European Study of Adult Well-Being: (ESAW)

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Comparative Report on
SELF RESOURCES
IN ADVANCED AND OLD AGE

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The ESAW Project was designed as part of the **Global Ageing Initiative**, initiated by the Indiana University Center on Aging and Aged, under the directorship of Dr. Barbara Hawkins. The aim of this parent project is to develop a globally applicable model of Ageing Well, estimating the direct causal contribution of five key components, personal characteristics and culture to the outcome variable *Ageing Well*. The five components included in the study are: (1) physical health and functional status; (2) cognitive efficacy (in the ESAW renamed self resources); (3) material security; (4) social support resources; and (5) life activity.

ESAW, funded by the European Union, represents a European sub-group of the larger global study, which aims to develop a European model of Adult Well-being, using the five key components and parallel methodology. The ESAW partner countries are: Austria, Italy, Luxembourg, the Netherlands, Sweden and the United Kingdom. The work has been co-ordinated by Professor G. Clare Wenger, of the University of Wales, Bangor, United Kingdom.

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PART I: Theoretical considerations

Ageing is characterized both by personal and social processes. Just as biology and psychology largely determine the personal or individual aging process, so the impact of social, cultural, and economic factors on the ageing process - domains of social gerontology – interact with personal processes. With respect to the personal process, biological ageing is widely seen as a non-adaptive process, resulting mainly from cumulative damage in cells, whereas when viewed from the field of psychology ageing is seen as an adaptive process. Findings saying that older people’s beliefs and attitudes may evolve according to their changing needs support that view.

This evolution is reflected in theories promoting cognitive regulation processes with respect to the individual’s life-satisfaction and subjective well-being in the cognitive theory of ageing (Thomae, 1970), one of the first theoretical frameworks put forward in this area. Cognitive ageing theory states that the individual’s interpretations and evaluations of age-correlated health problems and handicapping states depend not only on the elderly person’s needs, motives and aspirations but that socially shared stereotypes of old age affect the individual’s interpretation of age related changes as well. In general, human development is characterized by processes of plasticity and variability throughout the whole life span, with advanced and old age being parts of the individual’s development (Ryff, 1989). While there is broad evidence for adaptive psychological processes, especially for cognitive and affective processes with respect to well-being in advanced and old age (Rothbaum, Weisz & Snyder, 1982; Baltes & Baltes, 1990; Brandstädter & Greve, 1994; Carstensen, 1995; Heckhausen & Schulz, 1995; Moody, 2002; Baroni, 2003), the basis for successful adaptive psychological processes - the underlying psychological resources - contributing to well-being in advanced age, are still not well-established. The ESAW project focuses in its psychological section on the role of the “self” as a resource for a subjective good old age.

The present report consists of two main parts. Part I addresses selected psychological concepts with respect to self-resources. The chapter opens with a brief historically based introduction to the concept of the “self” and its rise during different epochs. Next, the self in general and concepts related to self-resources as defined by the instruments in Hawkins’ (2003) Global Aging Research Initiative and applied as core psychological measurements in ESAW's agenda will be reported. The themes addressed are self-esteem, locus-of-control, resilience and mental health and they will be discussed with related constructs on the basis of general research findings. Further, major findings from the ageing research literature related to these thematic areas will be outlined and discussed following mainly a life-span approach. Part II deals with specific methodological issues, information related to the application of the core instruments, and general issues related to data set will be referred to. Results of each instrument will be presented in a country related comparative way with respect
to agreed intervening variables. Significant differences and interactions will be reported. A discussion summarizes the main findings and offers a preliminary interpretation and closes with an outlook for advanced data analysis. The appendix offers the tables and figures summarizing the major findings as well as the original instruments (items) as applied in the present survey.

The self

The idea of the self and its relation to an individual’s identity is nowadays widely accepted in psychology and behavioural sciences. William James (1892) addressed in his classic work *Principles of Psychology* a distinction between the “I” and the “Me” that has influenced theories about the self ever since. The “I” is the knower, and the “Me” is the known; the self consists of both. However, the self as it presents itself nowadays can be seen as dependent on major societal changes. Formerly, in feudalistic cultures, people’s identities were linked to their social positions, occupations and family ties and people were not supposed to want to change these. Moreover, in western Judeo-Christian societies, most people were guided by Christian values and beliefs, affecting personal development. Since early modern time – starting with the age of Enlightenment - there is a growing interest for individual differences in personal growth, pointing to the uniqueness of the individual. Autobiographical writing as well as narratives focusing on detailed differences between people’s life experiences began to emerge.

The belief that fulfilment might be enhanced by developing a deeper understanding of the inner life of the self through culture became more and more accepted. The rise of democracies, with people choosing their leaders goes along with the rise in self-determination. Further, the popularisation of the ideas of the unconscious through the work of Sigmund Freud expanded the popular concept of the inner self and the idea that achieving self-knowledge and personal development was a challenging undertaking. Later, lifecycle theorist Erik Erikson (1968) suggested the idea that at transitional points during life – the stages of development of the lifecycle – identity crises were assumed to fuel major changes in an individual’s lifestyle, with people making their choices within a variety of options.

