How do you describe your general health? Good  Poor

3. How many medications do you take per day ? \_\_\_\_\_

4. Did you recently have any psychological problem? Yes  No

If so, what sort of problem? \_\_\_\_\_

5. Are you presently engaged in any psychological or psychiatric therapy: Yes  No

6. Do you exercise? Yes  No  7. If so, what type of exercise?

\_\_\_\_\_

8. Do you have any leisure activities? Yes  No

9. If so, which leisure activities: \_\_\_\_\_

## Adjustment to Aging Scale

The following are a series of phrases relating to adjustment to aging. Read each item and then circle the number which best expresses your views concerning the importance of each phrase for your adjustment to aging, in the present moment. Please give only one answer to each item. Use the following scale to record your answers.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Not important at all</b>	<b>Moderately not important</b>	<b>Slightly not important</b>	<b>Neutral</b>	<b>Slightly important</b>	<b>Moderately important</b>	<b>Absolutely important</b>

1. Being active and working at something that I like	1	2	3	4	5	6	7
2. Having curiosity and an interest in learning	1	2	3	4	5	6	7
3. Creating and being creative	1	2	3	4	5	6	7
4. Leaving a mark and seed the future	1	2	3	4	5	6	7
5. Laughter and having fun	1	2	3	4	5	6	7
6. Having spiritual, religious and existential values	1	2	3	4	5	6	7
7. Accepting changes	1	2	3	4	5	6	7
8. Making the best of my age	1	2	3	4	5	6	7
9. Feeling relaxed about the future	1	2	3	4	5	6	7
10. Being healthy, without pain or disease	1	2	3	4	5	6	7
11. Sports and outdoor activities	1	2	3	4	5	6	7
12. Living autonomously and at my own rhythm	1	2	3	4	5	6	7
13. Not being dependent on medication or treatments	1	2	3	4	5	6	7
14. Appreciating my body and appearance	1	2	3	4	5	6	7
15. Having mobility and getting out of the house	1	2	3	4	5	6	7
16. Supportive neighbors	1	2	3	4	5	6	7
17. Good climate	1	2	3	4	5	6	7
18. Safety	1	2	3	4	5	6	7
19. Having comfort and economic stability	1	2	3	4	5	6	7
20. Sharing intimacy with a partner	1	2	3	4	5	6	7
21. Having a good partner in life	1	2	3	4	5	6	7
22. Being cherished by my family	1	2	3	4	5	6	7

## Adjustment to Aging Total Pool of Items

The following are a series of phrases relating to adjustment to aging. Read each item and then circle the number which best expresses your views concerning the importance of each phrase for your adjustment to aging, in the present moment. Please give only one answer to each item. Use the following scale to record your answers.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Not important at all</b>	<b>Moderately not important</b>	<b>Slightly not important</b>	<b>Neutral</b>	<b>Slightly important</b>	<b>Moderately important</b>	<b>Absolutely important</b>

1. Integrating aging as a part of life	1	2	3	4	5	6	7
2. Being a grandparent or a parent	1	2	3	4	5	6	7
3. Being challenged	1	2	3	4	5	6	7
4. Sharing my knowledge with the young	1	2	3	4	5	6	7
5. Feeling fulfillment	1	2	3	4	5	6	7
6. Being with my descendants	1	2	3	4	5	6	7
7. Developing real interests	1	2	3	4	5	6	7
8. Sharing intimacy with a partner	1	2	3	4	5	6	7
9. Keeping myself intellectually active	1	2	3	4	5	6	7
10. Not financially depending on my children	1	2	3	4	5	6	7
11. Adapting to my limitations	1	2	3	4	5	6	7
12. Resting after a fulfilling life	1	2	3	4	5	6	7
13. Being active and working at something that I like	1	2	3	4	5	6	7
14. Doing projects together with others	1	2	3	4	5	6	7
15. Having less problems	1	2	3	4	5	6	7
16. Appreciating cultural events	1	2	3	4	5	6	7
17. Improving my capacities	1	2	3	4	5	6	7
18. Getting out of the house and having fun	1	2	3	4	5	6	7
19. Assuring the future of the next generations	1	2	3	4	5	6	7
20. Wanting to improve professionally	1	2	3	4	5	6	7
21. Having younger friends	1	2	3	4	5	6	7
22. Feeling curiosity for what I do not know	1	2	3	4	5	6	7
23. Having a good partner in life	1	2	3	4	5	6	7
24. Living with intensity	1	2	3	4	5	6	7
25. Having autonomy	1	2	3	4	5	6	7
26. Developing projects with young people	1	2	3	4	5	6	7
27. Having spiritual, religious and existential values	1	2	3	4	5	6	7
28. Sharing my knowledge with others	1	2	3	4	5	6	7

29. Leaving the house	1	2	3	4	5	6	7
30. Engaging in volunteer activities	1	2	3	4	5	6	7
31. Having projects, dreams and ambitions	1	2	3	4	5	6	7
32. Joking with other people	1	2	3	4	5	6	7
33. Traveling	1	2	3	4	5	6	7
34. Being consulted by others	1	2	3	4	5	6	7
35. Having a good health	1	2	3	4	5	6	7
36. Having curiosity and an interest in learning	1	2	3	4	5	6	7
37. Knowing what I want from what I already lived	1	2	3	4	5	6	7
38. Creating and being creative	1	2	3	4	5	6	7
39. Being able to appreciate a good meal with others	1	2	3	4	5	6	7
40. Doing what I like	1	2	3	4	5	6	7
41. Adapting my rhythm to my age	1	2	3	4	5	6	7
42. Not taking myself too seriously	1	2	3	4	5	6	7
43. Accepting changes	1	2	3	4	5	6	7
44. Having the ones I love around me	1	2	3	4	5	6	7
45. Eating and sleeping well	1	2	3	4	5	6	7
46. Respecting my own rhythm	1	2	3	4	5	6	7
47. Being able to work	1	2	3	4	5	6	7
48. Having fun	1	2	3	4	5	6	7
49. Having a healthy life	1	2	3	4	5	6	7
50. Teaching something to others	1	2	3	4	5	6	7
51. Having my own timetable	1	2	3	4	5	6	7
52. Trying to accomplish something	1	2	3	4	5	6	7
53. Being healthy, without pain or disease	1	2	3	4	5	6	7
54. Being with the young	1	2	3	4	5	6	7
55. Having more challenges	1	2	3	4	5	6	7
56. Sports and outdoor activities	1	2	3	4	5	6	7
57. Not making errors	1	2	3	4	5	6	7
58. Belonging to a religious community	1	2	3	4	5	6	7
59. Having mobility and getting out of the house	1	2	3	4	5	6	7
60. Having a life full of experiences	1	2	3	4	5	6	7
61. Appreciating the good things that one can only reach with my age	1	2	3	4	5	6	7
62. Concentrating in what I can do	1	2	3	4	5	6	7
63. Supportive neighbors	1	2	3	4	5	6	7
64. Leaving a mark and seed the future	1	2	3	4	5	6	7
65. Not changing my youth ideals	1	2	3	4	5	6	7
66. Being in contact with work colleagues	1	2	3	4	5	6	7
67. Good climate	1	2	3	4	5	6	7

68. Safety	1	2	3	4	5	6	7
69. Having comfort and economic stability	1	2	3	4	5	6	7
70. Having good friendships	1	2	3	4	5	6	7
71. Being lucid and articulating my thoughts well	1	2	3	4	5	6	7
72. Making plans that I can accomplish	1	2	3	4	5	6	7
73. Laughter and having fun	1	2	3	4	5	6	7
74. Keeping my physical abilities and my senses functioning well	1	2	3	4	5	6	7
75. Living autonomously and at my own rhythm	1	2	3	4	5	6	7
76. Not dependent on medication or treatments	1	2	3	4	5	6	7
77. Not having incapacities or physical limitations	1	2	3	4	5	6	7
78. Easy access to everything	1	2	3	4	5	6	7
79. Feeling love for what is around me	1	2	3	4	5	6	7
80. Being aware of what I cannot do	1	2	3	4	5	6	7
81. Feeling grateful	1	2	3	4	5	6	7
82. Using my experience to help others	1	2	3	4	5	6	7
83. Not making radical life changes	1	2	3	4	5	6	7
84. Being surrounded by comfort and in a good home environment	1	2	3	4	5	6	7
85. Joining with my descendants	1	2	3	4	5	6	7
86. Sun exposure	1	2	3	4	5	6	7
87. Living a pleasant and comfortable life	1	2	3	4	5	6	7
88. Being less demanding	1	2	3	4	5	6	7
89. Being cherished by my family	1	2	3	4	5	6	7
90. Being attentive to life events	1	2	3	4	5	6	7
91. Preparing myself for when I am not lucid	1	2	3	4	5	6	7
92. Believing in what I have inside of me and letting that come out	1	2	3	4	5	6	7
93. Considering myself mature instead of old	1	2	3	4	5	6	7
94. Living in tranquility	1	2	3	4	5	6	7
95. Not creating excuses for not making decisions	1	2	3	4	5	6	7
96. Not complicating life	1	2	3	4	5	6	7
97. Having a spiritual attitude	1	2	3	4	5	6	7
98. Appreciating simplicity	1	2	3	4	5	6	7
99. Not being limited by age	1	2	3	4	5	6	7
100. Not giving up	1	2	3	4	5	6	7
101. Having had a good career	1	2	3	4	5	6	7
102. Being able to drive	1	2	3	4	5	6	7
103. Feeling more complete nowadays	1	2	3	4	5	6	7
104. Not being tied up to a timetable	1	2	3	4	5	6	7
105. Keeping myself optimistic	1	2	3	4	5	6	7
106. Valuing events	1	2	3	4	5	6	7
107. Making others laugh	1	2	3	4	5	6	7

108. Appreciating my body and appearance	1	2	3	4	5	6	7
109. Having intellectual endurance	1	2	3	4	5	6	7
110. Exercising and being in good physical shape	1	2	3	4	5	6	7
111. Making the best of my age	1	2	3	4	5	6	7
112. Having time to do what I want	1	2	3	4	5	6	7
113. Concentrating on what I do and not on my age	1	2	3	4	5	6	7
114. Believing in something more after death	1	2	3	4	5	6	7
115. Feeling relaxed about the future	1	2	3	4	5	6	7
116. Feeling that my age brings me compensations that exceed losses	1	2	3	4	5	6	7
117. Taking advantage of all moments	1	2	3	4	5	6	7
118. Enjoying life	1	2	3	4	5	6	7
119. Not wasting time	1	2	3	4	5	6	7
120. Having a young and optimistic attitude	1	2	3	4	5	6	7
121. Having an adequate health and social system	1	2	3	4	5	6	7
122. Not worrying about my descendants	1	2	3	4	5	6	7
123. Feeling content	1	2	3	4	5	6	7
124. Not having to work	1	2	3	4	5	6	7
125. Feeling happy	1	2	3	4	5	6	7
126. Having a satisfactory sex life	1	2	3	4	5	6	7
127. Not needing prosthetics	1	2	3	4	5	6	7

## Subjective Well-Being Scale

Below there is a number of words and phrases that describe different feelings and emotions. Read each item and indicate to what extent you have lately felt this way. Then mark the appropriate answer in the space next to that word. Please give only one answer to each item. Use the following scale to record your answers.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Very slightly or not at all</b>	<b>A little</b>	<b>Moderately</b>	<b>Quite a bit</b>	<b>Extremely</b>

Lately, I have felt:

1. Interested		11. Proud	
2. Distressed		12. Irritable	
3. Excited		13. Alert	
4. Upset		14. Ashamed	
5. Strong		15. Inspired	
6. Guilty		16. Nervous	
7. Scared		17. Determined	
8. Attentive		18. Jittery	
9. Hostile		19. Active	
10. Enthusiastic		20. Afraid	

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by circling the appropriate number next to the item. Please give only one answer to each item. Use the following scale to record your answers.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Strongly disagree</b>	<b>Disagree</b>	<b>Slightly disagree</b>	<b>Neither agree or disagree</b>	<b>Slightly agree</b>	<b>Agree</b>	<b>Strongly agree</b>

1. In most ways my life is close to my ideal.	1	2	3	4	5	6	7
2. The conditions of my life are excellent.	1	2	3	4	5	6	7
3. I am satisfied with life.	1	2	3	4	5	6	7
4. So far I have gotten the important things I want in life.	1	2	3	4	5	6	7
5. If I could live my life over, I would change almost nothing.	1	2	3	4	5	6	7

## Orientation to Life Questionnaire

The following are a series of questions and/or sentences relating to various aspects of life. Please mark the number which best expresses your views concerning the item, with numbers 1 to 7. Please give only one answer to each question.

**1. When you talk to people, do you have the feeling that they don't understand you?**

Always have this feeling	1	2	3	4	5	6	7	Never have this feeling
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**2. In the past, when you had to do something which depended upon cooperation with others, did you have the feeling that it:**

Surely wouldn't get done	1	2	3	4	5	6	7	Surely would get done
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**3. Think of the people with whom you come into contact daily, aside from the ones to whom you feel closest. How well do you know most of them?**

You feel that they're strangers	1	2	3	4	5	6	7	You know them very well
---------------------------------	---	---	---	---	---	---	---	-------------------------

**4. Do you have the feeling that you don't really care about what goes on around you?**

Very often	1	2	3	4	5	6	7	Very seldom or never
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**5. Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?**

Always happened	1	2	3	4	5	6	7	Never happened
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**6. Has it happened that people whom you counted on, disappointed you?**

Always happened	1	2	3	4	5	6	7	Never happened
-----------------	---	---	---	---	---	---	---	----------------

**7. Life is:**

Completely routine	1	2	3	4	5	6	7	Full of interest
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**8. Until now your life has had:**

No clear goals or purpose at all	1	2	3	4	5	6	7	Very clear goals and purpose
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**9. Do you have the feeling that you're being treated unfairly?**

Very often	1	2	3	4	5	6	7	Very seldom or never
------------	---	---	---	---	---	---	---	----------------------

**10. In the past ten years your life has been:**

Full of changes without your knowing what will happen next	1	2	3	4	5	6	7	Completely consistent and clear
--	---	---	---	---	---	---	---	---------------------------------

**11. Most of the things you do in the future will probably be:**

Deadly boring	1	2	3	4	5	6	7	Completely fascinating
---------------	---	---	---	---	---	---	---	------------------------

**12. Do you have the feeling that you are in an unfamiliar situation and don't know what to do?**

Very often	1	2	3	4	5	6	7	Very seldom or never
------------	---	---	---	---	---	---	---	----------------------

**13. What best describes how you see your life?**

There is no solution to painful things in life	1	2	3	4	5	6	7	One can always find a solution to painful things in life
--	---	---	---	---	---	---	---	--

**14. When you think about your life, you very often:**

Ask yourself why you exist at all	1	2	3	4	5	6	7	Feel how good it is to be alive
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**15. When you face a difficult problem, the choice of a solution is:**

Always confusing and hard to find	1	2	3	4	5	6	7	Always completely clear
-----------------------------------	---	---	---	---	---	---	---	-------------------------

**16. Doing the things you do every day is:**

A source of pain and boredom	1	2	3	4	5	6	7	A source of deep pleasure and satisfaction
------------------------------	---	---	---	---	---	---	---	--

**17. Your life in the future will probably be:**

Full of changes without your knowing what will happen next	1	2	3	4	5	6	7	Completely consistent and clear
--	---	---	---	---	---	---	---	---------------------------------

**18. When something unpleasant happened in the past your tendency was:**

“To eat yourself up” about it	1	2	3	4	5	6	7	To say “ok that’s that, I have to live with it” and go on
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**19. Do you have very mixed-up feelings and ideas?**

Very often	1	2	3	4	5	6	7	Very seldom or never
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**20. When you do something that gives you a good feeling:**

It’s certain that something will happen to spoil the feeling	1	2	3	4	5	6	7	It’s certain that you’ll go on feeling good
--	---	---	---	---	---	---	---	---

**21. Does it happen that you have feelings inside you would rather not feel?**

Very often	1	2	3	4	5	6	7	Very seldom or never
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**22. You anticipate that your personal life in the future will be:**

Totally without meaning or purpose	1	2	3	4	5	6	7	Full of meaning and purpose
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**23. Do you think that there will always be people whom you’ll be able to count on in the future?**

You doubt there will be	1	2	3	4	5	6	7	You’re certain there will be
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**24. Does it happen that you have the feeling that you don’t know exactly what’s about to happen?**

Very often	1	2	3	4	5	6	7	Very seldom or never
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**25. Many people – even those with a strong character – sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?**

Very often	1	2	3	4	5	6	7	Never
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**26. When something happened, have you generally found that:**

You overestimated or underestimated its importance	1	2	3	4	5	6	7	You saw things in the right proportion
--	---	---	---	---	---	---	---	--

**27. When you think of the difficulties you are likely to face in important aspects of your life, do you have the feeling that:**

You won’t succeed in overcoming the difficulties	1	2	3	4	5	6	7	You will always succeed in overcoming the difficulties
--	---	---	---	---	---	---	---	--

**28. How often do you have the feeling that there’s little meaning in the things you do in your daily life?**

Very often	1	2	3	4	5	6	7	Very seldom or never
------------	---	---	---	---	---	---	---	----------------------

**29. How often do you have feelings that you’re not sure you can keep under control?**

Very often	1	2	3	4	5	6	7	Very seldom or never
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Many thanks for your cooperation!

## **APPENDIX C**

Interviews' Contents and Emergent Categories from Content Analysis

**INTERVIEWS' CONTENTS AND EMERGENT CATEGORIES FROM CONTENT  
ANALYSIS**

**PAPER 3**

<b>Participant</b>	<b>a) Gender b) Age c) Marital Status d) Professional Status e) Nationality</b>	<b>1. "How do you feel about your age?"</b>	<b>2. "I would like to understand what in your point of view, contributes to your adjustment to aging in this phase of your life."</b>
1	a) Male b) 89 c) Single d) Active e) Portuguese	-a idade tem de ser balanceada ( <b>6a</b> ) -apesar tudo muito com equilibrio ( <b>6a</b> ) -sinto-me jovem ainda ( <b>8a</b> )	-em primeiro lugar a constituição do corpo e da mente ( <b>2a</b> ) -estou evoluindo para as coisas mais pequenas ( <b>4a</b> ) -adoro pintar ( <b>1a</b> ) -doia-me sempre que eu tinha de levantar com o despertador ( <b>5a</b> ) -às vezes vou lá a casa, às vezes vai ela à minha ( <b>3a</b> ) -a melhor ocupação é o trabalho ( <b>1g</b> ) -é importante aceitar a idade ( <b>4c</b> )
2	a) Male b) 76 c) Single d) Active e) Portuguese	-apesar de tudo muito bem ( <b>6a</b> ) -não me sinto jovem ( <b>7a</b> ) -não estou contente com a minha idade ( <b>9a</b> )	-adoro escrever ( <b>1a</b> ) -sinto-me activo, com saúde ( <b>2a</b> ) -não me sinto muito afectada pela idade ( <b>4c</b> ) -observo melhor as coisas pequenas ( <b>4a</b> ) -não devia trabalhar tanto ( <b>1g</b> ) -passear, vou no passeio, e relaxar a tomar um cafezinho com amigos ( <b>5a</b> )
3	a) Male b) 79 c) Single d) Active e) Portuguese	-boas e más notícias, digolhe eu ( <b>6a</b> ) -sinto-me velho ( <b>7a</b> ) -sentir velho não é bom ( <b>9a</b> ) -gostar de tudo bom e mau ( <b>6a</b> )	-gosto de ver as coisas que saiem da terra ( <b>4a</b> ) -pintar é uma satisfação pessoal ( <b>1a</b> ) -o convívio é muito importante ( <b>3a</b> ) -posso usar de uma forma conceptual os meus conhecimentos ( <b>1g</b> ) -eu sinto é que já não posso fazer o que fazia antes ( <b>4c</b> ) -ficar quieto ( <b>5a</b> ) -estabilidade emocional é muito importante ( <b>2a</b> )
4	a) Male b) 83 c) Single	-chega-se ao fim e o resultado é positivo ( <b>6a</b> ) -sinto-me jovem ainda ( <b>8a</b> )	-para mim é importante trabalhar estar activo ( <b>1g</b> ) -é importante participar na vida social ( <b>3a</b> )

	d) Inactive e) Portuguese		-experienciar a vida à minha volta <b>(4a)</b> -temos que fazer as coisas ao nosso ritmo <b>(1e)</b>
5	a) Male b) 93 c) Widowed d) Active e) Portuguese	-ver os dois lados <b>(6a)</b> -sou velho <b>(7a)</b> -balancear o bom e o mau <b>(6a)</b> -às vezes, tenho uma alma jovem <b>(8a)</b>	-o ritmo não é tão rápido como quando era mais jovem, mas compenso isso com mais sabedoria <b>(1e)</b> -gosto da minha profissão <b>(1g)</b> -quero tipo, o repouso do guerreiro <b>(5a)</b> -cada dia, disfrutar da vida e andar com ela para a frente <b>(4a)</b> -quando um pessoa é saudável, já fica muito contente <b>(2a)</b> -devo começar a poupar-me <b>(5a)</b> -eu tenho a minha gente ao pé <b>(3b)</b>
6	a) Male b) 98 c) Married or in a relationship d) Active e) Portuguese	-ter em contra o bom e o mau <b>(6a)</b> -com esta idade e sou já velho <b>(7a)</b> -não gosto da minha idade <b>(9a)</b>	-eu gosto de ser mais velho <b>(4c)</b> -o mais importante é ter saúde <b>(2a)</b> -deixar de trabalhar por completo é perigoso <b>(1g)</b>
7	a) Female b) 78 c) Single d) Active e) Portuguese	-eu pondero bem a minha idade <b>(6a)</b> -sinto-me velha <b>(7a)</b> -velha só é mau <b>(9a)</b> -não são só más notícias, também há boas <b>(6a)</b>	-dou por mim, ocasionalmente a pensar na morte <b>(4b)</b> -tenho uma vida agora que é muito mais livre e muito mais agradável do que eu quando trabalhava <b>(5a)</b> -sinto que tenho a saúde média <b>(2a)</b> -vejo a minha idade também uma idade de preservar <b>(4d)</b> -abrandei o ritmo mas gosto de ainda ser útil <b>(1g)</b> -tenho o meu filho, tenho-os a todos [família] <b>(3b)</b> -gosto de pensar nela não como uma idade mas sim como uma oportunidade <b>(4c)</b>
8	a) Female b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-Gosto de ver os prós e os contras <b>(6a)</b> -A idade limita-me <b>(9a)</b> -A idade pesa <b>(7a)</b>	-Trabalhar, é sentir-me útil aos outros <b>(1g)</b> -Deixar de ter horário também foi uma coisa boa <b>(5a)</b> -O limite temporal é uma coisa, é uma coisa que só agora nos últimos 2 anos, começou ocasionalmente a surgir-me no espirito <b>(4b)</b>
9	a) Female b) 97 c) Married or in a relationship d) Active e) Portuguese	-a idade traz benefícios e também não <b>(6a)</b> -que quer, sou velho <b>(7a)</b> -mas às vezes também sei ser jovem <b>(8a)</b> -sinto-me sozinho e velho <b>(9a)</b>	-a idade é algo que não se consegue escapar e tão certa como a morte na vida e vai acontecer mais tarde ou mais cedo <b>(4c)</b> -uma coisa que me sinto bem, o ter tempo para mim <b>(5a)</b> -o acto criativo para mim é cada vez mais importante <b>(1a)</b>

		-ter em conta as vantagens e desvantagens da idade <b>(6a)</b>	-estou a envelhecer mas aceito com prazer as mudanças <b>(4c)</b> -depois o convívio com as pessoas e com a família <b>(3b)</b> -aceito o que veio com a idade <b>(4d)</b>
10	a) Female b) 97 c) Married or in a relationship d) Inactive e) Portuguese	-não são só coisas más <b>(6a)</b> -não gosto da minha idade <b>(7a)</b>	-para mim é importante a saúde <b>(2a)</b> -agora já não tenho de me levantar cedo <b>(5a)</b> -somos um produto biológico com prazo limitado <b>(4b)</b> -sentir-me activa <b>(1f)</b> - gosto do que a idade me trouxe <b>(4d)</b> -hoje era mais feliz se tivesse filhos <b>(3b)</b> -as rotinas são importantes para o meu equilíbrio <b>(1e)</b>
11	a) Female b) 99 c) Single d) Active e) Portuguese	-traz muitas coisas boas e isso deve ser ponderado <b>(6a)</b> -ser velha desagrada-me <b>(7a)</b>	-vejo-me activo na idade <b>(1f)</b> -alguns pensamentos qe têm que ver com a própria idade, que é perceber que estamos mais próximos do fim <b>(4b)</b> -conviver com a família e com os netos <b>(3b)</b> -é importante não ter horários <b>(5a)</b> -as rotinas orientam-me <b>(1e)</b> -ficar quieta <b>(5a)</b> -acho a minha idade bonita <b>(4c)</b> -sinto-me muitíssimo bem quer fisicamente, psicologicamente <b>(2a)</b> -ando dois quilómetros todos os dias. Faço-o ao meu próprio ritmo e é um tempo que dedico aos meus pensamentos <b>(2e)</b>
12	a) Male b) 89 c) Married or in a relationship d) Inactive e) Portuguese	-pondero muito a minha idade <b>(6a)</b> -ser velho não é bom <b>(7a)</b>	-estar ocupado para conseguir chegar a esta idade bem-disposto <b>(1f)</b> -finalmente descansar <b>(5a)</b> -agora já começo a pensar no fim, isso incomoda <b>(4b)</b> -adequar o ritmo ao envelhecimento é importante <b>(1e)</b>
13	a) Male b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-sinto-me mais jovem que muitos <b>(8a)</b> -a idade deve ser ponderada <b>(6a)</b> -os jovens às vezes são mais velhos que eu <b>(8a)</b>	-ter saúde até agora <b>(2a)</b> -se me perguntassem se eu gostava de ter menos 10 anos, eu diria que não gostava de ter <b>(4c)</b> -faço as coisinhas da minha casa e saio a passear <b>(1f)</b>
14	a) Female b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-devemos medir a nossa idade <b>(6a)</b> -ser velha tem coisas más <b>(7a)</b> -adoro a minha idade mas vejo coisas más <b>(6a)</b>	-adoro pintar <b>(1a)</b> -estar em paz <b>(5a)</b> -ser altruísta <b>(4e)</b> -do ponto de vista da definição da saúde OMS, física, psíquica e social, sinto-me bem <b>(2a)</b> -tirar o máximo partido do meu tempo, tenho... não quero desperdiçar tempo <b>(4b)</b> -preciso de fazer alguma coisa <b>(1f)</b> -é importante contactar com familiares <b>(3b)</b> -partilhar a natureza <b>(4e)</b> -eu preciso disso, da pintura <b>(1g)</b>
15	a) Female b) 99 c) Married or in a	-a idade não me pesa nem muito nem pouco <b>(6a)</b> -sinto-me velha <b>(7a)</b>	-quero dar a volta ao mundo <b>(1b)</b> -não estar doente <b>(2a)</b> -o meu marido faleceu cedo e fiquei sozinha

	relationship d) Inactive e) Portuguese	-não me sinto bem com a minha idade (9a)	(4b) -sinto-me bem ainda para trabalhar e ter uma actividade (1g) -deixar de ter horário é maravilhoso (5a) -uma perspectiva mais espiritual (4e) -não senti a falta dos filhos e hoje é que sinto (3b)
16	a) Female b) 93 c) Widowed d) Inactive e) Portuguese	-sou uma velha (7a) -gosto de ponderar a idade (6a)	-tento estar calma (2a) -ter tempo para tudo (5a) -estou consciente da idade, e do limite (4b) -é importante contactar com familiares (3b) -gosto dos meus pequenos desafios diários (1c)
17	a) Male b) 81 c) Widowed d) Inactive e) Portuguese	-são coisas boas e más (6a) -estou velho (7a)	-vejo a minha idade como a idade de mais modéstia (4c) -não quero fazer grandes planos (5b) -é importante viver a vida com um objectivo, intensidade e paixão (1c) -sentir uma ligação com o mundo (4e) -sinto-me bem por enquanto (2a) -faço hoje uma medicação preventiva que não fazia aos 20 anos (2a) -uma vida simples e não olhar para trás muito e não olhar muito também para o futuro (5b) -eu já não preciso de tantas coisas como eu precisava dantes (4c) -situação familiar estável (3b) -trabalhando, fica-se sempre bem-disposto (1g)
18	a) Female b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-traz muitas vantagens e desvantagens (6a) -a idade pesa-me (7a)	-temos que nos desafiar (1c) -pensar nos outros (4e) -estar sossegada (5a) -não ficar parada (1f) -antes rir que chorar (4f) -do ponto de vista sensorial e físico, propriamente dito, mantenho-me quase sem reparar na idade que tenho (2a) -sentir uma ligação com os outros (4e)
19	a) Male b) 77 c) Married or in a relationship d) Active e) Portuguese	-é o balanço (6a) -a idade já é tanta (7a) -a idade tira-nos tudo (9a) -há coisas que melhoram e outras que pioram (6a)	-as pessoas da minha idade, deve-se ter cuidado com alguns aspectos de medicina preventiva (2a) -eu gosto de ver as coisas simples (5b) -eu sinto-me encantado com a idade que eu tenho neste momento (4c) -ensinar e comunicar com os alunos faz-me pensar em soluções. Isto mantém-me jovem (1f)
20	a) Female b) 77 c) Married or in a relationship d) Active e) Portuguese	-é tão bom ser mais velha apesar de tudo (6a) -mas ser a mais velha não é bom em todos os sentidos (7a) -é o balanço de uma vida (6a)	-fazer, no meu caso na pintura e ter projectos (1a) -tentar viver no presente (5b) -ter os cinco sentidos a funcionar (2a) -cada idade tem o seu encanto (4c)
21	a) Female b) 78 c) Married or in a relationship d) Inactive e) Portuguese	-equilibrámos a idade e a s possibilidades (6a) -nem sempre me sinto bem com a minha idade (7a)	-tenciono fazer uma horta (1b) -tento estar sempre a rir (4f) -não preciso de ajuda de ninguém (5e) -se eu não tenho coisas para fazer, eu fico depressiva (1f) -os meus cinco sentidos são bons (2a)
22	a) Male b) 89	-a idade é terrível (7a) -olhamos para traz e vemos	-quero fazer ainda uma grande viagem (1b) -não penso em tantas mudanças (5b)

	c) Married or in a relationship d) Inactive e) Portuguese	o que conseguimos com a idade <b>(6a)</b> -eu sou jovem, o que pensa <b>(8a)</b>	-estar saudável é o mais importante <b>(2a)</b> -eu preciso de estar ocupado <b>(1f)</b>
23	a) Male b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-a idade deve ser equilíbrio <b>(6a)</b> -a idade não é boa para ninguém <b>(7a)</b> -há coisas que se tornam melhores <b>(6a)</b>	-estabilidade familiar <b>(3b)</b> -gosto de encarar a vida a rir <b>(4f)</b> -gosto do meu espaço <b>(5e)</b> -tem que se estar activo <b>(1f)</b> -nunca deixe de trabalhar, apenas diminui o ritmo <b>(1g)</b>
24	a) Female b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-a idade trouxe-me equilíbrio <b>(6a)</b> -a idade não traz nada de bom <b>(7a)</b>	-os netos também são muito importantes <b>(3b)</b> -tenho muitas viagens que quero fazer <b>(1b)</b> -a minha casa é confortável <b>(5e)</b> -Haver rotinas, hábitos, coisas fixas é importante <b>(1e)</b>
25	a) Female b) 89 c) Married or in a relationship d) Inactive e) Portuguese	-a idade mudou a forma como ponderava tudo <b>(6a)</b> -envelhecer traz-nos coisas más <b>(7a)</b> -ver os dois lados sempre <b>(6a)</b>	-este ano irei a duas conferências <b>(1b)</b> -estar ocupado e fazer coisas <b>(1f)</b> -a vitalidade não é a mesma <b>(2a)</b> -já não planeio em grande estilo <b>(5b)</b> -a idade chega a todos <b>(4c)</b>
26	a) Female b) 87 c) Married or in a relationship d) Inactive e) Portuguese	-a idade fez-me ver a vida de forma diferente <b>(6a)</b> -os velhos são descuidados por todos <b>(9a)</b> -gostava de ser mais novo <b>(7a)</b>	-vou fazer um projecto grande este ano <b>(1b)</b> -necessito actividade <b>(1f)</b> -o convívio das pessoas <b>(3c)</b> -envelhecer saudavelmente é importante <b>(2a)</b> -rio-me muito de mim e dos outros também <b>(4f)</b> -estar maioritariamente bem de saúde <b>(2a)</b>
27	a) Female b) 76 c) Widowed d) Inactive e) Portuguese	-há uma jovem que vive dentro de mim <b>(8a)</b> -a idade deve ser cuidadosamente levada em conta <b>(6a)</b> -ser velha é limitador <b>(7a)</b>	-dar forma aos sonhos é importante <b>(1b)</b> -preciso estar ocupado <b>(1f)</b> -ter amizades sinceras <b>(3c)</b> -porque há um limite <b>(4b)</b> -deixar de ter compromissos e poder sair sempre que quero <b>(5b)</b>
28	a) Male b) 81 c) Widowed d) Inactive e) Portuguese	-envelhecer não é bom <b>(7a)</b> -peso tudo na minha cabeça <b>(6a)</b>	-gosto de concretizar as coisas que planeio <b>(1b)</b> -gosto muito que sejam todos amigos <b>(3c)</b> -sentir que se está a fazer algo <b>(1f)</b> -já não planeio em grande estilo <b>(5b)</b>
29	a) Male b) 101 c) Married or in a relationship d) Inactive e) Portuguese	-tomara eles serem jovens como nós <b>(8a)</b> -jovem por dentro sempre <b>(8a)</b> -a idade faz-me pesar as coisas melhor <b>(6a)</b> -sinto-me muito jovem <b>(8a)</b>	-espero ainda realizar projectos <b>(1b)</b> -tenho que tomar medicamentos <b>(2a)</b> -estabilidade económica é muito importante <b>(5d)</b> -o que importa e sermos activos <b>(1f)</b>
30	a) Female b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-vou fazer a minha vida como um jovem <b>(8a)</b> -hoje em dia passei a ponderar a idade <b>(6a)</b> -jovem e não só <b>(8a)</b>	-continuo muitas vezes a sonhar fazer muita coisa <b>(1b)</b> -não penso em tantas mudanças <b>(5b)</b> -tenho pessoas amigas, isso é importante <b>(3c)</b> -faço malha, faço arraiolos, pinto <b>(1f)</b>
31	a) Male b) 79	-a idade pesa-me imenso <b>(7a)</b>	-a minha mulher faleceu cedo e fiquei sozinho <b>(4b)</b>

	c) Married or in a relationship d) Active e) Portuguese	-não gosto de me sentir velho (9a) -equilíbrio é a chave (6a)	-gostava de ter uma tarde por semana para frequentar aulas de música (1b) -eu gosto de ver as coisas simples (5b) -gosto de ter tempo a dois (3f)
32	a) Female b) 76 c) Married or in a relationship d) Active e) Portuguese	-a idade não é só vantagens (6a) -os ossos dizem-me sempre a verdade (7a) -ter em conta os dois lados (6a) -sinto-me uma jovem (8a)	-espero ainda realizar projectos (1b) -tem que se estar ocupada (1f) -trabalhámos aqui muito e o sol ajudou (5c) -tenho de dizer que estou muito bem casado (3e) -envelhecer é algo que acontece a todos (4c) -é importante contactar com os amigos (3c) -é importante manter a sanidade mental (2b) -sinto-me bem com o meu corpo mas sei que já tenho 76 e tenho de ser cuidadosa com tudo, como uma simples constipação (2a)
33	a) Female b) 91 c) Married or in a relationship d) Active e) Portuguese	-não tenho ilusões, já sou velha (7a) -a idade dá cabo de mim (9a) -gosto de viver a minha idade com equilíbrio (6a)	-continuo muitas vezes a sonhar fazer muita coisa (1b) -a vida é para ser vivida com alegria (4f) -é importante ser activo (1f) -tenho cuidado, mesmo com uma simples constipação (2a) -encontrar-me (4e) -estar rodeada pela minha família (3b)
34	a) Female a) 78 c) Widowed d) Inactive e) Portuguese	-gosto de ver a idade equilibradamente (6a) -sinto-me velha para tudo (7a)	-dar um sentido espiritual à vida (4e) -gostava de ter uma tarde por semana para frequentar aulas de música (1b) -boa situação climatérica (5c) -com a minha idade ainda tenho muita força interior (4c)
35	a) Male b) 77 c) Single d) Inactive e) Portuguese	-sinto-me bem com a perspectiva de uma idade bem equilibrada (6a) -a idade é um fardo (7a)	-tenho neste momento, um o dois projectos em marcha (1b) -uma vida simples e não olhar para trás muito e não olhar muito também para o futuro (5b) -preparar as coisas para o senhor Padre (4e) -os nossos vizinhos ajudam muito (3c) -ter compaixão (4e) -com dinheiro a pessoa sente-se em segurança (5d) -ir ali, fazer isto ou aquilo (1f) -é importante estar ocupado (1f) -estar com a minha neta (3d) -gostava era de ser mais novo (4c) -estar com a cabeça ocupada (2b) -vejo razoavelmente bem, ouço muito bem, tenho um paladar refinado (2a) -eu gostaria de ser mais nova para não lidar com a mudança (4c)
36	a) Male b) 97 c) Married or in a relationship d) Inactive e) Portuguese	-pondero tudo (6a) -tenho tudo jovem em mim (8a) -sou um jovem (8a) -equilíbrio é o que nos faz estar feliz (6a)	-estou muito tentado a criar algo nessa área, escrever mesmo um livro (1b) -ter estabilidade financeira (5d) -eu sinto é que já não posso fazer o que fazia antes (4c)
37	a) Male b) 88 c) Married or in a relationship	-equilíbrio é o que nos faz estar bem com a idade (6a) -sinto-me um trapo velho (7a)	-tenho sempre novas ideias (1b) -estabilidade económica (5d) -é suportável desde que a mente funcione (2b)

	d) Active e) Portuguese	-som idade ninguém quer saber de nós (9a)	-estou com as minhas amigas (3c) -tem que se fazer coisas (1f) -tento estar sempre com positivismo (4f)
38	a) Female b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-estar bem com a idade é estar equilibrada (6a) -por dentro estou jovem (8a)	-eu não deixei a cabeça de funcionar (2b) -contactar com amigos e também é muito importante (3c) -quando se é um pouco mais velha tem de se viver um pouco mais confortável (5e) -ainda me sei adaptar à idade que passa (4d) -vou publicar um livro de momento (1b)
39	a) Male b) 77 c) Married or in a relationship d) Inactive e) Portuguese	-ver as coisas boas e más (6a) -a idade pesa muito na vida (7a) -a idade tira tudo (9a) -eu não me sinto velho. Sinto-me da mesma forma como sempre me senti (8a)	-tenho projectos futuros (1b) -a gente conviver, os filhos, as noras, esta bem com a família, é muito importante (3e) -é importante aceitar a idade (4c) -não deixar que a monotonia tome conta de mim, gosto de ser activo (1f) -quero estar próxima dos transportes (5e) -os meus vizinhos ajudam-me muito. Trazem-me as compras todas as semanas (3c)
40	a) Female b) 78 c) Married or in a relationship d) Inactive e) Portuguese	-ter equilíbrio (6a) -a vida traz coisas fantásticas e outras nem por isso (6a)	-preciso de ser desafiada (1c) -sinto-me bem activa (1f) -a idade é algo que não se consegue escapar e tão certa como a morte na vida e vai acontecer mais tarde ou mais cedo (4c) -quero estar com acessibilidade (5e) -é preciso manter a cabeça activa (2b)
41	a) Female b) 78 c) Married or in a relationship d) Inactive e) Portuguese	-ter as coisas bem ponderadas (6a)	-os desafios são importantes (1c) -o conforto da minha casa é muito importante (5e) -fazer algo pelos outros (4e) -estar ao pé de tudo (5e) -tenho um parceiro maravilhoso (3e) -sem actividade, ficamos parados e senis (1f)
42	a) Male b) 83 c) Married or in a relationship d) Inactive e) Portuguese	-ver o lado bom e mau (6a) -sou como os jovens (8a)	-peregrinar todos os anos (4e)
43	a) Male b) 89 c) Married or in a relationship d) Active e) Portuguese	-estou ciente que a idade é um jogo de ganhos e perdas. Nós só temos que encontrar um equilíbrio real entre ambos e torná-lo um processo de ganhos (6a) -há que ver o bom e o mau (6a)	-todos os dias penso em coisas que poderia fazer, novos desafios (1c) -estar apaixonado por alguém (3f) -eu gosto da minha idade (4c) -ter sempre algo para fazer (1f) -partilhar (4e) -com o nascimento do meu neto, comecei uma nova vida (3b) -ter os serviços perto (5e) -tenho aceiteado que as coisas mudam (4d) -tem que se manter activo e ter a mente activa (2b)
44	a) Female b) 79 c) Married or in a	- não estou feliz com a minha idade (9a) -hoje sinto-me velha (7a)	-sinto que ainda não fiz tudo o que queria (1c) -ir ao cinema (1h) -ir à igreja e rezar (4e)

	relationship d) Active e) Portuguese		-que não haja demência (2b) -ver a vida com descontração (4f) -a cabeça é o mais importante (2b) -Ter passeios sem desniveis (5e) -preservar o futuro (4d)
45	a) Male b) 75 c) Married or in a relationship d) Inactive e) Portuguese	-a idade tem um lado bom e mau (6a) -não amadureci assim tanto (8a) -há uma jovem que habita em mim (8a) -não são só coisas boas ou más (6a) -jovem e não só (8a)	-é importante viver a vida com um objectivo, intensidade e paixão (1c) -vejo a minha idade também uma idade de preservar (4d) -só não quero terminar a minha vida inválida (4d) -tento manter a cabeça activa (2b) -ter bons vizinhos (3c)
46	a) Female b) 92 c) Married or in a relationship d) Inactive e) Portuguese	-a idade é mais que um resultado (6a) -eu sou jovem (8a)	-temos que nos desafiar (1c) -ter uma atitude compreensiva com o mundo (4e) -actividade ao nível da mente (2b) -divertir-me que é uma das principais coisas (1h)
47	a) Male b) 91 c) Married or in a relationship d) Inactive e) Portuguese	-a idade é para ser ponderada (6a) -sinto-me uma criança (8a) -ver o bom e o mau (6a)	-viver é sonhar, não importa a idade (1c) -a pessoa sente saudade do tempo em que foi mais novo e agora as coisas são diferentes (4d) -eu divirto-me muito, eu brinco muito (1h)
48	a) Female b) 91 c) Married or in a relationship d) Active e) Portuguese	-ver o que consegui até hoje (6a) -a idade não é algo que se queira (7a) -a idade traz muito de bom e de mau (6a) -ser jovem é uma atitude. Se eu acreditar que sou jovem, de facto eu sou jovem (8a)	-o desafio é importante para sabermos o que podemos fazer (1c) -preocupa-me quando eu não aceitar a mudança da minha vida, se ficar inválida (4d) -estar com os meus netos (3d) -é essencial manter a mente activa (2b)
49	a) Female b) 77 c) Married or in a relationship d) Active e) Portuguese	-pondero a soma de tudo (6a)	-sem desafios, nem que sejam coisas banais, não conhecemos os nossos limites (1c) -tento estar sempre optimista (4f) -com a idade, ter a mente é o mais importante (2b)
50	a) Female b) 92 c) Widowed d) Active e) Portuguese	-sou uma jovem (8a) -a soma de tudo é diferente do total (6a) -sou mais jovem que os jovens (8a)	-ambiciono fazer algumas coisas na minha área (1c) -o meu olfacto é bom e ouço muito bem (2a) -pensar no meu propósito de vida (4e) -são as preocupações das suas mudanças pelo envelhecimento (4d)
51	a) Female b) 88 c) Married or in a relationship d) Inactive e) Portuguese	-ver o bom e o mau (6a) -sou um velho agora (7a)	-na minha profissão nunca deixamos de ser o que somos (1g) -estar sempre optimista (4f) -ser intelectualmente activo (2b)
52	a) Male	-ver todos os lados (6a)	-não quero deixar de trabalhar nunca (1g)

	b) 77 c) Married or in a relationship d) Active e) Portuguese	-tenho uma mente jovem (8a)	-ficar quieto é que não (1f) -estar bem-disposto (4f) -o dinheiro é importante (5d) -eu aqui, estou com quem eu gosto, com a minha família (3b) -estou a tentar ter uma vida mais longa (4d) -a saúde começa na mente (2b)
53	a) Female b) 78 c) Widowed d) Inactive e) Romanian	-I love feeling juvenile (8a) -this is just a game of gains and losses (6a) -being old is not good (7a)	-amusing me that is one of the main things (1h) -I now believe in many Gods (4e) -living in a good neighbourhood (3c) -economic stability is very important (5d) -my husband died early and I was alone (4b)
54	a) Female b) 83 c) Married or in a relationship d) Active e) Romanian	-age is not good (7a) -I like to feel young (8a) -to know when you lose (6a)	-I am very amused, I play a lot (1h) -the movement is very important (2e) -I find myself occasionally thinking about death (4b)
55	a) Male b) 82 c) Married or in a relationship d) Active e) Romanian	-I like to balance everything (6a) -I am unhappy about everything (9a) -I don't like being old anymore (7a)	-with money I always feel safe (5d) -going out to the cinema (1h) -I am realizing that I am closer to the end (4b)
56	a) Female b) 91 c) Married or in a relationship d) Active e) Romanian	-I don't like being old (7a) -I am not pleased about my age (9a) -younger than all my family (8a) -I know to find harmony (6a)	-having dinner (1h) -we are an organic product with limited time (4b) -maintaining a physical activity is essential (2e) -the neighbors are an important help in everyday living (3c) -financial stability is important (5d)
57	a) Female b) 91 c) Married or in a relationship d) Inactive e) Romanian	-equilibrium is the key (6a) -I'm as young as you (8a)	-I still play sports (2e) -the time limit is a thing that began to emerge me in spirit (4b) -dancing (1h)
58	a) Male b) 86 c) Married or in a relationship d) Active e) Romanian	-in the middle is the best place (6a) -being old is a different thing, and not the best (7a) -I am frustrated about my age (9a) -I enjoy feeling young (8a)	-I don't need much money but I need to feel stability (5d) -now you begin to think in the end (4b) -listening to live music (1h)
59	a) Male b) 91 c) Single d) Inactive e) Romanian	-age takes us everything (9a) -knowing how to win and how to lose (6a) -I'm an eternal adolescent (8a) -I don't like being old (7a)	-maintenance of physical capacity and very important (2e) -financial stability (5d) -I want to make the most of my time, I, do not want to waste time ... (4b) -I have gone to the casino (1h) -there is a limit to life(4b)
60	a) Female b) 91 c) Single d) Inactive e) Romanian	-I enjoy feeling younger than my friends (8a) -finding my inner balance (6a) -not good (7a)	-economic stability is important (5d) -being able to make the effort to get a weight (2e) -I still enjoy a good show (1h)

61	a) Female b) 99 c) Married or in a relationship d) Active e) Romanian	-I'd prefer to be younger (7a) -I am not contented (9a) -balance is vital (6a) -I enjoy being young-at-heart (8a)	-I am retired and I have time to do a number of things (1h) -I am aware of the age, and the limit (4b) -money is important now (5d)
62	a) Female b) 93 c) Widowed d) Inactive e) Romanian	-my husband keeps me young (8a) -balancing age is crucial (6a) -I'm still young (8a) -I don't like being old (7a) -age is not good (9a)	-going out (1h) -I don't like to think about a limit in life, it makes me sad (4b) -keeping myself active (2e) -I am aware of the age limit (4b)
63	a) Male b) 78 c) Single d) Inactive e) Romanian	-balancing everything in life (6a) -age makes me unhappy (9a) -there are things that I can't do anymore. Age is heavy (7a)	-going to events (1h) -now I think about death (4b) -sports is great while we do (2e) -money is very important (5d)
64	a) Male b) 94 c) Married or in a relationship d) Inactive e) Romanian	-age you'll see, how it will be not good (7a) -I am not happy about my age (9a) -finding my equilibrium (6a) -everyone keeps me young (8a)	-I try not to eat bad things (2d) -financial and economic stability are very important (5d) -when I was younger I didn't think about death (4b) -it's good to have good neighbors (3c)
65	a) Female b) 99 c) Married or in a relationship d) Inactive e) Romanian	-being old is not the most enjoyable thing (7a) -I am not satisfied about my age (9a) -accepting losses and to see the good side (6a) -I like to be a child sometimes (8a)	-I must not eat sweets (2d) -we are all going to die sometime (4b) -stability of your income is crucial (5d) -I am lucky that my neighbors are my best friends (3c) -to do sports is very important (2e)
66	a) Male b) 89 c) Married or in a relationship d) Inactive e) Romanian	-life kept me young (8a) -seeing the pros and cons (6a) -age is not the best thing (7a)	-for me it is important to live in my own house (5d) -strength to climb the stairs (2e) -I don't like to think about death (4b)
67	a) Male b) 79 c) Married or in a relationship d) Inactive e) Romanian	-being balanced (6a) -age is heavy (7a) -I don't like my age. I'm too old. I wish I was younger (9a)	-amusing myself, that is one of the main things (1h) -having a supportive surrounding, like neighbors (3c) -knowing there is a time limitation is important (4b) -I have everything in my neighbourhood. I know that I do not have to drive anywhere (5e)