The modern conception of the self may be viewed in the context of changes towards more secular societies in which obligations based on religion have lost their predominant position and traditional social obligations have been replaced by higher variability and flexibility within the social stratification. Especially in the developed countries these changes opened new challenges for personal growth going along with adaptation to new strategies aiming at establishing and maintaining personal well-being. In psychology the self and close personal relationships are discussed as major resources for personal adjustment. Concepts nowadays commonly associated with the self, and also topics of research, include concepts such as the self as object and as agent, self-esteem, self-efficacy including locus of control concepts, coping strategies, defence mechanisms, mainly adaptive defence mechanisms such as self-regulation and self-evaluation, and the mental health as perceived by the individual.
Self as object and as agent

The self and especially the concept of the self-as-object and the self-as-agent have been addressed since the early days of psychology as a science, and are consistent themes throughout the literature of psychology (Baumeister, 1999). Whereas the self-as-object theme focuses on constructs from social, cognitive, behavioural and narrative psychology, such as self-concept, self-schemas, self as a set of learned skills, narrative self and autobiographical memory, constructed in language and the self as a social constructed and culturally determined phenomenon. The self-as-agent theme is central to evolutionary tradition, promoting the self as a conscious agent with the capacity to perceive, communicate, learn and adapt to the environment. The self-as-agent approach also underpins conceptions of the self as motivated to achieve conflicting goals, such as aggressive self-preservation, self-reproduction, social co-operation and the self as user of coping strategies and defence mechanisms. An overview of research on these two aspects of the self is offered by Robins, Norem and Cheek (1999).

ESAW’s domains of the self

Within the ESAW project the self was assessed in the area of self-esteem, locus-of-control, resilience and mental health. These four areas were evaluated by established self-report instruments often used in international research agendas. The following pages introduce these four concepts, offering the reader a general introduction and pointing to related constructs with a brief overview of selected measurement instruments including the one selected in the ESAW project.

Self esteem

Self-esteem was defined by William James (1890) as the feeling of self-worth that derives from the ratio of our actual success to our pretensions. Pretensions are viewed as the individual’s estimation and expectation of his potential success modulated by his values, goals and aspirations. Thus, the construct nature of self-esteem becomes obvious as self-esteem results from the way we evaluate ourselves and assess our own sense of worth by comparing how we are and how we aspire to be. Self-esteem is hierarchically organised with overall global self-esteem based on general judgements of self-worth and various subtypes of self-esteem based on evaluations of self-worth in different contexts and environments (Mruk, 1999). According to Mruk’s model self-esteem can best be described on the axes of worthiness and competence. Whereas competence refers to skills for competing tasks, worthiness refers to the affective experience of having a sense of worth including the cognitive judgment that one has worth.

According to these assumptions, the model generates four categories of self-esteem. High sense of worth and high competence (skills) result in authentic high self-esteem, whereas low sense of worth and low competence are associated with low self-esteem and negativism (depressed mood). In addition, two so called defensive self-esteem types can be located. People with these types of self-esteem behave in many contexts like people with high self-esteem. However, when their vulnerabilities are challenged they react and behave in ways that are not consistent with high
authentic self-esteem. Low competence and high sense of worth result in the
defensive self-esteem type I, the “narcissistic type”, and defensive self-esteem type
II, characterised prominently by “anti-social” behaviour, goes along with high levels of
competence and a low sense of personal worth. Type I persons are extremely
sensitive to criticism because of their sense of incompetence and inadequacy and
may use overcompensation mechanisms for reducing their anxiety. They may
criticise others or blame them, which reflects the defensive displacement of self-
directed criticism onto others. The extreme form of this type is associated with
narcissistic personality disorder, whereas low levels of this type describe self-centred
persons. Persons with type II defensive self-esteem show extreme sensitivity of their
worth, with a pronounced underlying sense of unworthiness. When their worth is
challenged these persons may become immersed in their work and can produce an
exceptional number of high achievements. Through overachievement they
compensate for a low sense of worthiness. On the contrary, when criticised or when
their worthiness is directly threatened they may respond with bullying and anti-social
behaviour as a defence. Depending on the underlying concept, self-esteem is viewed
as a global or multidimensional construct.

Measures of self-esteem
Self-esteem scales are either one-dimensional (global) or multidimensional and they
are designed for applications either in children or in adults. One of the earliest scales
and perhaps the classic, widely used measure of global self-esteem is Rosenberg’s
(1965) ten item Guttman ‘Self-esteem Scale’, as applied in the present study.
Rosenberg conceived this self-report scale as a one-dimensional construct, similar to
Nugent & Thomas’s (1993) ‘Self-esteem Rating Scale for Adults’. Both scales
showed to be useful for screening purposes, with the Self-esteem scale being
applicable for children and adults (Rosenberg, 1979). Well designed
multidimensional self-report self-esteem scales are O’Brien & Epstein’s (1988)
Multidimensional Self-Esteem Inventory for adults and Battle’s (1992) Culture Free
Self-Esteem Inventory for children and adults. The latter scale measures multiple
dimensions of self-esteem across the life-span. Besides global self-esteem, social
self-esteem and personal self-esteem are addressed. The scale includes in addition
a lie scale assessing defensive responding. Multidimensional scales are especially
useful for assessing profiles of self-esteem across a number of domains.
Furthermore some researchers used indices for self-esteem on the basis of
measurements from self-concept inventories.

Development of self-esteem
Research on the development of self-evaluative beliefs is abundant. Main findings
and current conclusions are reported in reviews (Baumeister, 1997; Mruk, 1999;
Robins, Norman & Cheek, 1999). For instance, parenting style is associated with
different levels of self-esteem. Consistent authoritative parenting style in which
children are encountered with warmth and respect and given opportunities to discuss
directives and rules of good conduct show high self-esteem. However, children of
parents who are permissive, inconsistent, strictly authoritarian, rejecting or abusive
develop low self-esteem. Self-esteem is relatively stable over time, but may be
altered at lifecycle transition points (Robins, Normen & Cheek, 1999). Self-esteem
tends to be high in pre-schoolers and declines gradually during the pre-adolescent
years. This is explained by a growing reliance on social comparison information and
a greater relevance given to feedback from external sources such as peers or
teachers. An additional drop in self-esteem can be observed at the onset of
adolescence which may be due to physical and social changes which are negatively evaluated by the adolescent, and self-esteem remains extremely variable during the period of adolescence. With the onset of adulthood self-esteem gradually increases. Improvements in self-esteem are reported from transitional points in adult life such as graduation from university, marriage, changing for a better job or moving. Self-esteem declines in older adulthood. Individual differences in self-esteem are relatively stable over time, and longitudinal studies show that stability is greater in adulthood than in childhood.

**Correlates of self-esteem**

In general high self-esteem is associated with achievement (not failure); acting in a way we perceive to be moral; having the skills to influence others; and being accepted and approved of by others (rather then rejected). Thus, self-esteem reflects not only our own evaluations of our worth based on the appraisal of our personal accomplishments, talents and attributes, but also on our perceptions of the way we are evaluated by others or by our expectations related to future evaluations of others. High self-esteem is associated with good personal adjustment across the lifespan, positive affectivity, personal autonomy, internal locus of control, greater self-knowledge, setting appropriate goals, fulfilling personal commitments, coping well with criticism or negative feedback, managing stress well, and showing low levels of self-criticism and criticism of others.

People with high levels of self-esteem are concerned mainly with enhancing their views of themselves and seek opportunities to excel and stand out. In contrast to these characteristics, low self-esteem correlates with poor psychological adjustment, a variety of mental health issues including depression, anxiety, drug abuse, eating disorders and suicide. In addition, low self-esteem is associated with difficulties in making and maintaining stable relationships, poor stress management and poor immune system functioning under stress.

If people with high self-esteem receive in laboratory tasks negative feedback they continue for a while but abandon if they are not successful. However, people with low self-esteem tend to persist until they succeed. In general people with low self-esteem are concerned with self-protection and avoiding failure, humiliation or rejection. Thus they aim to find out about their shortcomings so that they can adjust or remediate in order to be adequate and avoid failure. People with high self-esteem pursue in general the overall goal of enhancing their views of themselves by focusing on their strengths and seeking opportunities to use these to be outstanding. In addition, self-esteem is also influenced by broader social factors notably socio-economic status, with a higher socio-economic status associated with high levels of self-esteem.

**Improvement of self-esteem**

In general self-esteem affects our mood. Thus, strategies to improve self-esteem are often related to the person’s biography on achievements and competences. Strategies defined to improve self-esteem can be derived either from James’ definition of self-esteem, the ratio of achievement to aspirations or from Murk’s self-esteem model of competence and worthiness. In general skill training increases competence corresponding with improvement in self-esteem. Dependent on the area of low competence training may include skills in problem-solving, social skills, assertiveness skills, academic skills, and work related skills. If worthiness is derived from poverty or social disadvantage, environmental changes such as occupational
retraining, occupational placement, or social relocation to a less disadvantaged area may be appropriate. In cases of unrealistically high aspirations, despite a realistic goal of achievement, cognitive therapy may be required to help. Persons with low self-esteem often show a cognitive bias filtering out positive feedback which is inconsistent with their negative self-evaluation. In these cases cognitive therapy may be helpful to recalibrate this filter (Swann, 1997).

**Locus-of-control**

Control-beliefs and control orientations are either self-oriented or environmental-related cognitions of an individual. Locus-of-control theories, first introduced in Rotter’s (1954) theory of social learning, and later defined as a construct (Rotter, 1966) refers to a person’s general belief whether her own actions or the events of her life are influenced by her own behaviour and competence (internal control) or whether they are due to factors outside and independent of the person itself, such as luck, chance, fate or other persons’ behaviour (external control). The main notions referring to this theory are expectation and value.

Expectations are understood as hypotheses about consequences expected upon a defined behaviour, and values are referred to as a subjective evaluation of the consequences of a specific behaviour, which could have a positive, negative or neutral connotation. Rotter defined locus of control as a one-dimensional construct. Later he developed on the basis of the locus-of-control theory - the construct of control beliefs defined as global and specific, i.e. a situation dependent tendency of expectation. However, research showed the bipolar conception not to be consistent which led to a revision and the development of multidimensional theoretical frameworks as amendments of locus-of-control or control beliefs theories.

One of the best known control beliefs theories is the three-dimensional locus of control model of Levenson (1973), proposing three different sources for attributing control: a) chance and luck referred to as fatalistic externality, b) the powerful others, i.e. socially founded externality, and c) the self, the person’s own strength, referred to as internality. Another approach based on an *a priori* scheme is the spheres-of-control model (SOC) presented by Paulhus and Christie (1981). In this dynamic model of locus-of-control, internal as well as external control beliefs were conceptualised in a way varying with areas of life and over the lifecycle. The SOC-model is based on the assumption that the individual’s confrontation with the world is decomposed in three distinct areas, or according to the authors ‘theatres’. These theatres are conceived as concentric spheres surrounding the individual in his life space with the individual disputing with various external forces within each sphere. The model differentiates between three primary behavioural spheres. First, ‘personal efficacy’ refers to the individual’s quest for control on personal achievement in a primary non-social environment. Second, the individual interacts with others for defending his or her interests, attempting to develop or maintain social relationships, a sphere labelled ‘interpersonal control’. And third, the individual’s goals are often in discordance and conflict with those of the political and social system. Attempts of control in this area are referred to as ‘sociopolitical control’. These three conceptually independent dimensions of perceived control are described in an interactionist approach to assessment of perceived control (Paulhus & Christie, 1981).
Further, in some respect, it can be stated that Rotter’s locus-of-control theory was a forerunner of the idea of self-efficacy theory as researches recognised that beliefs and expectancies about locus-of-control might be domain specific. For instance Bandura’s (1997) self-efficacy theory in its extreme form states that efficacy beliefs are highly domain specific, though attempts have been made to evaluate the overall expectations of effectively controlling the environment (Sherer, Maddux et al., 1982). Further, scales were also developed to evaluate individual differences in other belief systems relevant to control such as desirability of control (Burger & Cooper, 1979). Other concepts of optimistic explanatory types like Antonovsky’s (1993) sense of coherence construct or Kobasa’s (1979) hardiness construct include elements which can be seen in common with control related constructs and which will be discussed in the ‘resilience’ section.