68	a) Female b) 89 c) Married or in a relationship d) Inactive e) Romanian	-I feel young (8a) -I 'm still young-at-heart (8a) -seeing everything in a balanced way (6a) -age is sometimes harsh on you (7a)	-I don't feel so flexible now but I have been adapting to aging (2e) -I feel I don't want to think much about death (4b) -I am very happy, I play a lot with my friends (1h)
69	a) Female b) 91 c) Widowed d) Inactive e) Romanian	-like an adolescent (8a) -leaving life in a balanced way (6a) -getting old is no fun (7a)	-having some money (5d) -leaving home and not be ruminating (1i) -I enjoy swimming, and so I remain active (2e)
70	a) Female b) 83 c) Married or in a relationship d) Inactive e) Romanian	-I like being young (8a) -I did not grow up (8a) -balance is the key (6a) -I don't have fun anymore with my age (7a)	-going to the beach (1i) -owning the house you live in (5d) -the notion of life to be limited is important (4b) -my neighbors are a reason to live here (3c) -swimming (2e) -it is comforting to know that you have money (5d)
71	a) Male b) 82 c) Married or in a relationship d) Inactive e) Romanian	-I used to feel young (7a) -age does not bring me good things (9a) -seeing the good and bad points (6a)	-I have to make the most of my life because there is an end (4b) -having enough money (5d) -traveling a lot by boat (1i) -practising yoga (2e) -having money to give to your children (5d)
72	a) Female b) 90 c) Widowed d) Active e) Romanian	-seeing the advantages and disadvantages (6a) -I love being young (8a) -I feel old now (7a)	-I like being outdoors(1i) -I don't feel good with my aging if I have to worry much about money (5d) -I am aware of death (4b) -living in a friendly neighborhood is important (3c)
73	a) Female b) 81 c) Married or in a relationship d) Inactive e) Romanian	-my age made me lose many things (7a) -age is just disadvantages (9a) -seeing balance (6a) -I like to feel as a child (8a) -Young-at-heart (8a)	-I'm very focused on golf (1i) -economic stability is very important (5d) -death is a certainty (4b) -walking is the best way to stay fit (2e)
74	a) Male b) 101 c) Married or in a relationship d) Inactive e) Romanian	-I feel as an adolescent (8a) -I am not happy about my life and my age (9a) -seeing advantages and disadvantages (6a) -I suffer with my age (7a)	-sometimes I give lectures, I continue to be asked (1j) -life is a cycle (4b) -I am very glad to live in my one home (5d) -it's crucial to have good neighbors (3c)
75	a) Female b) 84 c) Married or in a relationship d) Active e) Romanian	-I feel I am too old (7a) -age and me, not good friends (9a) -balancing everything (6a)	-the feedback from others allows me to understand that they are satisfied with my collaboration (1j) -having a good income and financial stability is a basic need(5d) -life and death, they are both a certainty (4b)
76	a) Female b) 87 c) Married or in a relationship	-seeing the bright side and the bad part (6a) -I don't like the bad things that age brings (9a)	-sleeping (2d) -at young age I didn't realise there was a limit to life (4b) -not having to worry about the income (5d)

	d) Active e) Romanian	-I feel so aged (7a)	-having trustful neighbors (3c)
77	a) Male b) 78 c) Married or in a relationship d) Active e) Romanian	-I am still young (8a) -measuring everything and see the results (6a) -I feel I aged years recently (7a)	-I think sleep is very important (2d) -not having financial worries is very good (5d) -good neighbors (3c) -because I am older I know there is a limit (4b)
78	a) Male b) 75 c) Married or in a relationship d) Inactive e) Romanian	-feeling balanced (6a) -since my wife died I aged a lot (7a) -age only brings bad things (9a) -still, I am younger than everyone (8a)	-a balanced diet is important (2d) -now I think about life and death and those things (4b) -helping each other (3c)
79	a) Male b) 75 c) Single d) Active e) Romanian	-respecting the good and bad things in our age (6a) -I feel like an old car (7a) -age is not the best thing (9a)	-financial stability (5d) -realizing that we are closer to the end (4b) -the recognition of my work satisfies me (1j)
80	a) Female b) 75 c) Married or in a relationship d) Active e) Romanian	-I love being young but that is not the case (7a)	-I like that my resume is appreciated by others (1j) -when one gets older there is more notion of a limit in life (4b) -my neighbors are my best support (3c)
81	a) Male b) 78 c) Widowed d) Active e) Romanian	-aging is not good (7a) -I'm still very young (8a)	-with money one feels safe (5d) -I avoid eating anything fried (2d) -life is precious and limited (4b) -for me it is relevant to have good neighbors (3c)
82	a) Female b) 75 c) Married or in a relationship d) Inactive e) Romanian	-I feel an old woman (7a) -age is just disadvantages (9a)	-going to exhibitions (1h) -I enjoy living and I valorize everything (4b) -I don't need much money but I need to feel stability (5d) -it is important to be with my family specially taking care of my grandchildren (3b) -I enjoy the socializing with people (3c) -a more spiritual perspective (4e)
83	a) Female b) 79 c) Married or in a relationship d) Active e) Romanian	-I am unfulfilled about my age (9a) -I feel an old woman (7a)	-doing gatherings (1h) -I don't need much but I need some income (5d) -I valorize my life (4b) -having good neighbors is like having good family (3c) -I want to stay connected to nature (4e)
84	a) Female b) 88 c) Married or in a relationship d) Inactive e) Romanian	-finding the key to accepting my age is balancing it with my experience (6a) -age is not good for me (9a) -I feel that my soul is not young anymore (7a)	-financial stability is very important to me (5d) -I can now go to the theatre (1h) -my husband died early and I am alone (4b)
85	a) Female b) 93 c) Widowed d) Inactive e) Romanian	-inside I aged (7a) -age is a bad thing (9a)	-stability of your income is crucial (5d) -I find myself occasionally thinking about death (4b) -eating healthy (2d) -having friends sincere (3c)

86	a) Male b) 78 c) Single d) Inactive e) Romanian	-I don't like being old (7a) -I like to be childish (8a)	-the appreciation of others, it remains high (1j) -I'm closer to the end (4b) -contacting with friends and it is also very important (3c)
87	a) Male b) 77 c) Married or in a relationship d) Inactive e) Romanian	-I will be a child forever (8a) -I balance my age and my life (6a) -age is not the best thing (7a) -I like to feel young (8a)	-I was told by 3 universities to teach a Masters (1j) -taking care of my grandchildren (3b)
88	a) Female b) 78 c) Married or in a relationship d) Active e) Romanian	-with age everything hurts (7a)	-I believe in a very restrictive diet (2d) -a more spiritual perspective (4e) -today I enjoy taking care of my grandchildren (3b)
89	a) Male b) 89 c) Married or in a relationship d) Inactive e) Romanian	-inside I feel young (8a) -life is a game of balancing (6a) -age is a nightmare (7a)	-we are what we eat (2d) -I am more aware about the spiritual part of life (4e) -being surrounded by my grandchildren (3b) -I became more spiritual (4e)
90	a) Male b) 86 c) Married or in a relationship d) Inactive e) Romanian	-oh age, my enemy (7a) -age is not just satisfaction(9a) -inside, I feel young (8a)	-I cannot eat everything I want (2d) -having sincere friends (3c) -you have do believe in something, particularly when you get older (4e) -having a good income and financial stability is a basic need(5d)
91	a) Female b) 78 c) Widowed d) Inactive e) Romanian	-if I could be just a bit younger (7a) -age is not just good things (9a) -young as a child (8a)	-money is important now (5d) -for me ageing means being more spiritual (4e) -although I'm not working like I used to, I'm collaborating an university, it is very rewarding (1j) -living with the sons, the daughters, the well-being of my family is very important (3b) -when we age, money makes us more independent (5d)
92	a) Female b) 83 c) Married or in a relationship d) Inactive e) Romanian	-I don' t like my age (7a) -being a child forever (8a)	-I like do take care of my grandchildren (3b) -with age healthy eating is important (2d) -thinking about life and God (4e)
93	a) Male b) 82 c) Married or in a relationship d) Inactive e) Romanian	-age is a bad thing (7a)	-eating well is important (2d) -money is very important (5d) -I feel that having good neighbors is very important (3c) -as I get older a became more cynical about God (4e)
94	a) Female b) 87 c) Widowed d) Active e) Romanian	-age destroy you (7a) -I enjoy balancing my age (6a)	-is essential to eat good food (2d) -I like do think that now I am more spiritual (4e) -sharing is important (3e) -economic stability is important (5d)

95	a) Female b) 87 c) Married or in a relationship d) Active e) Romanian	-age does not remind you good things (7a)	-God is more and more important for me (4e) -health starts with what you eat (2d) -socializing with people (3c)
96	a) Female b) 78 c) Single d) Inactive e) Romanian	-feeling well with the good and the bad (6a) -age is not fantastic as they say (7a) -age is inconvenient (9a)	-eating well is important (2d) -I don't think less or more about God now (4e) -having friendly people, this is important (3c)
97	a) Female b) 93 c) Widowed d) Active e) Romanian	-I did not mature as a good wine, I got old (7a) -balancing everything (6a)	-money is important (5d) -health comes with what you eat -I need to find meaning to my existence (4e)
98	a) Male b) 93 c) Married or in a relationship d) Active e) Romanian	-I am old and lonely (7a) -I am not happy about my age (9a)	-I worry about spiritual things (4e) -I walk more slowly, I feel heavier (2e) -I really like that they are all friends (3c)
99	a) Female b) 77 c) Married or in a relationship d) Inactive e) Romanian	-I feel very very old (7a) -age was not good for me (9a)	-believing in God (4e) -I am aware that I have to exercise (2e) -I would like to be connected to something (4e)
100	a) Male b) 78 c) Widowed d) Active e) Romanian	-do you think I am old? I feel that way (7a)	-now I have to look at what I ingest (2d) -supportive neighbors (3c) -I see myself in a spiritual age (4e) -for me it's important to take care of my children (3b) -having some money (5d) -I go to the church every week (4e)
101	a) Female b) 76 c) Married or in a relationship d) Active e) Romanian	-being old is not a good thing anymore (7a) -I enjoy being childish (8a)	-one seeks to keep the ability to move (2e) -I feel closer to spiritual things (4e) -I must say I am very happily married (3e)
102	a) Female b) 90 c) Married or in a relationship d) Active e) Romanian	-age is a terrible thing (7a) -age is a big inconvenience (9a)	-I'm with my friends (3c) -I'm getting spiritual now (4e) -not having financial worries is great (5d)
103	a) Female b) 78 c) Widowed d) Active de) Romanian	-I would like to be always young (8a) -balancing our age (6a)	-as I got older I felt that is was important to accept God in my life (4e) -I really like my neighbors and that is good (3c)
104	a) Female b) 76 c) Married or in a relationship d) Inactive e) Angolan	-sinto-me mesmo jovem (8a) -ver tudo na idade (6a) -sou infantil (8a)	-uma pessoa estar realizada (1d) -sinto que estou ainda lúcida (2b) -a roupa, fica com menos importância (2c) -ter vizinhos que ajudam (3c) -não preciso de ajuda de ninguém (5e) -dar o que tenho e o que não tenho ao mundo (4e)
105	a) Female b) 87	-sinto-me jovem por dentro (8a)	-saber que ainda consigo certas coisas, no trabalho, nas viagens (1d)

	c) Married or in a relationship d) Inactive e) Angolan	-gostar de ver o lado menos bom e bom (6a) -sou mais jovem que a senhora (8a)	-quanto à resistência intelectual, eu penso que não diminuiu (2b) -estar com a minha família (3b)
106	a) Female b) 87 c) Married or in a relationship d) Inactive e) Angolan	-a idade faz ponderar tudo (6a) -adoro ser ainda uma miúda (8a)	-em primeiro lugar a saúde (2a) -eu tenho um companheiro maravilhoso (3e) -gosto do meu conforto (5e) -estar descontraído (4f) -procuro activamente a vida (1d)
107	a) Female b) 88 c) Widowed d) Active e) Angolan	-ver o mau e o bom (6a) -sou mais infantil que toda a gente (8a)	-sabemos melhor o que queremos (1d) -não estar doente é importante para mim (2a) -estar com a minha família (3b) -gosto de sorrir (4f)
108	a) Male b) 75 c) Widowed d) Inactive e) Angolan	-ter em conta o bom e o mau (6a) -não parece mas eu sou jovem (8a)	-penso que é importante, se se viveu bem, concretizou-se coisas na vida (1d) -adoro estar com tudo ao pé (5e)
109	a) Male b) 79 c) Widowed d) Active e) Angolan	-crescer não é ser velho, sou um jovem -ver todos os lados (6a) -sou mais jovem que a minha mulher (8a)	-o mais importante é não estar doente (2a) -cheguei a um ponto da vida em que olho para trás (1d) -ser optimista (4f)
110	a) Female b) 89 c) Married or in a relationship d) Inactive e) Angolan	-ajuda a ponderar tudo na vida (6a) -às vezes envergonho com os meus filhos com a minha criancice (8a)	-posso dizer que tive uma boa vida (1d) -rir de mim (4f) -estabilidade emocional é muito importante (2a)
111	a) Male b) 89 c) Widowed d) Active e) Angolan	-vemos a vida de forma mais ampla (6a) -sou um adolescente (8a)	-gosto de pensar nela não como uma idade mas sim como uma oportunidade (4c) -gosto de tentar novas coisas de forma criativa (1a) -ir ao café com os amigos (3c)
112	a) Female b) 76 c) Married or in a relationship d) Active e) Angolan	-acho que nunca vou crescer (8a) -gosto de ver a idade uma forma abrangente (6a) -sou mesmo infantil (8a)	-vitalidade e saúde (2a) -fazer coisas que gosto, que é pintar, que é escrever (1d) -sorrir sempre (4f) -gostar de alguém (3e)
113	a) Female b) 79 c) Married or in a relationship d) Inactive e) Angolan	-ver tudo com todas as perspectivas (6a) -sou uma verdadeira miúda apesar de não parecer (8a) -a idade não é um detalhe (6a)	-estou confortável com as alterações do meu aspecto (2c) -sinto-me no meu ninho (5e) -ter amigos ao pé de nós (3c) -meditar na minha existência (4e) -poder fazer aquilo que eu gosto (1d)
114	a) Male b) 89 c) Married or in a relationship d) Inactive e) Angolan	-não quero crescer nunca (8a) -a idade deixa-me ver tudo de todos os lados (6a) -quem me conhece sabe que sou um adolescente (8a)	-sinto ainda muita força (2a) -bons amigos (3c) -não me isolar do mundo (4e) -ainda quero fazer muita coisa (1b) -ser altruísta (4e)

		-a idade dá-me insatisfação <b>(9a)</b>	
115	a) Male b) 86 c) Married or in a relationship d) Inactive e) Angolan	-quando se envelhece ponderamos tudo <b>(6a)</b> -por fora a idade não condiz com a minha juventude <b>(8a)</b>	-a idade não me impede de ter projectos <b>(1b)</b> -contribuir para algo maior <b>(4e)</b> -ter os nossos melhores amigos <b>(3c)</b> -a mente comanda o corpo <b>(2b)</b> -a minha casa é o meu ninho. Não dependo de ninguém <b>(5e)</b>
116	a) Female b) 89 c) Married or in a relationship d) Inactive e) Angolan	-sinto-me bem e equilibrada <b>(6a)</b> -sou muito jovem para a minha idade <b>(8a)</b> -sou uma eterna criança por dentro <b>(8a)</b>	-se parar de investir paro de viver <b>(1b)</b> -ajudar quem precisa <b>(4e)</b> -tenho mais cabelo branco, tenho mais rugas, o nosso corpo vai-se modificando <b>(2c)</b>
117	a) Female b) 77 c) Married or in a relationship d) Active e) Angolan	-sou uma criança <b>(8a)</b> -sinto-me equilibrada <b>(6a)</b> -gosto de ser ainda jovem <b>(8a)</b>	-sempre penso em novos projectos <b>(1b)</b> -encontrar o meu caminho <b>(4e)</b> -amar e ser amada <b>(3e)</b> -sinto que tenho a saúde média <b>(2a)</b>
118	a) Female b) 79 c) Married or in a relationship d) Inactive e) Angolan	-levar a idade com calma e jovialidade <b>(8a)</b> -pondo tudo na minha idade <b>(6a)</b> -a idade não é ser velha, é aprender a ser jovem <b>(8a)</b>	-gosto de pensar nas coisas que ainda vou fazer <b>(1b)</b> -tenho perda de cabelo e isso não é bom <b>(2c)</b> -estar em contacto com tudo e todos <b>(4e)</b> -amar uma pessoa <b>(3e)</b> -gosto de me divertir <b>(4f)</b>
119	a) Male b) 82 c) Married or in a relationship d) Active e) Angolan	-gosto de ver todos os lados <b>(6a)</b> -sinto-me insatisfeito com a minha idade <b>(9a)</b> -a idade é demais <b>(7a)</b> -Tenho em conta tudo <b>(6a)</b> -a idade é desvantajosa <b>(9a)</b>	-sentir paixão <b>(3e)</b> -partilhar experiências religiosas no meu grupo <b>(4e)</b> -em breve vou remodelar a minha casa <b>(1b)</b>
120	a) Female b) 93 c) Widowed d) Inactive e) Angolan	-a idade obriga-nos a ser mais ponderados <b>(6a)</b> -a idade é muito cheia de desvantagens <b>(9a)</b> -são muitos anos mas bons <b>(7a)</b>	-sinto-me satisfeita <b>(1d)</b> -ter o nosso ritmo <b>(1e)</b> -respeitar a família <b>(3e)</b> -tento manter a mente activa <b>(2b)</b>
121	a) Female b) 90 c) Widowed d) Active e) Angolan	-penso o bom e o mau <b>(6a)</b> -penso em tudo <b>(6a)</b> -é muita idade <b>(7a)</b> -a idade só traz coisas más <b>(9a)</b>	-estar confortável <b>(5e)</b> -sinto-me vivo sempre que vou ao hospital. Sei que posso contribuir com algo lá <b>(1d)</b> -acreditar em mim e nos outros faz-me sentir bem acerca da minha vida e idade <b>(4a)</b>
122	a) Female b) 81 c) Married or in a relationship d) Inactive e) Angolan	-não sou velha <b>(8a)</b> -a idade faz-nos pensar em tudo <b>(6a)</b> -tenho idade a mais <b>(7a)</b> -com a idade é só perder <b>(9a)</b> -gosto de recordar o bom e o mau <b>(6a)</b> -ser jovem é um estado de	-tenho algumas coisas que faria diferente, olhando para trás <b>(1d)</b> -poder ver todos os filhos <b>(3e)</b> -ter uma boa cama <b>(5e)</b> -olhar para dentro de mim e encontrar a ligação com o que está à minha volta <b>(4e)</b> -tenho mais rugas <b>(2c)</b>

		espírito <b>(8a)</b>	
123	a) Male b) 88 c) Widowed d) Inactive e) Angolan	-a idade faz-nos imaginar todos os lados <b>(6a)</b> -vejo a idade com jovialidade <b>(8a)</b> -as memórias boas e más ninguém me tira <b>(6a)</b> -sou uma criança por dentro <b>(8a)</b>	-a maioria das coisas que fiz, não me arrependo <b>(1d)</b> -sinto que ainda sou lúcido <b>(2b)</b> -ter a família perto <b>(3e)</b> -estar no conforto da nossa casa <b>(5e)</b>
124	a) Male b) 92 c) Married or in a relationship d) Active e) Angolan	-gosto de ser ainda jovem <b>(8a)</b> -a idade é boa e má <b>(6a)</b> -sou mesmo uma criança que não cresceu <b>(8a)</b>	-em suma, olho para a minha vida, e estou satisfeito com aquilo que realizei <b>(1d)</b> -rezar a Deus <b>(4e)</b> -ir à igreja <b>(4e)</b> -brincar com os meus netos <b>(3b)</b>
125	a) Female b) 78 c) Married or in a relationship d) Active e) Angolan	-sou uma verdadeira miúda <b>(8a)</b> -há dois lados na idade: o fantástico e o menos bom <b>(6a)</b> -as pessoas acham que sou velha mas eu não sou <b>(8a)</b>	-faria algumas coisas diferentes, no entanto sinto realização <b>(1d)</b> -eu sinto-me bem com a minha idade <b>(4c)</b> -em primeiro lugar a constituição do corpo e da mente <b>(2a)</b>
126	a) Female b) 75 c) Married or in a relationship d) Inactive e) Angolan	-a idade faz-nos ser mais globalizantes <b>(6a)</b> -ah estou velha <b>(7a)</b> -a idade não traz vantagens <b>(9a)</b> -é preciso chegar até aqui para equilibrar tudo <b>(6a)</b>	-tenho neste momento, um ou dois projectos em marcha <b>(1b)</b> -ter bons vizinhos <b>(3c)</b> -estar seguro <b>(5f)</b> -saber para que estou aqui <b>(4e)</b> -a saúde é muito importante <b>(2a)</b>
127	a) Male b) 77 c) Married or in a relationship d) Inactive e) Angolan	-sou um eterno adolescente <b>(8a)</b> -juventude faz parte de mim <b>(8a)</b> -a idade é para ser apreciada com sinceridade <b>(6a)</b> -devemos sempre brincar com a nossa idade <b>(8a)</b>	-estou muito tentado a criar algo nessa área, escrever mesmo um livro <b>(1b)</b> -eu gosto de ter a idade que eu tenho <b>(4c)</b> -a vida fica mais ritmada com a idade <b>(1e)</b> -é a mente boa <b>(2b)</b>
128	a) Female b) 79 c) Widowed d) Inactive e) Angolan	-a idade deve ser vista por todos os lados <b>(6a)</b> -sinto-me diferente, velha <b>(7a)</b>	-os anos que eu vivi, todos eles tiveram a sua importância <b>(4c)</b> -tenho sempre novas ideias <b>(1b)</b> -não ter medo de ser assaltado <b>(5f)</b> -consigo ter aqui uma vida mais saudável, isso é muito importante nesta etapa <b>(2a)</b>
129	a) Female b) 88 c) Single d) Inactive e) Angolan	-conseguir equilibrar tudo <b>(6a)</b> -sou ainda uma jovem <b>(8a)</b> -ver todos os ângulos <b>(6a)</b> -vejo a idade com juventude <b>(8a)</b>	-o ritmo de facto é diferente <b>(1e)</b> -vejo bem <b>(2a)</b> -ter uma vizinhança segura <b>(5f)</b> -eu sinto-me bem com a idade que eu tenho <b>(4c)</b> -continuo a dormir as minhas seis, sete horas <b>(2d)</b>
130	a) Female b) 75 c) Married or in a relationship d) Inactive e) Angolan	-sou muito jovem <b>(8a)</b> -há muitas perspectivas da idade <b>(6a)</b>	-gosto de pensar nas coisas que ainda vou fazer <b>(1b)</b> -o mais importante é que todos os sentidos funcionarem bem <b>(2a)</b> -perceber qual o meu papel no mundo <b>(4e)</b>

131	a) Female b) 75 c) Married or in a relationship d) Active e) Angolan	-a juventude está no nosso coração <b>(8a)</b> -a idade não é só uma, há muitas <b>(6a)</b> -juventude nunca a perdi <b>(8a)</b>	-ritmo próprio é importante para todos <b>(1e)</b>
132	a) Female b) 90 c) Widowed d) Inactive e) Angolan	-gosto de me sentir como uma criança <b>(8a)</b> -devemos respeitar tudo que a idade traz <b>(6a)</b> -a idade é jovem <b>(8a)</b>	-porque sei que não tenho uma vida muito longa à frente <b>(4c)</b> -tudo fica ao pé de mim <b>(5e)</b> -vou publicar algo <b>(1b)</b> -estar com Deus <b>(4e)</b> -ter uma boa vizinha <b>(3c)</b> -a saúde é o mais importante <b>(2a)</b>
133	a) Male b) 90 c) Widowed d) Inactive e) Angolan	-não me esquecer de tudo de bom e mau que vivi <b>(6a)</b> -hoje sinto-me velho <b>(7a)</b> -sinto-me insatisfeito com a idade <b>(9a)</b> -é preciso ser velho para ver todas as perspectivas <b>(6a)</b>	-a procura da criação e fazer coisa novas mantem-me jovem <b>(1a)</b> -estar com a minha filha mais velha <b>(3b)</b> -como muito legumes, alface, mas também peixe, e carne do campo e muitas coisas saudáveis <b>(2d)</b>
134	a) Male b) 89 c) Married or in a relationship d) Inactive e) Angolan	-se não gostarem de mim, é pena porque sou uma criança <b>(8a)</b> -a idade traz boas e más recordações <b>(6a)</b> -a minha idade ainda é pouca <b>(8a)</b> -gosto de viver a minha idade com tudo de bom e mau <b>(6a)</b> -adoro comportar-me como uma criança <b>(8a)</b>	-tenho projectos futuros <b>(1b)</b> -entregar-me a Deus <b>(4e)</b> -poder partilhar a amizade <b>(3c)</b> -o mais importante é ter saúde <b>(2a)</b> -não desligar da minha família <b>(3e)</b>
135	a) Male b) 79 c) Married or in a relationship d) Inactive e) Angolan	-velho pois é <b>(7a)</b> -velho não é bom <b>(9a)</b> -boas e más recordações <b>(6a)</b>	-ainda quero fazer muita coisa <b>(1b)</b> -talvez ainda seja uma criança no meu coração <b>(4c)</b> -viver perto do meu filho <b>(3b)</b> -aceitar os meus como são <b>(3e)</b> -não esquecer os meus deveres religiosos <b>(4e)</b>
136	a) Female b) 78 c) Married or in a relationship d) Active e) Angolan	-sou jovem não acha? <b>(8a)</b> -não são só boas memórias mas também não só más <b>(6a)</b> -sou uma jovem adulta amadurecida <b>(8a)</b>	-a idade não me impede de ter projectos <b>(1b)</b> -ir à congregação <b>(4e)</b> -andar sem medo de cair num buraco <b>(5f)</b> -acho que a mente activa é essencial <b>(2b)</b>
137	a) Male b) 86 c) Married or in a relationship d) Active e) Angolan	-serei sempre jovem <b>(8a)</b> -más e boas memórias, claro! <b>(6a)</b> -sou mesmo muito infantil <b>(8a)</b>	-se parar de investir paro de viver <b>(1b)</b> -encontrar-me <b>(4e)</b> -vejo no corpo, claro que vejo diferença <b>(2c)</b> -ir ao templo <b>(4e)</b> -gosto de brincar com os meus netos <b>(3b)</b>
138	a) Female b) 90 c) Widowed d) Active	-olho para atrás e penso que boa foi a minha vida <b>(6a)</b> -sou mesmo infantil por dentro e por fora <b>(8a)</b>	-sempre penso em novos projectos <b>(1b)</b> -quero estar com os meus <b>(3b)</b> -o cabelo começa a ficar mais ralo <b>(2c)</b>

	e) Angolan		
139	a) Female b) 90 c) Widowed d) Active e) Angolan	-tenho ideias de criança <b>(8a)</b> -gosto de apreciar o bom e o mau <b>(6a)</b>	quero fazer ainda uma grande viagem <b>(1b)</b> -para mim as rotinas são importantes <b>(1e)</b> -ter boa iluminação <b>(5f)</b> -sentir-se activa, com saúde <b>(2a)</b>
140	a) Male b) 81 c) Widowed d) Inactive e) Angolan	-sou um rapaz sem muita responsabilidade <b>(8a)</b> -tem algo de muito de bom e de mau <b>(6a)</b> -como uma criança <b>(8a)</b>	-em breve vou remodelar a minha casa <b>(1b)</b> -gostar do meu filho como eu gosto <b>(3e)</b> -não podemos parar a idade <b>(4c)</b> -ter um ritmo diário <b>(1e)</b> -não tenho a pele tão tonificada <b>(2c)</b> -abraçar os meus netos <b>(3e)</b> -ficamos mais conscientes de comer melhor <b>(2d)</b>
141	a) Male b) 81 c) Married or in a relationship d) Active e) Angolan	-vejo a idade com frescura <b>(8a)</b> -sou um adolescente <b>(8a)</b> -gosto de ver tudo <b>(6a)</b>	-dar beijinhos <b>(3e)</b> -é melhor quando a gente é nova mas pronto, habituamo-nos <b>(4c)</b> -sinto-me realizado <b>(1d)</b> -o aspecto vai-se alterando, isso incomoda <b>(2c)</b> -ter amigos ao pé de nós <b>(3c)</b> -andar sem medo <b>(5f)</b>
142	a) Female b) 84 c) Married or in a relationship d) Active e) Angolan	-sou jovial <b>(8a)</b> -ver os ângulos todos da idade <b>(6a)</b> -a idade leva-nos muito <b>(9a)</b> -eu sou como um adolescente <b>(8a)</b>	-o meu neto é tudo para mim <b>(3b)</b> -o meu maior orgulho é a minha família <b>(1d)</b>
143	a) Male b) 75 c) Married or in a relationship d) Active e) Angolan	-quero ser sempre jovem <b>(8a)</b> -quando cá chegar vai ver o bom e o mau da idade <b>(6a)</b> -às vezes não imaginam quão criança posso ser <b>(8a)</b> -ver as perspectivas todas <b>(6a)</b>	-tenho muitas viagens que quero fazer <b>(1b)</b> -estar com a minha família <b>(3b)</b> -gostava de ter um aspecto mais novo <b>(2c)</b> -ainda me sinto em forma e não vale a pena dizer que não posso fazer algo porque já estou muito velho <b>(4c)</b> -não é fácil só viver no presente <b>(5b)</b> -gosto de falar com colegas. Todos nos conhecemos há tanto tempo que de certa forma já partilhei mais tempo com eles que com a minha própria família <b>(3c)</b>
144	a) Male b) 79 c) Single d) Inactive e) Angolan	-nem tudo são rosas, algumas coisas são más <b>(6a)</b> -sinto-me um velho. Já tenho 86 anos, sabe!?! <b>(7a)</b>	-gostar do meu filho como eu gosto <b>(3e)</b> -ter acesso a tudo <b>(5e)</b> -não teria feito muita coisa diferente do que fiz <b>(1d)</b>
145	a) Female b) 89 c) Single d) Inactive e) Angolan	-gosto de tudo que a idade me trouxe <b>(6a)</b> -sou uma criança tantas vezes <b>(8a)</b> -estou insatisfeita com a idade <b>(9a)</b>	-quero passear pela Europa <b>(1b)</b> -ainda ter amigos <b>(3c)</b> -acho que a cabeça é o mais importante <b>(2b)</b>
146	a) Male b) 78 c) Widowed d) Inactive e) Angolan	-pondero sempre tudo <b>(6a)</b> -a vida é para ser vivida com leveza e jovialidade <b>(8a)</b>	-estou orgulhoso daquilo que consegui <b>(1d)</b> -ver a minha neta já gatinhar <b>(3b)</b>

147	a) Female b) 75 c) Married or in a relationship d) Inactive e) Angolan	-gosto do bom e do mau (6a) -gosto de ser assim, como uma miúda (8a)	-tenciono fazer uma horta (1b) -eu não faço muitas coisas (5b) -tenho tido por ora a sorte de manter, as minhas actividades intelectuais estáveis (2b) -a vida é para nós nos rirmos dela (4f) -ser visitada por todos (3e)
148	a) Female b) 83 c) Widowed d) Active e) Angolan	-conseguir equilibrar tudo de bom e menos bom (6a) -hoje sinto-me velha (7a) -ficamos sem nada com a idade (9a)	-às vezes olho para a minha vida e penso, eu fiz tudo isto (1d) -é importante termos um ritmo (1e) -ter poucos mas bons amigos (3c) -investir em coisas simples (5b) -ter companhia (3c)
149	a) Female b) 88 c) Widowed d) Active e) Angolan	-sou infantil (8a) -ver o bom e o mau (6a) -serei sempre uma criança (8a)	-não tenho muitos arrependimentos (1d) -estar bem com os meus genros e noras (3e) -se a gente ficar parada, perde a ligação com a vida real (1f) -hoje é importante, hoje, hoje, hoje (5b) -gosto do facto de pertencer a uma comunidade religiosa cristã (4e)
150	a) Female b) 77 c) Married or in a relationship d) Active e) Angolan	-a idade deixa-me com tristeza (9a) -ver a idade com tudo (6a) -ainda sou ingénua como era dantes (8a)	-a poesia faz-me sentir viva (1a) -estar com os meus (3e) -não estar sujeita a ter que me levantar àquela hora (1e) -quando um pessoa é saudável, já fica muito contente (2a) -é importante ter um ritmo (1e)
151	a) Male b) 88 c) Married or in a relationship d) Inactive e) Angolan	-sou fresco ainda (8a) -a idade traz tudo (6a) -sou jovem no meu coração (8a) -o meu filho tem medo que eu seja infantil (8a)	-olho para a minha vida com satisfação (1d) -rir (4f) -os meus filhos tratam-me bem (3b) -poder fazer as coisas quando eu quero e à hora que eu quero (1e) -estar com a minha família (3b)

## Categories for Indicators of Adjustment to Aging

1. Sense of Purpose and Ambitions
  - a. Accomplishment and Creation
  - b. Future Investments and Projects
  - c. Challenges, Dreams and Ambitions
  - d. Personal Fulfilment
  - e. Rhythm
  - f. Activities and Occupation of Daily Living
  - g. Work and Profession
  - h. Entertainment and Amusement
  - i. Outdoor Activities

j. Professional Recognition by Peers

2. Health and Wellness

a. General Health, Energy and Sensory Abilities

b. Intellectual Functioning

c. Body Appearance and Aesthetics

d. Importance of Food and Sleep

e. Mobility and Physical Movement

3. Social Support

a. Social Life and Participation

b. Family Relations

c. Friends and Neighbors

d. Dealing with/Taking Care of Descendants

e. Giving Love and Sharing

f. Intimacy and Sex Life

4. Existential Meaning

a. Attitude towards Life

b. Sense of Limit, Existential Issues and Perceptions of Death

c. Accepting Age

d. Adaptation to Change

e. Spiritual, Religious and Personal Beliefs

f. Humour

5. Stability and Accessibility

a. Rest and Relaxation

b. Simplification of Life

c. Climate

- d. Economic and Financial Stability
- e. Comfort and Accessibility
- f. Safety

### **Categories for Subjective Age**

- 6. Balanced
  - a. Balanced
- 7. Old
  - a. Old
- 8. Youthful
  - a. Youthful
- 9. Dissatisfied
  - a. Dissatisfied

## PAPER 4

Participant	a) Gender b) Age c) Marital Status d) Professional Status e) Nationality	1. “How do you feel about your age?”	2. “I would like to understand what in your point of view, contributes to your adjustment to aging in this phase of your life.”
1	a) Female b) 78 c) Widowed d) Inactive e) Angolan	-gosto de pensar nos prós e contras (8a) -a vida foi boa para mim (12a) -sinto-me jovem (11a) -não tenho medo da idade (9a)	-estar com a minha família (1b) -é importante manter a sanidade mental sempre (2b) -ter dinheiro (5a)
2	a) Female b) 79 c) Married or in a relationship d) Inactive e) Angolan	-a chave é saber equilibrar os bons e os maus momentos (8a) -nunca penso muito, sou infantil (11a) -não receio a idade (9a) -gosto da minha idade como é (12a)	-tenho uma família fantástica (1b) -a saúde é que é importante (2a) -estou sempre ocupada (3c)
3	a) Female b) 77 c) Married or in a relationship d) Inactive e) Angolan	-chega-se ao fim e é só equilíbrio (8a) -vejo-me sem medo (9a) -tenho uma alma jovem (11a) -estou feliz com a minha idade (12a)	-ter bons vizinhos à volta (1a) -o meu corpo obedece-me e eu faço por isso (2c)
4	a) Male b) 77 c) Widowed d) Active e) Angolan	-boas e más notícias (8a) -a idade nunca me meteu medo (9a) -a minha idade faz-me feliz (12a) -sinto-me muito jovem (11a)	-precisamos muito de saúde (2a) -visito os meus amigos que estão perto (1c)
5	a) Female b) 75 c) Married or in a relationship d) Inactive e) Angolan	-fazemos um balanço bom (8a) -a idade preocupa-me (10a) -sou um eterno adolescente (11a) -a idade deixa-me a pensar (10a) -estou feliz com a minha idade (12a)	-todas os sábados estou com as minhas amigas (1c) -gosto de andar sem ajudas de ninguém (2c)
6	a) Female b) 82 c) Married or in a relationship d) Active e) Angolan	- é preciso equilibrar a idade (8a) -a idade dá-me só preocupações (10a) -sou uma criança cá dentro (11a) -a idade trouxe-me excelentes (12a)	-à tarde gosto de ir ter com as minhas amigas (1c) -estou sempre a fazer coisas (3c)
7	a) Male b) 83 c) Married or in a relationship d) Inactive e) Angolan	-a vida tem sido equilibrada na nossa idade (8a) -não tenho medo da idade, claro (9a) -claro que estou muito satisfeito (12a) -sinto-me jovem ainda (8a)	-estar com a minha família (1b) -ter saúde (2a) -ter dinheiro para a velhice (5a)

		-mas a idade deixa-me a remoer (10a)	
8	a) Male b) 85 c) Widowed d) Inactive e) Angolan	- podemos ter tudo em harmonia, incluindo a idade (8a) -a idade foi excelente (12a) -gosto de ser jovem (11a) -medo da idade, nunca! (9a)	-é importante estar perto do meu filho (1b) -gosto de ter todos os sentidos a funcionar e de ter saúde (2a)
9	a) Female b) 90 c) Widowed d) Inactive e) Angolan	-gosto de ver os bons e os maus da idade na minha balança (8a) -não tenho mesmo medo (a idade) dela (9a) -a idade não conta, somos sempre jovens (11a) -a minha idade faz-me muito feliz (12a)	-tenho uma família fantástica (1b) -sem saúde não se faz nada (2a)
10	a) Male b) 92 c) Widowed d) Inactive e) Angolan	-vejo a minha idade de forma equilibrada (8a) -é tão bom ser criança (11a) -encaro a idade sem medo (9a) -às vezes ponho-me a pensar sobre a idade (10a) -a idade foi boa para mim (12a)	-estar com as minhas netas (1b) -não me faltar nada (5a)
11	a) Female b) 81 c) Married or in a relationship d) Inactive e) Angolan	- não devemos lutar contra a idade mas sim harmonizarmos (8a) -sou uma criança que não cresceu (11a) -penso muito na idade (10a) -a idade não me mete medo, já sou velhinha (9a) -foi bom chegar até aqui (12a)	-ter bons vizinhos aqui (1a) -ter saúde é o mais importante (2a)
12	a) Male b) 80 c) Married or in a relationship d) Inactive e) Angolan	-sinto que a idade correspondeu a tudo o que eu esperei (8a) -às vezes a idade preocupa-me (10a) -mas tenho uma mente infantil (11a) -estou muito satisfeita (12a) -medo, medo de quê? Da idade não (9a)	-visito os meus amigos (1c) -é importante estar com sanidade mental (2a) -tenho só os meus afazeres (3c)
13	a) Female b) 75 c) Married or in a relationship d) Active e) Angolan	-gosto de equilibrar a idade (8a) -a idade não me sai da cabeça (10a) -estou satisfeita (12a) -se tivesse medo da idade, comparava um cão (9a) -sinto-me mais jovem que muitos da minha idade (11a)	-todas as tardes estou com as minhas amigas (1c) -ter saudinha (2a)
14	a) Female b) 75 c) Widowed d) Active e) Angolan	-para mim a idade é a harmonia (8a) -não tenho medo de nada, nem da idade (9a) -gosto da minha idade mas fico a pensar (10a) -os jovens são mais velhos que eu (11a)	-aos domingos vou dançar com as minha vizinhas (1a) -ainda escrevo (4a) -gosto de andar sem ajuda (2c)
15	a) Female b) 76	-devemos pesar a nossa idade (8a)	-gosto de conviver (1a) -quero estar bem fisicamente (2a)

	c) Married or in a relationship d) Inactive e) Angolan	-a idade não é para ter medo <b>(9a)</b> -ah sou mais jovem que os jovens <b>(11a)</b> -foi bom chegar até à minha idade <b>(12a)</b> -a idade deixa-me a pensar <b>(10a)</b>	
16	a) Female b) 77 c) Widowed d) Active e) Angolan	-gosto de ponderar tudo, incluindo a idade <b>(8a)</b> -vou à minha vida, não tenho medo da idade <b>(9a)</b> -gosto de continuar a ser criança <b>(11a)</b> -a idade preocupa-me por vezes <b>(10a)</b> -estou satisfeita com a idade <b>(12a)</b> -vou ser sempre jovem <b>(11a)</b>	-ter uma boa vizinha <b>(1a)</b> -estou sempre ocupada com a casa <b>(3c)</b>
17	a) Male b) 77 c) Married or in a relationship d) Active e) Angolan	-se não pesasse a idade, já não estava aqui <b>(8a)</b> -o peso da idade preocupa-me <b>(10a)</b> -não tenho queixas. Sinto-me bem com a minha idade <b>(12a)</b> -somos eternamente jovens <b>(11a)</b> -há idades e idades mas não tenho medo <b>(9a)</b>	-eu nunca me esqueço do aniversário de todos os meus filhos, netos e irmãos <b>(1b)</b> -preciso de me exercitar <b>(2c)</b> -a minha família é a minha Fortaleza. Os meus filhos estão sempre lá para mim <b>(1b)</b>
18	a) Female b) 79 c) Widowed d) Inactive e) Angolan	-idade é equilíbrio <b>(8a)</b> -a idade não é para recluir <b>(9a)</b> -nunca cresci por dentro <b>(11a)</b> -a idade foi boa para mim <b>(12a)</b>	-visito os meus amigos que gosto <b>(1c)</b> -ter dinheiro mas não preciso de muito <b>(5a)</b> -gosto de estar lúcida <b>(2b)</b>
19	a) Female b) 79 c) Married or in a relationship d) Inactive e) Angolan	-o segredo de uma velhice feliz é o equilíbrio <b>(8a)</b> -estou muito satisfeita <b>(12a)</b> -sou uma criança crescida <b>(11a)</b> -a idade é para enfrentar <b>(9a)</b> -como pode ver, sou uma mulher idosa... Preocupo-me com a minha idade <b>(10a)</b>	-os meus netos dão-me muita alegria <b>(1b)</b> -preciso é de saúde <b>(2a)</b>
20	a) Female b) 77 c) Married or in a relationship d) Inactive e) Angolan	-vejo a idade com tudo de bom e de mau <b>(8a)</b> -gosto da minha idade <b>(12a)</b> -quero ser sempre criança <b>(11a)</b> -não tenho medo da idade <b>(9a)</b>	-aos domingos vou sair com a minha família <b>(1b)</b> -tento estar atento ao meu corpo. Uma simples constipação pode ser muito stressante <b>(2a)</b>
21	a) Female b) 77 c) Widowed d) Inactive e) Angolan	-é bom pesar a idade <b>(8a)</b> -vejo-me sem medo da idade <b>(9a)</b> -a idade trouxe-me coisas boas mesmo <b>(12a)</b> -gosto de ser uma criança crescida <b>(11a)</b>	-a minha família é o que mais conta. Se estiverem bem, eu estou bem <b>(1b)</b>
22	a) Male b) 75 c) Married or in a relationship d) Inactive e) Angolan	-devemos estar em harmonia com a nossa idade <b>(8a)</b> -tenho uma cabeça de criança <b>(11a)</b> -não tenho medo da idade <b>(9a)</b> -estou satisfeito <b>(12a)</b>	-tenho uma família fantástica <b>(1b)</b> -ter saúde sempre <b>(2a)</b> -ver os meus netos crescer <b>(1b)</b>

23	a) Female b) 87 c) Widowed d) Inactive e) Angolan	-não devemos lutar contra a idade <b>(8a)</b> -estou feliz com a minha idade <b>(12a)</b> -não receio a idade <b>(9a)</b> -tenho uma cabeça como as crianças <b>(11a)</b>	-saio com a minha família <b>(1b)</b> -quero ter sempre muita saúde <b>(2a)</b>
24	a) Female b) 83 c) Married or in a relationship d) Inactive e) Angolan	-estou em paz com a minha idade <b>(8a)</b> -sinto muita juventude em mim <b>(11a)</b> -a idade foi excelente <b>(12a)</b> -não entro em pânico com a idade <b>(9a)</b>	-não tenho muitos amigos, mas os que tenho são bons <b>(1b)</b> -poder estar sozinha sem ajuda <b>(2c)</b>
25	a) Male b) 85 c) Married or in a relationship d) Active e) Angolan	-o ideal é medir a idade bem medida <b>(8a)</b> -gosto de ser assim infantil <b>(11a)</b> -a minha idade faz-me feliz <b>(12a)</b>	-estar com os meus netos <b>(1b)</b>
26	a) Male b) 91 c) Widowed d) Inactive e) Angolan	-tenho medo de tudo menos da idade <b>(9a)</b> -tenho uma mente muito infantil <b>(11a)</b> -vejo a idade sem descanso às vezes <b>(10a)</b> -a idade trouxe-me coisas muito boas <b>(12a)</b> -meço bem a minha idade <b>(8a)</b>	-ao sábado a minha filha vem-me buscar <b>(1b)</b> -viver uma vida desafogada <b>(5a)</b>
27	a) Male b) 92 c) Widowed d) Inactive e) Angolan	-estou em harmonia com a minha idade <b>(8a)</b> -preocupo-me com as dores da idade <b>(10a)</b> -sinto-me jovem ainda, claro! <b>(11a)</b> -medo da idade, porquê? <b>(9a)</b>	-não desperdiço o meu tempo <b>(6b)</b> -estar com a minha família <b>(1b)</b>
28	a) Male b) 80 c) Married or in a relationship d) Active e) Angolan	-o segredo de ser jovem é uma idade equilibrada <b>(8a)</b> -por dentro, nunca cresci <b>(11a)</b> -a idade pesa-me nos pensamentos <b>(10a)</b> -não entro em pânico por nada, nem com a idade <b>(9a)</b>	-vou ao baile com a minha mulher <b>(1a)</b> -poder andar à minha vontade <b>(2c)</b>
29	a) Male b) 80 c) Widowed d) Inactive e) Angolan	-gosto de estra em equilíbrio com a idade <b>(8a)</b> -aprecio a minha idade <b>(12a)</b> -penso muito na idade <b>(10a)</b> -não temo a idade <b>(9a)</b> -não quero envelhecer, nem crescer <b>(11a)</b>	-gosto de conduzir sem ajuda <b>(2c)</b> -gosto de ir dançar <b>(3a)</b> -estar com as minhas netas <b>(1b)</b> -ainda ouço e vejo bem <b>(2a)</b>
30	a) Male b) 90 c) Married or in a relationship d) Active e) Angolan	-estou bem com a idade <b>(8a)</b> -sou muito jovem, sabia? <b>(11a)</b> -temer o quê, a idade? <b>(9a)</b> -a idade deixa-me preocupado <b>(10a)</b> -a idade foi excelente comigo <b>(12a)</b>	-estar com a minha família <b>(1b)</b> -tratar bem os outros <b>(1a)</b> -conforto em casa <b>(5b)</b>
31	a) Female b) 75 c) Married or in a	-a idade não tem nada de assustador <b>(9a)</b> -estou satisfeita <b>(12a)</b>	-ter boas vizinhas <b>(1a)</b>

	relationship d) Active e) Angolan	-não quero crescer <b>(11a)</b> -mas às vezes penso nela <b>(10a)</b> -se não fosse assim, com equilíbrio, não seria bom <b>(8a)</b>	
32	a) Female b) 76 c) Married or in a relationship d) Inactive e) Angolan	-é preciso balancear a idade <b>(8a)</b> -sinto-me jovem <b>(11a)</b> -a idade não me assusta <b>(9a)</b> -não vê que sou jovem!?! <b>(11a)</b> -a idade tratou-me bem <b>(12a)</b>	-vou a casa do meu filho todos os meses <b>(1b)</b> -ter saúde <b>(2a)</b> -ter vizinhos antigos <b>(1a)</b> -quero ainda fazer muito <b>(4a)</b>
33	a) Female b) 77 c) Widowed d) Active e) Angolan	-vejo a idade pesando tudo <b>(8a)</b> -chamam-me de criança <b>(11a)</b> -a idade, não tenho medo <b>(9a)</b> -a idade pesa, sabe e não dá para não pensar <b>(10a)</b> -qual quê, eu sou uma jovem! <b>(11a)</b> -Aa idade foi excelente <b>(12a)</b> -serei sempre jovem <b>(11a)</b>	-é importante estar perto da minha filha <b>(1b)</b> -ter a cabeça bem <b>(2b)</b> -sentir que à volta é seguro <b>(5c)</b> -ser saudável é muito importante para mim <b>(2a)</b>
34	a) Male b) 77 c) Married or in a relationship d) Active e) Angolan	-estou em paz com a idade <b>(8a)</b> -gosto da idade, não me assusta <b>(9a)</b> -nunca cresci na minha cabeça <b>(11a)</b> -a idade foi boa para mim sempre <b>(12a)</b> -tenho preocupação com a idade <b>(10a)</b>	-ter bons vizinhos <b>(1a)</b> -tenho sempre ideias na cabeça <b>(4a)</b> -Conforto e estar tudo limpo <b>(5b)</b> -sou muito activo profissionalmente. Ainda tenho contractos como consultor técnico <b>(3c)</b>
35	a) Male b) 78 c) Widowed d) Inactive e) Angolan	-não temo a idade <b>(9a)</b> -sinto-me em equilíbrio com a idade <b>(8a)</b> -a idade não passa ao lado e preocupo-me <b>(10a)</b> -sou um adolescente <b>(11a)</b> -a idade foi excelente para mim <b>(12a)</b>	-poder mexer-me sozinho <b>(2c)</b> -quero remodelar a casa <b>(4a)</b> -apreciar a idade <b>(6a)</b> -estar com a minha família <b>(1b)</b>
36	a) Male b) 79 c) Married or in a relationship d) Inactive e) Angolan	-estou pacificado com a minha idade <b>(8a)</b> -tenho um jovem sempre a chamar-me <b>(11a)</b> -a minha idade faz-me feliz <b>(12a)</b> -a idade não mata mas preocupa-me <b>(10a)</b> -gosto de ser ainda jovem <b>(11a)</b> -a idade não me deixa terrificado <b>(9a)</b>	-tenho de aproveitar o meu tempo sempre <b>(6b)</b> -o convívio é importante deveras <b>(1a)</b> -não vivo sem o meu conforto <b>(5b)</b> -mexer-me é muito importante para envelhecer bem <b>(2c)</b>
37	a) Male b) 78 c) Married or in a relationship d) Inactive e) Angolan	-a minha idade é exactamente o que esperei <b>(8a)</b> -estou satisfeito <b>(12a)</b> -tenho algo jovem em mim <b>(11a)</b> -devemos ver a idade com calma e não com medo <b>(9a)</b>	-gosto de mexer-me <b>(2c)</b> -o convívio é vital para continuarmos bem e envelhecer com alegria <b>(1a)</b>
38	a) Female b) 77 c) Widowed	-a idade só me dá que pensar <b>(10a)</b> -a idade é o que	-este tempo da nossa vida nunca volta <b>(6b)</b> -a minha família é fantástica <b>(1b)</b> -tenho projectos para pôr em prática <b>(4a)</b>

	d) Inactive e) Angolan	transparecemos e eu estou em equilíbrio <b>(8a)</b> - não me preocupo com a minha idade. Ainda me sinto jovem como na minha juventude <b>(11a)</b> -idade, qual idade, não tenho medo <b>(9a)</b> -gosto da minha idade <b>(12a)</b>	-ter muita saúde <b>(2a)</b> -gosto de ir à rua e falar com as pessoas que conheço <b>(1a)</b>
39	a) Male b) 75 c) Married or in a relationship d) Inactive e) Angolan	-gosto de me sentir em equilíbrio com a idade <b>(8a)</b> -vejo a idade sem medo <b>(9a)</b> -sempre serei uma criança <b>(11a)</b> -a idade trouxe-me coisas boas <b>(12a)</b>	-ter bons vizinhos por perto <b>(1a)</b> -ver que os meus filhos são alguém na vida <b>(1b)</b> -gosto de mexer-me logo de manhã <b>(2c)</b> -não andar com medo <b>(5c)</b> -sou um homem casado e feliz. Não consigo imaginar a minha vida sem ela [a esposa] <b>(1b)</b>
40	a) Female b) 82 c) Married or in a relationship d) Active e) Angolan	-a idade é estar equilibrada <b>(8a)</b> -eu quero ser sempre jovem <b>(11a)</b> -tenho preocupação com a idade <b>(10a)</b> -aprecio a minha idade <b>(12a)</b> -gosto de não crescer <b>(11a)</b> -a idade não é para ter medo <b>(9a)</b>	-poder mexer as pernas <b>(2c)</b> -valorizo muito a minha idade que já é de respeito <b>(6a)</b>
41	a) Male b) 83 c) Married or in a relationship e) Inactive d) Angolan	-ter equilíbrio <b>(8a)</b> -sinto-me jovem, não vê? <b>(11a)</b> -sou um João-sem-medo! <b>(9a)</b> -estou contente com a idade <b>(12a)</b>	-estar com a minha família <b>(1b)</b> -estar seguro em casa <b>(5a)</b> -saúde é sempre bom <b>(2a)</b> -a morte à vezes é libertadora <b>(7b)</b>
42	a) Male b) 85 c) Single d) Active e) Angolan	-a vida traz coisas muito boas e outras nem por isso <b>(8a)</b> -gosto de me sentir sempre jovem <b>(11a)</b> -a minha idade faz-me feliz <b>(12a)</b> -penso muito na idade <b>(10a)</b> -não me mete medo, a idade <b>(9a)</b>	-a minha família vem-me visitar sempre <b>(1b)</b> -não quero perder a sanidade mental <b>(2b)</b> -sentir segurança <b>(5c)</b>
43	a) Female b) 90 c) Widowed d) Active e) Angolan	-vejo o bom e o mau <b>(8a)</b> -tenho um jovem malandro em mim <b>(11a)</b> -ah, a idade, sem medos claro! <b>(9a)</b> -estou muito satisfeita com a idade <b>(12a)</b> -nunca deixei de ser criança <b>(11a)</b>	-gosto de ir à igreja <b>(7b)</b> -é importante estar com o meu neto <b>(1b)</b>
44	a) Female b) 92 c) Widowed d) Active e) Angolan	-gosto de equilibrar tudo <b>(8a)</b> -gosto da minha idade, não tenho medo <b>(9a)</b> -a idade trouxe-me coisas excelentes <b>(12a)</b> -tenho algo jovem em mim, não acha? <b>(11a)</b> -a idade deixa-me a pensar muito <b>(10a)</b>	-poder comprar os medicamentos <b>(5a)</b> -sou totalmente independente <b>(2c)</b>
45	a) Male b) 81 c) Married or in a relationship d) Active e) Angolan	-aprecio ser equilibrada com a idade <b>(8a)</b> -sinto-me jovem com a minha idade <b>(11a)</b> -a idade trouxe-me coisas fantásticas <b>(12a)</b>	-a minha família gosta muito de mim <b>(1b)</b> -a vida sem dinheiro não é possível <b>(5a)</b> -ter saúde <b>(2a)</b>

		-preocupo-me com tudo e a idade claro <b>(10a)</b> -vejo a idade sem medo e com respeito <b>(9a)</b>	
46	a) Female b) 82 c) Widowed d) Inactive e) Angolan	-para mim tudo conta em relação à idade <b>(8a)</b> -tenho um jovem em mim <b>(11a)</b> -estou feliz com tudo na idade <b>(12a)</b> -vejo a idade sem medo e com encanto <b>(9a)</b>	-o convívio é importante, claro <b>(1a)</b> -ter a cabeça ainda boa <b>(2b)</b>
47	a) Male b) 76 c) Married or in a relationship d) Active e) Angolan	-eu pondero a idade por todos os lados <b>(8a)</b> -medo, porquê? É sempre a andar <b>(9a)</b> -tenho uma mente infantil <b>(11a)</b> -estou contente com a idade que tenho <b>(12a)</b> -tenho preocupações com a idade <b>(10a)</b>	-tenho uma família fantástica <b>(1b)</b>
48	a) Female b) 75 c) Married or in a relationship d) Active e) Angolan	-sinto-me em harmonia com a minha vida e a minha idade <b>(8a)</b> -vejo a idade sem medo e com felicidade <b>(9a)</b> -quando crescer isto fica sem graça <b>(11a)</b> -a idade trouxe-me coisas maravilhosas <b>(12a)</b>	-estar com a minha família <b>(1b)</b> -faço tudo sozinha <b>(2c)</b> -cá tenho as minhas crenças <b>(7b)</b>
49	a) Male b) 76 c) Married or in a relationship d) Active e) Angolan	-a idade não me choca. Pelo contrário acho que devemos ver as coisas <b>(8a)</b> -sinto a idade como algo de bom não com medo <b>(9a)</b> -é impossível não me preocupar com a idade <b>(10a)</b> -adoro a minha idade <b>(12a)</b>	-estar com os meus netos <b>(1b)</b> -ter dinheiro dá segurança <b>(5c)</b>
50	a) Male b) 77 c) Married or in a relationship d) Active e) Angolan	-gosto de ver a idade por todos os lados <b>(8a)</b> -não devemos ter medo da idade <b>(9a)</b> -gosto da minha idade <b>(12a)</b> -ainda bem que não cresci por dentro <b>(11a)</b> -vou ser sempre um jovem adolescente <b>(11a)</b>	-ter bastante saúde <b>(2a)</b> -gosto de sair e conviver <b>(1a)</b>
51	a) Female b) 76 c) Widowed d) Active e) Angolan	-preciso de ver a idade pelo lado bom e pelo lado mau <b>(8a)</b> -temo outras coisas mas não a idade <b>(9a)</b> -sou uma miúda <b>(11a)</b> -estou muito feliz com a minha idade <b>(12a)</b>	-estou com quem eu gosto, com a minha família <b>(1b)</b> -poder mexer-me á minha vontade <b>(2c)</b>
52	a) Female b) 89 c) Married or in a relationship d) Inactive e) Portuguese	-é preciso ser rmaduro em relação à idade <b>(8a)</b> -vejo a idade sem medo e com surpresa pelo bom <b>(9a)</b> -é impossível não me preocupar com as coisas da idade <b>(10a)</b>	-eu sou a mais velha e eles (filhos) pedem-me conselhos <b>(1b)</b> -temos que aproveitar ao máximo a idade <b>(6b)</b> -gosto de fazer desenhos <b>(4a)</b> -ando muito <b>(3b)</b> -ter dinheiro para os gastos <b>(5a)</b> -gosto de ir à igreja aos domingos <b>(7b)</b> -ter saúde sempre <b>(2a)</b>

53	a) Female b) 78 c) Married or in a relationship d) Active e) Portuguese	-vejo todos os ângulos (8a) -concentro-me no bom então no medo (9a) -a idade dá-me que pensar (10a) -tenho um jovem que reside em mim (11a) -a idade trouxe-me aspectos excelentes (12a)	-gosto de andar à minha maneira sem ninguém a ajudar-me (2c) -gosto de ser útil aos outros (4a) -vejo os animais e as plantas e acho que faço parte disso tudo (7b) -preciso de me sentir bem na minha casa (5b) -temos que aproveitar ao máximo a idade (6b) -estou sempre ocupada com as coisas da casa (3c)
54	a) Female b) 77 c) Married or in a relationship d) Active e) Portuguese	-gosto de me sentir em harmonia com a idade (8a) -não receio a idade (9a) -estou feliz com a minha idade (12a) -gosto de ser uma criança muito crescida (11a)	-divirto-me a reparar coisas dos vizinhos (4a) -gosto do meu tempo e de o viver agora (6b) -preciso de ter acesso a tudo (5c) -apreciar a idade que temos (6a)
55	a) Female b) 83 c) Married or in a relationship d) Active e) Portuguese	-vejo que tenho uma idade equilibrada (8a) -estou muito satisfeito (12a) -porque haveria de ter medo da idade? (9a)	-gosto de ver a minha família (1b) -ser uma pessoa religiosa ajuda-me na minha vida (7b) -vejo muito bem (2a) -ter segurança (5c)
56	a) Male b) 82 c) Married or in a relationship d) Inactive e) Portuguese	-não paro de ruminar sobre a idade (10a) -a idade traz-me coisas boas e más (8a) -sou infantil (11a) -penso e muito na idade (10a) -estou contente com a minha idade (12a)	-a idade é uma coisa para ser admirada (6b) -aprecio as coisas normais do mundo (7b) -não precisar de ajuda para nada (2c) -gosto de estra sempre a imaginar coisas (4a) -ter bons vizinhos (1a) -gosto de descansar (3a)
57	a) Male b) 82 c) Widowed d) Inactive e) Portuguese	-penso em tudo na idade e pondero (8a) -quando crescer depois (11a) -claro que penso na idade (10a) -adoro a minha idade (12a)	-a minha cabeça estar boa (2b) -não sei se me posso considerar religiosa mas tenho certos valores (7b) -sou uma pessoa que precisa de estar envolvida em algo (4a) -viver uma vida sem apertos (5a)
58	a) Male b) 76 c) Married or in a relationship d) Active e) Portuguese	-é bom ver a vida como algo de positivo e também negativo (8a) -não receio a idade porque isso não ajuda (9a) -estou contente com a idade que tenho (12a) -isso não significa que não pense na idade (10a)	-parar é morrer (2c) -tempo é o que menos me resta., há que aproveitar! (6b) -gosto de estar perto de tudo (5c) -estar com a minha família (1b)
59	a) Male b) 75 c) Married or in a relationship d) Active e) Portuguese	-gosto de ver as perspectivas da idade (8a) -a vida é para ser vivida sem medo (9a) -sempre gostei da minha idade (12a) -gosto de ser uma criança (11a) -penso imenso na idade (10a)	-gosto de ir à igreja com o meu marido (7b) -ter sempre saúde (2a) -vou para a minha oficina e fico lá horas a arranjar coisas (4a)
60	a) Female b) 90 c) Married or in a relationship d) Inactive	-a idade trouxe-me muita paz e equilíbrio (8a) -estou contente com a idade, claro cheguei até aqui (12a) -gosto da minha idade e sem	-andar bem sem apoio (2c) -sem segurança não saio de casa (5c) -a idade eleva-nos para outro nível (7b) -estou sempre ocupada (3c) -estar com os meus netos (1b)

	e) Portuguese	medo <b>(9a)</b>	
61	a) Female b) 91 c) Widowed d) Inactive e) Portuguese	-com a idade sinto-me mais completa e equilibrada <b>(8a)</b> -a idade é sem medos! <b>(9a)</b> -a idade foi boa para mim <b>(12a)</b>	-estou com a minha família <b>(1b)</b> -viver uma vida em segurança <b>(5c)</b> -ter saúde claro <b>(2a)</b>
62	a) Female b) 76 c) Widowed d) Inactive e) Portuguese	-não tenho medo da idade nem de nada <b>(9a)</b> -sou muito infantil <b>(11a)</b>	-eles (filhos) moram longe mas visitam-me sempre que podem <b>(1b)</b> -venho ao teatro de vez em quando <b>(3a)</b> -temos que aproveitar ao máximo a idade <b>(6b)</b> -não consigo estar parada <b>(2c)</b>
63	a) Male b) 75 c) Widowed d) Active e) Portuguese	-a idade veio trazer muito equilíbrio à minha vida <b>(8a)</b> -penso em crescer mais tarde <b>(11a)</b> -a idade trouxe-me coisas fantásticas <b>(12a)</b>	-o tempo escorre por entre a s mãos <b>(6b)</b> -tenho uma família que me trata muito bem <b>(1b)</b> -apreciar a idade <b>(6a)</b> -gosto de me ocupar <b>(3c)</b>
64	a) Female b) 78 c) Married or in a relationship d) Active e) Portuguese	-gosto de sentir a minha idade como um apoio e que me orienta <b>(8a)</b> -quando crescer envelheço <b>(11a)</b> -foi bom chegar até aqui <b>(12a)</b> -a idade ocupa-me algum do meu pensamento <b>(10a)</b> -não sou medrosa pela idade, porque seria? <b>(9a)</b>	-seria tão bom se todos fôssemos mais preocupados com o bem <b>(7b)</b> -poder andar sem ajuda <b>(2c)</b> -passo muito tempo na cozinha a inventar doces <b>(4a)</b> -temos que aproveitar ao máximo a idade <b>(6b)</b> -visito os meus amigos <b>(1c)</b>
65	a) Female b) 99 c) Married or in a relationship d) Inactive e) Portuguese	-gosto de ver a idade pelo lado mau e bom <b>(8a)</b> -penso muito na idade <b>(10a)</b> -a idade tem algumas coisas más mas não devemos ter medo <b>(9a)</b>	-quero estar com os meus gatos no quentinho <b>(5b)</b> -o tempo é o mais valioso que existe <b>(6a)</b> -tive sorte com os meus filhos, muitos pais são abandonados mas eles visitam-me muito <b>(1b)</b> -é importante manter a sanidade mental <b>(2b)</b> -é preciso pensar sempre no que vai fazer a seguir <b>(4a)</b>
66	a) Female b) 79 c) Widowed d) Active e) Portuguese	-gosto de ver a idade por todos os lados <b>(8a)</b> -vejo a idade sem medo <b>(9a)</b> -a idade foi boa para mim <b>(12a)</b>	a saúde começa na cabeça <b>(2b)</b> -convivo muito com os vizinhos <b>(1a)</b> -pode-se dizer que sou espiritual <b>(7b)</b> -não quero ter de pensar no dinheiro <b>(5a)</b>
67	a) Female b) 79 c) Widowed d) Active e) Portuguese	-pacifiquei-me com a idade <b>(8a)</b> -a idade preocupa-me <b>(10a)</b> -vejo a idade sem medo e com respeito <b>(9a)</b> -estou contente com quase tudo na idade <b>(12a)</b>	-actividade ao nível da cabeça <b>(2b)</b> -ponho-me bonita e vou sair com o meu marido <b>(3a)</b> -a minha família é maravilhosa <b>(1b)</b> -sigo a minha vida com certos princípios que são meus <b>(7b)</b> -o estado não ajuda por isso precisamos ter o nosso dinheiro <b>(5a)</b> -o tempo não volta para trás por isso devemos aproveitá-lo <b>(6b)</b>
68	a) Male b) 75 c) Widowed d) Inactive e) Portuguese	-gosto de ver a idade como equilíbrio <b>(8a)</b> -sinto-me jovem <b>(11a)</b> -gosto de ver o meu futuro sem medo <b>(9a)</b>	-vou à igreja semanalmente <b>(7b)</b> -ter saúde como até agora <b>(2a)</b> -a vida é para nos divertirmos <b>(3a)</b> -adoro pintar mas não tenho muito jeito <b>(4a)</b>

		-estou feliz com a minha idade <b>(12a)</b>	
69	a) Female b) 89 c) Married or in a relationship d) Inactive e) Portuguese	-vejo os lados bons e maus <b>(8a)</b> -preocupa-me ficar velha <b>(10a)</b> -a idade é para admirar, não para ter medo <b>(9a)</b> -gosto da minha idade <b>(12a)</b> -gosto de ser uma criança grande <b>(11a)</b>	-a idade é uma coisa muito bonita <b>(6a)</b> -nesta fase da vida quero ser mais virada para coisas não materiais <b>(7b)</b> -ser saudável é essencial como até aqui <b>(2a)</b> -ter bons vizinhos <b>(1a)</b> -vou andar até sempre que posso <b>(3b)</b> -ter segurança em casa <b>(5c)</b>
70	a) Male b) 78 c) Married or in a relationship d) Active e) Portuguese	-respeito muito a minha idade, como é que podia ter medo <b>(9a)</b> -a idade trouxe-me maravilhas <b>(12a)</b> -gosto de ver a idade por todos os lados <b>(8a)</b>	-estamos sempre com medo que nos tirem a reforma. O dinheiro é muito importante <b>(5a)</b> -devemos viver a vida com pazer <b>(3a)</b> -não reconheço autoridade a um padre mas gosto de ouvir a sua experiência <b>(7b)</b> -sem projectos, morro <b>(4a)</b> -vou jogar com os meus amigos dominó <b>(1c)</b> -gosto de me manter em movimento <b>(2c)</b>
71	a) Male b) 77 c) Married or in a relationship d) Active e) Portuguese	-olho para trás e vejo tudo a idade com equilíbrio e alegria <b>(8a)</b> -não tenho medo nenhum <b>(9a)</b> -a idade foi boa para mim <b>(12a)</b>	-tenho sempre ideias <b>(4a)</b> -é preciso fazer render as coisas <b>(5a)</b> -gosto de me divertir <b>(3a)</b> -tenho uma família me ama <b>(1b)</b>
72	a) Female b) 83 c) Married or in a relationship d) Active e) Portuguese	-sabe a idade preocupa-me <b>(10a)</b> -não tenho medo da minha idade <b>(9a)</b> -gosto de ser infantil <b>(11a)</b> -aprecio a maturidade que a idade me dá <b>(8a)</b> -estou alegre com a idade <b>(12a)</b>	-ando a pé <b>(3b)</b> -nesta idade o tempo é muito importante <b>(6b)</b> -a nossa idade pede uma abordagem mais existencial <b>(7b)</b> -temos de fazer poupanças <b>(5a)</b> -quero deixar cá algo feito <b>(4a)</b> -quero estar bem de cabeça para tudo <b>(2b)</b> -faço muito arraiolos <b>(4a)</b>
73	a) Male b) 87 c) Married or in a relationship d) Inactive e) Portuguese	-ganhei e perdi com a idade <b>(8a)</b> -receio muito pouco a minha idade <b>(9a)</b> -sinto-me jovem como você! <b>(11a)</b> -a idade trouxe-me coisas fantásticas sempre <b>(12a)</b>	-estou com os meus amigos todos os dias <b>(1c)</b> -ir à igreja acalma-me <b>(7b)</b> -não quero ter de pedir dinheiro aos meus filhos <b>(5c)</b> -poder mexer-me <b>(2c)</b>
74	a) Male b) 81 c) Married or in a relationship d) Inactive e) Portuguese	-gosto de ver a idade por todos os lados <b>(8a)</b> -não gosto de ter medo de nada, nem da idade <b>(9a)</b> -sinto-me tão jovem <b>(11a)</b> -a idade foi excelente <b>(12a)</b> -não gosto de pensar na idade mas faço-o <b>(10a)</b>	-quero ter dinheiro suficiente para a minhas despesas <b>(5a)</b> -estar com a minha família <b>(1b)</b> -ter saúde <b>(2a)</b> -a proximidade da morte é visível mas não me preocupa <b>(7b)</b> -caminhamos juntos à tardinha <b>(3b)</b>
75	a) Male b) 76 c) Married or in a relationship d) Inactive e) Portuguese	-a idade é um jogo em que se ganha e perde <b>(8a)</b> -gosto de me sentir jovem <b>(11a)</b> -a idade foi uma bênção para mim <b>(12a)</b> -vejo a idade sem medo <b>(9a)</b>	-viver com saúde <b>(2a)</b> -é importante termos uma direcção <b>(4a)</b> -gosto de rezar <b>(7b)</b> -temos de poupar <b>(5a)</b> -fazemos caminhadas <b>(3b)</b> -estou com quem eu gosto, com a minha família <b>(1b)</b> -tenho de saber se ainda posso acreditar em mim <b>(7b)</b>

76	a) Male b) 75 c) Widowed d) Active e) Portuguese	-a idade não me assusta (9a) -não vou ser um velho, sou muito jovem (11a) -estou realizado com a idade (12a)	-visito os meus amigos aqui (1c) -vou a Fátima anualmente (7b) -tenho sempre ideias para fazer coisas (4a) -ando muito (3b)
77	a) Female b) 90 c) Married or in a relationship d) Inactive e) Portuguese	-nem me passaria pela cabeça não ver as coisas boas e más da idade (8a) -tenho uma alma jovem (11a) -estou contente com a idade que Deus me deu (12a) -não tenho medo da idade (9a)	-a morte está sempre lá e isso ajuda-me a apreciar a vida (7b) -estar com a minha família (1b) -tenho uma relação próxima de Deus (7b) -saio com o meu grupo de amigas (3a) -a minha idade é especial (6a)
78	a) Female b) 91 c) Widowed d) Inactive e) Portuguese	-a idade é boa e má (8a) -é inevitável pensar na idade (10a) -a idade venha ela! (9a) -estou contente com ter aqui chegado (12a) -por dentro não cresci (11a)	-acho que ser espiritual ajuda a ajustar-me ao envelhecimento (7b) -a saúde é o que temos de mais precioso (2a) -na igreja encontro-me com Deus (7b) -o conforto é muito importante (5b) -estar com os meus netos (1b)
79	a) Female b) 76 c) Widowed d) Inactive e) Portuguese	-há prós e contras na idade (8a) -penso na idade (10a) -a idade não me assusta (9a) -gosto de ser mais velha (12a)	-continuar com saúde (2a) -adoro pintar (4a) -estar segura no café (5c) -vou caminhar (3b) -gosto muito da família (1b)
80	a) Male b) 75 c) Widowed d) Active e) Portuguese	-tento estar em harmonia com o meu mundo idoso (8a) -estou muito satisfeito (12a) -sou um adolescente eterno (11a)	-apesar das coisas que incomodam, é uma idade que maravilhosa (6a) -ter saúde como até aqui (2a) -como isto está, temos de fazer poupanças (5a) -faço brinquedos para a minha neta (4a)
81	a) Female b) 78 c) Widowed d) Active e) Portuguese	-estou em harmonia com a minha idade (8a) -estou satisfeita (12a) -gosto de ser jovem sempre (11a) -preocupa-me tudo sobre a idade (10a) -enfrento a idade sem medo e aceito tudo o que esta me trouxe (9a)	-depois do almoço vou sempre ao café (1a) -quando envelhecemos, é importante pensarmos em algo superior (7b) -gosto das minhas coisa tal como estão (5b) -gosto de ir ao cinema (3a) -ando muito (2c)
82	a) Female b) 86 c) Married or in a relationship d) Inactive e) Portuguese	-penso muito no que faço com a minha idade (10a) -não luto contra a minha idade, equilíbrio (8a) -tenho um jovem em mim como se vê! (11a) -foi bom chegar até aos 86 (12a)	-tenho o direito de viver a minha vida à minha maneira e ao meu tempo (6b) -ter um bom vizinho (1a) -fazer a vida sem restrição de movimentos (2c) -tenho os meus valores e princípios éticos (7b) -caminhamos juntos sempre (3b)
83	a) Female b) 75 c) Widowed d) Active e) Portuguese	-pondero os ganhos e perdas da idade (8a) -gosto de me sentir sempre jovem (11a) -a idade foi excelente (12a) -preocupam-me as coisas da idade (10a) -qual medo da idade! (9a)	-tenho uma família cinco estrelas (1b) -preciso de ter algum dinheiro (5a) -sinto-me ligada aos outros sem ver essa espiritualidade em específico (7b) -devem respeitar a nossa idade (6a) -ter sempre muita saúde (2a)
84	a) Male b) 79	-oh, vejo sempre os lados todos (8a)	-o tempo é precioso (6b) -o convívio é importante (1a)

	c) Widowed d) Active e) Portuguese	-claro que me sinto jovem ainda <b>(11a)</b> -preocupa-me a idade <b>(10a)</b> -a idade é uma coisa bonita, não é para reacear <b>(9a)</b> -claro que estou satisfeito com a minha idade <b>(12a)</b>	-nunca parar <b>(2c)</b> -tenho sempre ideias para executar <b>(4a)</b> -ao ajudar, somos crentes <b>(7b)</b> -gosto de me sentir bem em casa <b>(5b)</b>
85	a) Male a) 75 c) Married or in a relationship d) Inactive e) Portuguese	-as coisas que a idade traz são de todo o tipo e devemos avaliar as coisas <b>(8a)</b> -a idade foi sempre boa para mim <b>(12a)</b> -nunca envelheci <b>(11a)</b> -se tiver medo da idade, isso não ajuda <b>(9a)</b>	-os amigos ajudam-nos a viver bem com o envelhecer <b>(1c)</b> -ter saúde <b>(2a)</b> -sem ajudar o próximo não valho de muito <b>(7b)</b> -sou muito criativo no que faço <b>(4a)</b> -não passo sem conforto <b>(5b)</b>
86	a) Female b) 82 c) Married or in a relationship d) Inactive e) Portuguese	-tenho em conta o balanço da idade e não me arrependo <b>(8a)</b> -sou tão criança <b>(11a)</b> -gosto da minha idade, isso não me assusta <b>(9a)</b> -Tudo tem sido bom na minha idade <b>(12a)</b>	-ver a morte mais próxima faz-me pensar na vida <b>(7a)</b> -gosto da minha idade <b>(6a)</b> -quero viver sempre lúcida <b>(2b)</b> -depois do jantar, vamos passear <b>(3b)</b> -estar confortável <b>(5b)</b> -invento tanta coisa ainda <b>(4a)</b> -temos sorte em viver numa área tão segura <b>(5c)</b>
87	a) Male b) 76 c) Married or in a relationship d) Active e) Portuguese	-gosto de encarar a idade de frente e com equilíbrio <b>(8a)</b> -a idade é para ser vivida jovem <b>(11a)</b> -não tenho razões para ter medo da idade <b>(9a)</b> -aprecio a minha idade <b>(12a)</b> -a idade dá-me muito que pensar <b>(10a)</b>	-a saúde é importante <b>(2a)</b> -é importante estar perto do meu filho <b>(1b)</b> -o espírito vence a matéria <b>(7b)</b> -gosto de fazer coisas para a casa <b>(4a)</b> -tenho a minha religião <b>(7b)</b> -só eu sei o que penso sobre a idade, é muito importante chegar aqui <b>(6b)</b> -ando muito a pé <b>(3b)</b>
88	a) Female b) 78 c) Married or in a relationship d) Inactive e) Portuguese	-é preciso ser justo com a idade <b>(8a)</b> -quero sempre estar alegre com a minha idade <b>(12a)</b> -claro que tenho algo jovem em mim <b>(11a)</b> -penso muito na idade <b>(10a)</b> -o medo é terrível e eu não tenho. Quando morrer, morri <b>(9a)</b>	-gosto de fazer render o tempo <b>(6b)</b> -estar com a minha família <b>(1b)</b> -gosto de me sentir unida à natureza <b>(7b)</b> -preciso de estar segura <b>(5c)</b> -estou cheia de ideias <b>(4a)</b> -quero estar bem de cabeça <b>(2b)</b>
89	a) Female b) 79 c) Married or in a relationship d) Inactive e) Portuguese	-não consigo não pensar na idade <b>(10a)</b> -a idade trouxe-me coisas boas <b>(12a)</b> -oh, tanta coisa que a idade trouxe, boa e má <b>(8a)</b> -não tenho medo da idade <b>(9a)</b>	-o meu irmão morreu e isso faz-me ver a morte como algo real <b>(7a)</b> -a idade conquista-se <b>(6a)</b> -tenho uma família de meter inveja <b>(1b)</b> -gosto de imaginar <b>(4a)</b>
90	a) Male b) 82 c) Widowed d) Inactive e) Portuguese	-temos que encarar a idade com verdade e justiça <b>(8a)</b> -estou satisfeito <b>(12a)</b> -somos sempre jovens <b>(11a)</b> -não há nada que ter medo <b>(9a)</b>	-tenho de me mexer <b>(2c)</b> -caminho a seguir ao jantar <b>(3b)</b> -a idade é para viver com tranquilidade <b>(5c)</b> -um dia acordo e morri e não usei o meu tempo <b>(6b)</b> -ter vizinhos que ajudam <b>(1a)</b>
91	a) Male b) 90 c) Widowed d) Inactive	-posso sempre ver os lados bons e maus <b>(8a)</b> -penso na idade <b>(10a)</b> -nunca cresci <b>(11a)</b>	-há coisas que só são vividas nesta idade <b>(6a)</b> -a minha família trata-me bem <b>(1b)</b> -nunca paro, estou sempre com novas ideias

	e) Portuguese	-a idade foi excelente para mim <b>(12a)</b> -a idade traz-me muitas preocupações <b>(10a)</b>	<b>(4a)</b> -quando parar, morro <b>(2c)</b> -gosto de ir nadar de manhã <b>(3b)</b> -tenho os meus valores <b>(7b)</b>
92	a) Male b) 88 c) Married or in a relationship d) Active e) Portuguese	-devemos focarmo-nos na idade de forma equilibrada <b>(8a)</b> -medo da idade, eu não! <b>(9a)</b> -à noite fico a remoer na cama <b>(10a)</b> -a idade trouxe-me coisas boas <b>(12a)</b>	-devemos dar valor às coisas maravilhosas que a idade nos traz <b>(6a)</b> -sonho com um mudo espiritualmente mais elevado <b>(7b)</b> -o convívio é essencial <b>(1a)</b> - só me sinto vivo quando escrevo <b>(4a)</b> -temos de nos divertir <b>(3b)</b>
93	a) Male b) 76 c) Married or in a relationship d) Inactive e) Portuguese	-o medo impede-nos de viver. Não tenho medo da idade <b>(9a)</b> -como em tudo na vida, é preciso bom senso com idade <b>(8a)</b> -é bom ser mais velho <b>(12a)</b> -gosto de ser um bebé <b>(11a)</b> -temo a idade um bocadinho <b>(10a)</b> -aprecio a minha idade <b>(12a)</b>	-tenho uma família magnífica <b>(1b)</b> -pensar na morte não me deixa triste porque me ajuda a compreendê-la <b>(7b)</b> -conforto é algo que não abdicoo <b>(5b)</b> -ando sempre com um amigo de caminhadas <b>(2c)</b> -Quero apreciar a minha idade <b>(6a)</b>
94	a) Female b) 75 c) Married or in a relationship d) Active e) Portuguese	-tenho uma alma jovem como os jovens <b>(11a)</b> -alegria e equilíbrio na idade! <b>(8a)</b> -estou satisfeita <b>(12a)</b> -recuso a ideia de ter medo da idade <b>(9a)</b>	-vou à minha vida independente todos os dias <b>(2c)</b> -ter vizinhos de há muito tempo <b>(1a)</b> -acho que posso dizer que sou muito espiritual <b>(7b)</b> -a vida é muito valiosa e estamos cá para a viver <b>(6a)</b> -gosto de fazer coisas para decoração <b>(4a)</b> -estar segura na rua <b>(5c)</b>
95	a) Female b) 78 c) Married or in a relationship d) Inactive e) Portuguese	-vejo a idade com calma e equilibradamente <b>(8a)</b> -gosto muito da minha idade <b>(12a)</b> -vou ser sempre jovem por dentro <b>(11a)</b> -não sou escrava da idade, não tenho medo <b>(9a)</b>	-tive muita sorte com a minha família <b>(1b)</b> -a idade é como o vinho, é para ser apreciado <b>(6a)</b> -gosto de andar de um lado para o outro <b>(2c)</b> -a nossa comunidade religiosa é muito importante na minha vida <b>(7b)</b> -gosto de andar sempre a inventar <b>(4a)</b> -não ter medo de assaltos <b>(5c)</b> -vou à piscina municipal todos os dias <b>(3b)</b> -tento viver a vida como se cada dia fosse o último dia da minha vida <b>(6a)</b>
96	a) Female b) 99 c) Widowed d) Active e) Portuguese	-gosto de equilíbrio em tudo, incluindo na idade <b>(8a)</b> -a idade foi excelente para mim <b>(12a)</b> -medo da idade, isso é tolice <b>(9a)</b>	-Gosto de investir na minha saúde <b>(2a)</b> -Sou muito criativo na minha vida <b>(4a)</b> -Gosto de andar <b>(3b)</b> -Tenho uma família maravilhosa <b>(1b)</b>
97	a) Male b) 76 c) Widowed d) Active e) Portuguese	-a idade traz-nos tudo de ganhos e perdas <b>(8a)</b> -respeito e gosto da minha idade <b>(12a)</b> -medo da idade não tenho <b>(9a)</b> -nada mudou dentro de mim. Sou um adolescente como sempre fui <b>(11a)</b>	-ter vizinhos que gostamos <b>(1a)</b> -a idade é algo que não devemos desvalorizar <b>(6a)</b> -caminhamos juntos em grandes caminhadas <b>(3b)</b> -viver com saúde sem ajudas <b>(2a)</b>

98	a) Female b) 78 c) Widowed d) Active e) Portuguese	-a idade não é só perder, também é ganhar <b>(8a)</b> -a idade trouxe-me coisas boas <b>(12a)</b> -perdi o medo da idade quando estive muito doente <b>(9a)</b> -preocupo-me com a minha idade e o futuro <b>(10a)</b>	-a vida não pára e nós também não <b>(2c)</b> -o tempo voa <b>(6b)</b> -sou mais espiritual agora <b>(7b)</b> -não brinco com a idade <b>(6a)</b> -ter bom ambiente em casa <b>(5b)</b>
99	a) Female b) 75 c) Widowed d) Inactive e) Portuguese	-quero ser uma pessoa completa na idade também <b>(8a)</b> -não quero crescer <b>(11a)</b> -respeito muito a minha idade, não tenho medo dela <b>(9a)</b> -a idade trouxe-me coisas fantásticas <b>(12a)</b>	-estou com quem eu adoro, com a minha família <b>(1b)</b> -ter muita saúde <b>(2a)</b> -estar segura em todo o lado <b>(5c)</b> -temos que aceitar a morte <b>(7a)</b> -quando envelhecermos, temos de nos divertir <b>(3b)</b>
100	a) Female b) 82 c) Married or in a relationship d) Inactive e) Portuguese	-a idade tem tanto de bom como de mau <b>(8a)</b> -durmo a pensar na idade <b>(10a)</b> -quando se está à beira da morte vive-se sempre como fosse o último dia e perde-se o medo da idade <b>(9a)</b> -cheguei até aqui, estou de parabéns! <b>(12a)</b> -nunca cresci na minha cabeça <b>(11a)</b>	-gosto de pensar cada vez mais numa espiritualidade própria nesta idade <b>(7b)</b> -é importante estar perto da minha filha <b>(1b)</b> -tenho de exigir o meu tempo <b>(6b)</b> -vou nadar <b>(3b)</b> -a minha cabeça não pára <b>(4a)</b>
101	a) Male b) 85 c) Widowed d) Inactive e) Portuguese	-ah, a idade conta muito, temos de a ponderar <b>(8a)</b> -a idade trouxe-me coisas muito boas <b>(12a)</b> -quero ser sempre jovem <b>(11a)</b> -preocupa-me envelhecer e tudo o que a idade traz <b>(10a)</b> -a idade é para amar, e não para assustar <b>(9a)</b> -nunca cresci por dentro <b>(11a)</b>	-o mundo está perigoso e por isso é preciso ter segurança <b>(5c)</b> -estar bem com os meus <b>(1b)</b> -quando não tiver boa da cabeça não quero mais viver <b>(2b)</b> -eu estou neste momento numa etapa muito diferente da que estava, mais espiritual, sem dúvida <b>(7b)</b> -há sociedades onde os velhos são os sábios e acho que devemos ser vistos desta forma, como se tivéssemos mais sabedoria <b>(6a)</b> -estou sempre a pensar no próximo projecto <b>(4a)</b>
102	a) Male b) 75 c) Married or in a relationship d) Inactive e) Portuguese	-não tenho medo de viver a minha idade <b>(9a)</b> -a idade não me deixa dormir descansado <b>(10a)</b> -gosto de me sentir jovem <b>(11a)</b> -sinto-me em harmonia com a idade também mas não só, também com a vida <b>(8a)</b> -serei sempre jovem <b>(11a)</b>	-viver a minha casa <b>(5b)</b> -a morte faz parte da vida <b>(7a)</b> -a idade avança sempre e nós vamos ganhando vantagens sobre os outros <b>(6a)</b> -estar com a minha família <b>(1b)</b>

## Categories for Indicators of Adjustment to Aging

### 1. Social support

#### a. Social Life and Participation

#### b. Family Relations

- c. Friends and Neighbors
- 2. Health and well-being
  - a. General Health, Energy and Sensory Abilities
  - b. Intellectual Functioning
  - c. Mobility and Physical Movement
- 3. Occupation and leisure
  - a. Leisure
  - b. Physical Activity
  - c. Occupation
- 4. Accomplishment and Future Projects
  - a. Engagement in projects
- 5. Stability and safety
  - a. Financial Stability
  - b. Comfort and Accessibility
  - c. Safety
- 6. Valorization of Time and Age
  - a. Appreciating Age
  - b. Valorizing Time
- 7. Existential Meaning and Sense of Limit
  - a. Proximity of Death
  - b. Spiritual, Religious and Existential Beliefs

### **Categories for Subjective Age**

- 8. In Harmony
  - a. In Harmony

9. Fearless

a. Fearless

10. With Concern

a. With Concern

11. Youthful

a. Youthful

12. Satisfactory

a. Satisfactory

## PAPER 5

Participant	<b>a) Gender</b> <b>b) Age</b> <b>c) Marital Status</b> <b>d) Professional Status</b> <b>e) Nationality</b>	<b>1. “I would like to understand what in your point of view, contributes to your adjustment to aging in this phase of your life.”</b>
1	a) Male b) 89 c) Widowed d) Active e) German	-doing my own things (2b) -our spiritual activities are spirited (3d) -we help children with learning difficulties (3d) -amusing me while I still here (1a) -I'm a social lady (4a) -I valorize good friends (4a) being with my friend (4a) -I valorize my time (3h) -I must make the best of our time (3h) -time is running out (3h) -veing independent (2b) -I am adjusted with nature (3c) -having pleasure in eating (2a) -feeling good about age (3g)
2	a) Female b) 100 c) Widowed d) Active e) German	-driving (2b) - I play a lot with my children (1a) -time is our friend, not our enemy (3h) -time is short (3h) -the movement is very important (2b) -I'm a social person (4a) -I enjoy people (4a) -it's much better if we understand our limit (3f) -we should be aware of death (3f) -being independent in the whole sense (2b)
3	a) Male c) Married or in a relationship d) Active b) 76 e) German	-I take care of my grandchildren (1b) -having a good pension is safer 5a) -I'm very sociable (4a) -I like socializing (4a) -time is scarce (3h) -I love my daughter (4b) -going out dancing (1a) -not making too much efforts (2a) -time open my eyes for the beauty of things (3h) -taking care of my body (2a) -feeling good about age (3g) -positive thoughts is good for everything (2a)
4	a) Male b) 79 c) Widowed d) Active e) German	-I am part of a religious community (3b) -I like socializing (4a) -I valorize good friendships (4a) -maintaining a physical activity is essential for your health (2a) -time has haa end (3h) -time does not go back (3h) -time is a beautiful thing (3h) -feeling good about age (3g) -being in a good mood (2b)
5	a) Female b) 88 c) Married or in a relationship d) Inactive e) German	-I still play sports (2b) -life is not forever (3f) -we must have our sense of limit (3f) -time vanishes (3h) -I enjoy being with my friends (4a) -I love my husband (4b) -I sing in the choir of my church (3d) -enjoying diner (2a) -we must fight death (3f) -I enjoy walking a lot (1b) -not drinking too much alcohol (2a)

6	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 83</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-age makes you lose your uncertainties (3g)</li> <li>-we must face death (3f)</li> <li>-being able to breath well (2a)</li> <li>-being awaken (2a)</li> <li>-I enjoy my time with my friends (4a)</li> <li>-age illuminates life (3g)</li> <li>-feeling good about age (3g)</li> <li>-time flies (3h)</li> <li>-time doesn't go back (3h)</li> <li>-not taking medication (2a)</li> <li>-listening to good music (1a)</li> </ul>
7	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 85</li> <li>c) Widowed</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-maintenance of physical capacity and very important (2e)</li> <li>-I love my daughter (4b)</li> <li>-we, old people, play with time (3h)</li> <li>-I appreciate my friends (4a)</li> <li>-I love playing cards with my friends (4a)</li> <li>-I respect everyone's time (3h)</li> <li>-my time is something! (3h)</li> <li>-taking care of myself (2a)</li> <li>-having a good memory (2a)</li> <li>-I enjoy the casino (1a)</li> <li>-I need my spiritual community (3b)</li> <li>-I like socializing (4a)</li> <li>-my family is the best (4b)</li> <li>-aging made me understand that I will not be here forever (3f)</li> </ul>
8	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 102</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-time doesn't forgive (3h)</li> <li>-having friends is the best thing in life (4a)</li> <li>-I have friendships for years (4a)</li> <li>-time is not on our side (3h)</li> <li>-time is my friend (3h)</li> <li>-I love my children (4b)</li> <li>-not taking medication (2a)</li> <li>-our spiritual activities are dynamic (3d)</li> <li>-we help children HIVs (3d)</li> <li>-being able to make the effort to be less fat (2a)</li> <li>-age makes everything clear (3g)</li> <li>-not drinking (2a)</li> <li>-time helped me to put things in perspective (3h)</li> <li>-age values my time (3h)</li> <li>-timing is more important than time (3h)</li> </ul>
9	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 77</li> <li>c) Married</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I am retired and I have time to do a number of things (1h)</li> <li>-breathing well (2a)</li> <li>-my family is wonderful (4b)</li> <li>-we have our religious activities(3d)</li> <li>-I love my husband (4b)</li> <li>-I play some instruments (3d)</li> <li>-feeling good about age (3g)</li> <li>-walking well (2b)</li> <li>-time is fantastic (3h)</li> <li>-time is to be respected (3h)</li> <li>-we don't have much time (3h)</li> <li>-moving a lot (2a)</li> <li>-age makes you more outgoing (3g)</li> <li>-being well (2a)</li> <li>-I watch sports (1a)</li> </ul>
10	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 79</li> <li>c) Widowed</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-going out with my wife (1a)</li> <li>-my family is fantastic (4b)</li> <li>-age makes you more demanding (3g)</li> <li>-what about swimming? It's great (1b)</li> <li>-when we age we valorize more our age (3g)</li> <li>-eating well (2a)</li> <li>-when someone dies, it reminds us of our limit (3f)</li> <li>-my wife died and I must adapt to this(3f)</li> <li>-keeping myself active (2b)</li> <li>-I love my children (4b)</li> <li>-good lungs (2a)</li> </ul>

		-when we get old, time gets more concrete <b>(3h)</b> -I value time more now <b>(3h)</b>
11	a) Female b) 88 c) Single d) Inactive e) German	-going to art openings <b>(1a)</b> -we help everyone that comes to our door <b>(3d)</b> -I clean the church <b>(3d)</b> -I help with the singing <b>(3d)</b> -sports is great if you can <b>(2b)</b> -being careful with drinking <b>(2a)</b> -having a good pension is important <b>(5a)</b> -my family is the most important thing <b>(4b)</b> -appreciating our age <b>(3g)</b> -going out and see a show <b>(1a)</b> -keeping my heart functioning <b>(2a)</b> -age is a good thing <b>(3g)</b> -age makes you grow up at any age <b>(3g)</b> -my spiritual community helps me <b>(3b)</b> -we must be clairvoyant death <b>(3f)</b>
12	a) Female b) 99 c) Married or in a relationship d) Active e) German	-my children entertain me <b>(1b)</b> -time flies <b>(3h)</b> -I value time more <b>(3h)</b> -I try not to eat bad things for my health <b>(2a)</b> -my children are always there for me <b>(4b)</b> -I try to feel connected to nature <b>(3c)</b> -I always find time for my daily walk <b>(1b)</b> -age makes you not caring about life so much <b>(3g)</b> -keeping my heart well <b>(2a)</b> -we pray every Sunday <b>(3d)</b> -I help families with difficulties <b>(3d)</b> -my family is so important to me <b>(4b)</b> -we have little money but we can help the sick people <b>(3d)</b> -keeping away from being sedentary <b>(2b)</b> -age simplifies everything <b>(3g)</b> -the awareness that I have a direction and a purpose in my life is what makes me feel good with my age and with myself <b>(3e)</b>
13	a) Female b) 78 c) Married or in a relationship d) Inactive e) German	-I'm always busy <b>(1b)</b> -I must not eat sweets <b>(2a)</b> -when we age we start loving our age <b>(3g)</b> -my family is unique <b>(4b)</b> -my spiritual community is everything <b>(3b)</b> -sometimes, dancing <b>(1a)</b> - I enjoy making sports for my health <b>(2e)</b> -I always feel connected to nature <b>(3c)</b> -time is a second <b>(3h)</b> -time makes fun of us <b>(3h)</b> -doing sports is very important <b>(2e)</b> -my family is unique <b>(4b)</b>
14	a) Female b) 93 c) Widowed d) Inactive e) German	-age makes you more serious <b>(3g)</b> -my family loves me <b>(4b)</b> -time is vanishing <b>(3h)</b> -I love my children <b>(4b)</b> -I enjoy all my time <b>(3h)</b> -in life time is very important <b>(3h)</b> building <b>(2b)</b> -not taking medication <b>(2a)</b> -I dedicate a lot of time to my community in church <b>(3b)</b> -adoring our age <b>(3g)</b> -doing sports is very important <b>(2a)</b>
15	a) Male b) 101 c) Single d) Inactive e) German	-feeling good about age <b>(3g)</b> -amusing myself is important <b>(1a)</b> -our spiritual activities are animated <b>(3d)</b> -we do everything in the community <b>(3d)</b> -we pray a lot <b>(3d)</b> -having a good pension is vital <b>(5a)</b> -when we age we enjoy more our age <b>(3g)</b> -my husband is my best friend <b>(4b)</b>