**Measures**

A first scale was developed by Rotter (1986) the ‘Internal-External Locus of Control Scale’ (I-E scale) which measured locus of control in a one-dimensional way, with internal control on the one and external control on the other end of this bipolar dimension. However factor analysis revealed that locus of control was multidimensional with different factors tapping beliefs about whether controlled by the self, chance or powerful others (Levenson, 1973). This led to the development of multidimensional scales such as Levenson’s (1973) ‘Multidimensional Locus-of-control Scale’ or Wallston, Wallston & DeVellis’ (1978) ‘Multidimensional Health Locus of Control Scale’. The latter scale points to the fact that researchers considered beliefs and expectations about locus-of-control to be domain specific. Based on the SOC model, Paulhus (1983) developed the “Spheres of Control Scale” (SOC-S), with ten items to be tapped in each of the three subscales and items being rated on 7-point Likert scales ranging from “strongly disagree” to “strongly agree”. The three factor structure of the scale was tested by means of confirmatory factor analysis, producing strongly supportive results. In addition the scales convergent and discriminant validity in relation to other individual difference measures showed excellent values. In the ESAW project control was assessed by the SOC scales.

**Development**

Locus of control and control beliefs are marked by experiences since early childhood. Within the first year of life children express pleasure and delight when experiencing effect,. White (1959) explains this behaviour as effectance motivation. This behaviour develops within the second and third year of life to a growing need to do things on one’s own. With entering school, control beliefs take a prominent role with respect to academic performance and achievement. Control beliefs not only predict scholastic success, they also determine the child’s success in areas outside the school setting. Research revealed a cyclic causal relationship between control beliefs and commitment to school related activities including academic performance (Skinner et al., 1998). In general, control beliefs and control orientation as well as characteristics like attribution, subjective evaluation of events, their desirability and predictability, the subjective meaningfulness and the subjective age-adequacy are predominantly discussed within personality research. A review of the literature discussing the effects these characteristics may have for developmental differentiation is offered by Hogan, Johnson & Briggs (1997).
Correlates
In general, research findings have produced well established evidence supporting for most people the beneficial effects of an internal locus-of-control on psychological adjustment and physical health (e.g. Lefcourt, 1982). Control beliefs in children are highly associated with the development of the child’s self-concept (Nicholls, 1984). Further, the beneficial effects of perceived control are correlated with desirability of control and are in part determined by the desirability of control (Burger & Cooper, 1979). In general control beliefs and control orientation are correlated with the subjective evaluation of events, the desirability of these and their predictability, as well as the goal-orientation (Caspi, 1998).

Improvements
A considerable amount of evidence, mainly from intervention studies in clinical psychology, report beneficial effects from programmes which aim to enhance a sense of personal control over physical and psychological difficulties and disorders (Thompson, 2002).

Resilience
The concept of resilience, which means psychological strength or mental resistance - has been discussed in recent years especially within developmental and clinical psychology, which has lead to new transdisciplinary areas of research, e.g. developmental psychopathology (Cicchetti & Cohen, 1995; Cicchetti, 1999; Masten, 2002), based on the observation that persons - though they are exposed to substantial stress, burden and risks - stay healthy or, when compared to other people recover within a short period from disorders, while (?) other persons develop under comparable disadvantaged conditions mental disorders and/or physical diseases (Rutter, 1995). On the one hand resilience can be viewed as the counterpart of vulnerability and on the other hand resilience has to be understood relatively. Further, the resilience concept shows close links to Antonovsky’s (1987, 1993) salutogenesis model, especially in the face of major trauma, and is genuinely oriented towards issues of a healthy mental development. This implies a focus on protective factors and resources for the resilience approach, whereas traditional clinical research operates within the vulnerability approach and deals predominantly with issues like risk factors (Rutter, 1990). The concept of resilience has received special attention in adult development and especially within the study of losses in later life (Staudinger et al., 1995). Other areas with special interest in resilience research are for children with special needs, e.g. learning disabilities and intellectual disability and people with mental health problems (Tizard & Clarke, 1992).

Various theoretical and methodological issues are related to the concept of resilience (Luthar, Cicchetti & Becker, 2000). A major issue is related to the definition of resilience, as some authors view the concept in terms of a relatively stable personality trait (Block & Block, 1980), others emphasize the construct's relational character, expressed only in specific resilience or resource constellations (Jessor, 1993; Staudinger, 1999). From this it can easily be derived that resilience can be viewed as both the process of bio-psycho-social adaptation to adverse living conditions or as it product (Masten, Best & Garmezy, 1990). When defined as a personality trait, resilience shows issues of differentiation with concepts like sense-of-coherence (Antonovsky, 1987), hardiness (Kobasa, 1982) or self-efficacy
expectations (Bandura, 1997). Very often authors use expectancy of self-efficacy as an indicator for resilience, which points to a confusion of both concepts. An additional issue arises with the differentiation between risk and protective factors (Rutter, 1990). Further issues are related to the assessment of resilience. The concept of resilience might be reconstructed as a generic term for a variety of underlying concepts, like locus-of-control and coping mechanisms.

**Measures**

In many investigations resilience was not directly assessed but only indirectly evaluated by means of various indicators related either to the person or to the person’s environment. Indicators used were intellectual and social competences, parents’ educational style as well as emotional bonding (Masten et al., 1999). When assessing resilience in a direct way only few instruments are on offer.

A well-known and widely used instrument is the Resilience-Scale by Wagnild & Young (1993) which was applied in the ESAW project. The Resilience Scale is a 25 item factor-analyzed scale with two factors. In the sub-scale “personal competence” (17 items) characteristics like self-confidence, independence, plasticity, perseverance and control are addressed. With the second sub-scale “acceptance of the self and of one’s life” (8 items), characteristics like, adaptability, tolerance and cognitive flexibility are evaluated. The items are answered on a 7-point Likert scale going from “strongly disagree = 1” to “strongly agree = 7”, with high scores marking high expression of resilience.