		-my family treats me as it was my birthday day <b>(4b)</b>
16	a) Male b) 89 c) Married or in a relationship d) Inactive e) German	-age reveals everything <b>(3g)</b> -climbing the stairs of my -I don't feel so flexible now but I have been adapting to aging <b>(2e)</b> -I valorize my age <b>(3g)</b> -my family is my most valuable thing <b>(4b)</b> -I love my children <b>(4b)</b> -age helps us to understand a lot of things <b>(3g)</b> -every saturday we have our activities <b>(3d)</b> -I help in the temple <b>(3d)</b> -I sing with the children <b>(3d)</b> -paying attention to what you eat <b>(2a)</b> -I love my children <b>(4b)</b> -not taking medication <b>(2a)</b> -I am very happy with my work <b>(1a)</b>
17	a) Male b) 88 c) Married or in a relationship d) Inactive e) German	-not falling <b>(2b)</b> -liking our age <b>(3g)</b> -leaving home and not be ruminating <b>(1i)</b> -I love my daughter <b>(4b)</b> -I meet a lot of interesting people in the temple <b>(3b)</b> -I enjoy swimming, and so I remain active <b>(2e)</b> -when we age we valorize other things in life and age <b>(3g)</b> -not being sedentary <b>(2b)</b>
18	a) Female b) 88 c) Married or in a relationship d) Inactive e) German	-going to the beach, to get my Vitamin D fix <b>(1a)</b> -I love my husband <b>(4b)</b> -I participate with my medicine knowledge <b>(3d)</b> -we have gatherings in the temple <b>(3d)</b> -I help the priest <b>(3d)</b> -swimming <b>(2e)</b> -I help families with great problems <b>(3d)</b> -we make a difference the sick people <b>(3d)</b> -when we age we make fun of our age <b>(3g)</b> -not taking medication <b>(2a)</b> -I feel connected to nature <b>(3c)</b> -drinking less beers <b>(2a)</b>
19	a) Male b) 76 c) Married or in a relationship d) Inactive e) German	-fishing <b>(1a)</b> -we must face death as being natural <b>(3f)</b> -death is a friend <b>(3f)</b> -I think about death in a good way <b>(3f)</b> -age makes you more childish <b>(3g)</b> -practising yoga <b>(2a)</b> -having fun while walking <b>(2a)</b> -swimming in the ocean <b>(2a)</b>
20	a) Female b) 78 c) Married or in a relationship d) Active e) German	-I like being outdoors <b>(1i)</b> -feeling good at any age <b>(3g)</b> -not taking medication <b>(2a)</b> -sleeping well <b>(2a)</b> -having a good pension is crucial <b>(5a)</b> -age elucidates everything <b>(3g)</b> -we must accept death <b>(3f)</b> -no one lives forever <b>(3f)</b> -life is beautiful but death is a reality <b>(3f)</b> -I love my daughter <b>(4b)</b> -being able to drive <b>(2a)</b> -adoring our age <b>(3g)</b>
21	a) Male b) 89 c) Married or in a relationship d) Inactive e) German	-I travel for golf <b>(1a)</b> -focusing well <b>(2a)</b> -when we age we get used to our age <b>(3g)</b> -being able to read <b>(2a)</b> -walking is the best way to stay fit <b>(2e)</b>
22	a) Male b) 79 c) Married or in a relationship d) Inactive e) German	-sometimes I travel <b>(1a)</b> -My sister died and it confronts me with death <b>(3f)</b> -I know there is an end <b>(3f)</b> -I must understand my limit <b>(3f)</b> -we must live with death <b>(3f)</b> -breathing well <b>(2a)</b>

		-having good eyes (2a) -listening well to what you say (2a)
23	a) Female b) 89 c) Married or in a relationship d) Inactive e) German	-I went to India last year (1a) -not drinking (2a) -my spiritual community helps me getting on with my life (3b) -not taking medication (2a) -listening well (2a)
24	a) Female b) 78 c) Widowed d) Inactive e) German	-sleeping well (2a) -I feel connected to nature (3c) -not needing help for moving (2b) -everyone must go one day (3f) - I know there is an end(3f) -I like my personal projects (1b) -I know my limit (3f) -I love my grandchildren (4b) -listening and eating well (2a)
25	a) Female b) 102 c) Married or in a relationship d) Inactive e) German	-sleeping is very important (2a) -I paint very often (1b) -I love my grandchildren (4b) -time should always be on our side (3h) -I don't want to live my life without making the most of my time (3h) -having a good memory (2a) -still driving (2a)
26	a) Female b) 83 c) Married or in a relationship d) Inactive e) German	-a balanced diet is important (2a) -I love to use my time in the best way (3h) -I feel connected to nature (3c) -my grandsons keep me busy (1b) -having a good pension is important (5a)
27	a) Male b) 82 c) Married or in a relationship d) Inactive e) German	-not taking too much medication (2a) -sleeping well (2a) -the recognition of my work is good (1b)
28	a) Female b) 93 c) Widowed d) Inactive e) German	-I travel a lot (1a) -paying attention to your food (2a) -I already needed help and my community helped me (3b) -not taking medication (2a) -not drinking at all (2a)
29	a) Female b) 90 c) Widowed d) Active e) German	-I avoid eating anything fried (2a) -we must accept the end (3f) -I live better now but I know it's not forever(3f) -money gives us the best options (5a) -I love my grandchildren (4b) -not drinking at night (2a) -seeing well (2a) -I earn my own money (5a) -time is great but not always(3h) -finally I have my own time! (3h) -time does not forgive anyone (3h) -my life has plenty of work (1b)
30	a) Female b) 81 c) Married or in a relationship d) Inactive e) German	-going to painting exhibitions (1a) -sleeping well (2a) -I enjoy helping others (3a) -not being sedentary (2b) -I live with a limit (3f) -I know that death is a reality (3f) -money buys peace (5a) -I feel safer with money (5a) -we must not fear the end (3f) -practising yoga (2a) -I always have a new idea (1b)
31	a) Male b) 100	-gambling a little(1a) -feeling good about age (3g)

	c) Widowed d) Inactive e) German	-being physically active (2b) -not being sedentary (2b) -practising yoga (2a)
32	a) Male b) 101 c) Married or in a relationship d) Inactive e) German	-we must understand that everything has an end (3f) -I know that death is close (3f) -eating good stuff (2b) -I love my grandchildren (4b) -I have time to have fun (1a) -I enjoy myself during my time (3h) -look at our time, isn't great! (3h) -I need more time now because I am slower (3h) -sleeping seven hours minimum (2b) -money gives us comfort (5a) -I feel more altruistic (3a) -walking around (2a)
33	a) Female b) 84 c) Married or in a relationship d) Active e) German	-not staying still (2b) -being active (2b) -eating healthy (2a) -money gives us a way-out (5a)
34	a) Female b) 87 c) Married or in a relationship d) Active e) German	-the other painters admire my work (1b) -not falling (2b) -we give away 100 meals per day (3d) -I love my grandchildren (4b) -we get together and pray (3d) -I help with the food (3d) -we help the sick people (3d) -not having glasses (2b) -not stopping being active (2b)
35	a) Male b) 78 c) Widowed d) Active e) German	-I was told to keep teaching (1b) -when we age we appreciate more our age (3g) -not being sedentary (2b) -being participative in activities like sports (2a) -with money we can be safe (5a) -I must understand my end date (3f) -I live with this thought of death (3f) -I know that death is a reality (3f) -not sitting around (2b)
36	a) Male b) 84 c) Single d) Inactive e) German	-homeopathy was the best thing that I did for helping others (1b) -I believe in a very healthy diet (2a) -I want to make the most of my time (3h) -having a good pension is huge (5a) -time is limited (3h) -we must be comfortable with death (3f) -I don't realize that death is close (3f) -having a good memory (2a) -sleeping well (2a) -I know that death is near (3f) -we must be comfortable with death (3f) -welcoming our age (3g)
37	a) Male b) 79 c) Single d) Active e) German	-I give sense to time (3h) -I use my time well (3h) -time is not enough (3h) -we are what we eat (2a) -I love my husband (4b) -I love being with my family (4b) -I want to have enough money (5a) -we pray together (3d) -I help in the canteen (3d) -doing Pilates (2a) -being healthy (2a)
38	a) Female b) 101 c) Married or in a relationship d) Inactive	-I love to eat everything I want (2a) I can't live without my wife (4b) -money helps a lot (5a) -working just for fun (1b)

	e) German	-feeling at ease with your body <b>(2b)</b> -I practice for free one day a week in our community <b>(3d)</b> -we need love in our community <b>(3d)</b> -with money we can travel <b>(5a)</b> -spirituality is not just praying, it's loving the others <b>(3d)</b> -not taking medication <b>(2a)</b>
39	a) Female b) 83 c) Married or in a relationship d) Inactive e) German	-I enjoy being with my friends <b>(4a)</b> -having a good pension is enough <b>(5a)</b> -money is crucial <b>(5a)</b> -eating less <b>(2a)</b> -I love altruism <b>(3a)</b> -having group walks <b>(2b)</b> -we pray for a better world <b>(3d)</b> -I help with the cooking <b>(3d)</b> -enjoying life is good for your health <b>(2a)</b> -time flies <b>(3h)</b> -I can't live without my family <b>(4b)</b> -my time is valuable <b>(3h)</b> -I'm collaborating with the University, it is great <b>(1b)</b> -enjoying our age <b>(3g)</b> -existential meaning is very important at this stage <b>(3e)</b> -I must know myself <b>(3e)</b> -death is close <b>(3f)</b> -I love my husband <b>(4b)</b> -I love being with my family <b>(4b)</b> -I don't want to think about death but I do <b>(3f)</b> -enjoying our age <b>(3g)</b>
40	a) Male b) 78 c) Widowed d) Active e) German	-my time is something special <b>(3h)</b> -I like to have enough money for my things <b>(5a)</b> -I take advantage of my time <b>(3h)</b> -we should always enjoy our time here <b>(3h)</b> -with age, good eating is important <b>(2a)</b> -I believe in God <b>(3c)</b> -I feel connected to nature <b>(3c)</b> -staying away from alcohol <b>(2b)</b> -having a good pension is incalculable <b>(5a)</b> -I can't live without my wife <b>(4b)</b> -I still read and write a lot <b>(1b)</b> -not being sedentary <b>(2b)</b>
41	a) Female b) 75 c) Married or in a relationship e) Inactive e) German	-eating well is important <b>(2d)</b> -life is simple and working is part of it <b>(1b)</b> -I valorize good friendships <b>(4a)</b> -money gives us freedom <b>(5a)</b> -practising yoga <b>(2a)</b> -age is everything <b>(3g)</b> -I love cooking for the family <b>(1b)</b> -existential meaning is to free myself of the material things <b>(3e)</b> -having a good pension is a privilege <b>(5a)</b> -sleeping well <b>(2a)</b>
42	a) Male b) 77 c) Married or in a relationship d) Active e) German	-I help my grandson with the homework <b>(1b)</b> -it's essential to eat good food <b>(2d)</b> -I believe in God <b>(3c)</b> -I love being with my family <b>(4b)</b> -I feel connected to nature <b>(3c)</b> -not being without moving around <b>(2b)</b> -walking a lot <b>(2b)</b> -life is a matter of giving and receiving <b>(3a)</b> -I valorize good friends <b>(4a)</b> -I want to do something for the world, even small <b>(1b)</b>
43	a) Female b) 79 c) Single d) Active	-valorising our age <b>(3g)</b> -my body well-being is essential for me. A simple cold can be very distressful for me <b>(2a)</b> -my life is so full of things to do <b>(1b)</b>

	e) German	<ul style="list-style-type: none"> <li>-I am existential at this point <b>(3e)</b></li> <li>-existential meaning is everything inside of us <b>(3e)</b></li> <li>-health starts with what you eat <b>(2d)</b></li> <li>-I only need some things that only money can buy <b>(5a)</b></li> <li>-sometimes small gestures are very rewarding <b>(3a)</b></li> <li>-time flies <b>(3h)</b></li> <li>-time owns us <b>(3h)</b></li> <li>-not falling in the stairs <b>(2b)</b></li> <li>-I help in the community <b>(1b)</b></li> </ul>
44	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 88</li> <li>c) Single</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I teach my granddaughter how to read <b>(1b)</b></li> <li>-I believe in God <b>(3c)</b></li> <li>-I get inspiration in nature <b>(3c)</b></li> <li>-eating well is important <b>(2a)</b></li> <li>-not taking medication <b>(2a)</b></li> <li>-I love being with my family <b>(4b)</b></li> <li>-having a good pension is very important <b>(5a)</b></li> <li>-I only keep my best friends <b>(4a)</b></li> <li>-we pray together <b>(3d)</b></li> <li>-I help families with problems <b>(3d)</b></li> <li>-we gather for our activities <b>(3d)</b></li> <li>-not being lonely, it's bad for your memory <b>(2b)</b></li> </ul>
45	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 77</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I love being a Doctor <b>(1b)</b></li> <li>-valorising our age <b>(3g)</b></li> <li>-health is what you eat <b>(2a)</b></li> <li>-I believe in God <b>(3c)</b></li> <li>-we should be natural <b>(3c)</b></li> <li>-not having difficulties sleeping <b>(2a)</b></li> <li>-money helps a lot in late adulthood <b>(5a)</b></li> <li>-time flies <b>(3h)</b></li> <li>-my time is precious <b>(3h)</b></li> <li>-I believe in me <b>(3e)</b></li> <li>-I an internal path <b>(3e)</b></li> <li>-not losing your memory <b>(2b)</b></li> </ul>
46	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 78</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-why wouldn't I work? <b>(1b)</b></li> <li>-making my daily walks <b>(2a)</b></li> <li>-I love being with my family <b>(4b)</b></li> <li>-I love being surrounded by my dear ones <b>(4b)</b></li> <li>-everyone contribute with something <b>(3d)</b></li> <li>-we help autistic children <b>(3d)</b></li> <li>-eating well <b>(2a)</b></li> <li>-money gives us security <b>(5a)</b></li> <li>-I enjoy helping my neighbor <b>(3a)</b></li> <li>-having a good pension is priceless <b>(5a)</b></li> <li>-I like what I do <b>(1b)</b></li> </ul>
47	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 93</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I am aware that I have to exercise <b>(2a)</b></li> <li>-I believe in God <b>(3c)</b></li> <li>-I found all my answers in nature <b>(3c)</b></li> <li>-working keeps me alive <b>(1b)</b></li> <li>-I can't live without working <b>(1b)</b></li> <li>-I love being surrounded by my grandchildren <b>(4b)</b></li> <li>-when we age we give value to our age <b>(3g)</b></li> <li>-accepting our age <b>(3g)</b></li> <li>-with money we accomplish everything <b>(5a)</b></li> <li>-having a good pension is so good <b>(5a)</b></li> <li>-sleeping a whole night <b>(2a)</b></li> <li>-I help other people that cannot move <b>(3d)</b></li> <li>-it's good to be part of something <b>(3d)</b></li> <li>-participating keeps me alive <b>(3d)</b></li> </ul>
48	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 78</li> <li>c) Single</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>- I have to pay attention to what I eat <b>(2a)</b></li> <li>-every night we distribute food <b>(3d)</b></li> <li>-I love being with my family <b>(4b)</b></li> <li>-having a good pension is enough <b>(5a)</b></li> <li>-we gather and pray <b>(3d)</b></li> <li>-I walk more slowly <b>(2a)</b></li> <li>-existential meaning something that I think a lot <b>(3e)</b></li> </ul>

		<ul style="list-style-type: none"> <li>-I feel existential (3e)</li> <li>-I need to keep on moving (2a)</li> <li>-amusing me in this world (1a)</li> <li>-I see God everywhere (3c)</li> <li>-I believe in nature (3c)</li> <li>-money helps a lot in old age (5a)</li> <li>-I'm a social being (4a)</li> <li>-I only keep my best friends (4a)</li> <li>-I have few but good friends (4a)</li> <li>-having a good pension is incalculable (5a)</li> <li>-I must have good friends (4a)</li> <li>-working makes me valid and useful (1b)</li> <li>-I balance everything in my life and I can only feel a sense of fulfillment and quietude (3g)</li> <li>-I am aware now that I will not live forever, therefore I want to make the most of my time (3h)</li> </ul>
49	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 89</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-keeping the ability to move (2b)</li> <li>-I go gambling with my friends (4a)</li> <li>-having friends is great! (4a)</li> <li>-I don't have much time so I make the best of it (3h)</li> <li>-my patients get better because of my work (1b)</li> <li>-I have a good pension (5a)</li> <li>-I know that death is in 20 years maximum (3f)</li> <li>-I believe in God (3c)</li> <li>-with money we can buy a new car (5a)</li> <li>-I love being surrounded by my children (4b)</li> <li>-enjoying our age, always (3g)</li> <li>-life is all about nature (3c)</li> <li>-if I close my company, I will work elsewhere for free (1b)</li> <li>-I believe in me (3e)</li> <li>-I have to build my path (3e)</li> <li>-I valorize my time (3h)</li> <li>-life goes too fast and we can't waste time (3h)</li> </ul>
50	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 88</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-going swimming every morning (2a)</li> <li>-existential meaning is something that I think of (3e)</li> <li>-existential meaning is to respect myself (3e)</li> <li>-having a good pension is strategic (5a)</li> <li>-working keeps me alive (1b)</li> <li>-I have a good pension (5a)</li> <li>-everything goes fast at our age (3h)</li> <li>-time flies (3h)</li> <li>-not having difficulties sleeping (2a)</li> <li>-I need to be volunteering (3a)</li> <li>-I give value my time (3h)</li> <li>-time is everything (3h)</li> <li>-I still do talks when I am invited (1b)</li> <li>-why me, I ask constantly? (3e)</li> <li>-I look for a better understanding of myself (3e)</li> <li>-I'm a social person (4a)</li> <li>-I like socializing (4a)</li> </ul>
51	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 88</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I enjoy walking (1a)</li> <li>-I believe in God (3c)</li> <li>-we can't waste any time (3h)</li> <li>-I valorize my time (3h)</li> <li>-I think a lot in why am I here (3e)</li> <li>-my pension is very good (5a)</li> <li>-I live with my pension (5a)</li> <li>-I'm a social guy (4a)</li> <li>-I valorize my time (3h)</li> <li>-time is not on our side (3h)</li> <li>-time is a worry (3h)</li> <li>-I need to make sense of my existence (3e)</li> <li>-sleeping well (2a)</li> <li>-I believe in nature (3c)</li> </ul>

		<ul style="list-style-type: none"> <li>-enjoying our age <b>(3g)</b></li> <li>-I enjoy seeing my patients <b>(1b)</b></li> <li>-feeling fit <b>(2a)</b></li> <li>-feeling capable <b>(2a)</b></li> </ul>
52	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 100</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-amusing me <b>(1a)</b></li> <li>-I've been here for long time <b>(3f)</b></li> <li>-I'm a social person <b>(4a)</b></li> <li>-I love being surrounded by my beloved ones <b>(4b)</b></li> <li>-I enjoy attending cocktails <b>(4a)</b></li> <li>-God sees us <b>(3c)</b></li> <li>-I believe in good people <b>(3c)</b></li> <li>-I work a lot <b>(1b)</b></li> <li>-I know we all have an expiration date<b>(3f)</b></li> <li>-I have a good pension <b>(5a)</b></li> <li>-I appreciate my friends <b>(4a)</b></li> <li>-my family is everything <b>(4b)</b></li> <li>-feeling good about age <b>(3g)</b></li> <li>-having money is basic <b>(5a)</b></li> <li>-being fit <b>(2a)</b></li> <li>-I believe in myself <b>(3e)</b></li> <li>-I never quit myself <b>(3e)</b></li> <li>-going everywhere <b>(2b)</b></li> <li>-I'm adoring my age <b>(3g)</b></li> </ul>
53	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 78</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-entertaining myself <b>(1a)</b></li> <li>-having a good pension is irreplaceable <b>(5a)</b></li> <li>-I have plenty of work <b>(1b)</b></li> <li>-I love my husband <b>(4b)</b></li> <li>-we must accept death <b>(3f)</b></li> <li>-feeling fit <b>(2a)</b></li> <li>-looking inside to find my existence <b>(3e)</b></li> <li>-I need to know why I am here <b>(3e)</b></li> <li>-feeling spirited <b>(2a)</b></li> <li>-age makes everything crystal clear <b>(3g)</b></li> <li>-we can't waste time <b>(3h)</b></li> <li>-we can't not make the most of my time at our age <b>(3h)</b></li> <li>-I enjoy my time with my friends <b>(4a)</b></li> <li>-time is everything at our age <b>(3h)</b></li> <li>-money is to protect ourselves <b>(5a)</b></li> <li>-with money I don't worry so much about the future <b>5a)</b></li> <li>-age is my friend <b>(3g)</b></li> <li>-not having difficulties sleeping <b>(2a)</b></li> <li>-I like to know that everyone is well <b>(3a)</b></li> </ul>
54	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 89</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I go to the hospital as a volunteer <b>(1b)</b></li> <li>-I love my children <b>(4b)</b></li> <li>-I help families with financial problems <b>(3d)</b></li> <li>-we pray <b>(3d)</b></li> <li>-I am a volunteer in an institution <b>(1b)</b></li> <li>-having money is good <b>(5a)</b></li> <li>-I have few but good friends <b>(4a)</b></li> <li>-having a good pension is good <b>(5a)</b></li> <li>-my family is everything <b>(4b)</b></li> <li>-God takes care of us <b>(3c)</b></li> <li>-I believe in people <b>(3c)</b></li> <li>-I know that death is a reality <b>(3f)</b></li> <li>-feeling healthy <b>(2a)</b></li> <li>-I believe in me <b>(3e)</b></li> <li>-I must have a meaning <b>(3e)</b></li> <li>-feeling well <b>(2a)</b></li> </ul>
55	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 86</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-having a good memory <b>(2a)</b></li> <li>-I enjoy walking <b>(1a)</b></li> <li>-I passed over my expiration date <b>(3f)</b></li> <li>-I have a good pension <b>(5a)</b></li> <li>-I must have good friends <b>(4a)</b></li> <li>-my life is my family <b>(4b)</b></li> <li>-enjoying our age <b>(3g)</b></li> </ul>

		<ul style="list-style-type: none"> <li>-I never want to not work <b>(1b)</b></li> <li>-I valorize my time <b>(3h)</b></li> <li>-time is rare. We must enjoy it <b>(3h)</b></li> <li>-time is too scarce to be wasted <b>(3h)</b></li> <li>-being able to get out of the house <b>(2b)</b></li> <li>-I have my spiritual beliefs <b>(3c)</b></li> <li>-I believe in people <b>(3c)</b></li> <li>-I love playing cards with my friends <b>(4a)</b></li> <li>-I am near my friends <b>(4a)</b></li> <li>-at our age people die and so we get in touch with our own limit <b>(3f)</b></li> <li>-I use my savings <b>(5a)</b></li> <li>-we must have some money, not much<b>(5a)</b></li> <li>-being physically well <b>(2a)</b></li> </ul>
56	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 89</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-age explicates everything <b>(3g)</b></li> <li>-I still work <b>(1b)</b></li> <li>-understanding death is to live better <b>(3f)</b></li> <li>-I go gambling with my friends <b>(4a)</b></li> <li>-we need some money <b>(5a)</b></li> <li>-we use our savings <b>(5a)</b></li> <li>-I only need the basic things <b>(5a)</b></li> <li>-we must not fear death <b>(3f)</b></li> <li>-I always find time for my daily walk <b>(1b)</b></li> <li>-I believe in people <b>(3c)</b></li> <li>-I must seek to make sense of my existence <b>(3e)</b></li> <li>-being able to focus <b>(2a)</b></li> <li>-I have to have an existential meaning <b>(3e)</b></li> <li>-it's an internal quest<b>(3e)</b></li> <li>-practising yoga <b>(2a)</b></li> <li>-I believe in nature as my protector <b>(3c)</b></li> <li>-I love my children <b>(4b)</b></li> </ul>
57	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 78</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I enjoy working <b>(1b)</b></li> <li>-having friends is great! <b>(4a)</b></li> <li>-I like to be with my friends<b>(4a)</b></li> <li>-enjoying our age <b>(3g)</b></li> <li>-having a good memory <b>(2a)</b></li> <li>-I must walk towards a personal meaning <b>(3e)</b></li> <li>-I live with my economies <b>(5a)</b></li> <li>-I love to live but I know there is an end <b>(3f)</b></li> <li>-I love my husband <b>(4b)</b></li> <li>-we must understand our limit of life <b>(3f)</b></li> <li>-not being forgetful <b>(2a)</b></li> <li>-I get busy with everything <b>(1b)</b></li> <li>-sleeping well <b>(2a)</b></li> <li>-my pension is enough<b>(5a)</b></li> <li>-giving is great <b>(3a)</b></li> <li>-I believe in God <b>(3c)</b></li> <li>-I believe in something higher <b>(3c)</b></li> </ul>
58	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 87</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-listening well <b>(2a)</b></li> <li>-we have our activities<b>(3d)</b></li> <li>-I like to be involved <b>(3d)</b></li> <li>-being able to listen well <b>(2a)</b></li> <li>-our spiritual activities are vibrant <b>(3d)</b></li> <li>-having friends is the best thing in life <b>(4a)</b></li> <li>-I like being alive and with my friends<b>(4a)</b></li> <li>-I need my own money <b>(5a)</b></li> <li>-old people have a life, you know <b>(1b)</b></li> <li>-age enlightens everything <b>(3g)</b></li> <li>-I need look for the sense of my existence <b>(3e)</b></li> <li>-I notice that I am slower but I work a lot <b>(1b)</b></li> <li>-having a good pension is basic <b>(5a)</b></li> <li>-death makes you live better <b>(3f)</b></li> <li>-I have friendships for years <b>(4a)</b></li> <li>-I love being with my friend <b>(4a)</b></li> <li>-my family is the best <b>(4b)</b></li> <li>-I like going home with my husband <b>(4b)</b></li> </ul>

		<ul style="list-style-type: none"> <li>-I believe in something higher (3c)</li> <li>-I believe in people (3c)</li> <li>-not having difficulties sleeping (2a)</li> <li>-death is just a passage (3f)</li> </ul>
59	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 83</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-not taking medication (2a)</li> <li>-I love my husband (4b)</li> <li>-simply amusing me (1a)</li> <li>-I believe in me (3e)</li> <li>-having money is essential (5a)</li> <li>-I must find the meaning of my existence (3e)</li> <li>-I work in my garage (1b)</li> </ul>
60	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 82</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-age shows us our existential meaning (3e)</li> <li>-I enjoy myself with many things (1a)</li> <li>-money allows us to do everything (5a)</li> <li>-money gives us everything (5a)</li> <li>-everyone thinks about death but I do probably too much(3f)</li> <li>-I believe in God (3c)</li> <li>-we must believe in people (3c)</li> <li>-I work with my friends (1b)</li> <li>-being fit (2a)</li> <li>-we must face death as being part of life (3f)</li> </ul>
61	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 101</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I'm always busy (1b)</li> <li>-my children are my priority(4b)</li> <li>-I have my pension (5a)</li> <li>-money gives us freedom (5a)</li> <li>-I love my children (4b)</li> <li>-we have to work hard in our religious community (3d)</li> <li>-my family is wonderful (4b)</li> <li>-I like seeing my children (4b)</li> <li>-we get involved in our community (3d)</li> <li>-accepting our age (3g)</li> <li>-I enjoy doing useful things (1b)</li> <li>-being strong (2a)</li> <li>-and being energetic (2a)</li> <li>-loving the other person is fantastic (3a)</li> </ul>
62	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 87</li> <li>c) Widowed</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-never doubt that we are very busy (1b)</li> <li>-we take care of children(3d)</li> <li>-my family is fantastic (4b)</li> <li>-I like being visited by my children (4b)</li> <li>-we have several houses for children and older adults (3d)</li> <li>-I believe that I will work till I die (1b)</li> <li>-I believe in nature (3c)</li> <li>-being vigorous (2a)</li> <li>-I'm devoted to my age (3g)</li> <li>-being physically dynamic (2a)</li> <li>-I believe in God (3c)</li> <li>-I love my husband (4b)</li> </ul>
63	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 76</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I don't want to stop (1b)</li> <li>-I need understand my existence (3e)</li> <li>-we need to have our decency kept and money helps (5a)</li> <li>-I still need my economies (5a)</li> <li>-I love being with everything my money can buy (5a)</li> <li>-my family is the only thing I care (4b)</li> <li>-I like being visited by my friends(4a)</li> <li>-existential meaning is to go after my goals (3e)</li> <li>-I like to develop new toys (1b)</li> <li>-loving our age (3g)</li> <li>-I love my children (4b)</li> <li>-remembering everything (2a)</li> <li>-God is everywhere (3c)</li> <li>-I believe in nature (3c)</li> <li>-my mind is well (2a)</li> <li>-enjoying our age (3g)</li> </ul>
64	<ul style="list-style-type: none"> <li>a) Male</li> </ul>	<ul style="list-style-type: none"> <li>-I enjoy walking (1a)</li> </ul>

	<ul style="list-style-type: none"> <li>b) 81</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I always find time for my to dos <b>(1a)</b></li> <li>-I love my grandchildren <b>(4b)</b></li> <li>-our spiritual activities are important <b>(3d)</b></li> <li>-loving is existential <b>(3e)</b></li> <li>-looking for my existentialism <b>(3e)</b></li> <li>-I have my pension <b>(5a)</b></li> <li>-finding myself <b>(3e)</b></li> <li>-doing my own things <b>(2b)</b></li> <li>-I help in the church <b>(3d)</b></li> <li>-driving everywhere <b>(2b)</b></li> <li>-my family is so important to me <b>(4b)</b></li> <li>-I like being surrounded by my grandchildren <b>(4b)</b></li> <li>-we should be happy about not living forever <b>(3f)</b></li> </ul>
65	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 101</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-age makes you a better person <b>(3g)</b></li> <li>-age is great for understanding things <b>(3g)</b></li> <li>-my family is something <b>(4b)</b></li> <li>-I like being surrounded by my children <b>(4b)</b></li> <li>-life is boring without anything to do <b>(1b)</b></li> <li>-we need our money <b>(5a)</b></li> <li>-I love being surrounded by good things <b>(5a)</b></li> <li>-we have our activities <b>(3d)</b></li> <li>-It's a small community but strong <b>(3d)</b></li> <li>-I love my grandchildren <b>(4b)</b></li> <li>-It's so good to do everything <b>(1b)</b></li> <li>-I don't want to ask for money <b>(5a)</b></li> <li>-I still have my economies <b>(5a)</b></li> <li>-existential meaning is living a good life <b>(3e)</b></li> <li>-no one stays here forever <b>(3f)</b></li> <li>-death validates life <b>(3f)</b></li> <li>-I believe in God as well <b>(3c)</b></li> <li>-doing my own things <b>(2b)</b></li> <li>-being tolerant our age <b>(3g)</b></li> <li>-being able to drive <b>(2b)</b></li> <li>-I believe nature <b>(3c)</b></li> </ul>
66	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 87</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I like computer things <b>(1b)</b></li> <li>-We have our own activities <b>(3d)</b></li> <li>-having a good pension is fundamental <b>(5a)</b></li> <li>-I always find time for my daily walk <b>(1a)</b></li> <li>-my family loves to have me around <b>(4b)</b></li> <li>-we need to have abundance <b>(5a)</b></li> <li>-I only need the usual things <b>(5a)</b></li> <li>-having money is fundamental <b>(5a)</b></li> <li>-my family treats me as it was my birthday day <b>(4b)</b></li> <li>-discovering myself <b>(3e)</b></li> <li>-I have time for everything now and I think a lot about my existence <b>(3e)</b></li> <li>-being independent <b>(2b)</b></li> <li>-being autonomous <b>(2b)</b></li> </ul>
67	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 87</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-having fun <b>(1a)</b></li> <li>-I must know more about my existence <b>(3e)</b></li> <li>-finding the beauty of my existence is being adjusted to aging <b>(3e)</b></li> <li>-I love my children <b>(4b)</b></li> <li>-exercising, why not <b>(1a)</b></li> <li>-age tells everything <b>(3g)</b></li> <li>-being healthy and well <b>(2a)</b></li> <li>-we pray to our God <b>(3d)</b></li> <li>-I have my pension <b>(5a)</b></li> <li>-we pray for a better world <b>(3d)</b></li> <li>-we pray for the sick <b>(3d)</b></li> <li>-doing my own things <b>(2b)</b></li> <li>-I must believe in something <b>(3c)</b></li> <li>-I believe in people <b>(3c)</b></li> <li>-accepting our age <b>(3g)</b></li> </ul>
68	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 88</li> </ul>	<ul style="list-style-type: none"> <li>-when I become too old, I will stop working <b>(1b)</b></li> <li>-I see God in everything <b>(3c)</b></li> </ul>

	<p>c) Single d) Inactive e) German</p>	<p>-I believe in nature (3c) -I valorize my age (3g) -I enjoy walking (1b) -death wakes you up for life (3f) -driving (2b) -being happy with myself (3e) -feeling great with what I became (3e) -I don't want to ask for money (5a) -I don't want to depend upon my children economically (5a) -uncovering my layers (3e) -being able to travel (2b) -death gives you a sense of limit (3f) -my family is my most valuable thing (4b) -I have my pension (5a) -my husband is my best friend(4b)</p>
69	<p>a) Male b) 75 c) Single d) Inactive e) German</p>	<p>-when we stop, we die (1b) -we have a lot of fun in our activities (3d) -I love my daughter (4b) -I valorize my age (3g) -age made me more profound (3g) -I have my pension (5a) -we pray in church (3d) -I know that I will die some day (3f) -having a good pension is key (5a) -I like being surrounded by my beloved ones (4b) -death is a reminder of our limit (3f) -we give food away (3d) -I have to shop and to cook (1b) -being at self-sufficient (2a) -just like an onion, I have may layers (3e) -I need to know my purpose (3e) -being on my own(2a) -I love my grandchildren (4b) -I feel connected to nature (3c) -I need my money (5a) -I need to be financially independent (5a)</p>
70	<p>a) Male b) 79 c) Single d) Active e) German</p>	<p>-I like my age (3g) -I always have things to keep me busy (1b) -existential meaning is loving someone (3e) -I am more existentialist (3e) -I want to have strength for working (1b) -being healthy (2a) -being able to do everything (2b) -I have my pension (5a) -having money is vital (5a) -I concentrate myself in the little things (3c) -I enjoy feeling that there is something higher out there (3c) -I love my daughter (4b)</p>
71	<p>a) Female b) 88 c) Married or in a relationship d) Inactive e) German</p>	<p>-I like doing things (1b) -working is a joy for me (1b) -understanding nature, is understanding aging (3c) -being thriving (2a) -age exposes everything (3g) -being with no disease (2a) -in our age, it's good to be happy with our age (3g) -I'm loving my age (3g) -I love my grandchildren (4b) -I feel connected to the little things (3c) -having a good pension is vital (5a) -having money is strategic (5a)</p>
72	<p>a) Female b) 89 c) Married or in a relationship d) Inactive e) German</p>	<p>-getting out, seeing old friends (1a) -having a good pension is key (5a) -age is wonderful (3g) -being self-directed (2b) -everyone has something to give (3d) -we work directly with some institutions (3d)</p>

		<ul style="list-style-type: none"> <li>-money keeps worries away (5a)</li> <li>-being independent (2b)</li> <li>-I have to work or I get so depressed (1b)</li> <li>-I get connected to the little things (3c)</li> <li>-we have an institution for the autistic children (3d)</li> </ul>
73	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 88</li> <li>c) Widowed</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I enjoy working (1b)</li> <li>-age reveals everything (3g)</li> <li>-working is a way of feeling useful (1b)</li> <li>-I live with my pension (5a)</li> <li>-with money I don't worry so much (5a)</li> <li>-I love my husband (4b)</li> <li>-I feel in touch with nature (3c)</li> <li>-I feel connected to the world (3c)</li> <li>-being ready for action (2a)</li> <li>-being active (2a)</li> <li>-I enjoy my age (3g)</li> </ul>
74	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 76</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-having fun (1a)</li> <li>-I feel connected to nature (3c)</li> <li>-I feel in touch with the world (3c)</li> <li>-we have to keep our minds busy (1b)</li> <li>-having money is key (5a)</li> <li>-I love my grandchildren (4b)</li> <li>-being fine (2a)</li> <li>-look, we must find out why we are here (3e)</li> <li>-existential meaning makes me think (3e)</li> <li>-being healthy (2a)</li> <li>-aging shows us our existential meaning (3e)</li> </ul>
75	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 79</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-life is a playground (1a)</li> <li>-I still hike (1a)</li> <li>-I believe in nature (3c)</li> <li>-being self-reliant (2b)</li> <li>-looking inside (3e)</li> <li>-finding the answers in me (3e)</li> <li>-being self-determining (2b)</li> <li>-age explains everything (3g)</li> </ul>
76	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 103</li> <li>c) Single</li> <li>d) Inactive</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I do a lot of exercise (1a)</li> <li>-being healthy (2a)</li> <li>-I love my daughter (4b)</li> <li>-I believe in nature (3c)</li> <li>-we should believe in nature (3c)</li> <li>-having a good pension is essential (5a)</li> <li>-being in good health (2a)</li> <li>-I appreciate my age (3g)</li> </ul>
77	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 90</li> <li>c) Single</li> <li>d) Active</li> <li>e) German</li> </ul>	<ul style="list-style-type: none"> <li>-I like to walk every day (1a)</li> <li>-knowing yourself is vital (3e)</li> <li>-we have to respect our self-actualizing tendency (3e)</li> <li>-my grandchildren keep me busy (1b)</li> <li>-being in good physical shape (2a)</li> <li>-age clarifies a lot of things (3g)</li> <li>-money is a good thing (5a)</li> <li>-having a good pension is enough (5a)</li> <li>-money gives us space (5a)</li> <li>-I love my daughter (4b)</li> <li>-nature is my God (3c)</li> </ul>
78	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 76</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-ser altruista (3a)</li> <li>-devemos fazer exercício (1a)</li> <li>-claro, ter dinheiro suficiente (5a)</li> <li>-ter vizinhos que ajudam (4a)</li> <li>-ter ainda resistência intelectual</li> <li>-ser altruista (3a)</li> <li>-continuo a ver bem (2a)</li> <li>-e fazer tudo sozinha (2b)</li> <li>-e não ter dores nenhuma (2a)</li> <li>-trato dos outros (3a)</li> <li>-dar-se com boa gente</li> </ul>

		<p>-não ficar parada à espera da morte <b>(2b)</b>          -ah, não ficar doente <b>(2a)</b>          -boas amigas <b>(4a)</b>          -estar com a minha família <b>(4b)</b>          -ajudo na comunidade do Senhor Padre <b>(3b)</b>          -gostar dos outros é não ser egoísta <b>(3a)</b></p>
79	<p>a) Female          b) 100          c) Married or in a relationship          d) Active          e) Portuguese</p>	<p>-preocupar-me com o próximo <b>(3a)</b>          -nós os dois pertencemos a uma comunidade religiosa <b>(3b)</b>          -vou todos os dias ao jardim <b>(1a)</b>          -gosto de estar ocupada <b>(1b)</b>          -acredito em Deus <b>(3c)</b>          -sou crente <b>(3c)</b>          -oh ter dinheiro <b>(5a)</b>          -fazer bons vizinhos <b>(4a)</b>          -os vizinhos não morrerem <b>(4a)</b>          -não tomar medicamentos <b>(2a)</b>          -pois claro, não ficar doente <b>(2a)</b>          -gosto de caminhar <b>(1a)</b></p>
80	<p>a) Female          b) 85          c) Widowed          d) Inactive          e) Portuguese</p>	<p>-preocupo-me com os outros <b>(3a)</b>          -sou espiritual <b>(3c)</b>          -meditar na minha existência <b>(3d)</b>          -rezar <b>(3d)</b>          -ter dinheiro suficiente <b>(5a)</b>          -claro que devemos fazer exercício <b>(1a)</b>          -vou ao jardim e venho <b>(1a)</b>          -ter gente boa ao pé <b>(4a)</b>  <b>(4a)</b>          -ter uma boa memória <b>(2a)</b>          -vizinhos que ajudam <b>(4a)</b>          -não ficar doente <b>(2a)</b>          -claro, ter uma mente activa <b>(2a)</b>          -tenho uma vida muito preenchida <b>(1b)</b></p>
81	<p>a) Female          b) 84          c) Single          d) Active          e) Portuguese</p>	<p>-pensar nos outros primeiro <b>(3a)</b>          -sou crente <b>(3c)</b>          -devemos fazer exercício <b>(1a)</b>          -ter dinheiro suficiente <b>(5a)</b>          -boa vizinhança <b>(4a)</b>          -não tomar medicamentos <b>(2a)</b>          -naturalmente, não ficar doente <b>(2a)</b>          -a idade deve ser balanceada <b>(3g)</b>          -a idade não traz só coisas más, também são muitas coisas boas <b>(3g)</b>          -a idade é uma descoberta <b>(3g)</b>          -ir à pastelaria com as amigas beber chá <b>(4b)</b>          -ter saúde emocional <b>(2a)</b></p>
82	<p>a) Female          b) 103          c) Married or in a relationship          d) Inactive          e) Portuguese</p>	<p>-eu fico para o fim <b>(3a)</b>          -acredito em Deus <b>(3c)</b>          -a vida é com exercício <b>(1a)</b>          -e não me esquecer das coisas <b>(2a)</b>          -é não estar doente <b>(2a)</b>          -saúde e frescura <b>(2a)</b>          -não tomar medicamentos <b>(2a)</b>          -ter algum dinheiro <b>(5a)</b>          -sem o meu filho não me safava <b>(4b)</b>          -bons vizinhos <b>(4a)</b>          -estar em interacção com o mundo <b>(3d)</b>          -ir à Missa <b>(3d)</b>          -apostar na energia positiva <b>(3d)</b>          -a horta dá-me trabalho <b>(1b)</b>          -os meus netos dão-me trabalho <b>(1b)</b></p>
83	<p>a) Female          b) 88          c) Married or in a relationship          d) Inactive          e) Portuguese</p>	<p>-claro ter dinheiro <b>(5a)</b>          -devemos fazer exercício <b>(1a)</b>          - muita resistência intelectual          -não tomar medicamentos <b>(2a)</b>          -não estar nunca doente é importante para mim <b>(2a)</b>          -ah, bons vizinhos <b>(4a)</b></p>

		<ul style="list-style-type: none"> <li>-estar com a minha família (4b)</li> <li>-não sou egoísta (3a)</li> <li>-ajudo os nossos companheiros do templo (3b)</li> <li>-acredito em Deus (3c)</li> <li>-sou crente (3c)</li> <li>-estar bem espiritualmente (3e)</li> <li>-estar bem comigo (3e)</li> <li>-procuro activamente viver (1b)</li> <li>-sabemos melhor o que queremos dos nossos objectivos (1b)</li> </ul>
84	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 88</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-há uma comunidade à qual pertença na igreja (3b)</li> <li>-sou crente (3c)</li> <li>-gosto de acreditar em algo superior (3c)</li> <li>-acredito no mundo (3c)</li> <li>-ando a aprender a pintar na universidade sénior (1b)</li> <li>-gosto de caminhar (1a)</li> <li>-claro ter dinheiro (5a)</li> <li>-não estar doente (2a)</li> <li>-adoro ainda ter resistência intelectual</li> <li>-não tomar medicamentos (2a)</li> <li>-vou passear com a minha irmã (1a)</li> <li>-se parar de ideias paro de viver (1b)</li> <li>-claro, não ter dores (2a)</li> <li>-e comemos bem (2a)</li> <li>-gosto de pensar nas coisas que ainda vou fazer (1b)</li> </ul>
85	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 86</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-temos uma comunidade no templo (3b)</li> <li>-acredito em Deus (3c)</li> <li>-ter algum dinheiro de parte (5a)</li> <li>-devemos fazer exercício (1a)</li> <li>-e ter bons vizinhos (4a)</li> <li>-uma família que nos quer bem (4b)</li> <li>-não estar nunca doente (2a)</li> <li>-é aborrecido perder resistência intelectual</li> <li>-um bom envelhecimento passa por ter uma boa memória (2a)</li> <li>-concentrar-me no bom das pessoas (3d)</li> <li>-ter uma atitude espiritual (3d)</li> <li>-faço muita coisa na garagem (1b)</li> <li>-ir ao café com os amigos (3c)</li> </ul>
86	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 87</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-acredito em Deus (3c)</li> <li>-ah, ter dinheiro suficiente (5a)</li> <li>-e estar com a minha família (4b)</li> <li>-não ficar doente (2a)</li> <li>-pensar acerca da minha existência (3e)</li> <li>-aceitar que há um fim (3f)</li> <li>-os meus netos já me dão muito exercício (1a)</li> <li>-gosto de me esticar (1a)</li> <li>-comer bem (2a)</li> <li>-leio muito (1a)</li> <li>-não tomar medicamentos (2a)</li> <li>-eu penso que não diminuiu a capacidade intelectual (2b)</li> <li>-viver uma vida mais elevada espiritualmente (3d)</li> <li>-sentar-me com calma e concentrar-me (3d)</li> <li>-oh filha, rezar pelas nossas almas! (3d)</li> <li>-tudo tem um fim (3f)</li> </ul>
87	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 85</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-vou à biblioteca e leio imenso (1a)</li> <li>-acredito em Deus (3c)</li> <li>-poupar algum dinheiro (5a)</li> <li>-quando se tem dinheiro de sobra (5a)</li> <li>-não ficar doente (2a)</li> <li>-olhe, comer bem (2a)</li> <li>-temos que nos mexer (2b)</li> <li>-em primeiro lugar a saúde da mente (2a)</li> </ul>

		<ul style="list-style-type: none"> <li>-família das boas <b>(4b)</b></li> <li>-ter bons vizinhos <b>(4a)</b></li> <li>-acredito no amor <b>(3c)</b></li> <li>-amar o mundo <b>(3d)</b></li> <li>-meditar <b>(3d)</b></li> <li>-fazer boas acções <b>(3d)</b></li> <li>-e eu ainda faço exercício <b>(1a)</b></li> <li>-gosto de pintar <b>(1b)</b></li> </ul>
88	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 86</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-acredito em Deus <b>(3c)</b></li> <li>-sou crente <b>(3c)</b></li> <li>-não precisar de pedir favores à família <b>(5a)</b></li> <li>-gostar de ser independente financeiramente <b>(5a)</b></li> <li>-não quero ter de dar satisfações de dinheiro <b>(5a)</b></li> <li>-acredito na fraternidade <b>(3c)</b></li> <li>-e não ficar doente <b>(2a)</b></li> <li>-pois, ter uma mente activa <b>(2a)</b></li> <li>-tenho mais cabelo branco, tenho mais rugas, o nosso corpo vai-se modificando <b>(2c)</b></li> </ul>
89	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 89</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-sou crente <b>(3c)</b></li> <li>-acredito no mundo <b>(3c)</b></li> <li>-ter dinheiro <b>(5a)</b></li> <li>-faço exercício <b>(1a)</b></li> <li>-fazer pela resistência intelectual</li> <li>-claro, não ficar doente <b>(2a)</b></li> <li>-fico com a neto <b>(1b)</b></li> <li>-dar o que tenho e o que não tenho <b>(3e)</b></li> <li>-meditar na minha existência <b>(3e)</b></li> <li>-não me isolar <b>(3e)</b></li> <li>-contribuir para algo maior <b>(3e)</b></li> <li>-a família é o que me importa <b>(4b)</b></li> <li>-a minha família não me deixa sozinha <b>(4b)</b></li> </ul>
90	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 78</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-acredito na paz no mundo <b>(3c)</b></li> <li>-devemos fazer exercício <b>(1a)</b></li> <li>-ter dinheiro suficiente <b>(5a)</b></li> <li>-ter uma cabeça boa <b>(2a)</b></li> <li>-lembrar-me das coisas <b>(2a)</b></li> <li>-claro, estar com a minha família <b>(4b)</b></li> <li>-e eu ainda ganho o meu dinheiro <b>(5a)</b></li> <li>-o dinheiro é para nos dar conforto <b>(5a)</b></li> <li>-acredito na vida <b>(3c)</b></li> <li>-dar e receber <b>(3d)</b></li> <li>-dar ao mundo algo nosso <b>(3d)</b></li> <li>-participar em cerimónias na Igreja <b>(3d)</b></li> <li>-acredito em dar-mos todos bem sem guerras <b>(3c)</b></li> </ul>
91	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 87</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-acredito em Deus, não nos homens <b>(3c)</b></li> <li>-gosto de caminhar <b>(1a)</b></li> <li>-poupar algum dinheiro <b>(5a)</b></li> <li>-poder fazer aquilo que se gosta <b>(1b)</b></li> <li>-ainda quero fazer muita coisa na vida <b>(1b)</b></li> <li>-uma família generosa <b>(4b)</b></li> <li>-uma boa amiga por cá <b>(4a)</b></li> <li>-não peço dinheiro a ninguém <b>(5a)</b></li> <li>-eu penso que ter uma cabeça activa é muito bom <b>(2a)</b></li> <li>-a mente comanda o corpo <b>(2b)</b></li> <li>-não tomar medicamentos <b>(2a)</b></li> <li>-rezar em conjunto <b>(3d)</b></li> <li>-ir em peregrinação uma vez por ano <b>(3d)</b></li> <li>-ir à Missa <b>(3d)</b></li> </ul>
92	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 85</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-planto coisas na horta <b>(1b)</b></li> <li>-estar com a minha família <b>(4b)</b></li> <li>-acredito em Deus, não na guerra <b>(3c)</b></li> <li>-acredito num mundo melhor <b>(3c)</b></li> <li>-não ficar doente <b>(2a)</b></li> <li>-ter uma mente activa <b>(2a)</b></li> <li>-faço exercício <b>(1a)</b></li> <li>-uma família sem atritos <b>(4b)</b></li> </ul>

		<ul style="list-style-type: none"> <li>-se nos concentramos, mudamos o mundo (3c)</li> <li>-ando a aprender a trabalhar no bronze (1b)</li> <li>-comer bem (2a)</li> <li>-gosto de me mexer de um lado para o outro (2b)</li> <li>-acredito em algo maior (3c)</li> <li>-acredito na amizade (3c)</li> <li>-quero viver em paz no meu espírito (3d)</li> <li>-temos de tentar praticar o bem (3d)</li> </ul>
93	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 82</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-acredito no amor (3c)</li> <li>-penso muito num mundo melhor (3c)</li> <li>-com as acções podemos mudar o mundo (3c)</li> <li>-vou dar um mergulho no mar (1a)</li> <li>-ah, ter dinheiro (5a)</li> <li>-bons amigos (4a)</li> <li>-e vizinhos dos bons (4a)</li> <li>-ainda ter uma cabeça activa (2a)</li> <li>-gosto de caminhar (1a)</li> <li>-gozar um pouco o dinheiro enquanto estou vivo (5a)</li> <li>-não tomar medicação (2a)</li> <li>-encontrar paz cá dentro (3e)</li> <li>-não sofrer e entregar-me ao destino (3e)</li> </ul>
94	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 93</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-encontrar o meu caminho (3e)</li> <li>-estou cá para perceber porque cá estou (3e)</li> <li>-ter algum dinheiro de parte (5a)</li> <li>-uma família com muitos netinhos (4b)</li> <li>-uma boa amiga perto (4a)</li> <li>-naturalmente, ter uma cabeça boa (2a)</li> <li>-faço hidroginástica (1a)</li> <li>-cultivo uma vida activa (1b)</li> <li>-não tomar medicação (2a)</li> <li>-acredito no amor (3c)</li> <li>-viver uma vida espiritual (3d)</li> <li>-olhar para dentro (3e)</li> </ul>
95	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 90</li> <li>c) Widowed</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-acredito no poder da meditação (3c)</li> <li>-acho que é possível um mundo melhor (3c)</li> <li>-com boas acções somos pessoas mais elevadas. Acredito nisso (3c)</li> <li>-somos entes espirituais (3c)</li> <li>-de manhã vou nadar (1a)</li> <li>-ter algum dinheiro de parte (5a)</li> <li>-e ter uma cabeça activa (2a)</li> <li>-estou confortável com as alterações do meu aspecto (2c)</li> <li>-uma boa pensão (5a)</li> <li>-estimo todos os meus irmãos (4b)</li> </ul>
96	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 83</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-claro, ter dinheiro suficiente (5a)</li> <li>-uma família bondosa (4b)</li> <li>-faço exercício há anos (1a)</li> <li>-acredito no poder da oração (3c)</li> <li>-ter boa genética (2a)</li> <li>-ter uma boa saúde (2a)</li> <li>-estar em paz com a nossa ética (3d)</li> <li>-olhe tentamos comer bem (2a)</li> <li>-e fazer cuidado com a dieta (2a)</li> <li>-amar sem exigir retorno é espiritual (3d)</li> <li>-rezar pelos outros (3d)</li> <li>-descobrir a natureza (3d)</li> <li>-ajudo os outros na rua com pequenos trabalhos (1b)</li> <li>-não tomar medicação (2a)</li> </ul>
97	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 88</li> <li>e c) Widowed</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-temos uma alma, acredito que podemos usá-la (3c)</li> <li>-a espiritualidade é algo necessário (3c)</li> <li>-rezar (3d)</li> <li>-poupar algum dinheiro (5a)</li> <li>-ter uma cabeça boa (2a)</li> <li>-gosto de caminhar (1a)</li> <li>-estar bem no espírito (3e)</li> <li>-estar bem na alma (3e)</li> </ul>

		<ul style="list-style-type: none"> <li>-gozar um pouco o dinheiro que tenho (5a)</li> <li>-uma família que não mora longe (4b)</li> <li>-a natureza renasce, e nós também (3f)</li> <li>-aceitar a idade (3g)</li> <li>-lembrar-me das coisas (2a)</li> </ul>
98	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 92</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-pois, uma família sem problemas (4b)</li> <li>-acredito no amor (3c)</li> <li>-ir em viagem à Terra Santa (3d)</li> <li>-jejuar (3d)</li> <li>-vou dar um mergulho na piscina (1a)</li> <li>-e lembrar-me das coisas (2a)</li> <li>-ah, a saúde é o principal (2a)</li> <li>-eu, ainda ganho o meu dinheiro (5a)</li> <li>-pagam-me para fazer biscates (1b)</li> <li>-o jardim dá-me muito trabalho (1b)</li> <li>-deus é o meu senhor (3c)</li> </ul>
99	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 85</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-poder ouvir (2a)</li> <li>-ter algum dinheiro de parte (5a)</li> <li>-quanto à memória, lembrar-me de tudo (2a)</li> <li>-acredito em dar (3c)</li> <li>-acredito em mim (3c)</li> <li>-ando muito a pé (1a)</li> <li>-é melhor ganhar o dinheiro do que pedir (5a)</li> <li>-ver o porquê a minha existência (3e)</li> <li>-aceitar que há um fim (3f)</li> <li>-compreender o mundo (3d)</li> <li>-boas acções para o mundo ficar melhor (3d)</li> <li>-uma boa família (4b)</li> <li>-rezar (3d)</li> <li>-vou à biblioteca e leio os jornais principais (1a)</li> <li>-o meu passatempo é a internet (1a)</li> <li>-gozar um pouco o dinheiro que recebo (5a)</li> </ul>
100	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 91</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-estar com a família (4b)</li> <li>-é bom conhecer o nosso limite (3f)</li> <li>-acredito nos outros (3c)</li> <li>-é importante para mim ter bem-estar espiritual (3e)</li> <li>-viver bem e decentemente (5a)</li> <li>-ah, não ter dores (2a)</li> <li>-e fazer cuidado com a dieta (2a)</li> <li>-quero continuar a ver os meus amigos (4a)</li> <li>-poder mexer-me (2a)</li> <li>-continuo a ver bem (2a)</li> <li>-estar em paz com a nossa moral (3d)</li> <li>-meditar no meio da natureza (3d)</li> </ul>
101	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 91</li> <li>c) Single</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-orar (3d)</li> <li>-ajudar na catequese (3d)</li> <li>-pois, ter dinheiro suficiente (5a)</li> <li>-ando a pé (1a)</li> <li>-ah, ter uma cabeça activa (2a)</li> <li>-olhe, poder ouvir (2a)</li> <li>-fazer o bem a todos (3d)</li> <li>-encontrar o meu caminho (3e)</li> <li>-aceitar que o fim chega (3f)</li> <li>-prefiro ter tempo para as minhas coisas (3h)</li> <li>-o tempo é uma coisa engraçada, perdemos e ganhamos (3h)</li> <li>-não tomar medicamentos (2a)</li> <li>-e uma família que se preocupa (4b)</li> </ul>
102	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 86</li> <li>c) Single</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-claro poupar algum dinheiro (5a)</li> <li>-devemos fazer exercício (1a)</li> <li>-claro, lembrar-me das coisas (2a)</li> <li>-perceber a minha existência (3e)</li> <li>-pois, não ter dores (2a)</li> <li>-aceitar que há um fim (3f)</li> <li>-a idade traz-nos experiência (3g)</li> </ul>

		<ul style="list-style-type: none"> <li>-o tempo é valioso (3h)</li> <li>-ir ao café com os amigos (4a)</li> <li>-ter uma cabeça boa (2a)</li> <li>-oh, não ter dores (2a)</li> <li>-ah, não sofrer das costas (2a)</li> <li>-comemos bem (2a)</li> <li>-poder ouvir (2a)</li> </ul>
103	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 91</li> <li>c) Single</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-pois, ter uma boa memória (2a)</li> <li>-respeitar a natureza (3d)</li> <li>-conhecer o mundo (3d)</li> <li>-gozar um pouco o dinheiro que ainda recebo (5a)</li> <li>-a minha filha é muito especial (4b)</li> <li>-gostar de alguém dos nossos (4b)</li> <li>-ter amigos ao pé de nós (4a)</li> <li>-aceitar que há um fim (3f)</li> <li>-viver bem com a idade (3g)</li> <li>-apreciar a idade (3g)</li> <li>-faço sempre exercício (1a)</li> <li>-procuro tudo na internet (1a)</li> <li>-e ter uma mente activa (2a)</li> </ul>
104	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 78</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-a morte faz-nos dar valor à vida e às pessoas (3f)</li> <li>-a morte prepara-nos para uma vida melhor (3f)</li> <li>-acredito na oração (3c)</li> <li>-o dinheiro é bom, claro (5a)</li> <li>-ter reforma (5a)</li> <li>-de tarde vou nadar (1a)</li> <li>-e vejo bem (2a)</li> <li>-ter uma boa memória (2a)</li> <li>-ter saúde de atleta (2a)</li> <li>-ter bom sangue (2a)</li> <li>-desde que fui avó tudo mudou (4b)</li> <li>-ser visitada pela família (4b)</li> </ul>
105	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 85</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-orar (3d)</li> <li>-ajudar na catequese (3d)</li> <li>-ando a pé (1a)</li> <li>-não sofrer dos ossos (2a)</li> <li>-pois, não ter dores nos ossos (2a)</li> <li>-ter algum dinheiro (5a)</li> <li>-a morte ajuda-nos em vida (3f)</li> <li>-uma família que ajuda (4b)</li> <li>-claro, ter uma boa memória (2a)</li> <li>-oh, a saúde é o principal (2a)</li> <li>-vejo bem (2a)</li> <li>-encontrar um sentido para a minha existência (3e)</li> <li>-aceitar que há um fim (3f)</li> <li>-gosto de estar ocupada (1b)</li> <li>-não depender de ninguém (5a)</li> </ul>
106	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 84</li> <li>c) Widowed</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-reflectir sobre o mundo (3d)</li> <li>-ajudar a escolher as leituras na Missa (3d)</li> <li>-gozar um pouco o dinheiro (5a)</li> <li>-gosto de estar ocupado (1b)</li> <li>-o exercício é essencial (1a)</li> <li>-ah, e não me esquecer das coisas (2a)</li> <li>-não tomar medicamentos (2a)</li> <li>-ter boa saúde (2a)</li> <li>-morrer valoriza a existência (3f)</li> <li>-aceitar que o fim chega (3f)</li> <li>-não andar a pedir favores à família (5a)</li> <li>-uma família sem discussões (4b)</li> <li>-viver bem com a nossa idade (3g)</li> <li>-a idade é para ser descoberta (3g)</li> </ul>
107	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 86</li> <li>c) Married or in a relationship</li> <li>d) Active</li> </ul>	<ul style="list-style-type: none"> <li>-acredito no amor (3c)</li> <li>-rezar pelo mundo (3d)</li> <li>-ouvir bem (2a)</li> <li>-gozar um pouco o dinheiro quando posso (5a)</li> </ul>

	e) Portuguese	-ter reforma (5a) -ter uma cabeça boa (2a) -não tomar muita medicação (2a) -sinto que tenho a saúde média (2a) -a saúde é muito importante (2a) -olhar para dentro de mim encontrar as minhas respostas (3e) -reflectir sobre a minha vida (3e) -a vida tem um final (3f) -os meus netos preenchem-me (4b)
108	a) Male b) 84 c) Married or in a relationship d) Inactive e) Portuguese	-ajudar na Missa (3d) -ser acólito (3d) -faço hidroginástica (1a) -gozar um pouco o dinheiro (5a) -ter reforma boa (5a) -lembrar-me das coisas (2a) -ter uma mente activa (2a) -vejo melhor que a senhora (2a) -acredito na meditação (3c) -rezar (3d) -aceitar a idade (3g) -quero concretizar coisas na vida (1b)
109	a) Female b) 86 c) Single d) Inactive e) Portuguese	-desde que tive filhos tornei-me muito completa (4b) -gosto de imaginar os meus netinhos muito felizes (4b) -cantar com as crianças na Missa (3d) -rezar em conjunto (3d) -gosto de estar sempre ocupada (1b) -faço Pilates (1a) -ter o suficiente (5a) -não depender de ninguém (5a) -ah, ter uma boa memória (2a) -sempre ter uma cabeça activa (2a) -valorizar o que tenho porque o fim chega (3f) -tudo tem um fim (3f) -aceitar a idade (3g) -a idade é um crescimento (3g) -ando a tirar um curso de internet (1a)
110	a) Male b) 88 c) Single d) Inactive e) Portuguese	-eu cá faço exercício (1a) -estar em paz com a nossa consciência (3d) -deixar a vida acontecer (3d) -e poupar algum dinheiro (5a) -ter os nossos melhores amigos (4a) -e ter uma boa memória (2a) -e poder conduzir (2a) -ponderar a minha existência (3e) -tenho um terreno e entretenho-me (1b) -encontrar o caminho que tenho de traçar (3e) -tento perceber porque cá estou (3e)
111	a) Male b) 75 c) Married or in a relationship d) Inactive e) Portuguese	-ter reforma boa (5a) -acredito na oração (3c) -ter o dinheiro para as coisas (5a) -vou nadar (1a) -continuo a ver bem (2a) -ainda, fazer tudo sozinho (2b) -lembrar-me de tudo (2a) -bons amigos (4a) -a família visitar-me (4b) -respeitar a minha existência (3e) -aceitar que há um fim (3f) -morrer faz parte do ciclo de vida (3f) -temos vários ciclos importantes na vida (3f) -aceitar a idade (3g) -ando a pé (1a)
112	a) Female b) 78	-e ter reforma boa (5a) -ando a pé no jardim (1a)

	<p>c) Married or in a relationship  d) Active  e) Portuguese</p>	<p>-faço Yoga <b>(1a)</b>  -desde que faço exercício durmo melhor <b>(1a)</b>  -eu e a minha neta somos muitos próximas <b>(4b)</b>  -uma família que próxima <b>(4b)</b>  -ter uma cabeça boa <b>(2a)</b>  -e ter uma boa memória <b>(2a)</b>  - pois, poder ouvir <b>(2a)</b>  -dar a catequese <b>(3d)</b>  -a vida tem uma passagem pela morte <b>(3f)</b>  -estar em paz com o mundo <b>(3d)</b>  -gosto de tentar novas coisas de forma criativa <b>(1b)</b>  -ir à Missa <b>(3d)</b>  -o tempo deve ser estimado <b>(3h)</b>  -penso na morte ajuda a enfrentá-la <b>(3f)</b></p>
113	<p>a) Male  b) 90  c) Widowed  d) Inactive  e) Portuguese</p>	<p>-rezar em conjunto <b>(3d)</b>  -ir em peregrinação <b>(3d)</b>  -gozar um pouco o dinheiro <b>(5a)</b>  -e ter reforma <b>(5a)</b>  -ah, não ter dores nos ossos <b>(2a)</b>  - pois, não sofrer das costas <b>(2a)</b>  -ah, ter uma boa memória <b>(2a)</b>  -fazer coisas que gosto, que é pintar <b>(1b)</b>  -ainda trabalho como médico homeopático e tenho imenso trabalho <b>(1b)</b>  -concentrar-me espiritualmente <b>(3d)</b>  -ir à Missa <b>(3d)</b>  -tudo tem um fim <b>(3f)</b>  -viver bem com a nossa idade <b>(3g)</b>  -encontrar-me com os meus amigos <b>(4a)</b></p>
114	<p>a) Male  b) 86  c) Single  d) Inactive  e) Portuguese</p>	<p>-ter uma reforma boa <b>(5a)</b>  -eu cá, ando muito a pé <b>(1a)</b>  -ter uma saúde de ferro <b>(2a)</b>  -ter bons genes <b>(2a)</b>  -ter uma mente activa <b>(2a)</b>  -é bom estar preparado para o nosso limite <b>(3f)</b>  -valorizar o que tenho porque o fim chega <b>(3f)</b>  -valorizar a nossa idade <b>(3g)</b>  -a velhice não me impede de ter projectos <b>(1b)</b>  -olhar para dentro de mim <b>(3e)</b>  -reflectir sobre a minha existência <b>(3e)</b></p>
115	<p>a) Male  b) 89  c) Married or in a relationship  d) Inactive  e) Portuguese</p>	<p>-acredito na meditação <b>(3c)</b>  -ter uma boa pensão <b>(5a)</b>  -claro, estar com a minha família <b>(4b)</b>  - pois, não me esquecer das coisas <b>(2a)</b>  -sem saúde não se faz nada <b>(2a)</b>  -ah, poder conduzir <b>(2a)</b>  -temos que saber viver com a nossa idade <b>(3g)</b>  -gosto da minha idade <b>(3g)</b>  -preparar as músicas do rito <b>(3d)</b>  -tenho novas ideias <b>(1b)</b>  -faço biscates em casas <b>(1b)</b>  -respeitar o mundo <b>(3d)</b>  -tentar compreender o mundo <b>(3d)</b>  -ajudar os outros <b>(3d)</b>  -meditar em paz <b>(3d)</b>  -não pedir favores à família <b>(5a)</b></p>
116	<p>a) Male  b) 83  c) Married or in a relationship  d) Inactive  e) Portuguese</p>	<p>-ir à Terra Santa <b>(3d)</b>  -penso em novos projectos <b>(1b)</b>  -ainda ganho o meu dinheiro <b>(5a)</b>  -penso que vou ter um final com todos à minha volta <b>(3f)</b>  -preparo a minha vida seguinte <b>(3f)</b>  -amo a vida e por isso tenho de aceitar a morte <b>(3f)</b>  -quero viver e a morte é uma boa motivadora <b>(3f)</b>  -aceitar a idade <b>(3g)</b>  -a idade é um amadurecimento <b>(3g)</b>  -gosto de ter chegado até aqui <b>(3g)</b></p>

		<ul style="list-style-type: none"> <li>-ah, ter boa saúde (2a)</li> <li>-não me esquecer das coisas (2a)</li> <li>-mexer-me (2b)</li> <li>-abraçar os meus netos (4b)</li> </ul>
117	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 100</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-tratar bem a natureza (3d)</li> <li>-orar (3d)</li> <li>-ter uma boa pensão (5a)</li> <li>-não me esquecer das coisas (2a)</li> <li>-e ter boa saúde (2a)</li> <li>-eu cá gosto de estar ocupada (1b)</li> <li>-ouvir bem (2a)</li> <li>-tenho muito trabalho (1b)</li> <li>-tenho novas ideias que me dão gozo (1b)</li> <li>-vejo bem (2a)</li> <li>-viver uma vida espiritual (3d)</li> <li>-fazer o bem (3d)</li> <li>-acredito no poder da meditação (3c)</li> <li>-tomo conta da neto (1b)</li> <li>-não pedir dinheiro a ninguém (5a)</li> <li>-viver bem com a nossa idade (3g)</li> <li>-penso no meu limite claro (3f)</li> </ul>
118	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 82</li> <li>c) Married or in a relationship</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-ter algum dinheiro (5a)</li> <li>-preparar as músicas da celebração (3d)</li> <li>-tratar bem o mundo (3d)</li> <li>-saber como funciona o mundo (3d)</li> <li>-olhe, ter boa saúde (2a)</li> <li>-ando muito a pé (1a)</li> <li>-não depender de ninguém (5a)</li> <li>-pois, fazer tudo sozinha (2b)</li> <li>-aceitar a idade (3g)</li> <li>-viver bem com a idade (3g)</li> <li>-morrer valoriza a nossa busca espiritual (3f)</li> <li>-tenho sempre coisas que fazo no jardim (1b)</li> <li>-vou para a terra e estou lá como quero com os meus amigos de infância (4a)</li> </ul>
119	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 86</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-orar (3d)</li> <li>-ajudar os miúdos ma catequese (3d)</li> <li>-gosto muito de estar ocupada (1b)</li> <li>-gosto de pintar (1b)</li> <li>-ter uma boa pensão (5a)</li> <li>-não me esquecer das coisas (2a)</li> <li>-não ter dores (2a)</li> <li>-uma boa amiga (4a)</li> <li>-preparar as músicas do rito (3d)</li> <li>-rezar em conjunto (3d)</li> <li>-ir em peregrinação a Fátima (3d)</li> <li>-ter reforma boa (5a)</li> <li>-poder ouvir (2a)</li> <li>-continuo a ver bem (2a)</li> <li>-sempre poder ouvir (2a)</li> <li>-encaro o fim sem medo (3f)</li> <li>-a vida tem um fim (3f)</li> <li>-como pessoa, sinto-me Benvinda e valorizada na minha comunidade espiritual (3b)</li> <li>-o jardim dá-me trabalho (1b)</li> <li>-poder andar de um lado para o outro (2b)</li> <li>-mexer-me (2b)</li> <li>-a morte não me assusta (3f)</li> <li>-a vida tem um fim (3f)</li> </ul>
120	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 100</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-jejuar (3d)</li> <li>-claro ter uma cabeça activa (2a)</li> <li>-tenho novas ideias que gosto de pôr em prática (1b)</li> <li>-tenho muito trabalho (1b)</li> <li>-transcender-me espiritualmente (3e)</li> <li>-amar-me e respeitar-me (3e)</li> </ul>

		<ul style="list-style-type: none"> <li>-compreender-me (3e)</li> <li>-ponderar a minha vida (3e)</li> <li>-durmo pouco mesmo assim o tempo não me chega (3h)</li> <li>-o tempo é valioso (3h)</li> <li>-ter dinheiro de sobra (5a)</li> <li>-ter uma saúde boa (2a)</li> <li>-não tomar medicamentos (2a)</li> <li>-a morte ajuda-nos em vida (3f)</li> <li>-penso que vou ter um final feliz (3f)</li> <li>-aceitar a idade (3g)</li> <li>-tenho as pessoas que gosto ao pé (4a)</li> </ul>
121	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 86</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-estar em interacção com a natureza (3d)</li> <li>-andar pelo mundo (3d)</li> <li>-ah, ter reforma (5a)</li> <li>-desenho (1b)</li> <li>-ter boa saúde (2a)</li> <li>-poder conduzir (2a)</li> <li>-e poder ouvir (2a)</li> <li>-gosto de ver a minha família bem (4b)</li> <li>-respeito muito os meus anos (3g)</li> <li>-gosto de quase tudo que a idade traz, menos as doenças (3g)</li> <li>-apreciar a idade (3g)</li> </ul>
122	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 91</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-ter dinheiro de sobra (5a)</li> <li>-rezar em conjunto (3d)</li> <li>-concentrar boas energias (3d)</li> <li>-bordo panos (1b)</li> <li>-ah ter reforma boa (5a)</li> <li>-e lembrar-me de tudo (2a)</li> <li>-pois, ter boa saúde (2a)</li> <li>-pensar na morte não é mau (3f)</li> <li>-sei que vou morrer mas não me assusta (3f)</li> <li>-admirar a nossa idade (3g)</li> <li>-apreciar um bom jogo de cartas com as amigas (4a)</li> <li>-ah, poder ouvir (2a)</li> <li>-dar amor aos meus netos (4b)</li> <li>-preparar as canções da Missa (3d)</li> </ul>
123	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 78</li> <li>c) Widowed</li> <li>d) Inactive</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-ter uma saúde boa (2a)</li> <li>-sinto ainda muita força (2a)</li> <li>-não tomar medicamentos (2a)</li> <li>-saber como funciona a natureza (3d)</li> <li>-respeitar o mundo (3d)</li> <li>-estar em paz (3d)</li> <li>-é importante estar em paz com a minha idade (3g)</li> <li>-a idade é para ser vivida (3g)</li> <li>-ir ao café com as amigas beber chá (4b)</li> <li>-esta idade também tem coisas excepcionais, já não faço fretes (3g)</li> <li>-vou naquelas viagens de autocarro (1a)</li> <li>-vou à terra (1a)</li> <li>-para me sentir bem, valorizo o meu tempo (3h)</li> <li>-nem sempre estou disponível para os outros porque quero o meu tempo (3h)</li> <li>-a vida tem o seu tempo (3h)</li> </ul>
124	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 86</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-não tomar medicação (2a)</li> <li>-gosto de estar sempre ocupada (1b)</li> <li>-e quando se tem dinheiro de sobra (5a)</li> <li>-ter o suficiente (5a)</li> <li>-ir em peregrinação (3d)</li> <li>-jejuar (3d)</li> <li>-não comer carne na Quaresma (3d)</li> <li>-concentrar boas energias (3d)</li> <li>-a saúde é muito importante (2a)</li> <li>-a minha irmã vive aqui perto e que me faz companhia (4b)</li> <li>-não troco a minha idade (3g)</li> <li>-aproveito bem o tempo que me resta (3h)</li> </ul>

		<ul style="list-style-type: none"> <li>-conhecer a natureza <b>(3d)</b></li> <li>-ando a aprender a pintar <b>(1b)</b></li> <li>-trabalho muito <b>(1b)</b></li> <li>-uma boa amiga que dá para visitar <b>(4a)</b></li> </ul>
125	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 83</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-penso muito no meu limite sem medo <b>(3f)</b></li> <li>-a morte é uma boa confidente <b>(3f)</b></li> <li>-viver bem com a idade <b>(3g)</b></li> <li>-cultivo uma vida com actividade <b>(1b)</b></li> <li>-ter reforma boa <b>(5a)</b></li> <li>-ir à Missa <b>(3d)</b></li> <li>-continuo a ver bem <b>(2a)</b></li> <li>-não ter dores, claro <b>(2a)</b></li> <li>-estar em paz com todos <b>(3d)</b></li> <li>-concentrar-me espiritualmente <b>(3d)</b></li> <li>-gosto muito da minha família <b>(4b)</b></li> <li>-não tomar muita medicação <b>(2a)</b></li> <li>-a saúde é muito importante agora <b>(2a)</b></li> <li>-lembrar-me de tudo <b>(2a)</b></li> <li>-arranjo a casa <b>(1b)</b></li> </ul>
126	<ul style="list-style-type: none"> <li>a) Male</li> <li>b) 82</li> <li>c) Married or in a relationship</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-preparar as músicas da Missa com os escuteiros <b>(3d)</b></li> <li>-eu ando muito a pé <b>(1a)</b></li> <li>-ter reforma <b>(5a)</b></li> <li>-a saúde é importante <b>(2a)</b></li> <li>-devemos fazer algo que nos obrigue a mexer <b>(2b)</b></li> <li>-ter uma boa dieta <b>(2a)</b></li> <li>-a vida tem um fim <b>(3f)</b></li> <li>-percebo de chão <b>(1b)</b></li> <li>-é bom conhecer o nosso limite <b>(3f)</b></li> <li>-andar pela natureza <b>(3d)</b></li> <li>-encontrar o meu caminho na estrada <b>(3e)</b></li> <li>-quero perceber porque cá estou <b>(3e)</b></li> <li>-a idade e o tempo devem ser estimados <b>(3h)</b></li> <li>-gosto de uma vida activa <b>(1b)</b></li> <li>-cultivo uma horta <b>(1b)</b></li> <li>-percebo de electricidade <b>(1b)</b></li> </ul>
127	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 92</li> <li>c) Widowed</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-centrar-me espiritualmente <b>(3d)</b></li> <li>-actuar de acordo com os campos energéticos <b>(3d)</b></li> <li>-pois ter dinheiro de sobra <b>(5a)</b></li> <li>-ando a aprender a pintar <b>(1b)</b></li> <li>-os meus netos dão-me que fazer <b>(1b)</b></li> <li>-não tomar muita medicação <b>(2a)</b></li> <li>-a saúde é vital <b>(2a)</b></li> <li>-a morte origina uma busca espiritual <b>(3f)</b></li> <li>-a morte valoriza tudo o que fazemos <b>(3f)</b></li> <li>-acredito que reencarnamos <b>(3f)</b></li> <li>-gosto do antigamente <b>(3h)</b></li> <li>-aproveitar todos os tempinhos <b>(3h)</b></li> <li>-quero viver o meu tempo <b>(3h)</b></li> </ul>
128	<ul style="list-style-type: none"> <li>a) Female</li> <li>b) 90</li> <li>c) Widowed</li> <li>d) Active</li> <li>e) Portuguese</li> </ul>	<ul style="list-style-type: none"> <li>-a saúde está acima de tudo <b>(2a)</b></li> <li>-pois, ter uma cabeça activa <b>(2a)</b></li> <li>-ah, lembrar-me de tudo <b>(2a)</b></li> <li>-é importante perceber o meu caminho <b>(3e)</b></li> <li>-faço crochet <b>(1b)</b></li> <li>-ter reforma boa <b>(5a)</b></li> <li>-fico com a neta <b>(1b)</b></li> <li>-o meu filho quer-me bem <b>(4b)</b></li> <li>-a minha irmã é que me faz companhia <b>(4b)</b></li> <li>-a vida e a morte são gémeas <b>(3f)</b></li> <li>-penso muito no meu limite <b>(3f)</b></li> <li>-viver bem com a nossa idade <b>(3g)</b></li> <li>-gosto da minha idade <b>(3g)</b></li> <li>-ouvir bem <b>(2a)</b></li> <li>-filha, não sofrer com dores <b>(2a)</b></li> <li>-ah, não sofrer das costas <b>(2a)</b></li> <li>-concentrar energias positivas <b>(3d)</b></li> <li>-tentar viver uma vida espiritual <b>(3d)</b></li> </ul>

129	<p>a) Female b) 81 c) Married or in a relationship d) Active e) Portuguese</p>	<p>-fazer o bem aos outros (3d) -encontrar o meu próprio caminho (3e) -é importante para mim perceber porque cá estou (3e) -a idade leva-nos a um nível mais elevado (3g) -com a idade não se brinca (3g) -o tempo é o bem mais precioso (3h) -o tempo não volta para trás (3h) -ah ter dinheiro de sobra (5a) -faço Pilates (1a) -e comer bem (2a) -é preciso fazer algo para nos mexermos (2b) -tomo conta dos meus netos (1b) -a família é tudo (4b) -pois, a saúde é o principal (2a) -e não ter dores nos ossos (2a) -depois de vencer o cancro, acho que passei o pior (2a) -para me sentir bem, valorizo o meu tempo e a s memórias (3h) -fazer cuidado com a dieta (2a) -temos que fazer as coisas ao nosso ritmo (1e)</p>
130	<p>a) Female b) 101 c) Widowed d) Inactive e) Portuguese</p>	<p>-é importante para mim perceber o meu caminho (3e) -encontrar-me bem espiritualmente (3e) -fico com o neto (1b) -uma boa pensão (5a) -e o importante é ter saúde (2a) -os meus netos fazem-me sorrir (4b) -respeito muito a minha idade (3g) -olhe, não sofrer dos ossos (2a) -respeito os meus anos (3g) -a idade é algo que nos faz crescer (3g) -temos de fazer do tempo um aliado (3h) -eu o meu tempo somos amigos (3h) -vivo muito no tempo passado (3h) -leio muito (1a)</p>
131	<p>a) Female b) 102 c) Married or in a relationship d) Active e) Portuguese</p>	<p>-claro, a saúde é o principal (2a) -respeitar o meu espírito inquieto (3e) -encontrar o meu caminho (3e) -é bom saber o nosso limite (3f) -não depender de ninguém (5a) -oh, não sofrer dos ossos (2a) -estou entretida (1b) -ter dinheiro de sobra (5a) -valorizo o meu tempo (3h) -às vezes não percebo bem o que se passa hoje e refugio-me no passado (3h)</p>
132	<p>a) Female b) 84 c) Married or in a relationship d) Active e) Portuguese</p>	<p>-claro, ter o suficiente (5a) -faço muita coisa no curso de pintura (1b) -tomo conta da neta (1b) -a minha neta adora-me(4b) -aprofundar-me espiritualmente (3e) -olhar para mim e compreender-me (3e) -pensar sobre a minha vida (3e) -morrer faz parte de viver (3f) -estimo os meus (4b) -a idade permitiu-me alguns luxos (3g) -com a idade aprendemos (3g)</p>
133	<p>a) Female b) 87 c) Married or in a relationship d) Active e) Portuguese</p>	<p>-quando se tem dinheiro de sobra (5a) -respeitar o meu espírito (3e) -reflectir sobre a minha existência (3e) -aceitar que o fim chega (3f) -encontro o que quero na internet (1a) -ah, o importante é ter saúde (2a) -e ver bem (2a) -o tempo devem ser valorizado (3h) -poder andar de um lado para o outro (2b) -o tempo deve ser levado a sério (3h) -e não sofrer das costas (2a)</p>

		<p>-não troco o meu tempo por nada (3h)          -o tempo não volta para trás (3h)          -não tomar medicação (2a)          -tenho um filho que trata bem de mim (4b)          -estimar a idade (3g)</p>
134	<p>a) Female          b) 85          c) Single          d) Inactive          e) Portuguese</p>	<p>-vou passear (1a)          -encontrar paz para a minha existência (3e)          -aceitar o destino (3e)          -acredito em respeitar a vida em todas as formas, em acreditar nos outros, em acreditar em mim (3c)          -aceitar que o fim chega (3f)          -apreciar a idade (3g)          -e ter dinheiro de sobra (5a)          -os meus netos deixam-me feliz (4b)          -pois, o importante é ter saúde (2a)          -continuo a ver bem (2a)          -penso muito no meu limite (3f)</p>
135	<p>a) Male          b) 84          c) Single          d) Active          e) Portuguese</p>	<p>-tenho novas ideias sempre (1b)          -a vida tem um fim (3f)          -ponderar a minha vida (3e)          -admirar a nossa idade (3g)          -e uma boa pensão (5a)          -a saúde é valiosa (2a)          -ainda ganho o meu dinheiro (5a)          -poder conduzir (2a)          -ouvir bem (2a)          -arranjo os canos (1b)          -e ainda faço biscates (1b)          -a internet dá-me que fazer (1a)          -vou à terrinha (1a)          -gostaria de ter mais tempo (3h)          -o tempo deve ser valorizado (3h)</p>
136	<p>a) Male          b) 85          c) Single          d) Inactive          e) Portuguese</p>	<p>-penso muito no meu fim (3f)          -viver bem com a idade (3g)          -não depender de ninguém (5a)          -não andar a pedir favores aos outros (5a)          -apreciar a idade (3g)          -a internet dá-me gozo (1a)          -a terra é para visitar (1a)          -parece que vivi vários tempos (3h)          -com a nossa idade, vivemos muitos tempos (3h)          -o tempo tem de ser apreciado (3h)          -ainda faço a contabilidade (1b)          -tenho o meu ritmo para fazer as minhas coisas (1b)          -não sofrer das costas (2a)          -como bem (2a)          -a idade é viver, é experimentar (3g)          -o tempo é valioso (3h)          -claro, ter dinheiro suficiente (5a)</p>
137	<p>a) Female          b) 88          c) Married or in a relationship          d) Inactive          e) Portuguese</p>	<p>-a vida tem um fim (3f)          -e ter dinheiro suficiente (5a)          -tenho uma vida activa (1b)          -tenho muito trabalho (1b)          -os meus netos dão-me muito trabalho (1b)          -ser visitada pela minha amiga (4a)          -olhe, o importante é ter saúde (2a)          -poder andar de um lado para o outro (2b)          -mexer-me (2b)          -brinco com a minha neta sempre que posso (4b)          -estimar a idade (3g)          -gosto de viver a minha idade (3g)          -estou em paz com a minha idade (3g)          -aprendi muito com a idade (3g)          -o tempo é valioso (3h)</p>
138	<p>a) Female</p>	<p>-contemplar a nossa idade (3g)</p>

	<p>b) 89 c) Married or in a relationship d) Inactive e) Portuguese</p>	<p>-faço os trabalhos com a neta <b>(1b)</b> -ter o conforto garantido com o dinheiro que se ganha <b>(5a)</b> -não pedir favores à família <b>(5a)</b> -continuo a ver bem <b>(2a)</b> -mexer-me <b>(2b)</b> -valorizar a nossa idade <b>(3g)</b> -sem dúvida, fazer tudo sozinha <b>(2b)</b> -adoro ser bem tratada por quem me conhece <b>(4a)</b> -morrer valoriza a vida <b>(3f)</b> -agarro-me ao passado <b>(3h)</b> -ainda penso nas minhas recordações <b>(3h)</b> -temos que estar actualizados <b>(3h)</b> -a vida é sempre a correr e eu quero estar calma <b>(3h)</b></p>
139	<p>a) Male b) 83 c) Widowed d) Inactive e) Portuguese</p>	<p>-morrer valoriza a nossa viagem aqui <b>(3f)</b> -trato dos condomínios <b>(1b)</b> -poder conduzir <b>(2a)</b> -trabalho muito <b>(1b)</b> -quero ir mais devagar na vida <b>(3h)</b> -o tempo é um aliado <b>(3h)</b> -ouvir bem <b>(2a)</b> -admirar a nossa idade <b>(3g)</b> -quando se tem dinheiro de sobra, é bom <b>(5a)</b> -respeito a minha idade <b>(3g)</b> -a idade é um crescimento interior <b>(3g)</b> -a idade é amadurecer <b>(3g)</b> -fazer cuidado com a alimentação <b>(2a)</b> -eu preciso disso, da pintura <b>(1g)</b></p>
140	<p>a) Female b) 85 c) Married or in a relationship d) Inactive e) Portuguese</p>	<p>-valorizar a nossa idade <b>(3g)</b> -gosto de pensar nas coisas que ainda vou fazer <b>(1b)</b> -estarmos ajustados é viver bem com a nossa idade <b>(3g)</b> -ah, o importante é ter saúde <b>(2a)</b> -ainda poder conduzir <b>(2a)</b> -ouvir bem <b>(2a)</b> -ainda penso nas memórias do passado <b>(3h)</b> -o tempo constrói-se <b>(3h)</b> -gosto de pensar no tempo que ainda tenho <b>(3h)</b> -ligo mais às estações que aos anos <b>(3h)</b> -a vida é melhor porque a morte existe <b>(3f)</b></p>
141	<p>a) Male b) 85 c) Married or in a relationship d) Active e) Portuguese</p>	<p>-dou um jeito aos canos <b>(1b)</b> -morrer faz parte da vida <b>(3f)</b> -quando se tem dinheiro de sobra <b>(5a)</b> -pois claro, ter boa saúde <b>(2a)</b> -não tomar medicação <b>(2a)</b> -ainda faço biscates <b>(1b)</b> -valorizar a nossa idade <b>(3g)</b> -o tempo não volta para trás <b>(3h)</b> -o tempo é muito precioso <b>(3h)</b></p>
142	<p>a) Female b) 83 c) Single d) Active e) Portuguese</p>	<p>-temos que aceitar a nossa idade <b>(3g)</b> -não pedir dinheiro a ninguém <b>(5a)</b> -temos que nos sentir bem neste tempo conturbado <b>(3h)</b> -quero existir devagar <b>(3h)</b> -estou entretida <b>(1b)</b> -desde que fui avó tudo mudou para melhor <b>(4b)</b> -quero estar actualizado <b>(3h)</b> -tenho um tempo próprio <b>(3h)</b></p>
143	<p>a) Female b) 88 c) Single d) Active e) Portuguese</p>	<p>-continuo a ver bem <b>(2a)</b> -oh ter dinheiro de sobra <b>(5a)</b> -viver bem com a nossa idade <b>(3g)</b> -aproveito muito bem o meu tempo <b>(3h)</b> -ter o suficiente no banco <b>(5a)</b> -não pedir dinheiro a ninguém <b>(5a)</b></p>
144	<p>a) Female b) 86 c) Married or in a relationship d) Active e) Portuguese</p>	<p>-morrer faz parte da existência <b>(3f)</b> -gosto da minha idade <b>(3g)</b> -o trabalho está sempre lá <b>(1b)</b> -ah, fazer tudo sozinha <b>(2a)</b> -não ter dores <b>(2a)</b> -ando a aprender a pintar <b>(1b)</b></p>

		<p>-sabe, gosto da minha vida a trabalhar <b>(1b)</b></p> <p>-viver condignamente <b>(5a)</b></p> <p>-dar beijinhos aos meus netos <b>(4b)</b></p> <p>-ainda vejo bem <b>(2a)</b></p> <p>-fazer o que quero do tempo é um privilégio da velhice <b>(3h)</b></p> <p>-estarmos ajustados é viver bem com a nossa idade <b>(3g)</b></p> <p>-vivo ao meu tempo e ao meu ritmo <b>(3h)</b></p> <p>-vivo bem com o meu tempo <b>(3h)</b></p>
145	<p>a) Female</p> <p>b) 87</p> <p>c) Married or in a relationship</p> <p>d) Inactive</p> <p>e) Portuguese</p>	<p>-contemplar a nossa idade <b>(3g)</b></p> <p>-ter algum dinheiro <b>(5a)</b></p> <p>-ah, ter uma mente activa <b>(2a)</b></p> <p>-claro, ter boa saúde <b>(2a)</b></p> <p>-aceitar a minha existência <b>(3e)</b></p> <p>-a morte valoriza a nossa busca espiritual <b>(3f)</b></p> <p>-não peço dinheiro a ninguém <b>(5a)</b></p> <p>-respeito o tempo dos outros <b>(3h)</b></p> <p>-o meu tempo é mais lento agora <b>(3h)</b></p> <p>-gosto de fazer coisas na casa <b>(1b)</b></p>
146	<p>a) Female</p> <p>b) 100</p> <p>c) Widowed</p> <p>d) Active</p> <p>e) Portuguese</p>	<p>-mexer-me <b>(2b)</b></p> <p>-oh, estimar a idade <b>(3g)</b></p> <p>-tomo conta do neto <b>(1b)</b></p> <p>-não ter de pedir dinheiro a ninguém <b>(5a)</b></p> <p>-viver bem com a nossa idade <b>(3g)</b></p> <p>-gosto da minha idade <b>(3g)</b></p> <p>-poder andar de um lado para o outro <b>(2b)</b></p> <p>-conseguir fazer tudo sozinha <b>(2b)</b></p> <p>-trato da casa <b>(1b)</b></p> <p>-faço render o meu tempo <b>(3h)</b></p>
147	<p>a) Female</p> <p>b) 79</p> <p>c) Single</p> <p>d) Active</p> <p>e) Portuguese</p>	<p>-eu cá estou entretida <b>(1b)</b></p> <p>-fazer tudo sozinha <b>(2b)</b></p> <p>-não ter dores <b>(2a)</b></p> <p>-ainda penso no futuro <b>(3h)</b></p> <p>-gosto de passar o meu tempo a passear e a pensar na vida <b>(3h)</b></p> <p>-penso sempre que tenho muito tempo pela frente <b>(3h)</b></p> <p>-sinto-me ajustada porque faço o que quero do meu tempo <b>(3h)</b></p> <p>-faço o meu serviço <b>(1b)</b></p> <p>-vejo TV <b>(1b)</b></p> <p>-viver com decência <b>(5ª)</b></p>
148	<p>a) Female</p> <p>b) 89</p> <p>c) Married or in a relationship</p> <p>d) Active</p> <p>e) Portuguese</p>	<p>-estou entretida <b>(1b)</b></p> <p>-não andar a pedir favores aos outros <b>(5a)</b></p> <p>-abraçar a minha neta <b>(4b)</b></p> <p>-trabalho muito <b>(1b)</b></p> <p>-a saúde é o bem mais precioso <b>(2a)</b></p> <p>-ouvir bem <b>(2a)</b></p> <p>-para me sentir bem, valorizo o meu tempo <b>(3h)</b></p> <p>-a morte leva-nos a uma busca espiritual <b>(3f)</b></p> <p>-a vida precisa da morte <b>(3f)</b></p> <p>-e estimar a idade <b>(3g)</b></p>
149	<p>a) Female</p> <p>b) 88</p> <p>c) Married or in a relationship</p> <p>d) Inactive</p> <p>e) Portuguese</p>	<p>-tomo conta da neta <b>(1b)</b></p> <p>-faço decoração <b>(1b)</b></p> <p>-e ter dinheiro <b>(5a)</b></p> <p>-não andar a pedir favores aos amigos <b>(5a)</b></p>
150	<p>a) Female</p> <p>b) 88</p> <p>c) Married or in a relationship</p> <p>d) Inactive</p> <p>e) Portuguese</p>	<p>-sempre trabalhei <b>(1b)</b></p> <p>-admirar a idade <b>(3g)</b></p> <p>-temos que valorizar a nossa idade <b>(3g)</b></p> <p>-ter o suficiente para viver <b>(5a)</b></p> <p>-faço umas coisitas em casa dos outros <b>(1b)</b></p>
151	<p>a) Female</p> <p>b) 83</p> <p>c) Married or in a relationship</p> <p>d) Inactive</p> <p>e) Portuguese</p>	<p>-pertencço aos Amigos do Hospital <b>(1b)</b></p> <p>-faço umas contabilidades <b>(1b)</b></p> <p>-ainda ganho o meu dinheiro <b>(5a)</b></p> <p>-comer bem <b>(2a)</b></p> <p>-uma pessoa parada morre <b>(2b)</b></p>

		-ah, estimar a idade <b>(3g)</b> -quero estar actualizada no meu tempo <b>(3h)</b> -gosto de viver sem correrias ao meu tempo <b>(3h)</b>
152	a) Female b) 84 c) Married or in a relationship d) Inactive e) Portuguese	-ter dinheiro suficiente <b>(5a)</b> -trabalho muito <b>(1b)</b> -a minha neta gosta muito de mim <b>(4b)</b> -ajudo no hospital <b>(1b)</b> -respeito a minha idade <b>(3g)</b> -o tempo escorre pelas mãos, é preciso aproveitar <b>(3h)</b> -o tempo não volta para trás <b>(3h)</b> -vivo no tempo passado <b>(3h)</b>
153	a) Male b) 89 c) Married or in a relationship d) Active e) Portuguese	-faço biscates <b>(1b)</b> -o que ganho dá-me para os gastos <b>(5a)</b> -tento viver ao máximo o meu tempo <b>(3h)</b> -o tempo de outrora é que era bom <b>(3h)</b> -tenho muito trabalho <b>(1b)</b> -não ter dores nos ossos <b>(2a)</b> -não sofrer das costas <b>(2a)</b> -sou voluntário no hospital <b>(1b)</b> -eu cá não peço dinheiro a ninguém <b>(5a)</b> -o tempo devem ser respeitado <b>(3h)</b> -acho que nós é que temos que pensar em como passamos o tempo <b>(3h)</b>
154	a) Female b) 86 c) Married or in a relationship d) Active e) Portuguese	-tenho sempre que fazer <b>(1b)</b> -o trabalho não acaba <b>(1b)</b> -uma pessoa parada fica doente <b>(2b)</b> -imagino-me daqui a uns anos <b>(3h)</b> -fazer cuidado com a dieta <b>(2a)</b> -não peço dinheiro a ninguém <b>(5a)</b> -o tempo é cíclico <b>(3h)</b> -os anos mudam mas as coisas nem sempre mudam <b>(3h)</b> -o tempo não perdoa <b>(3h)</b> -os meus netos são a minha alegria <b>(4b)</b> -não me sinto velha. Pratico yoga há 32 anos. Não é só exercício, é também uma maneira de ser <b>(3d)</b>

### Categories for Indicators of Adjustment to Aging

1. Occupation
  - a. Physical activity and Leisure
  - b. Occupation
2. Health and Autonomy
  - a. General Health
  - b. Autonomy
3. Spirituality
  - a. Altruism
  - b. Spiritual Community
  - c. Spiritual Beliefs

- d. Spiritual Activities
- e. Existential Meaning
- f. Sense of Limit
- g. Valorization of Age
- h. Valorization of Time

#### 4. Social Embeddedness

- a. Social Life
- b. Family Relations

#### 5. Economic Situation

- a. Economic Situation

## **APPENDIX D**

Analysis of the instruments' psychometric properties

## **ANALYSIS OF THE INSTRUMENTS' PSYCHOMETRIC PROPERTIES**

The construct validity of all scales was asserted by confirmatory factor analysis, convergent and discriminant validity. The goodness of fit of the measurement model was given by chi-square statistics ( $\chi^2/df$ ), comparative fit index (*CFI*), goodness of fit index (*GFI*) and root mean square error of approximation (*RMSEA*). Reference values indicative of good model fit were those values currently practiced in structural equation modelling (Byrne, 2001; Maroco, 2010).