With the ‘Sense-of-Coherence Scale’ (Antonovsky, 1993) a related concept is addressed. The scale assesses the degree to which life situations are perceived as meaningful, comprehensible and manageable. The manageability aspect of the scale suggests that it shares features in common with other control related constructs. The hardiness scale, developed by Kobasa (1979) is predictive for continued health and well-being despite increases in life stress. The scale also evaluates beliefs like whether significant aspects of one’s life situation are controllable, the expectation that life will entail challenges and the commitment to finding meaning in life.

**Development**

Resilience can be viewed as a person’s multiple competencies - cognitive, emotional, social - to deal with issues of every day life, as well as with exceptional challenges, challenges which are typically age associated, challenges which are temporary or chronic as well as with challenges of ongoing change, directly or indirectly related to the individual (Tizard & Clarke, 1992). From this perspective effective resilience behaviour goes along with adaptive behaviour which leads to and maintains personal well-being. Behaviour favouring resilience is strongly influenced by the various psychological resources which in addition are developed through personal experiences, and effective resilience is determined by whether the person has access to his or her resources (Cicchetti & Cohen, 1995). Correlations for resilience are reported for major aspects of the self, including tenacity. Resilience can be enhanced through cognitive interventions and environmental changes or adaptations.
Mental health

Health has been defined by the WHO (1948) as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Mental health disturbances or mental health disorders can be observed when mental well-being is affected. These disturbances or disorders may on the one hand be strongly correlated with socio-cultural and environmental factors and on the other they may be rather independent of these factors, with biological and genetic factors being assumed to be more prominent.

Mental health disturbances are generally expressed with major changes in emotional states, cognitive representations and/or behavioural responses. Most important is that these changes affect the general functioning of the individual in a serious way limiting him or her substantially in handling and executing his or her activities of daily life and resulting quite often in impairments. In general, persons affected report that they are suffering from such changes. In addition, mental health disorders can be accompanied by endangering one-self or third parties, i.e. threatening the life of one-self - suicidal attempts – or threatening other’s people life (Comer, 1999). Though there is a high agreement on general characteristics of definitions and of the diagnostic classification as defined by the DSM and ICD systems (APA, 2000; WHO, 1992), the issue of the validity of the diagnoses is not settled (Birley, 1990; Poland et al., 1994).

Mental health disturbances and disorders go beyond all limitations - cultural, economical, emotional and intellectual. Mental health problems are widespread and common. According to the DSM diagnostic criteria the life-time prevalence for mental disturbances and disorders is reported to be 48% for the whole population (Kessler et al., 1994) with 21% showing at least once in their life one episode of mental health problems, 13% being affected with two and another 14% suffering from three and more episodes of various mental health disorders during their lifetime.

Measures

The main part of the mental health battery as used in the ESAW project represents the mental health scale from the OARS (Older Americans’ Resources and Services) Multidimensional Functional Assessment (1978). The OARS model consists of three elements: (1) population classification according to functional state of individuals, (2) service use according to service packages actually used, and (3) a transition matrix allowing an assessment of the impact between service use and functional state. A general overview of the outcomes of the OARS assessment based on a longitudinal study of the well-being of elderly people can be found in Comptroller General (1979). The first element of the OARS, the functional assessment, including five a priori defined dimensions – social, economic, mental health, physical health and self-care capacity – has been subject to validation and reliability studies (Fillenbaum & Smyer, 1981). The OARS' mental health scale consists of 10 dichotomous items covering vegetative symptoms, like restlessness, worrying, depressed mood and drive, energy, interests, sleep, paranoia and loneliness.

Instruments like the SCAN (Wing, et al., 1990) or the CIDI (Robins et al., 1985) have been developed especially for international application when aiming at a comprehensive diagnostic assessment for mental health issues. A functional assessment instrument concerned with overall functioning is CARE (comprehensive...
assessment and referral evaluation) which emphasizes mental health (Gurland et al., 1977). Besides the OARS Mental health Scale the WHO developed a widely used screening for mental health assessment the CIDI-SF, WHO’s Composite International Diagnostic Interview Short-Form (Kessler et al., 1998). The PAS-ADD (Moss, 2002) is an additional screening instrument for mental health problems, based on the SCAN-philosophy and especially developed for application in the group of adult and older people with developmental disabilities. In contrast to OARS’ Mental Health Scale, which is a self-report scale, the evaluations in the CIDI-SF as well as the PAS-ADD, are rated by third parties.

Development

Behavioural and mental disorder can be observed and diagnosed from early infancy. There are a number of disorders usually first diagnosed in infancy, childhood or adolescence. The main characteristics of these disorders may persist during adulthood or they may alter and disappear. Apart from schizophrenia and other psychotic disorders or personality disorders the most frequent disorders reported in adulthood are mood disorders (depressive disorders) and anxiety disorders including stress disorders. The one year prevalence for all forms of anxiety disorders can be rated up to 22% and for mood disorders to 10% (Comer, 1999). Factors discussed as causing mental health disorders range from biological, social, environmental, transpersona, to psychological ones, with a multi-causal or multi-factorial view of the roots underlying the clinical symptoms and disorders being adopted in most cases.

The two most frequent mental health disorders in adulthood - mood and anxiety disorders - show in general high correlations with constructs like self-esteem and control-beliefs as well as with additional psychological dimensions. There is good evidence that especially mood and anxiety disorders can be altered through means of psychological interventions, stressing the relevance of underlying cognitive representations in mental health disturbances (reviewed in Comer, 1999).