The convergent validity of the instruments was analysed through the average variance extracted (*AVE*). An adequate value should be higher than .45. The discriminant validity was explored comparing the inter-factors' squared correlation with the *AVE* of each individual factor. To demonstrate the factors' discriminant validity, the squared correlation between factors should be smaller than the individual (Maroco, 2010).

Criterion validity was explored through concurrent-oriented validity of scales, using Pearson's correlation with similar constructs.

In addition, to demonstrate the stability of the original structure of the instruments and assert external validity of the measurement model, initial confirmatory factor analysis was made in 60% of the sample, randomly selected, and the factor weights and correlations stability were confirmed in the remaining 40% of the sample (Maroco, 2010).

Sensitivity was explored through the analysis of minimum and maximum values, skewness and kurtosis. Values are expected to range through the overall Lykert-type scales (from the minimum to the maximum scores) and skewness and kurtosis are expected to have absolute values below 3 and 7 respectively (Kline, 2005; Maroco, 2010). Finally, reliability was studied applying the Cronbach's alpha. Alpha scores should be above .70 (Maroco, 2010).

### **Orientation to Life Questionnaire**

#### **Construct Related Validity**

##### *Confirmatory Factor Analysis*

The Orientation to Life measurement model presented a good fit ( $X^2/df=3.700$ ; *CFI*=.972; *GFI*=.933; *RMSEA*=.046;  $p=.997$ ; *C.I.* 90%=[.043; .048]).

### *Convergent Validity*

All subscales present good AVE scores (i.e., equal or above .450).

Table 1.

#### *Orientation to Life Questionnaire: Convergent validity*

Orientation to Life Subscales	AVE
Comprehensibility	.666
Manageability	.585
Meaningfulness	.577

### *Discriminant Validity*

Of the three paired-factors possible comparisons, the totality showed AVE greater than the corresponding squared correlations between each two pairs of factors, therefore all presented discriminant-related validity.

Table 2.

#### *Orientation to Life Questionnaire: Discriminant validity*

Association between different factors	Squared correlations
Comprehensibility - Manageability	.024
Comprehensibility - Meaningfulness	.129
Manageability - Meaningfulness	.213

### **Criterion Validity**

Divergent criterion validity was shown in the SwLS, PANAS and AtAS. OtLQ total score was positively correlated with SwLS total score ( $r=.255$ ;  $p<.001$ ), with PANAS total score ( $r=.258$ ;  $p<.001$ ) and lowly and negatively correlated with AtAS total score ( $r=-.202$ ;  $p<.001$ ).

Regarding the subscales, divergent criterion validity was observed in the association of all the subscales. Comprehensibility subscale was positively correlated with positive affect ( $r=.086$ ;  $p=.002$ ) and negatively correlated with zest and spirituality subscale ( $r=-.082$ ;  $p=0.03$ ). Manageability subscale was positively correlated with positive affect ( $r=.072$ ;

$p=.009$ ). Meaningfulness subscale was negatively correlated with social support subscale ( $r=-.074$ ;  $p=.008$ ). All the remaining correlations were not significant or inferior in absolute value to the correlations reported above.

### **External Validity**

The model presents a good adjustment ( $\chi^2/df=2.612$ ;  $CFI=.967$ ;  $GFI=.908$ ;  $RMSEA=.035$ ;  $p=1.000$ ;  $C.I. 90\%=[.033; .037]$ ) in both groups (60% and 40% of the total sample).

The unconstrained measurement model does not have a significantly better fit than the model with constrained factorial weights ( $\Delta\chi^2(26)=235.962$ ;  $p=.092$ ), hence confirming external validity of the measurement model. Therefore, there are no significant differences in the factorial measurement weights between both groups (60% of the sample versus 40%) confirming the stability of the subjective well-being's assessment.

### **Reliability**

The internal consistency of three subscales and of the overall scale was also explored. All subscales and overall scale presented a very good Cronbach's alpha, as shown in table 3.

Table 3.

*Orientation to Life Questionnaire: Reliability*

Scale	Cronbach's Alpha
Comprehensibility	.951
Manageability	.921
Meaningfulness	.910
Orientation to Life (overall scale)	.930

### **Sensitivity**

To address sensitivity, the range of the Likert-type scale was explored as well as the skewness and kurtosis values of the 29 items. All items presented answers ranging from 1 to 7 and all values of skewness and kurtosis were below 3 and 7, respectively, as evidenced in table 4.

Table 4.

*Orientation to Life Questionnaire: Values regarding minimum and maximum scores, skewness and kurtosis*

Items	Minimum	Maximum	Skewness	Kurtosis
1	1	7	-.626	.001
2	1	7	.353	.001
3	1	7	-.880	.474
4	1	7	.015	-.408
5	1	7	-.690	-.226
6	1	7	.353	.005
7	1	7	-.163	-1.081
8	1	7	-.160	-.889
9	1	7	.119	-.399
10	1	7	-.775	.268
11	1	7	-.116	-.619
12	1	7	-.605	-.092
13	1	7	.144	-.741
14	1	7	-.226	-.874
15	1	7	-.587	-.140
16	1	7	-.174	-.673
17	1	7	-.722	.034
18	1	7	.325	-1.068
19	1	7	-.592	-.049
20	1	7	-.044	-.808
21	1	7	-.719	.347
22	1	7	-.205	-.796
23	1	7	.355	-.050

24	1	7	-.638	.023
25	1	7	.126	-.568
26	1	7	-.708	.127
27	1	7	.303	-.378
28	1	7	-.061	-.734
29	1	7	.106	-.618

### Positive Affect and Negative Affect Scale

#### Construct Validity

##### *Confirmatory Factor Analysis*

The Positive Affect and Negative measurement model presented a good fit ( $\chi^2/df=3.369$ ;  $CFI=.977$ ;  $GFI=.958$ ;  $RMSEA=.043$ ;  $p=.999$ ;  $C.I. 90\%=[.039; .047]$ ).

##### *Convergent Validity*

All subscales present good AVE scores (i.e., equal or above .450).

Table 1.

##### *Positive Affect and Negative Affect Scale: Convergent validity*

Positive Affect and Negative Affect Subscales	AVE
Positive Affect	.573
Negative Affect	.442

##### *Discriminant Validity*

The one paired-factor possible comparison showed AVE greater than the corresponding squared correlation between the pair of factors, therefore it presented discriminant-related validity.

Table 2.

*Positive Affect and Negative Affect Scale: Discriminant validity*

Association between different factors	Squared correlations
Positive Affect - Negative Affect	.076

**Criterion Validity**

Divergent criterion validity was shown in the AtAS, SwLS and OtLQ. PANAS total score was positively correlated with SwLS total score ( $r=.092$ ;  $p=.001$ ) and with OtLQ total score ( $r=.258$ ;  $p<.001$ ) and negatively correlated with AtAS total score ( $r=-.099$ ;  $p<.001$ ).

Regarding the subscales, divergent criterion validity was observed in the association of all the subscales. Positive affect subscale was positively correlated with comprehensibility ( $r=.086$ ;  $p=.002$ ) and with manageability subscale ( $r=.072$ ;  $p=.009$ ) and it was negatively correlated with sense of purpose and ambitions subscale ( $r=-.167$ ;  $p<.001$ ), with social support subscale ( $r=-.084$ ;  $p=.003$ ), with zest and spirituality subscale ( $r=-.269$ ;  $p<.001$ ), with body and health subscale ( $r=-.118$ ;  $p<.001$ ), with aging in place and stability subscale ( $r=-.240$ ;  $p<.001$ ). Negative affect subscale was positively correlated with sense of purpose and ambitions subscale ( $r=.119$ ;  $p<.001$ ), with social support subscale ( $r=.167$ ;  $p<.001$ ), with zest and spirituality subscale ( $r=.130$ ;  $p<.001$ ) and with body and health subscale ( $r=-.196$ ;  $p<.001$ ). All the remaining correlations were not significant or inferior in absolute value to the correlations reported above.

**External Validity**

The model presents a good adjustment ( $X^2/df=2.203$ ;  $CFI=.976$ ;  $GFI=.946$ ;  $RMSEA=.031$ ;  $p=1.000$ ;  $C.I. 90\%=[.028; .034]$ ) in both groups (60% and 40% of the total sample).

The unconstrained measurement model does not have a significantly better fit than the model with constrained factorial weights ( $\Delta X^2(18)=18.321$ ;  $p=.435$ ), hence confirming external validity of the measurement model. Therefore, there are no significant differences in the factorial measurement weights between both groups (60% of the sample versus 40%) confirming the stability of the subjective well-being's assessment.

## Reliability

The internal consistency of three subscales and of the overall scale was also explored. All subscales and overall scale presented a very good Cronbach's alpha, as shown in table 3.

Table 3.

*Positive Affect and Negative Affect Scale: Reliability*

Scale	Cronbach's Alpha
Positive Affect	.922
Negative Affect	.884
Positive Affect and Negative Affect Scale (overall scale)	.787

## Sensitivity

To address sensitivity, the range of the Likert-type scale was explored as well as the skewness and kurtosis values of the 20 items. All items presented answers ranging from 1 to 5 and all values of skewness and kurtosis were below 3 and 7, respectively, as evidenced in table 4.

Table 4.

*Positive Affect and Negative Affect Scale: Values regarding minimum and maximum scores, skewness and kurtosis*

Items	Minimum	Maximum	Skewness	Kurtosis
1	1	5	.344	-.551
2	1	5	.422	-.440
3	1	5	.427	-.396
4	1	5	.408	-.697
5	1	5	.121	-.493
6	1	5	.173	-.1.001
7	1	5	.325	-.762
8	1	5	.139	-.923
9	1	5	.401	-.835
10	1	5	.302	-.1.184
11	1	5	-.067	-.951
12	1	5	.227	-.831
13	1	5	.427	-.429
14	1	5	.317	-.738
15	1	5	.118	-.709
16	1	5	.273	-.663
17	1	5	.042	-.766
18	1	5	.349	-.735
19	1	5	.089	-.766
20	1	5	.132	-.630

## Satisfaction with Life Scale

### Construct Related Validity

#### *Confirmatory Factor Analysis*

The satisfaction with life measurement model presented a good fit ( $\chi^2/df=2.734$ ;  $CFI=.999$ ;  $GFI=.996$ ;  $RMSEA=.037$ ;  $p=.800$ ;  $C.I. 90\%=[.014; .061]$ ).

#### *Convergent Validity*

The overall scale present a good AVE score (i.e., equal or above .450).

Table 1.

*Satisfaction with Life Scale: Convergent validity*

Satisfaction with Life Scale	AVE
Overall scale	.673

#### *Discriminant Validity*

No discriminant validity was evaluated as the SwLS is composed of five items, which are not grouped in different subscales.

### Criterion Validity

Divergent criterion validity was shown in the OtLQ and PANAS. SwLS total score was positively and moderately correlated with OtLQ total score ( $r=.255$ ;  $p<.001$ ) and with PANAS total score ( $r=.092$ ;  $p=.001$ ). All the remaining correlations were not significant or inferior in absolute value to the correlations reported above.

### External Validity

The model presents a good adjustment ( $\chi^2/df=1.764$ ;  $CFI=.999$ ;  $GFI=.995$ ;  $RMSEA=.024$ ;  $p=.992$ ;  $C.I. 90\%=[.000; .043]$ ) in both groups (60% and 40% of the total sample).

The unconstrained measurement model does not have a significantly better fit than the model with constrained factorial weights ( $\Delta\chi^2(4)=1.416$ ;  $p=.841$ ), hence confirming external validity of the measurement model. Therefore, there are no significant differences in the factorial measurement weights between both groups (60% of the sample versus 40%) confirming the stability of the subjective well-being's assessment.

## Reliability

The internal consistency of the overall scale was also explored. The scale presented a very good Cronbach's alpha, as shown in table 3.

Table 3.

### *Satisfaction with Life Scale: Reliability*

Scale	Cronbach's Alpha
Satisfaction with Life Scale (overall scale)	.899

## Sensitivity

To address sensitivity, the range of the Likert-type scale was explored as well as the skewness and kurtosis values of the five items. All items presented answers ranging from 1 to 7 and all values of skewness and kurtosis were below 3 and 7, respectively, as evidenced in table 4.

Table 4.

### *Satisfaction with Life Scale: Values regarding minimum and maximum scores, skewness and kurtosis*

Items	Minimum	Maximum	Skewness	Kurtosis
1	1	7	.022	-.674
2	1	7	-.244	-1.050
3	1	7	-.057	-.217
4	1	7	.175	-.807
5	1	7	.032	-.639

## **APPENDIX E**

Portuguese Foundation for Science and Technology's (FCT) grant approval

# PORTUGUESE FOUNDATION FOR SCIENCE AND TECHNOLOGY'S (FCT) GRANT APPROVAL

FCT Fundação para a Ciência e a Tecnologia  
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

## CONTRATO DE BOLSA DE INVESTIGAÇÃO

### ENTRE:

**PRIMEIRO:** Fundação para a Ciência e a Tecnologia, Instituto Público dotado de autonomia administrativa e financeira, com instalações na Avenida D. Carlos I, 126, 1º, em Lisboa, com o nº de identificação de pessoa colectiva 503 904 040, representada neste acto pelo Professor Doutor Francisco Sepúlveda Teixeira, Vogal do Conselho Directivo, adiante designada por "Primeiro Outorgante", e

**SEGUNDO:** SOFIA CAETANO DE ALMEIDA FREIFRAU VON HUMBOLDT DACHRÖDEN, portador do Bilhete de Identidade nº 10553083, residente em Rua Galileu Saúde Correia, Nº18, 7ªA, Pragal, 2800 559, ALMADA, Portugal, adiante designado por "Segundo Outorgante",

Considerando que uma das atribuições da Fundação para a Ciência e a Tecnologia prevista na sua Lei Orgânica é financiar ou co-financiar acções de formação e qualificação de investigadores, nomeadamente através da atribuição de bolsas no país e no estrangeiro e de subsídios de investigação:

É celebrado de boa-fé, e reciprocamente aceite, o presente contrato de bolsa de investigação, ao abrigo do Estatuto do Bolseiro de Investigação, aprovado pela Lei nº 40/2004, de 18 de Agosto, que se rege pelas cláusulas seguintes:

### Cláusula Primeira

O Primeiro Outorgante compromete-se a conceder ao Segundo Outorgante uma Bolsa de investigação, com a referência SFRH/BD/44544/2008 pelo período de doze meses, eventualmente renováveis até ao máximo previsto no Regulamento da Formação Avançada e Qualificação de Recursos Humanos da FCT.

### Cláusula Segunda

O Segundo Outorgante obriga-se a realizar o plano de actividades, conforme descrito no processo de candidatura, a partir da data de início nele referida e em regime de dedicação exclusiva, nos termos do artigo 5º do Estatuto do Bolseiro de Investigação.

### Cláusula Terceira

O Segundo Outorgante realiza os trabalhos em *Instituto Superior de Psicologia Aplicada — Psicologia da Saúde* que funciona como Entidade Acolhedora, tendo como Orientador Científico *Isabel Maria Pereira Leal*.

### Cláusula Quarta

O montante da bolsa é o resultante do estabelecido no Regulamento da Formação Avançada e Qualificação de Recursos Humanos da FCT.

### Cláusula Quinta

O Primeiro Outorgante poderá rescindir o presente contrato nos casos a seguir indicados:

- Incumprimento grave e reiterado dos deveres do Segundo Outorgante por causa que lhe seja imputável, designadamente não atingir os objectivos estabelecidos no plano de actividades aprovado;
- Quando se verificar que o bolseiro prestou falsas declarações.



*[Handwritten signature]*

#### Cláusula Sexta

Sem prejuízo do disposto na cláusula anterior, este contrato cessa automaticamente com a conclusão do plano de actividades, com o decurso do prazo pelo qual a bolsa é atribuída, com a revogação por mútuo acordo ou alteração das circunstâncias e com a constituição de relação jurídico-laboral com a entidade acolhedora.

#### Cláusula Sétima

É subsidiariamente aplicável o Regulamento da Formação Avançada e Qualificação de Recursos Humanos da FCT, do qual o bolseiro declara ter tomado conhecimento.

#### Cláusula Oitava

Convenciona-se, por acordo entre as partes, que em caso de necessidade e para dirimir todas as questões emergentes do presente contrato será competente o Tribunal da Comarca de Lisboa, com expressa renúncia a qualquer outro.

#### Cláusula Nona

Qualquer alteração a introduzir no contrato no decurso da sua execução ou prorrogação do mesmo será objecto de acordo prévio.

#### Cláusula Décima

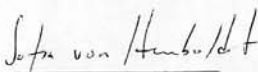
As partes Outorgantes declaram estar de acordo com o clausulado neste contrato, que é feito em duplicado, todas as cópias valendo como originais, ficando um exemplar na posse de cada um dos Outorgantes.

Lisboa, 5 de Agosto de 2009,

O Primeiro Outorgante

O Segundo Outorgante <sup>1 2</sup>

  
Francisco Septúlveda Teixeira

  
(O candidato a bolseiro ou seu procurador)



<sup>1</sup>O titular da bolsa ou o seu procurador.  
<sup>2</sup>Rubricar todas as folhas deste Contrato.

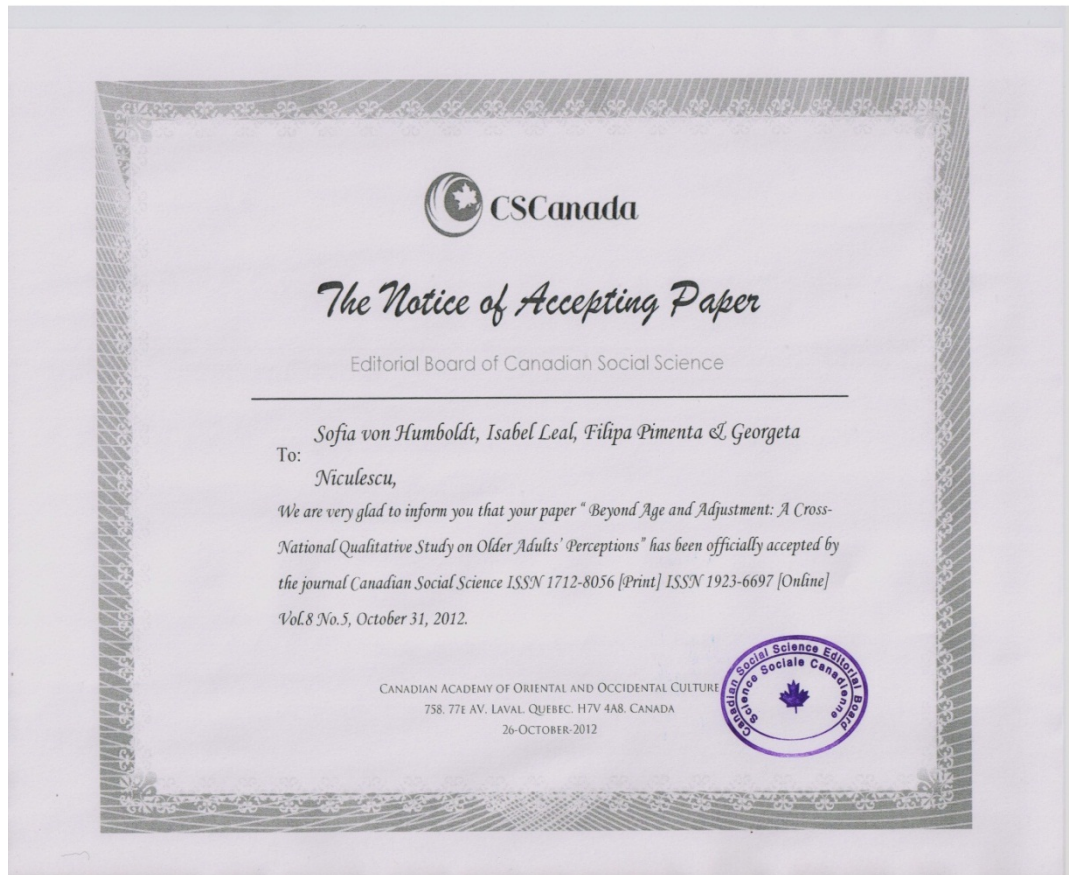


## **APPENDIX F**

Publication's acceptance e-mails

**PUBLICATION ACCEPTANCE EMAILS**

**CANADIAN SOCIAL SCIENCE**



# INTERNATIONAL JOURNAL OF GERONTOLOGY

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## International Journal of Gerontology

May 17, 2013

**Dr. Sofia von Humboldt,**

Research Unit in Psychology and Health, R&D,  
ISPA – Instituto Universitário. Rua Jardim do Tabaco, 34, 1149-041 Lisboa, Portugal.  
Tel: +351. 218811700  
Fax: +351218860954  
E-mail:sofia.humboldt@gmail.com

Dear Dr. Sofia von Humboldt,

We are pleased to inform you that your manuscript "ANALYZING ADJUSTMENT TO AGING AND SUBJECTIVE AGE FROM ANGOLAN AND PORTUGUESE COMMUNITY-DWELLING OLDER ADULTS' PERSPECTIVES" is now accepted for publication in 'International Journal of Gerontology'.

Yours sincerely,

Hung-I Yeh M.D., Ph.D.  
Editor-in-Chief

Chien-Liang Wu M.D.  
Deputy Editor-in-Chief

Yu-Jen Chen M.D., Ph D.  
Deputy Editor-in-Chief

**International Journal of Gerontology**

## JAPANESE PSYCHOLOGICAL RESEARCH

[JPA:057] [R12030] Notification of the Paper to be Published



jpaednew@psych.or.jp

Dear Dr. von Humboldt Sofia, (ID: NEW0001400)



jpaednew@psych.or.jp

to me

Dear Dr. von Humboldt Sofia,  
(ID: NEW0001400)

Thank you very much for your interest in "Japanese Psychological Research".

It is our pleasure to notify the informal acceptance of your paper for the publication after the editorial committee has deliberately discussed. We will advise you later on the volume/issue number where your paper will be published and the submission method of the final manuscript.

-----  
Journal: Japanese Psychological Research

Paper ID: R12030

Title: Does spirituality really matter? : A study on the potential of spirituality to older adult's adjustment to aging

-----  
When you would like to confirm the current review status or the information of your paper, please login the URL below.

URL: [https://jpa.bunken.org/jpa/user\\_logins/en](https://jpa.bunken.org/jpa/user_logins/en)

LoginID: NEW0001400

Password: 9ZdDRjzz

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The Japanese Psychological Association Editorial Office

<http://www.psych.or.jp/english/index.html>

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## **APPENDIX G**

Statistical outputs

# STATISTICAL OUTPUTS

## Paper 1

### Studies Included in the Systematic Literature Review

Study	Country	Language	N	Age	Design	Sample	Sampling	Findings	Quality Rating
Bagheri-Nesami, Rafii, & Oskouie, 2010	Iran	English	19	65+	Qualitative with semi-structured interviews	Community-dwelling older women.	Purposeful and theoretical sample and observation.	The participants used problem-focused (e.g., problem solving, spending leisure time, confrontation) and emotion-focused (e.g., self-control, distancing, praying, avoidance, and escape) strategies for their AtA.	0.75
Bar-Tur, Levy-Shiff, & Burns, 1998	Australia	English	60	63+	Mixed methods design.	Community-dwelling older men residents in Sydney	Convenient sample recruited through various civic and social organizations.	Mental and emotional engagements with significant others were related to well-being and AtA in older men.	0.86
Battini, Maciel, & Finato, 2006	Brazil	Portuguese	1	65	Case study	Community-dwelling older woman	Convenient sample	Psychological variables such as autonomy, self-acceptance, and supportive network and religious beliefs positively related to AtA whilst aging denial, isolation,	0.75

								conformist mystical religious posture and present alienation negatively related to AtA.	
Carlsson , Berg, & Wenesta m, 1991a	Sweden	English	129	85	Qualitative study with in-depth interviews	Communit y-dwelling, non- institutiona lized older adults	Purposeful sample recruited in Gothenbur g	Seven patterns of AtA in late adulthood were found in this study: self- realizing, mature aging, adapting, dependent, resignedly accepting, despairing and withdrawing.	0.80
Carlsson , Berg, & Wenesta m, 1991b	Sweden	English	129	85	Qualitative study with in-depth interviews	Communit y-dwelling older , non- institutiona lized older adults	Purposeful sample recruited in Gothenbur g	Older adults with poorer AtA could be more affected by minor physical impairments, while physical impairments were of a subordinate importance to those who were better adjusted to aging.	0.80
Fridman, Bakerm ans- Kranenb urg, Sagi- Schwart z, &Van Ijzendo orn, 2011	Israel	English	65	60+	Case- control study	Communit y-dwelling elderly female Holocaust survivors.	Convenien t sample recruited from population -wide demograp hic informatio n provided by the population registry administer ed by Israeli Ministry of	The Holocaust survivors showed that they were unable to integrate their past and present challenges when AtA and showed more post- traumatic symptoms, as expressed in dissociative symptomatology , less satisfaction with	0.82

							Interior.	their life, more cognitive impairment and more stress.	
Holahan , Holahan , & Belk, 1984	USA	English	64	65+	Qualitative study with structured interviews.	Community-dwelling older adults	Purposeful sample	Negative life events and daily hassles were related to maladjustment to aging for men whilst hassles were associated with poor AtA for women. An inverse relationship between self-efficacy and maladjustment was also found.	0.80
Holahan , & Holahan , 1987	USA	English	52	65+	Qualitative study with structured interviews	Community-dwelling older adults	Purposeful sample	Frequency of hassles, of negative life events and perceived self-efficacy were related to AtA.	0.80
Krzemie , Monchietti, & Urquijo, 2005	Argentina	Spanish	60	60+	Quasi-experimental study	Community-dwelling older women	Convenient sample recruited from the Universidad de Adultos Mayores (Universidad Nacional de Mar del Plata)	Older adults used active and adaptive strategies (e.g., behavioral, cognitive and self-distraction strategies) for promoting AtA.	0.71
Rickabaugh, & Tomlinson, 1997	USA	English	70	65+	Qualitative , descriptive with semi-structured interviews	Community older residents of Southern California	Convenient sample recruited from two senior center facilities in Southern	Older participants evidenced self-enhancing social and temporal comparison processes in their perceived	0.75

							California	AtA, and the majority of these comparisons were positive (i.e., self-enhancing) in nature. Participants perceived themselves to be adjusting well to the changes in adulthood and demonstrated comparatively superior adjustment to the vicissitudes of aging than their friends, neighbors, and most other older adults.	
Slangen-De kort, Midden, Aarts, & van Wagenberg, 2001	Netherlands	English	199	61+	Quasi-experimental study.	Community-dwelling independent older adults.	Convenient sample recruited from local networks of the Catholic Association of Senior Citizens in the south of the Netherlands.	Response efficacy and self-efficacy influenced adaptive strategies within AtA.	0.79
Sneed & Whitbourne, 2003	USA	English	86	60+	Cross-Sectional	Community-dwelling older adults.	Convenient sample	Reliance on identity assimilation, was found to be higher in older adults, when AtA.	0.91
Thomae, 1992	Germany	English	222	65+	Longitudinal	Community-dwelling older adults	Analytic sample recruited from the Bonn	Older adults' AtA was achieved when a balance between the cognitive and	0.68

							Longitudinal Study on Aging (BOLSA).	motivational systems of the persons was attained.	
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## Country

Country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Developed region	10	76,9	76,9	76,9
	Developing region	3	23,1	23,1	100,0
	Total	13	100,0	100,0	

## Language

Language

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English	11	84,6	84,6	84,6
	Spanish	1	7,7	7,7	92,3
	Portuguese	1	7,7	7,7	100,0
	Total	13	100,0	100,0	

## Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	>60+	3	23,1	23,1	23,1
	>61+	1	7,7	7,7	30,8
	>63+	1	7,7	7,7	38,5
	>65+	6	46,2	46,2	84,6
	>85+	2	15,4	15,4	100,0
	Total	13	100,0	100,0	

## Design

		Design			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Qualitative	6	46,2	46,2	46,2
	Quasi-experimental	2	15,4	15,4	61,5
	Cross-sectional	1	7,7	7,7	69,2
	Mixed methods	1	7,7	7,7	76,9
	Case control	1	7,7	7,7	84,6
	Case study	1	7,7	7,7	92,3
	Longitudinal study	1	7,7	7,7	100,0
	Total	13	100,0	100,0	

## Sample

		Sample			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Community-dwelling	13	100,0	100,0	100,0

## Sampling

		Sampling			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Purposeful	6	46,2	46,2	46,2
	Convenience	7	53,8	53,8	100,0
	Total	13	100,0	100,0	

## Review Classification

		Statistics	
		Final review 1	Final review 2
N	Valid	13	13
	Missing	0	0
Mean		,7862	,7931
Std. Deviation		,06035	,06210

## Quality Rating

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement    Kappa	,810	,121	6,746	,000
N of Valid Cases	13			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## Paper 2

### Studies Included in the Systematic Literature Review

Study	Country	Language	N	Age	Design	Sample	Sampling	Variables Influencing SWB	Variables Influencing Positive Affect	Variables Influencing Negative Affect	Variables Influencing SWL
Cardoso & Ferreira, 2009	Brazil	Portuguese	256	60+	Cross-Sectional	Community-dwelling older adults	Convenient sample recruited from religious communities				Subjective religiosity (+)
Chen & Short, 2008	People's Republic of China	English	7534	80+	Cross-Sectional	Community-dwelling oldest-old adults.	Analytic sample recruited from the Chinese Longitudinal Healthy Longevity Survey (CLHLS)	Co-residence with immediate family (spouse or children) (+); living alone (-)			
Cheng, Lee, Chan, Leung, Lee, 2009	People's Republic of China	English	1005	60+	Cross-Sectional	Community-dwelling older adults in Hong Kong.	Convenient sample recruited in Hong Kong	Diverse and family-focused networks (+); distant family networks (-)			
Cheng, Li, Leung, & Chan,	People's Republic of China	English	1005	60+	Cross-Sectional	Community-dwelling older adults in	Convenient sample recruited in Hong Kong	Social exchanges with close			

2011						Hong Kong.		and peripheral vertical family members (+); close horizontal family members (+)			
Freedman, Stafford, Schwarz, Conrad, & Cornman, 2012	USA	English	751	60 +	Cross-Sectional	Community-dwelling older couples in which one or both spouses had a chronic condition that limited their daily activities	Analytic sample recruited from the 2009 Disability and Use of Time (DUST) supplement to the 2009 Panel Study of Income Dynamics (PSID).	Marital quality (+); volunteering (+); physical activities (+); severity of impairment (not disability perse) (-)			
Guedea, Albuquerque, Tróccoli, Noriega, Seabra, & Guedea, 2006	Brazil	Portuguese	123	60 +	Cross-Sectional	Community-dwelling older adults	Convenient sample recruited from the city of João Pessoa	Satisfaction of the received support (+); direct and re-appraisal coping (+); coping by avoida	Given support (-); coping by avoidance (+)	Pension income (+); perceived and given support (+); direct coping (+); direct positive reappraisal of situations (+)	

									nce (-)		
Jones, Rappoport, Hanks, Lichtenberg, & Telmet, 2003	USA	English	129	65+	Cross-Sectional	Community-dwelling older adults.	Convenient sample recruited from an urban community.		Task-oriented and avoidance-oriented coping (+)		Cognitive functioning (+); emotion-focused coping strategies (-); poor perceived health (-);
Litwin & Shiovitz-Ezra, 2011	USA	English	1462	65+	Cross-Sectional	Community-dwelling older adults.	Analytic sample recruited from the first wave of the National Social Life, Health, and Aging Project (NSHAP).	Social network type (+); lower education (-); lower income (-); functional health disabilities (-)			
Nikitin, Burgermeister, & Freund, 2012	Switzerland	English	69	61+	Cross-Sectional	Community-dwelling independent older adults.	Convenient sample selected from assisted senior residences.	Social approaches (+); age (+); social avoidance motives (-)			
Resende, Ferreira, Naves, Arantes, Ferreira, Roldão, Galante	Brazil	Portuguese	12	68+	Cross-Sectional	Community-dwelling older adults	Convenient sample recruited from theater groups		Social support (+)	Resilience (-)	Resilience (+)

Sousa, & Abreu, 2010											
Robb, Small, & Haley, 2008	USA	English	144	60 +	Cross-Sectional	Community-dwelling older couples.	Analytic sample recruited from the the Charlotte County Healthy Aging Study (CCHAS), a community-based, cross-sectional study	Functional disability in self and in the spouse (-); neuroticism (-); for husbands, extraversion and social support (+)			
Schneider, Driessch, Kruse, Nehen, & Heuft, 2006	USA	English	56	60 +	Cross-Sectional	Patients of an internal hospital.	Convenient sample recruited from an internal hospital	Objective conditions of aging (-); functional impairment (-); individual's subjective evaluation of the present situation (+); sense of coherence. (+)			

Shirai, Iso, Fukuda, Toyoda, Takatorige, & Tataru, 2006	Japan	English	4376	60+	Cross-Sectional	Community-dwelling older adults.	Analytic sample randomly selected from members of the Silver Human Resources Center (SHRC) in Osaka, Japan	Life-changes through work (+); for males, physical condition and socioeconomic factors (e.g., the number of rooms in one's residence or annual income and work for financial benefit) (+); for females, family relations (e.g., having spouse); satisfaction with one's life history			
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								(+)			
Wiesmann & Hannich, 2008	Germany	English	175	60+	Cross-Sectional	Community-dwelling older adults.	Convenient sample of psychophysically active elderly people living in a north-eastern community in Germany	Self-efficacy (+); sense of coherence (+); self-esteem (+); low fatalistic externality (+); low social externality (+); education (+).			

Note: (+) = positive influence; (-) negative influence.

### Country

Country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Developed region	8	57,1	57,1	57,1
	Developing region	6	42,9	42,9	100,0
	Total	14	100,0	100,0	

### Language

Language

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	English	11	78,6	78,6	78,6
	Portuguese	3	21,4	21,4	100,0
	Total	14	100,0	100,0	

## Age

		Age			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	>60+	9	64,3	64,3	64,3
	>61+	1	7,1	7,1	71,4
	>65+	2	14,3	14,3	85,7
	>68+	1	7,1	7,1	92,9
	>80+	1	7,1	7,1	100,0
	Total	14	100,0	100,0	

## Design

		Design			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cross-sectional	14	100,0	100,0	100,0

## Sample

		Sample			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Community-dwelling	13	92,9	92,9	92,9
	Clinical sample	1	7,1	7,1	100,0
	Total	14	100,0	100,0	

## Sampling

		Sampling			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Analytic	5	35,7	35,7	35,7
	Convenience	9	64,3	64,3	100,0
	Total	14	100,0	100,0	

## Review Classification

		Statistics	
		Final review 1	Final review 2
N	Valid	14	14
	Missing	0	0
Mean		,8057	,8100
Std. Deviation		,04767	,04977

## Quality Rating

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement    Kappa	,892	,105	6,138	,000
N of Valid Cases	14			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## Paper 3

### Socio-Demographic Characteristics

#### Nationality

		Nationality			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Portuguese	52	34,4	34,4	34,4
	Romanian	51	33,8	33,8	68,2
	Angolan	48	31,8	31,8	100,0
	Total	151	100,0	100,0	

#### Age

##### Descriptives

##### Age

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Portuguese	52		
Romanian	51	84,59	6,806	,953	82,67	86,50	75	101
Angolan	48	83,04	6,243	,901	81,23	84,85	75	101
Total	151	84,59	6,905	,562	83,48	85,70	75	101

#### Sex

##### Sex \* Nationality Crosstabulation

##### Count

		Nationality			Total
		Portuguese	Romanian	Angolan	
Sex	Male	24	20	19	63
	Female	28	31	29	88
Total		52	51	48	151

## Educational Level

### Education \* Nationality Crosstabulation

Count

		Nationality			Total
		Portuguese	Romanian	Angolan	
Education	Primary school	6	3	9	18
	Middle school	16	10	16	42
	High school	23	20	11	54
	University or higher	7	18	12	37
Total		52	51	48	151

## Marital Status

### Marital Status \* Nationality Crosstabulation

Count

		Nationality			Total
		Portuguese	Romanian	Angolan	
Marital Status	Married or in relationship	38	34	30	102
	Not married or in relationship	7	6	2	15
	Widow	7	11	16	34
Total		52	51	48	151

## Professional Status

### Prof\_stat \* Nationality Crosstabulation

Count

		Nationality			Total
		Portuguese	Romanian	Angolan	
Prof_stat	Active	22	22	21	65
	Inactive	30	29	27	86
Total		52	51	48	151

## Income

### Income \* Nationality Crosstabulation

Count

		Nationality			Total
		Portuguese	Romanian	Angolan	
Income	<20000	27	37	39	103
	>20000	25	14	9	48
Total		52	51	48	151

## Perceived Health

### Perceived health \* Nationality Crosstabulation

Count

		Nationality			Total
		Portuguese	Romanian	Angolan	
Perceived health	Good	29	32	32	93
	Poor	23	19	16	58
Total		52	51	48	151

### Categories Frequency: Portuguese

#### Statistics

		Social	Health	Purpose	Stability	Existential Meaning	Balanced	Old	Youthful	Dissastified
N	Valid	52	52	52	52	52	52	52	52	52
	Missing	0	0	0	0	0	0	0	0	0
Sum		34	43	63	43	76	68	35	28	14

### Categories Frequency: Romanian

#### Statistics

		Social	Health	Purpose	Stability	Existential Meaning	Balanced	Old	Youthful	Dissastified
N	Valid	51	51	51	51	51	51	51	51	51
	Missing	0	0	0	0	0	0	0	0	0
Sum		35	34	27	37	56	34	49	34	27

### Categories Frequency: Angolan

#### Statistics

		Social	Health	Purpose	Stability	Existential Meaning	Balanced	Old	Youthful	Dissastified
N	Valid	48	48	48	48	48	48	48	48	48
	Missing	0	0	0	0	0	0	0	0	0
Sum		40	38	69	20	41	58	10	67	13

## Chi-Square Test for the Cross-National Differences among the Three Groups of Participants

### Indicators of AtA

**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	19,959 <sup>a</sup>	16	,222	,206 <sup>b</sup>	,196	,217			
Likelihood Ratio	20,246	16	,209	,273 <sup>b</sup>	,262	,285			
Fisher's Exact Test	19,131			,211 <sup>b</sup>	,201	,222			
Linear-by-Linear Association	2,957 <sup>c</sup>	1	,086	,078 <sup>b</sup>	,071	,085	,038 <sup>b</sup>	,033	,043
N of Valid Cases	151								

a. 12 cells (44,4%) have expected count less than 5. The minimum expected count is ,32.

b. Based on 10000 sampled tables with starting seed 624387341.

c. The standardized statistic is -1,720.



**Chi-Square Tests**

	Value	Df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	24,514 <sup>a</sup>	8	,002	,001 <sup>b</sup>	,000	,002			
Likelihood Ratio	26,129	8	,001	,001 <sup>b</sup>	,000	,002			
Fisher's Exact Test	24,158			,001 <sup>b</sup>	,000	,002			
Linear-by-Linear Association	1,007 <sup>c</sup>	1	,316	,335 <sup>b</sup>	,323	,347	,174 <sup>b</sup>	,164	,184
N of Valid Cases	151								

a. 6 cells (40,0%) have expected count less than 5. The minimum expected count is ,95.

b. Based on 10000 sampled tables with starting seed 1993510611.

c. The standardized statistic is 1,003.

## Health and Wellness

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	18,010 <sup>a</sup>	10	,055	,036 <sup>b</sup>	,031	,040			
Likelihood Ratio	21,048	10	,021	,031 <sup>b</sup>	,026	,035			
Fisher's Exact Test	18,080			,014 <sup>b</sup>	,011	,017			
Linear-by-Linear Association	,038 <sup>c</sup>	1	,846	,886 <sup>b</sup>	,878	,894	,442 <sup>b</sup>	,429	,455
N of Valid Cases	151								

a. 12 cells (66,7%) have expected count less than 5. The minimum expected count is ,64.

b. Based on 10000 sampled tables with starting seed 92208573.

c. The standardized statistic is -,195.

## Social Support

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	5,510 <sup>a</sup>	4	,239	,240 <sup>b</sup>	,229	,251			
Likelihood Ratio	5,645	4	,227	,240 <sup>b</sup>	,229	,250			
Fisher's Exact Test	5,566			,227 <sup>b</sup>	,216	,237			
Linear-by-Linear Association	1,903 <sup>c</sup>	1	,168	,185 <sup>b</sup>	,175	,195	,094 <sup>b</sup>	,086	,102
N of Valid Cases	151								

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5,09.

b. Based on 10000 sampled tables with starting seed 957002199.

c. The standardized statistic is 1,380.

## Existential Meaning

### Chi-Square Tests

	Value	Df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	27,398 <sup>a</sup>	6	,000	,000 <sup>b</sup>	,000	,001			
Likelihood Ratio	31,218	6	,000	,000 <sup>b</sup>	,000	,000			
Fisher's Exact Test	27,031			,000 <sup>b</sup>	,000	,001			
Linear-by-Linear Association	14,353 <sup>c</sup>	1	,000	,000 <sup>b</sup>	,000	,000	,000 <sup>b</sup>	,000	,000
N of Valid Cases	151								

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is 4,13.

b. Based on 10000 sampled tables with starting seed 726961337.

c. The standardized statistic is -3,789.

## Stability and Accessibility

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	17,599 <sup>a</sup>	4	,001	,001 <sup>b</sup>	,000	,002			
Likelihood Ratio	17,614	4	,001	,002 <sup>b</sup>	,001	,003			
Fisher's Exact Test	17,408			,001 <sup>b</sup>	,000	,001			
Linear-by-Linear Association	14,207 <sup>c</sup>	1	,000	,000 <sup>b</sup>	,000	,001	,000 <sup>b</sup>	,000	,001
N of Valid Cases	151								

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is 1,59.

b. Based on 10000 sampled tables with starting seed 79654295.

c. The standardized statistic is -3,769.

## Subjective Age

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	22,581 <sup>a</sup>	12	,032	,021 <sup>b</sup>	,017	,024			
Likelihood Ratio	23,333	12	,025	,038 <sup>b</sup>	,033	,043			
Fisher's Exact Test	20,320			,026 <sup>b</sup>	,022	,030			
Linear-by-Linear Association	1,275 <sup>c</sup>	1	,259	,254 <sup>b</sup>	,243	,265	,133 <sup>b</sup>	,125	,142
N of Valid Cases	151								

a. 10 cells (47,6%) have expected count less than 5. The minimum expected count is ,64.

b. Based on 10000 sampled tables with starting seed 126474071.

c. The standardized statistic is 1,129.

## Balanced

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	34,812 <sup>a</sup>	4	,000	,000 <sup>b</sup>	,000	,000			
Likelihood Ratio	34,514	4	,000	,000 <sup>b</sup>	,000	,000			
Fisher's Exact Test	33,324			,000 <sup>b</sup>	,000	,000			
Linear-by-Linear Association	,577 <sup>c</sup>	1	,448	,466 <sup>b</sup>	,453	,479	,243 <sup>b</sup>	,232	,254
N of Valid Cases	151								

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 12,40.

b. Based on 10000 sampled tables with starting seed 1487459085.

c. The standardized statistic is -,759.

Old

**Chi-Square Tests**

	Value	df	Asymp . Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	51,298 <sup>a</sup>	4	,000	,000 <sup>b</sup>	,000	,000			
Likelihood Ratio	54,283	4	,000	,000 <sup>b</sup>	,000	,000			
Fisher's Exact Test	49,112			,000 <sup>b</sup>	,000	,000			
Linear-by-Linear Association	15,376 <sup>c</sup>	1	,000	,000 <sup>b</sup>	,000	,000	,000 <sup>b</sup>	,000	
N of Valid Cases	151								

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is 2,23.

b. Based on 10000 sampled tables with starting seed 1507486128.

c. The standardized statistic is -3,921.

## Youthful

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	41,422 <sup>a</sup>	6	,000	,000 <sup>b</sup>	,000	,000			
Likelihood Ratio	46,156	6	,000	,000 <sup>b</sup>	,000	,000			
Fisher's Exact Test	40,144			,000 <sup>b</sup>	,000	,000			
Linear-by-Linear Association	17,453 <sup>c</sup>	1	,000	,000 <sup>b</sup>	,000	,000	,000 <sup>b</sup>	,000	,000
N of Valid Cases	151								

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is 2,54.

b. Based on 10000 sampled tables with starting seed 1131884899.

c. The standardized statistic is 4,178.

## Dissatisfied

### Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	10,639 <sup>a</sup>	4	,031	,022 <sup>b</sup>	,018	,026			
Likelihood Ratio	10,397	4	,034	,035 <sup>b</sup>	,030	,040			
Fisher's Exact Test	10,601			,014 <sup>b</sup>	,011	,017			
Linear-by-Linear Association	,007 <sup>c</sup>	1	,934	1,000 <sup>b</sup>	1,000	1,000	,501 <sup>b</sup>	,488	,513
N of Valid Cases	151								

a. 3 cells (33,3%) have expected count less than 5. The minimum expected count is ,95.

b. Based on 10000 sampled tables with starting seed 1122541128.

c. The standardized statistic is ,083.

## Paper 4

### Socio-Demographic Characteristics

#### Nationality

		Nationality			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Portuguese	51	50,0	50,0	50,0
	Angolans	51	50,0	50,0	100,0
	Total	102	100,0	100,0	

#### Age

##### Descriptives

##### Age

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Portuguese	51		
Angolans	51	80,12	5,105	,715	78,68	81,55	75	92
Total	102	80,50	5,762	,571	79,37	81,63	75	99

#### Mini Mental Status Exam Score

##### Descriptives

##### Mini-mental Score

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Portuguese	51		
Angolans	51	28,0784	1,02854	,15299	27,7711	28,3857	27,00	30,00
Total	102	28,3024	1,06301	,10797	28,1682	28,5965	27,00	30,00

## Sex

**Sex \* Nationality Crosstabulation**

			Nationality		Total
			Portuguese	Angolans	
Sex	Male	Count	23	24	47
		% within Nationality	45,1%	47,1%	46,1%
	Female	Count	28	27	55
		% within Nationality	54,9%	52,9%	53,9%
Total	Count		51	51	102
	% within Nationality		100,0%	100,0%	100,0%

## Educational Level

**Education \* Nationality Crosstabulation**

			Nationality		Total
			Portuguese	Angolans	
Education	Primary	Count	3	6	9
		% within Nationality	5,9%	11,8%	8,8%
	Middle	Count	15	22	37
		% within Nationality	29,4%	43,1%	36,3%
	High	Count	27	11	38
		% within Nationality	52,9%	21,6%	37,3%
	Uni	Count	6	12	18
		% within Nationality	11,8%	23,5%	17,6%
Total	Count		51	51	102
	% within Nationality		100,0%	100,0%	100,0%

## Marital Status

**Marital Status \* Nationality Crosstabulation**

			Nationality		Total
			Portuguese	Angolans	
Marital Status	Married or in relationship	Count	30	30	60
		% within Nationality	58,8%	58,8%	58,8%
	Not married or in relationship	Count	1	0	1
		% within Nationality	2,0%	,0%	1,0%
	Widow	Count	20	21	41
		% within Nationality	39,2%	41,2%	40,2%
Total	Count		51	51	102
	% within Nationality		100,0%	100,0%	100,0%

## Professional Status

**Profes \* Nationality Crosstabulation**

			Nationality		Total
			Portuguese	Angolans	
Profes	Active	Count	23	21	44
		% within Nationality	45,1%	41,2%	43,1%
	Inactive	Count	28	30	58
		% within Nationality	54,9%	58,8%	56,9%
Total	Count		51	51	102
	% within Nationality		100,0%	100,0%	100,0%

## Income

**Income \* Nationality Crosstabulation**

			Nationality		Total
			Portuguese	Angolans	
Income	≤10 000	Count	2	1	3
		% within Nationality	3,9%	2,0%	2,9%
	10 001 - 20 000	Count	14	14	28
		% within Nationality	27,5%	27,5%	27,5%
	20001-37500	Count	23	19	42
		% within Nationality	45,1%	37,3%	41,2%
	37 501 - 70 000	Count	6	15	21
		% within Nationality	11,8%	29,4%	20,6%
	≥ 70 000	Count	6	2	8
		% within Nationality	11,8%	3,9%	7,8%
Total	Count		51	51	102
	% within Nationality		100,0%	100,0%	100,0%

## Perceived Health

**Per\_health \* Nationality Crosstabulation**

			Nationality		Total
			Portuguese	Angolans	
Per_hea lth	Good	Count	32	29	61
		% within Nationality	62,7%	56,9%	59,8%
	Poor	Count	19	22	41
		% within Nationality	37,3%	43,1%	40,2%
Total	Count		51	51	102
	% within Nationality		100,0%	100,0%	100,0%

## Measure of Agreement

### Social Support

#### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement	Kappa	,953	,026	13,618	,000
N of Valid Cases		102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

### Health and Well-Being

#### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement	Kappa	,878	,040	12,543	,000
N of Valid Cases		102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

### Occupation and Leisure

#### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement	Kappa	,924	,041	12,267	,000
N of Valid Cases		102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

### Accomplishment and Future Projects

#### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement	Kappa	,884	,047	11,526	,000
N of Valid Cases		102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## Stability and Safety

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement    Kappa	,928	,034	11,691	,000
N of Valid Cases	102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## Valorization of Time and Age

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement    Kappa	,941	,033	11,575	,000
N of Valid Cases	102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## Existential Meaning and Sense of Limit

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement    Kappa	,922	,037	11,425	,000
N of Valid Cases	102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## In Harmony

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement    Kappa	,946	,030	13,063	,000
N of Valid Cases	102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## Fearless

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement Kappa	,966	,024	13,506	,000
N of Valid Cases	102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## With Concern

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement Kappa	,983	,017	13,344	,000
N of Valid Cases	102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## Youthful

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement Kappa	,876	,041	12,735	,000
N of Valid Cases	102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

## Satisfactory

### Symmetric Measures

	Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Measure of Agreement Kappa	,871	,044	12,168	,000
N of Valid Cases	102			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

### Categories Frequency: Angolan

#### Statistics

		In harmony	Fearless	With Concern	Youthful	Satisfactory
N	Valid	51	51	51	51	51
	Missing	0	0	0	0	0
Sum		51	48	30	57	48

#### Statistics

		Social	Health	Profession	Accomplishment	Stability	Time and Age	Limit and Existence
N	Valid	51	51	51	51	51	51	51
	Missing	0	0	0	0	0	0	0
Sum		57	39	6	6	15	6	3

### Categories Frequency: Portuguese

#### Statistics

		In harmony	Fearless	With Concern	Youthful	Satisfactory
N	Valid	51	51	51	51	51
	Missing	0	0	0	0	0
Sum		48	45	30	39	48

#### Statistics

		Social	Health	Profession	Accomplishment	Stability	Time and Age	Limit and Existence
N	Valid	51	51	51	51	51	51	51
	Missing	0	0	0	0	0	0	0
Sum		42	42	30	30	36	36	42

## Asymptotic Chi-Square Test for Differences

### Asymptotic Chi-Square Test for Differences Concerning AtA and Nationality

Chi-Square Tests									
	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	33,000 <sup>a</sup>	8	,000	,000 <sup>b</sup>	,000	,000			
Likelihood Ratio	41,655	8	,000	,000 <sup>b</sup>	,000	,000			
Fisher's Exact Test	33,691			,000 <sup>b</sup>	,000	,000			
Linear-by-Linear Association	21,931 <sup>c</sup>	1	,000	,000 <sup>b</sup>	,000	,000	,000 <sup>b</sup>	,000	,000
N of Valid Cases	102								

- a. 10 cells (55,6%) have expected count less than 5. The minimum expected count is 1,50.
- b. Based on 10000 sampled tables with starting seed 624387341.
- c. The standardized statistic is -4,683.

### Asymptotic Chi-Square Test for Differences Concerning AtA and Educational Level

Chi-Square Tests									
	Value	df	Asymp. Sig. (2-sided)	Monte Carlo Sig. (2-sided)			Monte Carlo Sig. (1-sided)		
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	73,923 <sup>a</sup>	24	,000	,000 <sup>b</sup>	,000	,000			
Likelihood Ratio	71,348	24	,000	,000 <sup>b</sup>	,000	,000			
Fisher's Exact Test	55,475			,000 <sup>b</sup>	,000	,000			
Linear-by-Linear Association	10,345 <sup>c</sup>	1	,001	,001 <sup>b</sup>	,000	,002	,001 <sup>b</sup>	,000	,001
N of Valid Cases	102								

- a. 30 cells (83,3%) have expected count less than 5. The minimum expected count is ,26.
- b. Based on 10000 sampled tables with starting seed 2000000.
- c. The standardized statistic is 3,216.

### Asymptotic Chi-Square Test for Differences Concerning AtA and Professional Status

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	18,935 <sup>a</sup>	8	,015	,010 <sup>b</sup>	,007	,012			
Likelihood Ratio	20,945	8	,007	,016 <sup>b</sup>	,012	,019			
Fisher's Exact Test	18,408			,010 <sup>b</sup>	,007	,012			
Linear-by-Linear Association	1,777 <sup>c</sup>	1	,182	,194 <sup>b</sup>	,184	,204	,105 <sup>b</sup>	,097	,112
N of Valid Cases	102								

a. 9 cells (50,0%) have expected count less than 5. The minimum expected count is 1,29.

b. Based on 10000 sampled tables with starting seed 957002199.

c. The standardized statistic is -1,333.

### Asymptotic Chi-Square Test for Differences Concerning AtA and Marital Status

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	24,037 <sup>a</sup>	16	,089	,133 <sup>b</sup>	,124	,141			
Likelihood Ratio	26,215	16	,051	,011 <sup>b</sup>	,008	,013			
Fisher's Exact Test	30,783			,010 <sup>b</sup>	,007	,013			
Linear-by-Linear Association	11,106 <sup>c</sup>	1	,001	,001 <sup>b</sup>	,000	,001	,001 <sup>b</sup>	,000	,001
N of Valid Cases	102								

a. 19 cells (70,4%) have expected count less than 5. The minimum expected count is ,03.

b. Based on 10000 sampled tables with starting seed 1487459085.

c. The standardized statistic is 3,333.

### Asymptotic Chi-Square Test for Differences Concerning AtA and Perceived Health

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	19,495 <sup>a</sup>	8	,012	,007 <sup>b</sup>	,005	,010			
Likelihood Ratio	25,754	8	,001	,003 <sup>b</sup>	,002	,004			
Fisher's Exact Test	18,743			,007 <sup>b</sup>	,005	,010			
Linear-by-Linear Association	10,509 <sup>c</sup>	1	,001	,001 <sup>b</sup>	,000	,002	,000 <sup>b</sup>	,000	,001
N of Valid Cases	102								

### Asymptotic Chi-Square Test for Differences Concerning SA and Nationality

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	20,286 <sup>a</sup>	5	,001	,001 <sup>b</sup>	,000	,001			
Likelihood Ratio	27,263	5	,000	,000 <sup>b</sup>	,000	,000			
Fisher's Exact Test	22,062			,000 <sup>b</sup>	,000	,001			
Linear-by-Linear Association	2,217 <sup>c</sup>	1	,137	,155 <sup>b</sup>	,146	,164	,076 <sup>b</sup>	,069	,083
N of Valid Cases	102								

a. 4 cells (33,3%) have expected count less than 5. The minimum expected count is 3,00.

b. Based on 10000 sampled tables with starting seed 126474071.

c. The standardized statistic is 1,489.

### Asymptotic Chi-Square Test for Differences Concerning SA and Educational Level

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	36,135 <sup>a</sup>	15	,002	,002 <sup>b</sup>	,001	,003			
Likelihood Ratio	33,820	15	,004	,008 <sup>b</sup>	,006	,010			
Fisher's Exact Test	27,189			,008 <sup>b</sup>	,006	,010			
Linear-by-Linear Association	,736 <sup>c</sup>	1	,391	,406 <sup>b</sup>	,393	,418	,206 <sup>b</sup>	,195	,216
N of Valid Cases	102								

a. 19 cells (79,2%) have expected count less than 5. The minimum expected count is ,53.

b. Based on 10000 sampled tables with starting seed 475497203.

c. The standardized statistic is ,858.

### Asymptotic Chi-Square Test for Differences Concerning SA and Professional Status

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	17,714 <sup>a</sup>	5	,003	,002 <sup>b</sup>	,001	,003			
Likelihood Ratio	20,365	5	,001	,002 <sup>b</sup>	,001	,003			
Fisher's Exact Test	17,564			,003 <sup>b</sup>	,001	,004			
Linear-by-Linear Association	8,643 <sup>c</sup>	1	,003	,003 <sup>b</sup>	,002	,005	,002 <sup>b</sup>	,001	,003
N of Valid Cases	102								

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is 2,59.

b. Based on 10000 sampled tables with starting seed 79654295.

c. The standardized statistic is -2,940.

### Asymptotic Chi-Square Test for differences concerning SA and marital status

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	20,426 <sup>a</sup>	10	,025	,044 <sup>b</sup>	,039	,049			
Likelihood Ratio	19,950	10	,030	,011 <sup>b</sup>	,008	,014			
Fisher's Exact Test	21,842			,007 <sup>b</sup>	,005	,009			
Linear-by-Linear Association	3,798 <sup>c</sup>	1	,051	,055 <sup>b</sup>	,049	,061	,030 <sup>b</sup>	,026	,034
N of Valid Cases	102								

a. 11 cells (61,1%) have expected count less than 5. The minimum expected count is ,06.

b. Based on 10000 sampled tables with starting seed 726961337.

c. The standardized statistic is 1,949.

### Asymptotic Chi-Square Test for Differences Concerning SA and Perceived Health

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Monte Carlo Sig. (2-sided)		Monte Carlo Sig. (1-sided)			
				Sig.	99% Confidence Interval		Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound		Lower Bound	Upper Bound
Pearson Chi-Square	7,527 <sup>a</sup>	5	,184	,188 <sup>b</sup>	,178	,198			
Likelihood Ratio	7,596	5	,180	,214 <sup>b</sup>	,203	,225			
Fisher's Exact Test	7,203			,199 <sup>b</sup>	,188	,209			
Linear-by-Linear Association	,479 <sup>c</sup>	1	,489	,539 <sup>b</sup>	,526	,552	,270 <sup>b</sup>	,259	,282
N of Valid Cases	102								

a. 5 cells (41,7%) have expected count less than 5. The minimum expected count is 2,41.

b. Based on 10000 sampled tables with starting seed 1993510611.

c. The standardized statistic is -,692.

## Multiple Correspondence Analysis

### Multiple Correspondence Analysis: Angolan Participants

#### Model Summary

Dimension	Cronbach's Alpha	Variance Accounted For		
		Total (Eigenvalue)	Inertia	% of Variance
1	,790	3,629	,302	30,244
2	,733	3,046	,254	25,381
3	,564	2,070	,173	17,253
Total		8,745	,729	
Mean	,717 <sup>a</sup>	2,915	,243	24,293

a. Mean Cronbach's Alpha is based on the mean Eigenvalue.

#### Discrimination Measures

	Dimension			Mean
	1	2	3	
In harmony	,140	,507	,175	,274
Fearless	,907	,003	,004	,305
With concern	,133	,090	,666	,296
Youthful	,392	,472	,010	,292
Satisfactory	,067	,491	,176	,244
Social Support	,516	,330	,000	,282
Health and Well-Being	,062	,141	,587	,264
Occupation and Leisure	,016	,008	,217	,080
Accomplishment and Future Projects	,016	,008	,214	,079
Stability and Safety	,319	,429	,002	,250
Valorization of Time and Age	,750	,083	,004	,279
Existential meaning and Sense of Limit	,313	,483	,015	,270
Active Total	3,629	3,046	2,070	2,915
% of Variance	30,244	25,381	17,253	24,293

## Multiple Correspondence Analysis: Portuguese Participants

### Model Summary

Dimension	Cronbach's Alpha	Variance Accounted For		
		Total (Eigenvalue)	Inertia	% of Variance
1	,851	4,542	,378	37,849
2	,823	4,065	,339	33,876
3	,606	2,249	,187	18,744
Total		10,856	,905	
Mean	,789 <sup>a</sup>	3,619	,302	30,157

a. Mean Cronbach's Alpha is based on the mean Eigenvalue.

### Discrimination Measures

	Dimension			Mean
	1	2	3	
In harmony	,642	,155	,002	,266
Fearless	,818	,082	,001	,300
With concern	,002	,417	,447	,289
Youthful	,143	,669	,170	,327
Satisfactory	,256	,408	,220	,295
Social Support	,760	,057	,013	,277
Health and Well-Being	,804	,096	,063	,321
Occupation and Leisure	,000	,437	,429	,289
Accomplishment and Future Projects	,004	,325	,629	,319
Stability and Safety	,804	,096	,063	,321
Valorization of Time and Age	,143	,669	,170	,327
Existential meaning and Sense of Limit	,166	,654	,041	,287
Active Total	4,542	4,065	2,249	3,619
% of Variance	37,849	33,876	18,744	30,157

## Paper 5

### Socio-Demographic Characteristics

#### Nationality

		Nationality			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Portuguese	77	50,0	50,0	50,0
	German	77	50,0	50,0	100,0
	Total	154	100,0	100,0	

#### Age

##### Descriptives

Age

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Portuguese	77		
German	77	86,96	5,757	,656	85,65	88,27	75	103
Total	154	86,56	6,979	,562	85,45	87,67	75	103

#### Sex

##### Sex \* Nationality Crosstabulation

Count

		Nationality		Total
		Portuguese	German	
Sex	Male	32	27	59
	Female	45	50	95
Total		77	77	154

## Educational level

### Education \* Nationality Crosstabulation

Count

		Nationality		Total
		Portuguese	German	
Education	Primary school	15	14	29
	Middle school	21	26	47
	High school	25	22	47
	University or higher	16	15	31
Total		77	77	154

## Marital Status

### Marital Status \* Nationality Crosstabulation

Count

		Nationality		Total
		Portuguese	German	
Marital Status	Not married or in relationship	12	13	25
	Married or in relationship	43	51	94
	Widow	22	13	35
Total		77	77	154

## Professional Status

### Prof\_stat \* Nationality Crosstabulation

Count

		Nationality		Total
		Portuguese	German	
Prof_stat	Active	25	33	59
	Inactive	52	44	95
Total		77	77	154

## Income

### Income \* Nationality Crosstabulation

Count

		Nationality		Total
		Portuguese	German	
Income	≤10000eur	18	17	35
	10001-20000 eur	37	30	67
	20001-37500 eur	12	17	29
	37501-70000 eur	4	4	8
	≥70000 eur	6	9	15
Total		77	77	154

## Perceived Health

### Perceived health \* Nationality Crosstabulation

Count

		Nationality		Total
		Portuguese	German	
Perceived health	Good	48	47	95
	Poor	29	30	59
Total		77	77	154

## Measure of Agreement

## Occupation

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,959	,018	24,924	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 1519014429.

## Health and Autonomy

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,917	,025	23,517	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on 10000 sampled tables with starting seed 826030962.

## Spirituality

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,954	,018	29,391	,000	. <sup>c</sup>	.	.
N of Valid Cases		154						

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on 10000 sampled tables with starting seed 826030962.

## Social Embeddedness

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,973	,015	22,332	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on 10000 sampled tables with starting seed 826030962.

## Economic Situation

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,963	,018	21,777	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 826030962.

## Altruism

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,907	,049	12,052	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 53834038.

## Spiritual Community

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,958	,040	12,282	,000	. <sup>c</sup>	.	.
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 26584118.

## Spiritual Beliefs

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,859	,034	13,997	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 1678759390.

## Spiritual Activities

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,891	,029	18,593	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 1905543110.

## Existential Meaning

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,933	,026	14,373	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 1143207290.

## Sense of Limit

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,948	,030	13,166	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 424620234.

## Valorization of Age

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,807	,093	12,066	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 1458335693.

## Valorization of Time

### Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	Monte Carlo Sig.		
						Sig.	99% Confidence Interval	
							Lower Bound	Upper Bound
Measure of Agreement	Kappa	,918	,058	14,441	,000	,000 <sup>c</sup>	,000	,000
N of Valid Cases		154						

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on 10000 sampled tables with starting seed 946042643.

## Correlations

### Nationality and Spirituality

#### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,292	,285	,274 <sup>a</sup>	,263	,286
	Cramer's V	,292	,285	,274 <sup>a</sup>	,263	,286
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 475497203.

### Age and Spirituality

#### Correlations

		Age	Total Spirituality
Age	Pearson Correlation	1	-,132
	Sig. (2-tailed)		,102
	N	154	154
Total Spirituality	Pearson Correlation	-,132	1
	Sig. (2-tailed)	,102	
	N	154	154

### Sex and Spirituality

#### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,231	,691	,738 <sup>a</sup>	,726	,749
	Cramer's V	,231	,691	,738 <sup>a</sup>	,726	,749
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 113410539.

## Sex and Altruism

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,120	,332	,388 <sup>a</sup>	,376	,401
	Cramer's V	,120	,332	,388 <sup>a</sup>	,376	,401
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 213798720.

## Sex and Spiritual Community

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,126	,297	,340 <sup>a</sup>	,328	,352
	Cramer's V	,126	,297	,340 <sup>a</sup>	,328	,352
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 213798720.

## Sex and Spiritual Beliefs

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,263	,031	,020 <sup>a</sup>	,016	,024
	Cramer's V	,263	,031	,020 <sup>a</sup>	,016	,024
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 213798720.

## Sex and Spiritual Activities

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,178	,300	,310 <sup>a</sup>	,298	,322
	Cramer's V	,178	,300	,310 <sup>a</sup>	,298	,322
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 213798720.

## Sex and Existential Meaning

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,114	,366	,363 <sup>a</sup>	,351	,375
	Cramer's V	,114	,366	,363 <sup>a</sup>	,351	,375
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 213798720.

## Sex and Sense of Limit

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,082	,594	,695 <sup>a</sup>	,683	,706
	Cramer's V	,082	,594	,695 <sup>a</sup>	,683	,706
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 213798720.

## Sex and Valorization of Age

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,058	,774	,873 <sup>a</sup>	,865	,882
	Cramer's V	,058	,774	,873 <sup>a</sup>	,865	,882
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 213798720.

## Sex and Valorization of Time

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,139	,228	,193 <sup>a</sup>	,182	,203
	Cramer's V	,139	,228	,193 <sup>a</sup>	,182	,203
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 213798720.

## Nationality and Altruism

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,043	,870	,888 <sup>a</sup>	,880	,897
	Cramer's V	,043	,870	,888 <sup>a</sup>	,880	,897
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 619230322.

## Nationality and Spiritual Community

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,081	,604	1,000 <sup>a</sup>	1,000	1,000
	Cramer's V	,081	,604	1,000 <sup>a</sup>	1,000	1,000
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 619230322.

## Nationality and Spiritual Beliefs

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,133	,607	,669 <sup>a</sup>	,657	,681
	Cramer's V	,133	,607	,669 <sup>a</sup>	,657	,681
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 619230322.

## Nationality and Spiritual Activities

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,365	,000	,000 <sup>a</sup>	,000	,001
	Cramer's V	,365	,000	,000 <sup>a</sup>	,000	,001
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 619230322.

## Nationality and Existential Meaning

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,086	,562	,598 <sup>a</sup>	,585	,610
	Cramer's V	,086	,562	,598 <sup>a</sup>	,585	,610
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 619230322.

## Nationality and Sense of Limit

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,141	,215	,305 <sup>a</sup>	,293	,316
	Cramer's V	,141	,215	,305 <sup>a</sup>	,293	,316
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 619230322.

## Nationality and Valorization of Age

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,047	,844	1,000 <sup>a</sup>	1,000	1,000
	Cramer's V	,047	,844	1,000 <sup>a</sup>	1,000	1,000
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 619230322.

## Nationality and Valorization of Time

### Symmetric Measures

		Value	Approx. Sig.	Monte Carlo Sig.		
				Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by Nominal	Phi	,047	,844	1,000 <sup>a</sup>	1,000	1,000
	Cramer's V	,047	,844	1,000 <sup>a</sup>	1,000	1,000
N of Valid Cases		154				

a. Based on 10000 sampled tables with starting seed 619230322.

### Age and Spirituality Categories

		Age	Altruism	Spiritual community	Spiritual beliefs	Spiritual activities	Existential meaning	Sense of limit	Valorization of age	Valorization of time
Age	Pearson Correlation	1	.047	.070	-.066	-.143	-.084	-.166	-.008	-.087
	Sig. (2-tailed)		.561	.388	.419	.076	.300	.040	.924	.286
	N	154	154	154	154	154	154	154	154	154

### Category Frequencies: German

#### Indicators of AtA

##### Statistics

		Accomplishment, occupation and leisure	Health and Body	Spirituality	Interpersonal attachment and intimacy	Stability and Safety
N	Valid	77	77	77	77	77
	Missing	0	0	0	0	0
	Sum	115	202	417	130	93

#### Spirituality

##### Statistics

		Altruism	Spiritual community	Spiritual beliefs	Spiritual activities	Existential Meaning	Sense of Limit	Valorization of Age	Valorization of Time
N	Valid	77	77	77	77	77	77	77	77
	Missing	0	0	0	0	0	0	0	0
	Sum	11	8	62	68	56	61	75	76

### Category Frequencies: Portuguese

#### Indicators of AtA

##### Statistics

		Occupation	Health and autonomy	Spirituality	Social Embeddedness	Economic situation
N	Valid	77	77	77	77	77
	Missing	0	0	0	0	0
	Sum	160	221	428	84	108

## Spirituality

### Statistics

		Altruism	Spiritual community	Spiritual beliefs	Spiritual activities	Existential Meaning	Sense of Limit	Valorization of Age	Valorization of Time
N	Valid	77	77	77	77	77	77	77	77
	Missing	0	0	0	0	0	0	0	0
Sum		9	6	51	101	49	64	74	74

## Multiple Correspondence Analysis

### Multiple Correspondence Analysis: Portuguese Participants

#### Model Summary

Dimension	Cronbach's Alpha	Variance Accounted For		
		Total (Eigenvalue)	Inertia	% of Variance
1	,780	3,150	,394	39,381
2	,616	2,168	,271	27,095
3	,496	1,766	,221	22,077
Total		7,084	,886	
Mean	,659 <sup>a</sup>	2,361	,295	29,517

a. Mean Cronbach's Alpha is based on the mean Eigenvalue.

#### Discrimination Measures

	Dimension			Mean
	1	2	3	
Spirituality:Altruism	,063	,013	,841	,305
Spirituality:Spiritual community	,116	,040	,762	,306
Spirituality:Spiritual beliefs	,790	,074	,053	,306
Spirituality:Spiritual activities	,824	,095	,046	,322
Spirituality:Existential Meaning	,791	,106	,050	,316
Spirituality:Sense of limit	,005	,545	,003	,185
Spirituality: Valorization of Age	,281	,647	,005	,311
Spirituality: valorization of Time	,281	,647	,005	,311
Active Total	3,150	2,168	1,766	2,361
% of Variance	39,381	27,095	22,077	29,517

## Paper 6

### Socio-Demographic Characteristics

#### Nationality

		Nationality			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Angolan	285	22,1	22,1	22,1
	Brazilian	314	24,3	24,3	46,4
	Portuguese	351	27,2	27,2	73,6
	English	341	26,4	26,4	100,0
	Total	1291	100,0	100,0	

#### Age

##### Descriptives

##### Age

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Angolan	285		
Brazilian	314	84,28	6,408	,362	83,57	84,99	75	100
Portuguese	351	83,61	6,933	,370	82,88	84,33	75	101
English	341	84,03	6,586	,357	83,32	84,73	75	102
Total	1291	83,85	6,677	,186	83,49	84,21	75	102

#### Sex

##### Sex \* Nationality Crosstabulation

##### Count

		Nationality				Total
		Angolan	Brazilian	Portuguese	English	
Sex	Female	162	201	197	191	751
	Male	123	113	154	150	540
	Total	285	314	351	341	1291

## Education

Education \* Nationality Crosstabulation

Count

		Nationality				Total
		Angolan	Brazilian	Portuguese	English	
Education	< High school	134	147	147	139	567
	≥High school	151	167	204	202	724
Total		285	314	351	341	1291

## Marital Status

Marital status \* Nationality Crosstabulation

Count

		Nationality				Total
		Angolan	Brazilian	Portuguese	English	
Marital status	Not married or in a relationship	113	138	153	162	566
	Married or in the relationship	172	176	198	179	725
Total		285	314	351	341	1291

## Professional status

Professional Status \* Nationality Crosstabulation

Count

		Nationality				Total
		Angolan	Brazilian	Portuguese	English	
Professional Status	Inactive	147	149	179	195	670
	Active	138	165	172	146	621
Total		285	314	351	341	1291

## Income

Income \* Nationality Crosstabulation

Count

		Nationality				Total
		Angolan	Brazilian	Portuguese	English	
Income	≤10,000 €	142	172	176	150	640
	>10,000€	143	142	175	191	651
Total		285	314	351	341	1291





## Cronbach's Alpha

### AtAS Total Score

#### Reliability Statistics

Cronbach's Alpha	N of Items
,891	22

### Sense of Purpose and Ambitions

#### Reliability Statistics

Cronbach's Alpha	N of Items
,874	4

### Zest and Spirituality

#### Reliability Statistics

Cronbach's Alpha	N of Items
,927	4

### Body and Health

#### Reliability Statistics

Cronbach's Alpha	N of Items
,904	4

### Aging in Place and Stability

#### Reliability Statistics

Cronbach's Alpha	N of Items
,862	4

### Social Support

#### Reliability Statistics

Cronbach's Alpha	N of Items
,932	4

## Construct Related Validity

### Confirmatory Factor Analysis

#### *Kaiser-Meyer-Olkin Measure of Sampling Adequacy*

##### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,867
Bartlett's Test of Sphericity    Approx. Chi-Square	18654,797
Df	231
Sig.	,000

#### *Variance Explained by Factor (%) and Eigenvalues*

##### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared			Rotation Sums of Squared		
	Eigenvalues			Loadings			Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7,162	32,555	32,555	7,162	32,555	32,555	4,126	18,755	18,755
2	3,426	15,573	48,128	3,426	15,573	48,128	3,688	16,766	35,520
3	2,263	10,287	58,415	2,263	10,287	58,415	3,256	14,802	50,323
4	1,996	9,075	67,490	1,996	9,075	67,490	2,965	13,478	63,801
5	1,789	8,134	75,623	1,789	8,134	75,623	2,601	11,823	75,623
6	,722	3,283	78,906						
7	,610	2,771	81,677						
8	,546	2,481	84,158						
9	,537	2,439	86,597						
10	,496	2,253	88,850						
11	,460	2,090	90,940						
12	,410	1,864	92,804						
13	,333	1,514	94,318						
14	,320	1,455	95,773						
15	,283	1,286	97,059						
16	,268	1,220	98,278						
17	,168	,764	99,043						
18	,127	,577	99,620						
19	,030	,137	99,757						
20	,029	,130	99,887						
21	,020	,089	99,976						
22	,005	,024	100,000						

Extraction Method: Principal Component Analysis.

*Range of Items Loadings*

**Rotated Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
SPA1	,079	,166	,159	,914	,049
SPA2	,076	,050	,048	,657	,166
SPA3	,069	,134	,137	,873	,088
SPA4	,046	,162	,151	,855	,014
SS1	,085	,178	,094	,139	,930
SS2	,003	,132	,087	,055	,860
SS3	,088	,199	,087	,142	,927
ZS1	,949	,098	,189	,054	,032
ZS2	,948	,084	,188	,055	,030
ZS3	,721	,046	,175	,054	,069
ZS4	,943	,097	,196	,055	,028
ZS5	,804	,074	,188	,101	,043
BH1	,094	,915	,184	,135	,125
BH2	,046	,746	,032	,047	,119
BH3	,104	,711	,095	,126	,111
BH4	,096	,913	,182	,139	,127
BH5	,041	,835	,034	,111	,078
APS1	,289	,131	,816	,174	,124
APS2	,124	,068	,746	,098	,046
APS3	,118	,052	,700	,043	,041
APS4	,255	,172	,807	,146	,036
APS5	,170	,091	,738	,101	,078

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

## Convergent and Discriminant Validity

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate	L2	e
ea1_SPA	<---	SPA	0.977	0.954529	0.045471
ea2_SPA	<---	SPA	0.592	0.350464	0.649536
ea3_SPA	<---	SPA	0.859	0.737881	0.262119
ea4_SPA	<---	SPA	0.832	0.692224	0.307776
ea1_SS	<---	SS	0.985	0.970225	0.029775
ea2_SS	<---	SS	0.761	0.579121	0.420879
ea3_SS	<---	SS	0.985	0.970225	0.029775
ea1_ZS	<---	ZS	0.985	0.970225	0.029775
ea2_ZS	<---	ZS	0.988	0.976144	0.023856
ea3_ZS	<---	ZS	0.597	0.356409	0.643591
ea4_ZS	<---	ZS	0.981	0.962361	0.037639
ea5_ZS	<---	ZS	0.758	0.574564	0.425436
ea1_BH	<---	BH	0.998	0.996004	0.003996
ea2_BH	<---	BH	0.653	0.426409	0.573591
ea3_BH	<---	BH	0.637	0.405769	0.594231
ea4_BH	<---	BH	0.994	0.988036	0.011964
ea5_BH	<---	BH	0.774	0.599076	0.400924
ea1_APS	<---	APS	0.931	0.866761	0.133239
ea2_APS	<---	APS	0.655	0.429025	0.570975
ea3_APS	<---	APS	0.6	0.36	0.64
ea4_APS	<---	APS	0.873	0.762129	0.237871
ea5_APS	<---	APS	0.702	0.492804	0.507196

## AVE Scores and Composite Reliability

Factor	VEM	Composite Reliability	$r^2$				
		CR	SPA	SS	ZS	BH	APS
SPA	0.684	0.894					
SS	0.84	0.939	0.063				
ZS	0.768	0.941	0.194	0.031			
BH	0.683	0.912	0.068	0.116	0.039		
APS	0.582	0.871	0.116	0.077	0.194	0.112	
Total		0.980					

*Correlations*

**Correlations: (Group number 1 - Default model)**

			Estimate
BH	<-->	APS	0.335
ZS	<-->	APS	0.441
SS	<-->	APS	0.277
SPA	<-->	APS	0.34
ZS	<-->	BH	0.197
SS	<-->	BH	0.34
SPA	<-->	BH	0.26
SS	<-->	ZS	0.177
SPA	<-->	ZS	0.164
SPA	<-->	SS	0.25

**Content Validity**

**Statistics**

		SPA 1	SPA 2	SPA 3	SPA 3	SS1	SS2	SS3	ZS1	ZS2	ZS3	ZS4
N	Valid	7	7	7	7	7	7	7	7	7	7	7
	Missing	0	0	0	0	0	0	0	0	0	0	0
	Mean	1.86	1.86	1.86	2.00	1.86	1.71	1.86	1.86	1.86	2.00	1.86
	Std. Deviation	.378	.378	.378	.000	.378	.488	.378	.378	.378	.000	.378

**Statistics**

		ZS5	BH1	BH2	BH3	BH4	BH5	APS 1	APS 2	APS 3	APS 4	APS 5
N	Valid	7	7	7	7	7	7	7	7	7	7	7
	Missing	0	0	0	0	0	0	0	0	0	0	0
	Mean	2.00	2.00	2.00	1.86	1.86	1.86	1.86	1.86	2.00	2.00	2.00
	Std. Deviation	.000	.000	.000	.378	.378	.378	.378	.378	.000	.000	.000

## External Validity

*Confirmatory Factor Analysis (40% sample)*

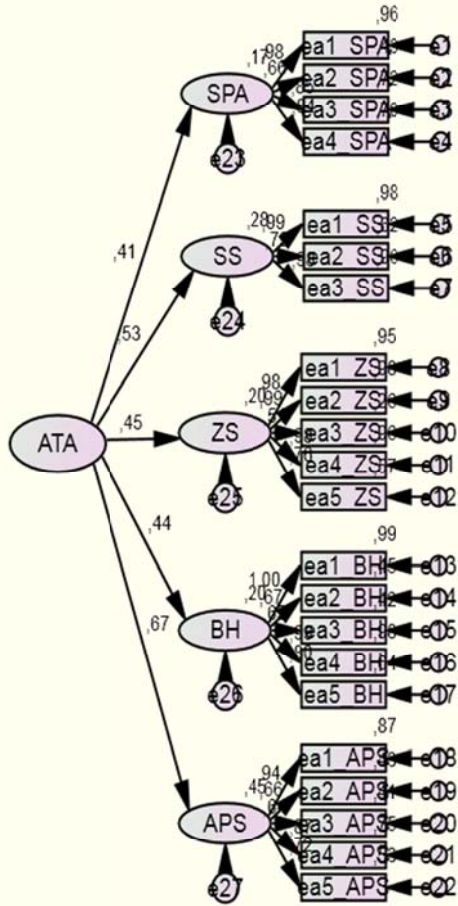
### Nested Model Comparisons

Assuming model Unconstrained to be correct:

Model	D F	CMIN	P	NFI Delta- 1	IFI Delta- 2	RFI rho-1	TLI rho 2
Measurement weights	17	26,310	,069	,001	,001	,000	,000
Structural weights	21	33,526	,041	,001	,001	,000	,000
Structural covariances	22	35,353	,036	,001	,001	,000	,000
Structural residuals	27	43,813	,022	,001	,001	,000	,000
Measurement residuals	49	315,784	,000	,010	,011	,008	,008

### CFA of ATAS

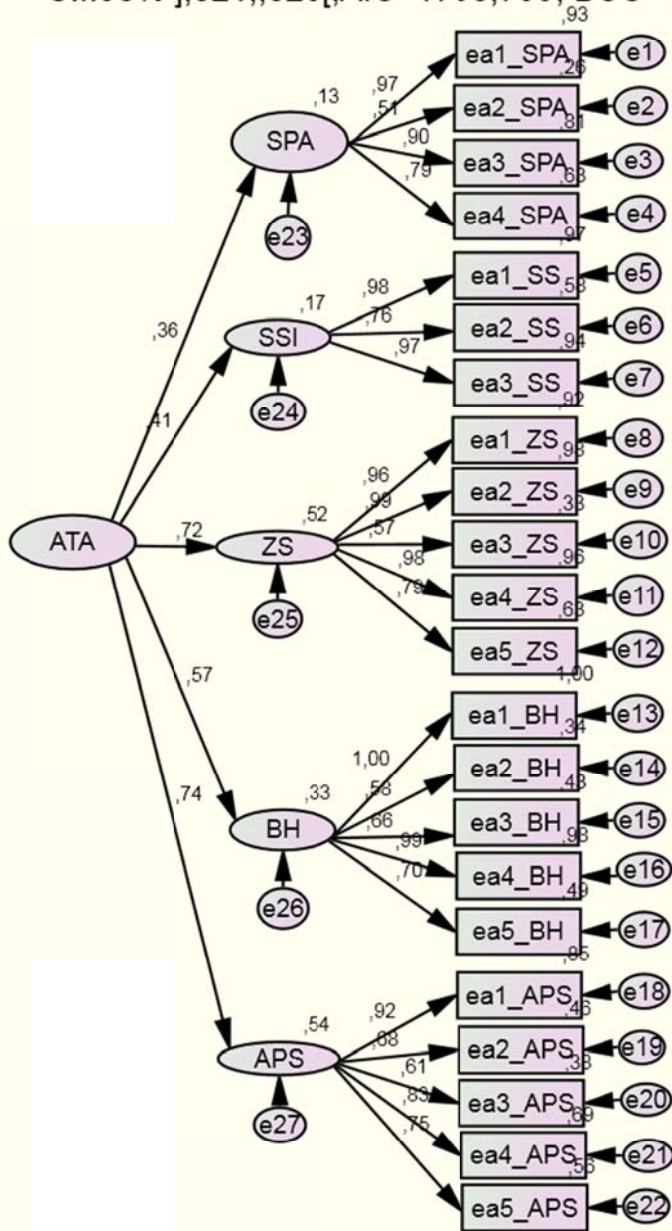
21,193; df=204; p=,000; X2/df=1,574; CFI=,990; PCFI=,874;GFI=,946; PGFI=,972; RMSEA=,034; P(rmsea<0.05)=1,000  
 I.C.90% ],027,,041[;AIC=419,193; BCC=423,879; MECVI=,841



## Multi-group Analysis for the Four Nationalities (Angolan, Brazilian, English and Portuguese)

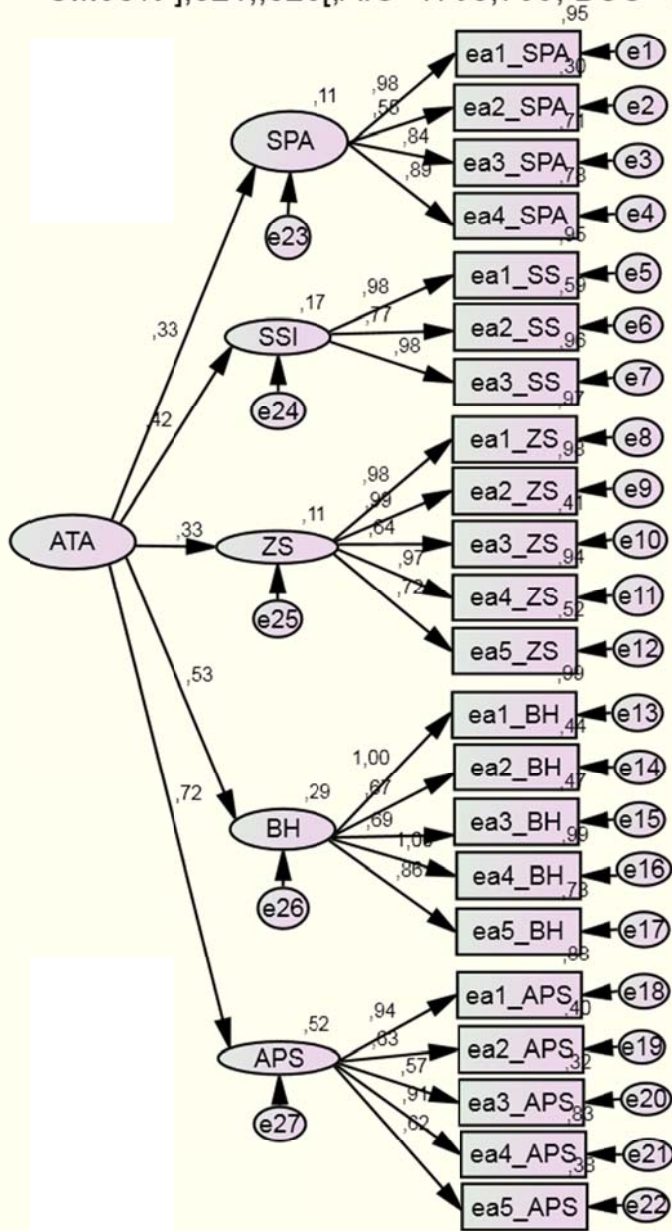
Angolan

CFA of ATAS  
 $\chi^2=1406,799$ ;  $df=820$ ;  $p=,000$ ;  $\chi^2/df=1,716$ ;  $CFI=,981$ ;  $PCFI=,871$ ;  $GFI=,913$ ;  
 $PGFI=,739$ ;  $NFI=,956$ ;  $RMSEA=,024$ ;  $P(rmsea<0.05)=1,000$   
 $C.I.90\% ] ,021, ,026[$ ;  $AIC=1790,799$ ;  $BCC=1820,599$ ;  $MECVI=1,415$



CFA of ATAS

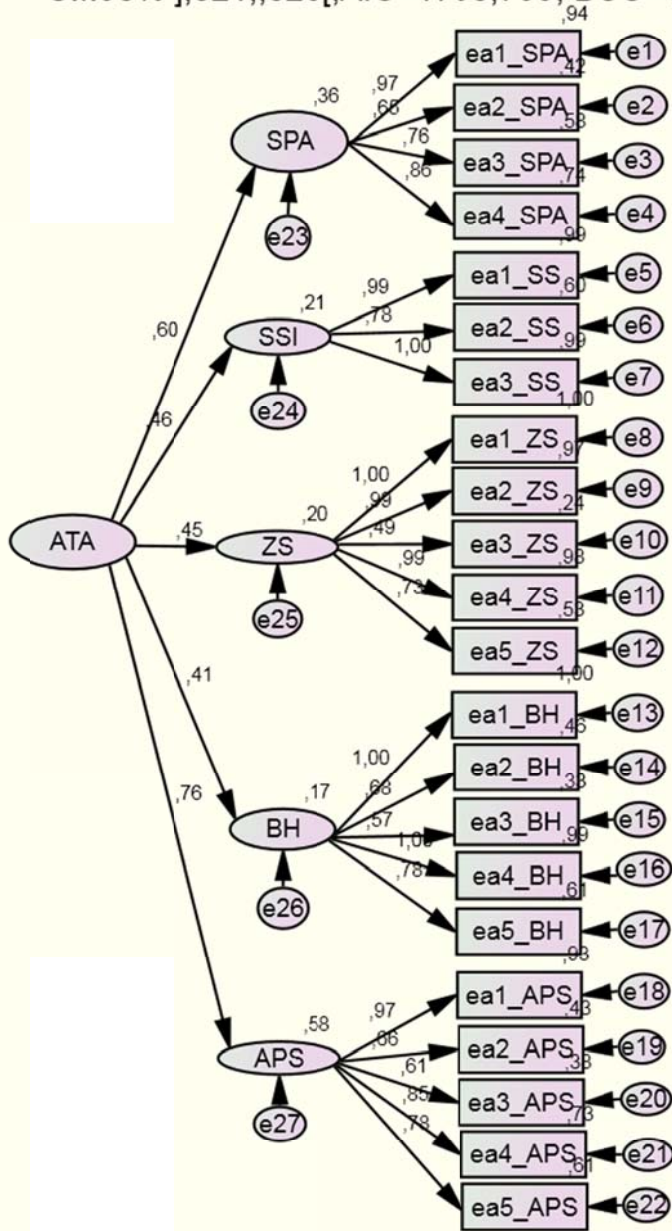
X<sup>2</sup>=1406,799; df=820; p=,000; X<sup>2</sup>/df=1,716; CFI=,981; PCFI=,871; GFI=,913;  
 PGFI=,739; NFI=,956; RMSEA=,024; P(rmsea<0.05)=1,000  
 C.I.90% ],021,,026[; AIC=1790,799; BCC=1820,599; MECVI=1,415



English

CFA of ATAS

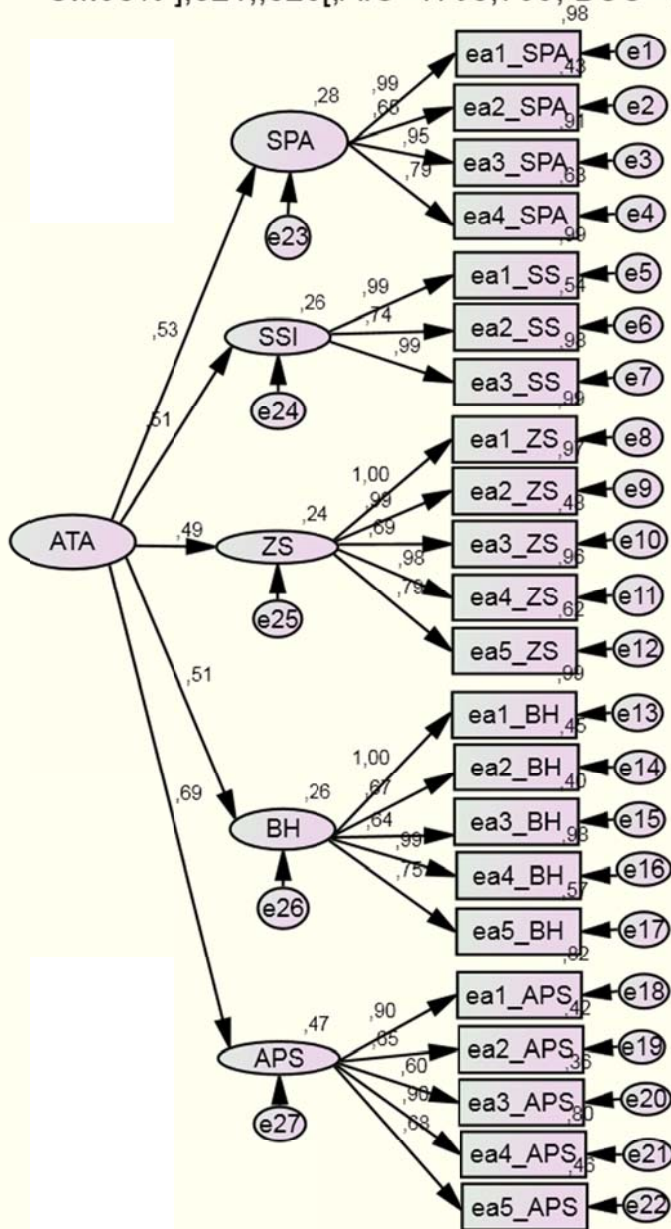
X<sup>2</sup>=1406,799; df=820; p=,000; X<sup>2</sup>/df=1,716; CFI=,981; PCFI=,871; GFI=,913;  
 PGFI=,739; NFI=,956; RMSEA=,024; P(rmsea<0.05)=1,000  
 C.I.90% ],021,,026[; AIC=1790,799; BCC=1820,599; MECVI=1,415



Portuguese

### CFA of ATAS

$\chi^2=1406,799$ ;  $df=820$ ;  $p=,000$ ;  $\chi^2/df=1,716$ ;  $CFI=,981$ ;  $PCFI=,871$ ;  $GFI=,913$ ;  
 $PGFI=,739$ ;  $NFI=,956$ ;  $RMSEA=,024$ ;  $P(rmsea<0.05)=1,000$   
C.I.90% ],021,,026[;  $AIC=1790,799$ ;  $BCC=1820,599$ ;  $MECVI=1,415$



Assuming model Unconstrained to be correct:

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Measurement weights	51	66,190	,075	,002	,002	-,001	-,001
Structural weights	63	108,463	,000	,003	,003	,000	,000
Structural covariances	66	111,890	,000	,004	,004	,000	,000
Structural residuals	78	128,978	,000	,004	,004	,000	,000
Measurement residuals	144	1311,527	,000	,041	,042	,032	,033

### Criterion Validity

#### Correlations

		ATA Total	Soc Total	PANAS Total	SWL Total
ATA Total	Pearson Correlation	1	-,202**	-,099**	-,034
	Sig. (2-tailed)		,000	,000	,219
	N	1291	1291	1291	1291
Soc Total	Pearson Correlation	-,202**	1	,258**	,255**
	Sig. (2-tailed)	,000		,000	,000
	N	1291	1291	1291	1291
PANAS Total	Pearson Correlation	-,099**	,258**	1	,092**
	Sig. (2-tailed)	,000	,000		,001
	N	1291	1291	1291	1291
SWL Total	Pearson Correlation	-,034	,255**	,092**	1
	Sig. (2-tailed)	,219	,000	,001	
	N	1291	1291	1291	1291

\*\* . Correlation is significant at the 0.01 level (2-tailed).