The self as a resource in old age

While modern theories of life-span psychology no longer view ageing as an exclusively negative process, consisting exclusively of losses, it is still seen as the time of life that involves most losses, and a time in which losses clearly outweigh gains (see, e.g., Baltes, Lindenberger, & Staudinger, 1998). In old age, the probability of losses in most domains of life increases – examples include loss of close others, loss of family and professional roles, decline in physical functioning and health, decline in some cognitive functions, and so on. Even if an individual does not encounter much loss, the awareness that losses are likely to occur and that one's own life is approaching its end, can be enough to make it very difficult to enjoy life in old age. However, the empirical evidence shows what has been called a "paradox" (e.g., Gross, Carstensen, Pasupathi, Tsai, Skorpen & Hsu, 1997; Brandtstädtler, 1990; Brandtstädtler & Greve, 1994): There is no increase in the prevalence of depression in older age; most older adults are at least as happy and satisfied with their lives as younger adults. How do older people manage to do so well emotionally in the face of so many difficulties? Part of the answer is in protective functions of the self, that is, in the way older people interpret and deal with, the experience of ageing and its challenges. Thus, the various facets of the self constitute an important resource that older people draw upon.
The term "resources" has been criticized for its conceptual vagueness and because it has sometimes been used in a circular way (e.g., Hasher & Zacks, 1988; Light, 1991; MacKay & James, 2001; Salthouse, 1988, 1991). A more comprehensive definition of the role and types of resources would indeed be valuable. However, in the present context, we use the term in a more specific sense. While every individual can draw upon many different resources (internal resources such as cognitive functions, knowledge, health, etc., and external resources such as money, social support, books, etc.), the facets of the self that we discuss here play a special role in older age because they are not necessarily afflicted by the general pattern of age-related losses. Thus, they are a resource that older individuals can draw upon when facing challenges in other domains.

In the following paragraphs, we will give an overview of findings about the life-span development of the four domains of the self studied in the ESAW project – self-esteem, control, resilience, and mental health. Note, however, that most evidence in these domains comes from cross-sectional studies.

**Self-Esteem over the Life Span**

Many studies have shown that levels of global self-esteem are remarkably stable across adulthood and well into old age (e.g., Bengtson, Reedy, & Gordon, 1985, Brandstätder & Greve, 1994; Freund & Smith, 1999). It has also been shown that high self-esteem is an effective "buffer" against depression (Brandstätder, Wentura, & Greve, 1993); thus, self-esteem is indeed a resource in the sense discussed above. The finding of self-esteem stability in old age is one of the main aspects of the "old age paradox" described above: How do older individuals maintain their self-esteem, given that they have to give up important roles and their capabilities in many domains are declining?

A number of explanations for this phenomenon have been proposed. First of all, self-esteem is a relatively global aspect of an individual's self-concept, that is, his or her self-evaluation regarding various domains that he or she finds more or less important. It has been shown that the content of spontaneous self-representations varies systematically with age and age-specific life contexts (Cross & Markus, 1991; Hooker, 1992, 1999; Ryff, 1991). For example, job performance is an important aspect of self-descriptions in young and middle, but not in older adulthood. Spontaneous self-descriptions of old to very old individuals most frequently refer to health, family, and life review as central categories (Cross & Markus, 1991; Freund & Smith, 1999; Hooker, 1992, 1999; Ryff, 1991). Thus, older individuals view other domains as central to their self-evaluations than younger individuals do, and the domains they find important may be less malleable to the losses typical of old age, allowing for maintenance of self-esteem. (The idea that older individuals adjust their goals and interests in the face of impending death is at the center of Carstensen's Socio-Emotional Selectivity Theory; see overview in Carstensen, Isaacowitz, & Charles, 1999).

It has also been shown that complexity and differentiation of self-concept is a protective factor in the face of losses (Coleman & Antonucci, 1982; Linville, 1987), at least when the self-concept is consistently positive across domains (Donahue, Robins, Roberts, & John, 1993; Freund & Smith, 1999; Woelfolk, Novalany, Gara, Allen, & Polino, 1995). Showers and Ryff (1996) found that for older adults, having a
small number of self-domains that are highly positively valued is an important protective factor (see also Heidrich & Ryff, 1993; Kling, Ryff, & Essex, 1997).

Another explanation for the maintenance of self-esteem in old age is based on the comparison standards individuals use when evaluating themselves. The level of functioning an individual assigns to him-/herself is clearly dependent on with who he or she compares him-/herself. Downward comparisons, in which people compare themselves to others who are worse off than they are, seem to be an efficient means of maintaining self-esteem even in the face of losses ("other people my age are much worse off than I am"; e.g., Heckhausen & Krüger, 1993; Taylor & Lobel, 1989; Wood, 1989). In other domains, it may be actually conducive to self-esteem to use oneself at younger ages as the comparison standard ("I don't get angry now as easily as I used to"). Flexible, domain-specific choice of comparison standards can be an important resource in maintaining general self-esteem even in the face of losses.

Third, ways of dealing with perceived losses are relevant to maintenance of self-esteem. Once a goal is no longer attainable due to age-related losses in capability, an individual can either adjust his/her goals, for example, by setting a less ambitious goal or by devaluing the respective domain, or he/she can struggle even harder to still reach the goal. As Brandtstädter and his co-workers have shown, individuals who are flexible in adjusting their goals have been shown to maintain their self-esteem to a higher degree than individuals who keep on struggling even if achieving a goal becomes very hard or impossible (e.g., Brandtstädter, 1992).

Locus of Control over the Life Span

At first sight, it seems plausible that global sense of control should increase with growing independence in adolescence and should decrease with increasing dependence (due to both biological and social changes) in older age. The empirical evidence, however, is relatively inconsistent. Studies operationalizing sense of control as a global person variable have found increases, stability, and decreases of internal control in older age (see overview in Fung, Abeles & Carstensen, 1999). For a more differentiated understanding, it is important to assess sense of control in a domain-specific way (Lachman, 1986). For example, older individuals have a lower sense of control than younger individuals in the physical and health domain (Lachman, 1991). In the intellectual domain, older adults have stable internal, but at the same time increasing external control perceptions (that is, they more often see "powerful others" as also controlling what happens; Lachman & Leff, 1989). With respect to Paulhus’s concept of three domains of control, Lachman (1991) found that older adults differ from younger adults in personal control, but not in the interpersonal and socio-political domain. Thus, in total, older adults are relatively successful in maintaining a sense of control, at least in those domains that they find important, even when facing actual losses in resources (Fung et al., 1999; Baltes, 1996).

Resilience over the Life Span

As discussed above, the concept of resilience was developed to account for the fact that some individuals show very good developmental outcomes even though they have encountered a high number of risk factors known to usually lead to negative outcomes. The resilience concept applies very well to the general maintenance of well-being and self-esteem in old age (Staudinger, Marsiske, & Baltes, 1995). Most
elderly individuals are highly resilient to the stressors old age brings, although with very old age and an increasing number of losses in various domains, resilience may begin to decline. In the ESAW project, resilience was conceptualized as one self-resource among others, although one could also argue that resilience is the product of the interplay of other, more one-dimensional, self-resources. Staudinger et al. (1995) list a number of self-related factors that may help older individuals to maintain their high resilience, including structure of the self-concept, goal and priority selection, use of downward and lifetime comparisons, life review, emotional regulation, and coping strategies. As the first three aspects have already been discussed above in the context of self-esteem maintenance, we will briefly refer to the latter three here.

Life review, that is, the reconstruction, explanation and evaluation of the past, has been viewed as an important source of well-being in older age. Older people are often interested in integrating self-aspects and finding meaning in life (Bluck & Habermas, 2001; Bluck & Levine, 1998). Wong and Watt (1991) found that successful ageing was related to integrative reminiscence.

Emotional regulation is one of the few domains in which older adults actually show higher levels of "performance" than younger adults. The basic components of emotional experience are the same in younger and older adults (Levenson, Carstensen, Friesen, & Ekman, 1991), but older adults describe their feelings in a more complex way than younger adults (Labouvie-Vief, 1997). Older adults are better than younger adults at controlling their own feelings, for example, in emotionally difficult situations (Blanchard-Fields, 1996). They do not differ from younger adults in subjective experience and expression of emotions; however, the physiological arousal that goes with emotions is less pronounced in older adults (Lawton, Kleban, Rajagopal & Dean, 1992; Levenson et al., 1991; Malatesta & Kalnok, 1984). Older adults seem to be able to selectively “down-regulate” negative emotions (Carstensen, Pasupathi, Mayr & Nesselroade, 2000).

An important aspect of resilience concerns the way people cope with critical life events (e.g., Bandura, 1982; Brim & Ryff, 1980; Filipp, 1981; Montada, Filipp & Lerner, 1992; Zani & Cicognani, 1999). Over the life span, both the types of stressors people typically face and the resources they have available for dealing with them change. In older age, there is a shift in stressor domains, with job and family-management issues becoming less prominent and health issues, maintenance of functions, and dealing with losses becoming central. Therefore, changes in predominant coping styles may as much be a result of changes in stressors as they may be a result of psychological change “within” the individual. Findings show that older adults more often use distancing (“I don't care so much about this domain anyway”) and positive reappraisal (“There is good to this situation too”) than younger individuals. Younger individuals more often use direct confronting of the problem and search for social support (Diehl, Coyle & Labouvie-Vief, 1996; Folkman, Lazarus, Pimley & Novacek, 1987).

**Mental Health over the Life Span**

While ageing major changes in mental areas take place. In general due to a higher susceptibility to physical disorders and injuries, people experience more burden, load and stress. This is enhanced by a higher rate of major losses with age. Older people not only lose persons close to them (partners, friends and adult children). With
retirement they often lose their social role and experience changes related to the meaning of their life. If they live up to old age they are at high risk of experiencing, in addition, chronic illness and limitations in mobility. Older people may lose their animal companions, and their property or change their accustomed accommodation setting (Gallagher-Thompson & Thompson, 1995). In addition older people often experience declines in their cognitive abilities and capacities, associated at the age 85 and over in 50% with dementias (Cowley, 2000). Here we will refer only to the first group as people with dementias were not included in ESAW's survey. For disorders related to group one it is however not unconditional that older person’s burden and stress lead to mental health problems (Schulz & Heckhausen, 1996). Indeed the literature reports that the vast majority of older people, though experiencing a higher prevalence of stressful events, do not develop major mental health disorders. The answer to this phenomenon is seen in successful coping strategies used by older persons.

Mental health problems of older people may be classified in two major groups. One group is composed of disorders observed in all ages which may be especially linked to the aging process. Those conditions are mood, anxiety and substance-related disorders. The other group is typical for age and old age and includes dementias, delirium as well as amnestic and other cognitive disorders.

Depression shows the highest prevalence for mental disorder in the group older then 65 years, reaching up to 20% (Lyness et al., 1999), with a significant higher prevalence for older women (Fernandez et al., 1995). Research revealed that the presence of depression in older persons highly correlates with the risk of physical conditions. The risk for older persons with high blood pressure to experience a cerebral stroke is three times higher when these people show in addition depressive disorders (Simonsick et al., 1995). Further older depressive persons have longer recovery periods or do not recover completely after cardiac infarction, a broken hip, pneumonia and infections (Goleman, 1995).

Anxiety disorders also show a high prevalence in advanced age (Fuentes & Cox, 2000), with approximately 7% having generalised anxiety disorder, up to 5% agoraphobia and another 1 to 12% other specific phobias (Flint, 1994). It cannot be ignored that there is a higher prevalence of anxiety disorders in this age group, as older people might refer symptoms like heart beat and sweating to physical conditions (Sleek, 1996).