## Paper 7

### Socio-Demographic Characteristics

#### Age

##### Statistics

Idade

N	Valid	1270
	Missing	0
Mean		83,84
Std. Deviation		6,660

#### Sex

##### Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	739	58,2	58,2	58,2
	Male	531	41,8	41,8	100,0
	Total	1270	100,0	100,0	

#### Nationality

##### Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Angolan	279	22,0	22,0	22,0
	Brazilian	312	24,6	24,6	46,5
	Portuguese	345	27,2	27,2	73,7
	English	334	26,3	26,3	100,0
	Total	1270	100,0	100,0	

#### Education

##### Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< High school	558	43,9	43,9	43,9
	≥ High school	712	56,1	56,1	100,0
	Total	1270	100,0	100,0	

## Marital Status

Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not married or in a relationship	560	44,1	44,1	44,1
	Married or in a relationship	710	55,9	55,9	100,0
	Total	1270	100,0	100,0	

## Household

Household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Living alone	464	36,5	36,5	36,5
	Living with others	806	63,5	63,5	100,0
	Total	1270	100,0	100,0	

## Adult Children

Adult children

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	680	53,5	53,5	53,5
	Yes	590	46,5	46,5	100,0
	Total	1270	100,0	100,0	

## Professional Status

Professional status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inactive	654	51,5	51,5	51,5
	Active	616	48,5	48,5	100,0
	Total	1270	100,0	100,0	

## Income

		Income			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<10,000 €	630	49,6	49,6	49,6
	≥10,000€	640	50,4	50,4	100,0
	Total	1270	100,0	100,0	

## Living Setting

		Living setting			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural	668	52,6	52,6	52,6
	Urban	602	47,4	47,4	100,0
	Total	1270	100,0	100,0	

## Leisure

		Leisure			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	450	35,4	35,4	35,4
	Yes	820	64,6	64,6	100,0
	Total	1270	100,0	100,0	

## Self-Reported Spirituality

		Spirituality			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	283	22,3	22,3	22,3
	Yes	987	77,7	77,7	100,0
	Total	1270	100,0	100,0	

## Perceived Health

		Perceived health			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	625	49,2	49,2	49,2
	Good	645	50,8	50,8	100,0
	Total	1270	100,0	100,0	

## Recent Disease

Recent disease

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	789	62,1	62,1	62,1
	Yes	481	37,9	37,9	100,0
	Total	1270	100,0	100,0	

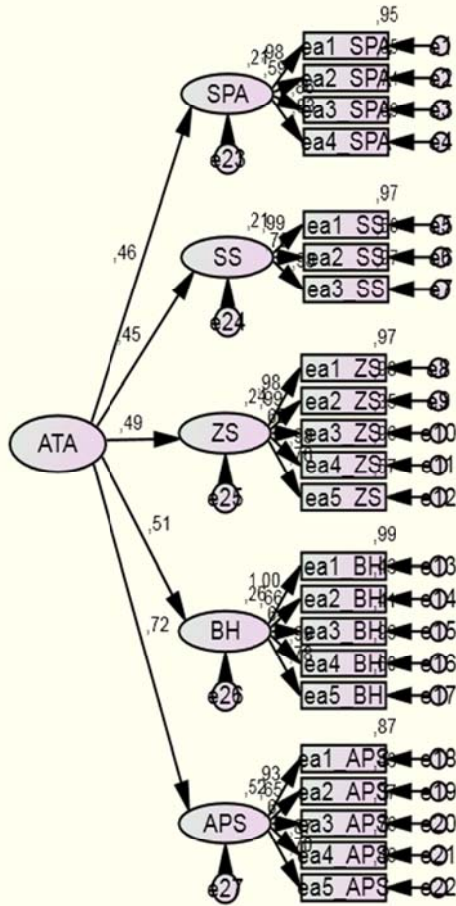
## Medication

Medication

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	117	9,2	9,2	9,2
	Yes	1153	90,8	90,8	100,0
	Total	1270	100,0	100,0	

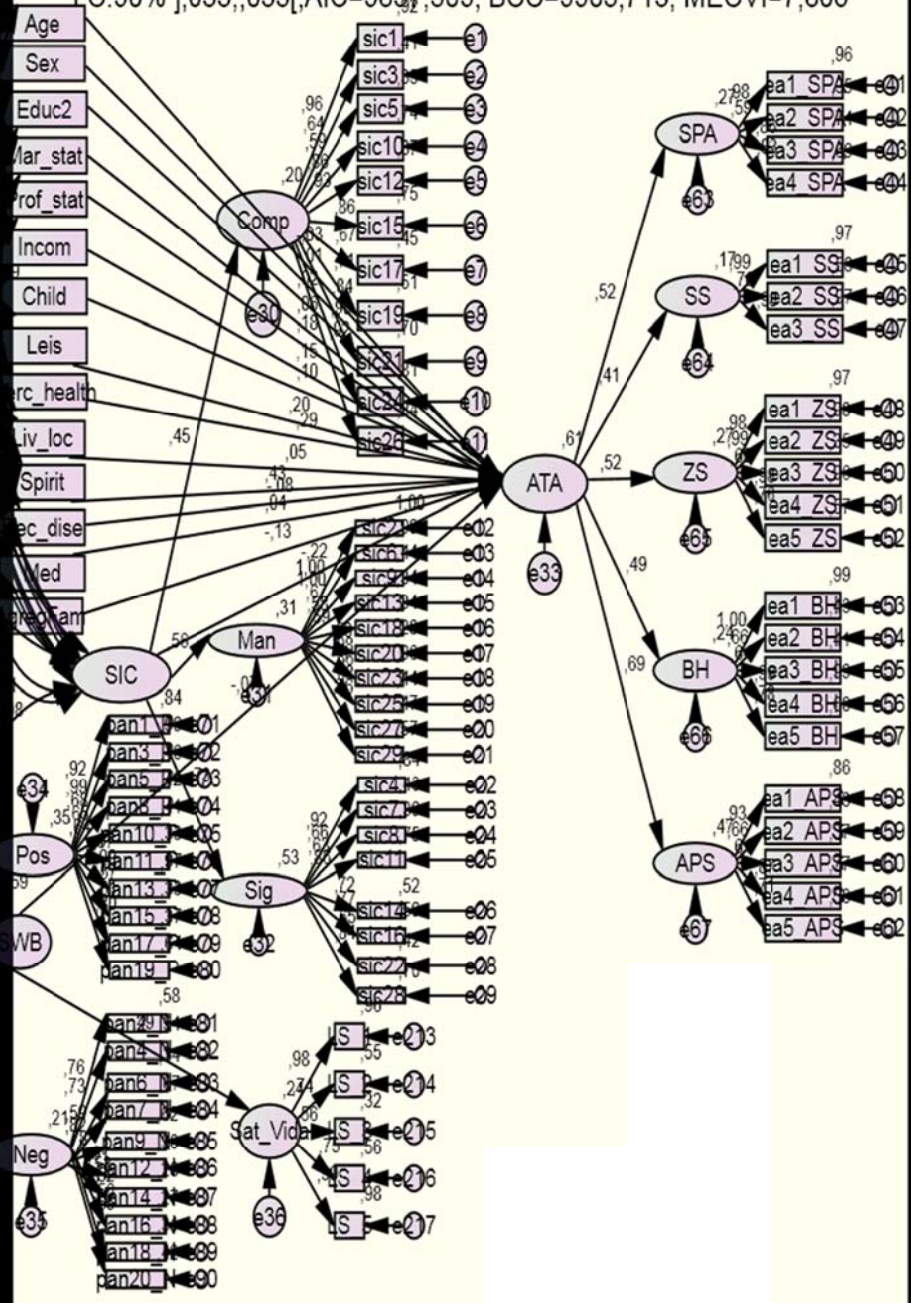
## Measurement Model

ATAS Measurement Model  
 87,594; df=204; p=,000; X<sup>2</sup>/df=2,390; CFI=,990; PCFI=,875; GFI=,966; PGFI=  
 NFI=,983; RMSEA=,033; P(rmsea<0.05)=1,000  
 I.C.90% ],029,,037[; AIC=585,594; BCC=587,403; MECVI=,463



## Structural Model

**ATAS Structural Model**  
 33,509; df=3783; p=,000; X2/df=2,441; CFI=,943; PCFI=,891; GFI=,858; PGF  
 NFI=,908; RMSEA=,034; P(rmsea<0.05)=1,000  
 I.C.90% ],033,,035[;AIC=9857,509; BCC=9905,713; MECVI=7,806



## Structural Weights of the Independent Variables

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
ATA <--- SIC	-,202	,070	-2,880	,004	par_116
ATA <--- SWB	-,089	,099	-,901	,368	par_117
ATA <--- Age	-,004	,003	-1,218	,223	par_130
ATA <--- Sex	-,021	,043	-,490	,624	par_131
ATA <--- Educ2	,031	,060	,514	,607	par_132
ATA <--- Mar_stat	,100	,057	1,768	,077	par_133
ATA <--- Prof_stat	,283	,047	5,957	***	par_134
ATA <--- Incom	,230	,069	3,343	***	par_135
ATA <--- Leis	,322	,055	5,818	***	par_136
ATA <--- Perc_health	,455	,058	7,830	***	par_137
ATA <--- Liv_loc	,080	,052	1,537	,124	par_138
ATA <--- Spirit	,816	,069	11,752	***	par_139
ATA <--- Rec_dise	-,123	,068	-1,818	,069	par_140
ATA <--- Med	-,026	,020	-1,293	,196	par_154
ATA <--- AgregFam	-,208	,078	-2,678	,007	par_155
ATA <--- Child	,164	,065	2,529	,011	par_209

### AtA Variability

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
ATA	,606

## Paper 8

### Socio-Demographic Characteristics

#### Age

##### Statistics

idade

N	Valid	1258
	Missing	0
Mean		83,89
Std. Deviation		6,667

#### Sex

##### Sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	732	58,2	58,2	58,2
	Male	526	41,8	41,8	100,0
	Total	1258	100,0	100,0	

#### Nationality

##### Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Angolan	278	22,1	22,1	22,1
	Brazilian	302	24,0	24,0	46,1
	Portuguese	344	27,3	27,3	73,4
	English	334	26,6	26,6	100,0
	Total	1258	100,0	100,0	

#### Education

##### Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< High school	554	44,0	44,0	44,0
	≥ High school	704	56,0	56,0	100,0
	Total	1258	100,0	100,0	

## Marital status

		Marital status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not married or in a relationship	554	44,0	44,0	44,0
	Married or in the relationship	704	56,0	56,0	100,0
	Total	1258	100,0	100,0	

## Household

		Household			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Living alone	452	35,9	35,9	35,9
	Living with others	806	64,1	64,1	100,0
	Total	1258	100,0	100,0	

## Professional Status

		Professional Status			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Inactive	654	52,0	52,0	52,0
	Active	604	48,0	48,0	100,0
	Total	1258	100,0	100,0	

## Social Support

		Support			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	907	72,1	72,1	72,1
	No	351	27,9	27,9	100,0
	Total	1258	100,0	100,0	

## Living Setting

Living setting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural	660	52,5	52,5	52,5
	Urban	598	47,5	47,5	100,0
	Total	1258	100,0	100,0	

## Leisure

Leisure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	444	35,3	35,3	35,3
	Yes	814	64,7	64,7	100,0
	Total	1258	100,0	100,0	

## Self-Reported Spirituality

Self-reported spirituality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	708	56,3	56,3	56,3
	Yes	550	43,7	43,7	100,0
	Total	1258	100,0	100,0	

## Physical Activity

Physical activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	713	56,7	56,7	56,7
	Yes	545	43,3	43,3	100,0
	Total	1258	100,0	100,0	

## Recent disease

		Recent disease			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	778	61,8	61,8	61,8
	Yes	480	38,2	38,2	100,0
Total		1258	100,0	100,0	

## Perceived health

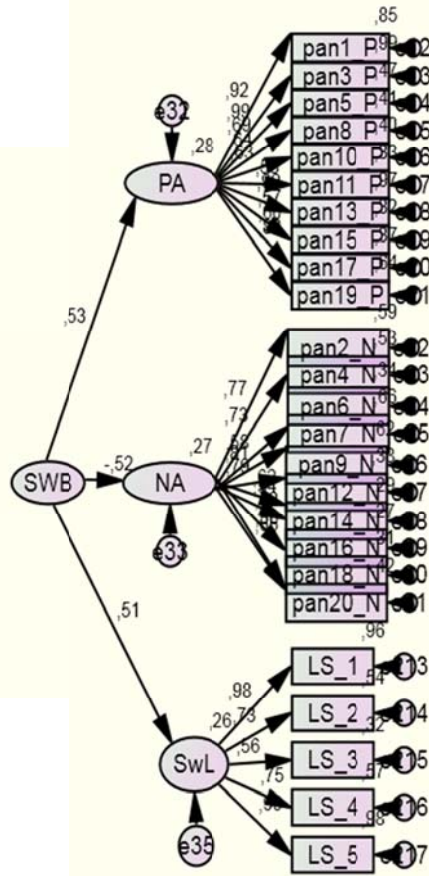
		Perceived health			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	622	49,4	49,4	49,4
	Good	636	50,6	50,6	100,0
Total		1258	100,0	100,0	

## Medication

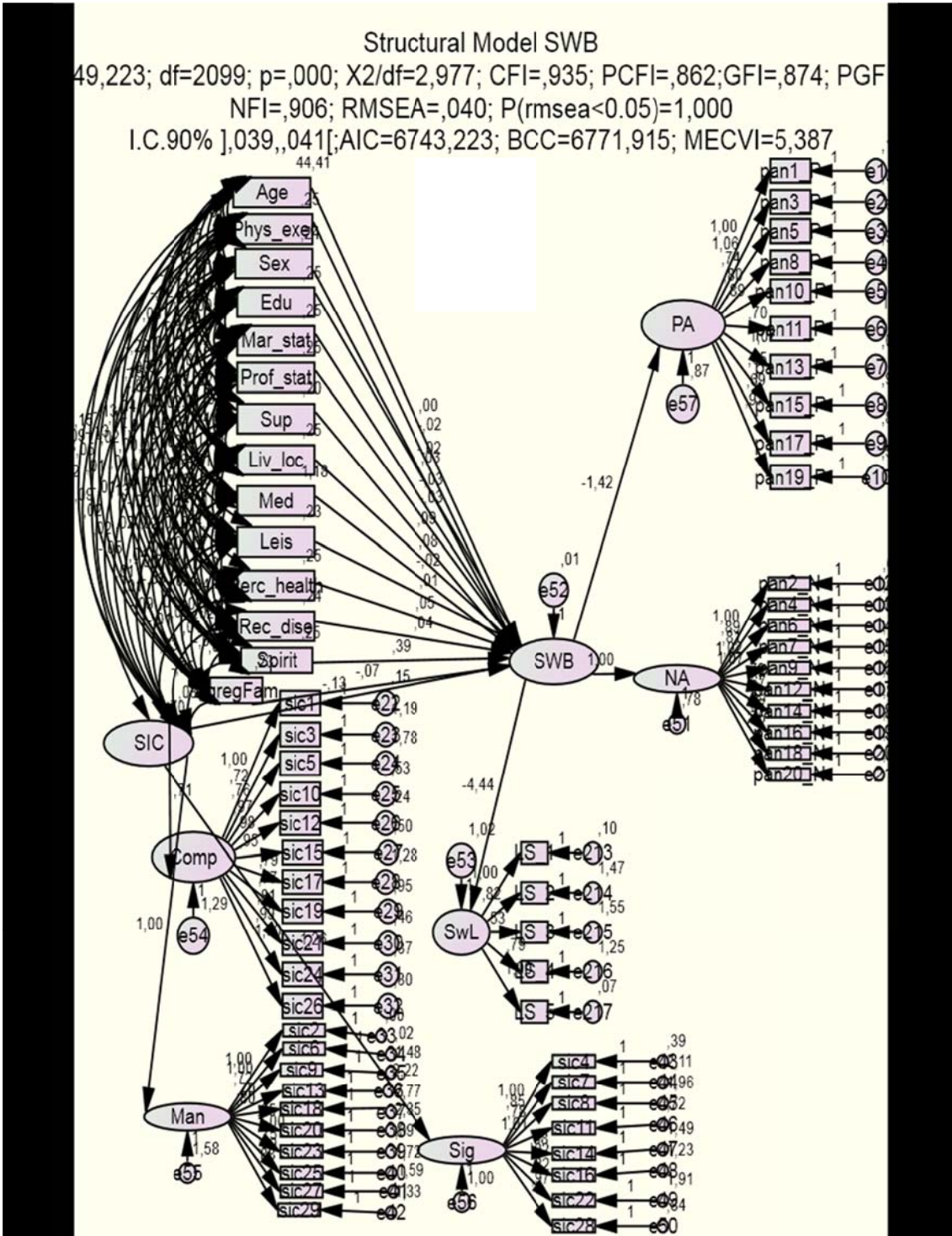
		Medication			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	113	9,0	9,0	9,0
	Yes	1145	91,0	91,0	100,0
Total		1258	100,0	100,0	

## Measurement Model

Measurement Model SWB  
 61,367; df=272; p=,000; X2/df=3,534; CFI=,970; PCFI=,880;GFI=,944; PGFI=  
 NFI=,959; RMSEA=,045; P(rmsea<0.05)=,997  
 I.C.90% ],042,,048[AIC=1067,367; BCC=1069,606; MECVI=,851



## Structural Model



## Structural Weights of the Independent Variables

### Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
SWB <--- Sex	-,023	,015	-1,564	,118	par_61
SWB <--- Edu	,027	,017	1,586	,113	par_62
SWB <--- Mar_stat	-,025	,019	-1,345	,179	par_63
SWB <--- Prof_stat	-,029	,016	-1,839	,066	par_64
SWB <--- Sup	,089	,034	2,655	,008	par_65
SWB <--- Liv_loc	,083	,019	4,264	***	par_66
SWB <--- Med	-,015	,007	-2,128	,033	par_67
SWB <--- Leis	,012	,018	,683	,494	par_68
SWB <--- Phys_exer	-,018	,026	-,702	,483	par_69
SWB <--- Perc_health	,049	,018	2,694	,007	par_79
SWB <--- Rec_dise	,039	,021	1,860	,063	par_80
SWB <--- SIC	-,128	,024	-5,329	***	par_119
SWB <--- Age	,001	,001	,851	,395	par_143
SWB <--- Spirit	,395	,044	9,070	***	par_144
SWB <--- AgregFam	-,072	,020	-3,548	***	par_172

### AtA Variability

### Squared Multiple Correlations: (Group number 1 - Default model)

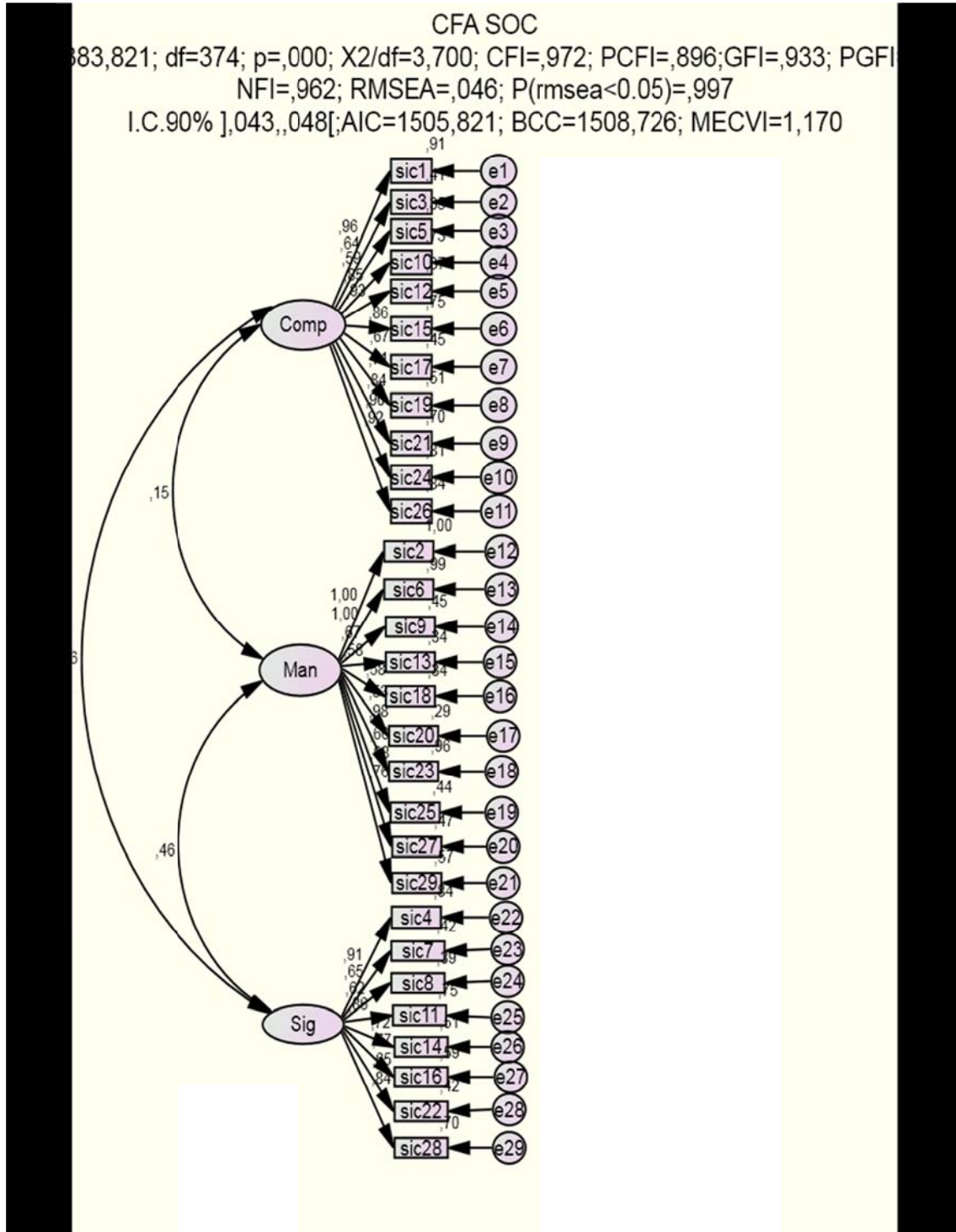
	Estimate
SWB	,829

# Analysis of the Instruments' Psychometric Properties

## Orientation to Life Questionnaire

### Construct Related Validity

#### Confirmatory Factor Analysis



**Standardized Regression Weights: (Group number 1 - Default model)**

	Estimate
sic1 <--- Comp	,956
sic3 <--- Comp	,639
sic5 <--- Comp	,592
sic10 <--- Comp	,854
sic12 <--- Comp	,931
sic15 <--- Comp	,864
sic17 <--- Comp	,669
sic2 <--- Man	,999
sic6 <--- Man	,997
sic9 <--- Man	,668
sic13 <--- Man	,584
sic18 <--- Man	,583
sic20 <--- Man	,535
sic23 <--- Man	,982
sic25 <--- Man	,660
sic27 <--- Man	,685
sic29 <--- Man	,757
sic4 <--- Sig	,915
sic7 <--- Sig	,648
sic8 <--- Sig	,623
sic11 <--- Sig	,863
sic14 <--- Sig	,715
sic16 <--- Sig	,770
sic22 <--- Sig	,645
sic28 <--- Sig	,838
sic19 <--- Comp	,712
sic21 <--- Comp	,837
sic24 <--- Comp	,900
sic26 <--- Comp	,918

*Convergent Validity*

			Estimate	L2	e
sic1	<---	Comp	0.956	0.913936	0.086064
sic3	<---	Comp	0.639	0.408321	0.591679
sic5	<---	Comp	0.592	0.350464	0.649536
sic10	<---	Comp	0.854	0.729316	0.270684
sic12	<---	Comp	0.931	0.866761	0.133239
sic15	<---	Comp	0.864	0.746496	0.253504
sic17	<---	Comp	0.669	0.447561	0.552439
sic19	<---	Comp	0.712	0.506944	0.493056
sic21	<---	Comp	0.837	0.700569	0.299431
sic24	<---	Comp	0.9	0.81	0.19
sic26	<---	Comp	0.918	0.842724	0.157276
sic2	<---	Man	0.999	0.998001	0.001999
sic6	<---	Man	0.997	0.994009	0.005991
sic9	<---	Man	0.668	0.446224	0.553776
sic13	<---	Man	0.584	0.341056	0.658944
sic18	<---	Man	0.583	0.339889	0.660111
sic20	<---	Man	0.535	0.286225	0.713775
sic23	<---	Man	0.982	0.964324	0.035676
sic25	<---	Man	0.66	0.4356	0.5644
sic27	<---	Man	0.685	0.469225	0.530775
sic29	<---	Man	0.757	0.573049	0.426951
sic4	<---	Sig	0.915	0.837225	0.162775
sic7	<---	Sig	0.648	0.419904	0.580096
sic8	<---	Sig	0.623	0.388129	0.611871
sic11	<---	Sig	0.863	0.744769	0.255231
sic14	<---	Sig	0.715	0.511225	0.488775
sic16	<---	Sig	0.77	0.5929	0.4071
sic22	<---	Sig	0.645	0.416025	0.583975
sic28	<---	Sig	0.838	0.702244	0.297756

Factor	AVE
Comp	0.666
Man	0.585
Sig	0.577

*Discriminant Validity*

**Correlations: (Group number 1 - Default model)**

	Estimate
Man <--> Sig	,462
Comp <--> Sig	,359
Comp <--> Man	,154

Factor	AVE	r <sup>2</sup>		
		Comp	Man	Sig
Comp	0.666	-	-	-
Man	0.585	0.024	-	-
Sig	0.577	0.129	0.213	-

**Criterion Validity**

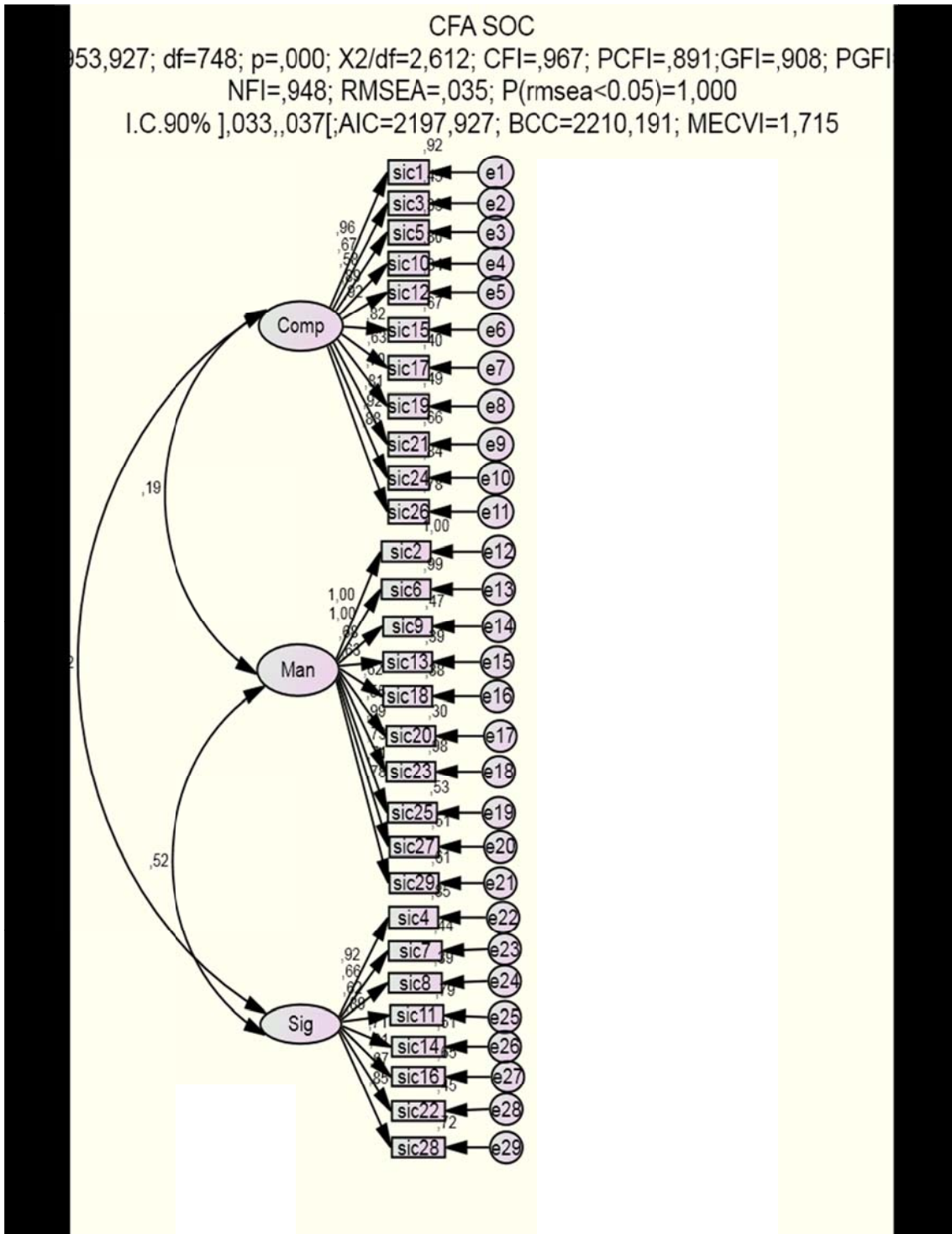
**Correlations**

		Soc Total
PANAS Total	Pearson Correlation	.258
	Sig. (2-tailed)	.000
	N	1291
SWL Total	Pearson Correlation	.255
	Sig. (2-tailed)	.000
	N	1291
ATA Total	Pearson Correlation	-.202
	Sig. (2-tailed)	.000
	N	1291

**Correlations**

		Comp	Man	Sig
Panas Positive	Pearson Correlation	.086	.072	-.039
	Sig. (2-tailed)	.002	.009	.160
	N	1291	1291	1291
Panas Negative	Pearson Correlation	-.044	-.027	.026
	Sig. (2-tailed)	.118	.332	.342
	N	1291	1291	1291
Sense of Purpose and Ambitions	Pearson Correlation	-.016	.000	.054
	Sig. (2-tailed)	.558	.989	.052
	N	1291	1291	1291
Social Support	Pearson Correlation	-.052	-.054	-.074
	Sig. (2-tailed)	.062	.051	.008
	N	1291	1291	1291
Zest and Spirituality	Pearson Correlation	-.082	-.023	-.003
	Sig. (2-tailed)	.003	.413	.912
	N	1291	1291	1291
Body and Health	Pearson Correlation	.014	.015	-.039
	Sig. (2-tailed)	.605	.592	.158
	N	1291	1291	1291
Aging in Place and Stability	Pearson Correlation	.000	.012	-.032
	Sig. (2-tailed)	.999	.665	.246
	N	1291	1291	1291

## External Validity



Assuming model Unconstrained to be correct:

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Measurement weights	26	35,962	,092	,001	,001	-,001	-,001
Structural covariances	32	51,121	,017	,001	,001	-,001	-,001
Measurement residuals	61	373,570	,000	,010	,010	,006	,006

## Reliability

### *Comprehensibility*

#### Reliability Statistics

Cronbach's Alpha	N of Items
,951	11

### *Manageability*

#### Reliability Statistics

Cronbach's Alpha	N of Items
,921	10

### *Meaningfulness*

#### Reliability Statistics

Cronbach's Alpha	N of Items
,910	8

### *Overall Scale*

#### Reliability Statistics

Cronbach's Alpha	N of Items
,930	29

## Values Regarding Minimum and Maximum Scores, Skewness and Kurtosis

**Statistics**

		sic1	sic3	sic5	sic10	sic12
N	Valid	1291	1291	1291	1291	1291
	Missing	0	0	0	0	0
Skewness		-.626	-.880	-.690	-.775	-.605
Std. Error of Skewness		,068	,068	,068	,068	,068
Kurtosis		,001	,474	-.226	,268	-.092
Std. Error of Kurtosis		,136	,136	,136	,136	,136
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

**Statistics**

		sic15	sic17	sic19	sic21	sic24
N	Valid	1291	1291	1291	1291	1291
	Missing	0	0	0	0	0
Skewness		-.587	-.722	-.592	-.719	-.638
Std. Error of Skewness		,068	,068	,068	,068	,068
Kurtosis		-.140	,034	-.049	,347	,023
Std. Error of Kurtosis		,136	,136	,136	,136	,136
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

**Statistics**

		sic26	sic2	sic6	sic9	sic13
N	Valid	1291	1291	1291	1291	1291
	Missing	0	0	0	0	0
Skewness		-.708	,353	,353	,119	,144
Std. Error of Skewness		,068	,068	,068	,068	,068
Kurtosis		,127	,001	,005	-.399	-.741
Std. Error of Kurtosis		,136	,136	,136	,136	,136
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

**Statistics**

		sic18	sic20	sic23	sic25	sic27
N	Valid	1291	1291	1291	1291	1291
	Missing	0	0	0	0	0
Skewness		,325	-,044	,355	,126	,303
Std. Error of Skewness		,068	,068	,068	,068	,068
Kurtosis		-1,068	-,808	-,050	-,568	-,378
Std. Error of Kurtosis		,136	,136	,136	,136	,136
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

**Statistics**

		sic29	sic4	sic7	sic8	sic11
N	Valid	1291	1291	1291	1291	1291
	Missing	0	0	0	0	0
Skewness		,106	,015	-,163	-,160	-,116
Std. Error of Skewness		,068	,068	,068	,068	,068
Kurtosis		-,618	-,408	-1,081	-,889	-,619
Std. Error of Kurtosis		,136	,136	,136	,136	,136
Minimum		1	1	1	1	1
Maximum		7	7	7	7	7

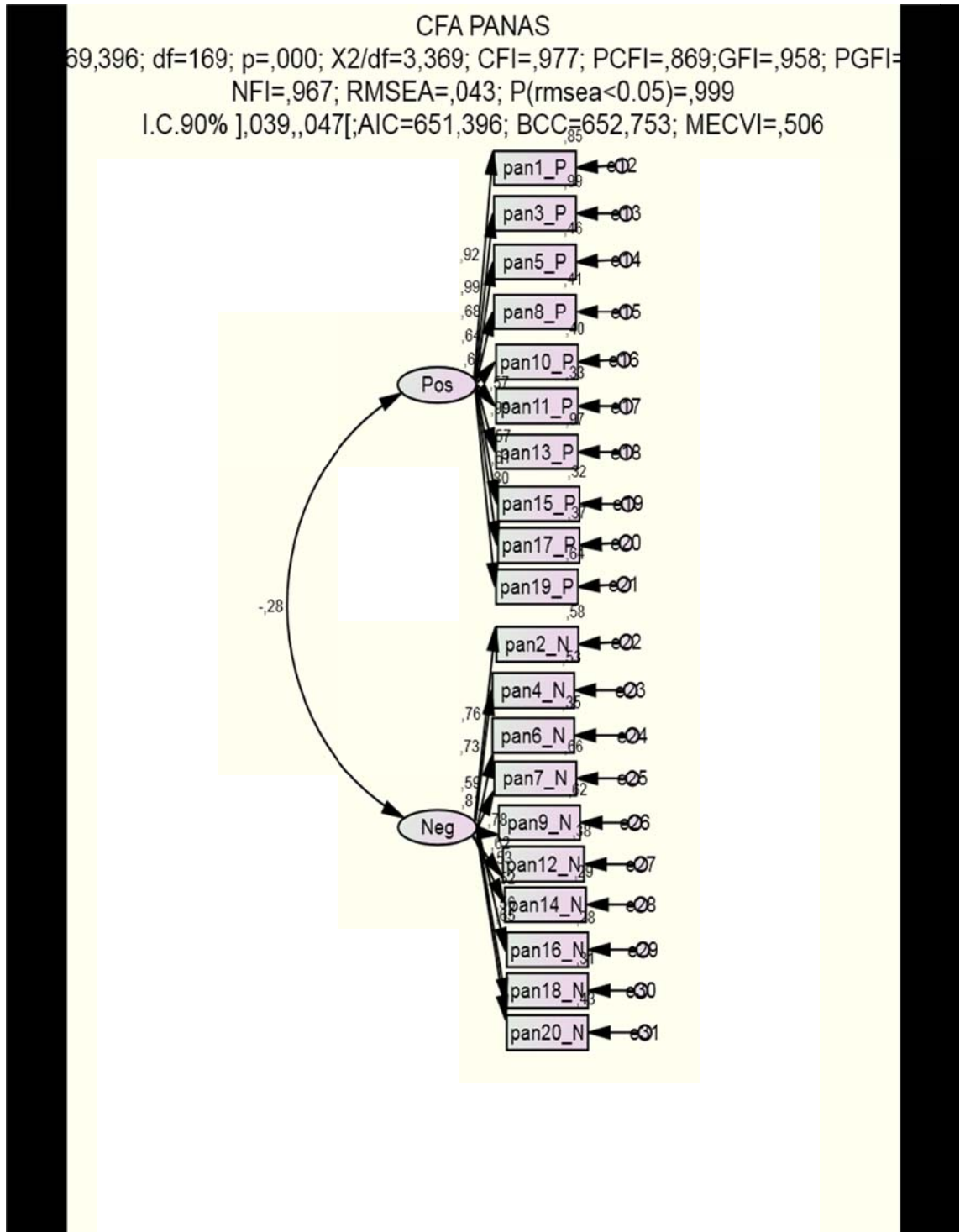
**Statistics**

		sic14	sic16	sic22	sic28
N	Valid	1291	1291	1291	1291
	Missing	0	0	0	0
Skewness		-,226	-,174	-,205	-,061
Std. Error of Skewness		,068	,068	,068	,068
Kurtosis		-,874	-,673	-,796	-,734
Std. Error of Kurtosis		,136	,136	,136	,136
Minimum		1	1	1	1
Maximum		7	7	7	7

## Positive Affect and Negative Affect Scale

### Construct Related Validity

#### Confirmatory Factor Analysis



**Standardized Regression Weights: (Group number 1 - Default model)**

	Estimate
pan3_P <--- Pos	,995
pan5_P <--- Pos	,679
pan8_P <--- Pos	,638
pan10_P <--- Pos	,635
pan11_P <--- Pos	,572
pan13_P <--- Pos	,987
pan15_P <--- Pos	,566
pan17_P <--- Pos	,607
pan19_P <--- Pos	,798
pan1_P <--- Pos	,920
pan4_N <--- Neg	,730
pan2_N <--- Neg	,762
pan6_N <--- Neg	,590
pan7_N <--- Neg	,814
pan9_N <--- Neg	,785
pan12_N <--- Neg	,618
pan14_N <--- Neg	,535
pan16_N <--- Neg	,525
pan18_N <--- Neg	,559
pan20_N <--- Neg	,654

*Convergent Validity*

**Standardized Regression Weights: (Group number 1 - Default model)**

	Estimate	L2	e
pan3_P <--- Pos	0.995	0.990025	0.009975
pan5_P <--- Pos	0.679	0.461041	0.538959
pan8_P <--- Pos	0.638	0.407044	0.592956
pan10_P <--- Pos	0.635	0.403225	0.596775
pan11_P <--- Pos	0.572	0.327184	0.672816
pan13_P <--- Pos	0.987	0.974169	0.025831
pan15_P <--- Pos	0.566	0.320356	0.679644
pan17_P <--- Pos	0.607	0.368449	0.631551
pan19_P <--- Pos	0.798	0.636804	0.363196
pan1_P <--- Pos	0.92	0.8464	0.1536
pan4_N <--- Neg	0.73	0.5329	0.4671
pan2_N <--- Neg	0.762	0.580644	0.419356
pan6_N <--- Neg	0.59	0.3481	0.6519
pan7_N <--- Neg	0.814	0.662596	0.337404
pan9_N <--- Neg	0.785	0.616225	0.383775
pan12_N <--- Neg	0.618	0.381924	0.618076

pan14_N	<---	Neg	0.535	0.286225	0.713775
pan16_N	<---	Neg	0.525	0.275625	0.724375
pan18_N	<---	Neg	0.559	0.312481	0.687519
pan20_N	<---	Neg	0.654	0.427716	0.572284

Factor	AVE
PA	0.573
NA	0.442

### Discriminant Validity

#### Correlations: (Group number 1 - Default model)

	Estimate
Pos <--> Neg	-,276

Factor	r <sup>2</sup>		
	AVE	PA	NA
PA	0.573	-	-
NA	0.442	0.076	-

### Criterion Validity

#### Correlations

		PANAS Total
ATAS Total	Pearson Correlation	-.099
	Sig. (2-tailed)	.000
	N	1291
Soc Total	Pearson Correlation	.258
	Sig. (2-tailed)	.000
	N	1291
SWL Total	Pearson Correlation	.092
	Sig. (2-tailed)	.001
	N	1291

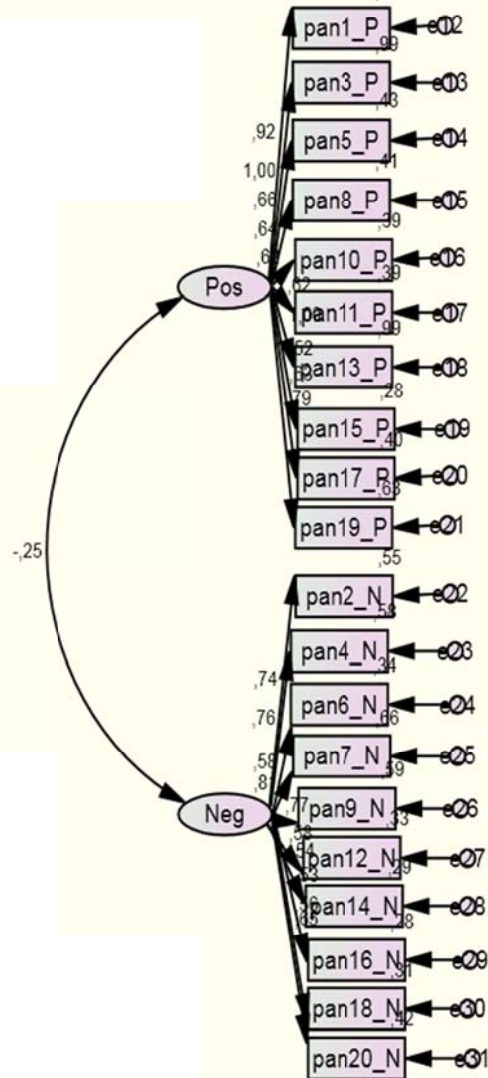
### Correlations

		Panas Positive	Panas Negative
Comp	Pearson Correlation	.086	-.044
	Sig. (2-tailed)	.002	.118
	N	1291	1291
Man	Pearson Correlation	.072	-.027
	Sig. (2-tailed)	.009	.332
	N	1291	1291
Sig	Pearson Correlation	-.039	.026
	Sig. (2-tailed)	.160	.342
	N	1291	1291
Sense of Purpose and Ambitions	Pearson Correlation	-.167	.119
	Sig. (2-tailed)	.000	.000
	N	1291	1291
Social Support	Pearson Correlation	-.084	.167
	Sig. (2-tailed)	.003	.000
	N	1291	1291
Zest and Spirituality	Pearson Correlation	-.269	.130
	Sig. (2-tailed)	.000	.000
	N	1291	1291
Body and Health	Pearson Correlation	-.118	.196
	Sig. (2-tailed)	.000	.000
	N	1291	1291
Aging in Place and Stability	Pearson Correlation	-.240	.009
	Sig. (2-tailed)	.000	.750
	N	1291	1291

## External Validity

### CFA PANAS

44,600; df=338; p=,000; X<sup>2</sup>/df=2,203; CFI=,976; PCFI=,869;GFI=,946; PGFI=  
NFI=,958; RMSEA=,031; P(rmsea<0.05)=1,000  
I.C.90% ],028,,034[;AIC=908,600; BCC<sub>85</sub>=914,432; MECVI=,709



Assuming model Unconstrained to be correct:

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Measurement weights	18	18,321	,435	,001	,001	-,001	-,001
Measurement intercepts	38	34,957	,611	,002	,002	-,003	-,003
Structural covariances	41	35,634	,708	,002	,002	-,003	-,003
Measurement residuals	61	217,768	,000	,012	,013	,005	,005

## Reliability

*Positive Panas*

### Reliability Statistics

Cronbach's Alpha	N of Items
,922	10

*Negative PANAS*

### Reliability Statistics

Cronbach's Alpha	N of Items
,884	10

*Overall Scale*

### Reliability Statistics

Cronbach's Alpha	N of Items
,787	20

## Sensitivity

		PAN_1	PAN_3	PAN_5	PAN_8	PAN_10
N	Valid	1291	1291	1291	1291	1291
	Missing	0	0	0	0	0
Skewness		.344	.427	.121	.139	.302
Std. Error of Skewness		.068	.068	.068	.068	.068
Kurtosis		-.551	-.396	-.493	-.923	-1.184
Std. Error of Kurtosis		.136	.136	.136	.136	.136
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

		PAN_11	PAN_13	PAN_15	PAN_17	PAN_19
N	1291	1291	1291	1291	1291	1291
	0	0	0	0	0	0
Skewness		-.067	.427	.118	.042	.089
Std. Error of Skewness		.068	.068	.068	.068	.068
Kurtosis		-.951	-.429	-.709	-.766	-.766
Std. Error of Kurtosis		.136	.136	.136	.136	.136
Minimum		1	1	1	1	1
Maximum		5	5	5	5	5

		PAN_2	PAN_4	PAN_6	PAN_7	PAN_9
N	1291	1291	1291	1291	1291	1291
	0	0	0	0	0	0
Skewness		.422	.408	.173	.325	.401
Std. Error of Skewness		.068	.068	.068	.068	.068
Kurtosis		-.440	-.697	-1.061	-.762	-.835
Std. Error of Kurtosis		.136	.136	.136	.136	.136
Minimum		1	1	1	1	1
Maximum		7	5	5	5	5

		PAN_12	PAN_14	PAN_16	PAN_18	PAN_20
N	1291	1291	1291	1291	1291	1291
	0	0	0	0	0	0
Skewness	Skewness	.422	.408	.173	.325	
Std. Error of Skewness	Std. Error of Skewness	.068	.068	.068	.068	
Kurtosis	Kurtosis	-.440	-.697	-1.061	-.762	
Std. Error of Kurtosis	Std. Error of Kurtosis	.136	.136	.136	.136	
Minimum	Minimum	1	1	1	1	
Maximum	Maximum	7	5	5	5	

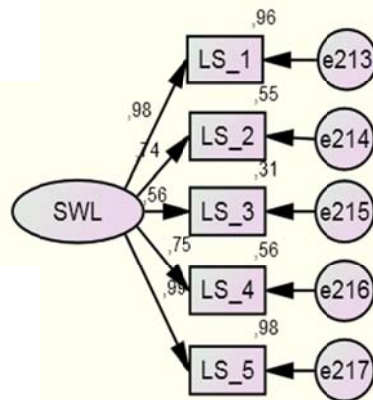
## Satisfaction with Life Scale

### Construct Related Validity

#### Confirmatory Factor Analysis

##### CFA SWLS

$\chi^2=13,670$ ;  $df=5$ ;  $p=,018$ ;  $X^2/df=2,734$ ;  $CFI=,999$ ;  $PCFI=,499$ ;  $GFI=,996$ ;  $PGFI=,3$   
 $NFI=,998$ ;  $RMSEA=,037$ ;  $P(rmsea<0.05)=,800$   
I.C.90% ],014,,061[;  $AIC=33,670$ ;  $BCC=33,763$ ;  $MECVI=,026$



*Convergent Validity*

**Standardized Regression Weights: (Group number 1 - Default model)**

	Estimate
LS_1 <--- Sat_Vida	,981
LS_2 <--- Sat_Vida	,738
LS_3 <--- Sat_Vida	,561
LS_4 <--- Sat_Vida	,749
LS_5 <--- Sat_Vida	,990

<b>Standardized Regression Weights: (Group number 1 - Default model)</b>					
			Estimate	L2	e
LS_1	<---	Sat_Vida	0.981	0.962361	0.037639
LS_2	<---	Sat_Vida	0.738	0.544644	0.455356
LS_3	<---	Sat_Vida	0.561	0.314721	0.685279
LS_4	<---	Sat_Vida	0.749	0.561001	0.438999
LS_5	<---	Sat_Vida	0.99	0.9801	0.0199

Factor	AVE
Only factor	0.673

**Criterion Validity**

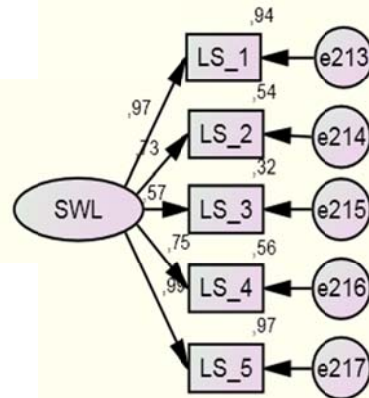
**Correlations**

		SWL Total
ATAS Total	Pearson Correlation	-.034
	Sig. (2-tailed)	.219
	N	1291
Soc Total	Pearson Correlation	.255
	Sig. (2-tailed)	.000
	N	1291
SWL Total	Pearson Correlation	.092
	Sig. (2-tailed)	.001
	N	1291

## External Validity

### CFA SWLS

$\chi^2/df=1,764$ ;  $p=.061$ ;  $CFI=.999$ ;  $PCFI=.499$ ;  $GFI=.995$ ;  $PGFI=.997$ ;  $RMSEA=.024$ ;  $P(rmsea<0.05)=.992$   
I.C.90% ],000,,043[;  $AIC=57,641$ ;  $BCC=58,028$ ;  $MECVI=.045$



Assuming model Unconstrained to be correct:

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Measurement weights	4	1,416	,841	,000	,000	-,001	-,001
Measurement intercepts	9	9,451	,397	,001	,001	-,001	-,001
Structural covariances	10	11,222	,340	,002	,002	-,001	-,001
Measurement residuals	15	98,440	,000	,016	,016	,009	,009

## Reliability

### Reliability Statistics

Cronbach's Alpha	N of Items
,899	5

## Sensitivity

### Statistics

	LS_1	LS_2	LS_3	LS_4	LS_5
N Valid	1291	1291	1291	1291	1291
Missing	0	0	0	0	0
Skewness	,022	-,244	-,057	,175	,032
Std. Error of Skewness	,068	,068	,068	,068	,068
Kurtosis	-,674	-1,050	-,217	-,807	-,639
Std. Error of Kurtosis	,136	,136	,136	,136	,136
Minimum	1	1	1	1	1
Maximum	7	7	7	7	7