Alcohol and other forms of substance abuse may be problems for older people. However, prevalence figures indicate declining rates for these disorders after age 60 (Graham et al., 1996). According to results from surveys 4% to 6% of those over 60 years old, and especially men, report that they had drinking problems the year preceding the interview (Adams & Cox, 1997). Older persons with drink problems can be classified as those with early and those with late onset of this behaviour. In the late onset group, persons typically start their drinking problem in relation to major negative events they experience and which are typically associated with ageing.

Mental health issues in older people are also reported in some cases to be associated with forgetting to take their medication or confusion about the correct medication or doses (Lipton, 1988). Finally, ageism is often suggested as an important factor limiting access to mental health services for older adults. This view is
strongly supported by data pointing to the high prevalence rates for mental health needs in this population and the low proportion of older people actively supported and treated in mental health care services (Robb, Chen & Haley, 2002).

**ESAW’s conception of the Self as a Resource in Old Age**

As the literature review above has shown, no large decreases in the self resources studied in the ESAW project should be expected. Only a few studies, however, have studied a significant number of “very old” people (i.e., aged above 80), as is the case in ESAW. With very old age and the accumulation of losses in many domains, some decline in self-related resources may be expected. Next hypotheses need to be generated to explore the interactions of well-being and self-resources in advanced and old age.

**Part II: Methodology and Results**

**Methodology**

The ESAW Project was designed as part of the *Global Study of Ageing*, initiated by the Indiana University Center on Aging and Aged, under the directorship of Dr. Barbara Hawkins. The aim of the parent project is to develop a globally applicable model of Ageing Well, estimating the direct causal contribution of five key components, personal characteristics and culture to the outcome variable *Ageing Well*. The five components included in the study are: (1) physical health and functional status, (2) cognitive efficacy, (3) material security, (4) social support resources, and (5) life activity. ESAW represents a European sub-group of the larger global study, which aims to develop a European model of Adult Well-Being using the five key components and parallel methodology. This report focuses on analysis of the data for cognitive efficacy from the ESAW.

**Study Areas**

Six West European countries participated in the study: Austria, Italy, Luxembourg, the Netherlands, Sweden and the United Kingdom. The six countries range from Scandinavia to the Mediterranean. The ESAW research was initiated and co-ordinated by the United Kingdom. The work has been conducted in each participating country by a Principal Co-ordinator and a team of researchers.

**Research Design**

The ESAW research design had 3 phases.

*Phase 1*

**Questionnaire development:** Between them respondents in the participating countries use 9 languages. Researchers at Indiana University (IU) prepared a questionnaire for the global project. In Phase 1 the ESAW participants produced compatible versions of the questionnaire for each country and translated the questionnaire into the necessary languages. Interviewers were recruited and trained.

The translation of questionnaires is not straightforward. The theoretical model being tested is defined by manifest or measured variables to represent conceptualised latent variables set in a causal model to develop the *European Social-Cultural Model for Ageing Well*. Therefore, it was important that universal meaning be shared across
the cultural groups participating. Some questions needed to be calibrated to be culturally/nationally appropriate. For example, they may need to be calibrated to be applicable locally and then re-calibrated for cross-cultural analysis and model testing.

Sample selection:
A representative population of adults aged 50-90 was selected by each of the country teams to reflect the age and gender structure of that population. Samples included both rural and urban areas. Because of the differences in the settlement patterns and population density, the definition of rurality used was left up to each country to decide. Definitions used were those relevant to the particular participating country.

A target sample of 2000 was set in each country. Achieved samples ranged from 1854 to 2154. All countries experienced higher than expected refusal rates. The total sample for the ESAW is 12,000+. Where achieved samples did not conform with population structures, weightings have been introduced to adjust for that.

Phase 2
Interviewing: The second phase of the research focused primarily on data collection. In most cases, the questionnaire was administered to respondents face-to-face, in their own home, in the first language of the respondent, by trained interviewers. In some instances, depending on local situations, telephone interviews were conducted with part of the sample.

Measures used:
Considerable work has been completed in recent years to develop the concept and provide research evidence to support successful ageing or Ageing Well (Baltes & Baltes 1990; Johnson 1995; Rowe & Kahn 1997). In general, well-being in old age evolves from exercising the choices that create a successful and productive life (Krains 1995). The interaction between the ageing process and well-being is a dynamic process involving the individual in his or her environment, including the historical and cultural context. Well-being in old age and the quality of life of older people is necessarily concerned with the resiliency and adaptability of the ageing individual (Johnson 1995). The individual and the environment are interactive, and the positive behavioural outcome associated with well-being are a direct result of adaptation and negotiation that take place within this context.

ESAW is concerned with measuring domains that have been shown to impact on the ageing process and well-being and extensive literature searches have been undertaken. A literature review (conducted by colleagues in the University of Indiana – the parent project) identified indicators that have been used to explain aspects of the quality of life of older people. These have been grouped into the five key components:

- Physical health and functional status
- Mental efficacy (referred to as Self Resources in ESAW)
- Material security
- Life activity
- Social Resources
**Data-sets:** Each team created a national data-base in SPSS. Care was taken to ensure compatible data-sets. Methods for handling of data cleaning and reliability testing were agreed between the teams. Cleaned data-sets were subsequently combined into an integrated dataset by the UK Principal Investigator and all teams provided with a complete data-set.

**Phase 3**
The third phase of the research focuses on data analysis, writing and dissemination. This report represents one of six comparative reports written on each of the five key component areas together with a sixth report on the cultural backgrounds of the study areas and participating countries. An authorship team of five members, one from each nation, was drawn up for each paper of which two or three acted as lead authors. Subsequently, work will be completed on the European Socio-Cultural Model for Ageing Well using causal modelling techniques (LISREL).

Each of the comparative papers considers the effect of the following variables: age, gender, socio-economic status, rural or urban residence, employed/not employed, country, region, ethnicity, household composition. Socio-economic status is measured on the basis of the national distributions and described as high, medium or low. Rurality is defined using the definition of rurality as used in each country. Ethnicity was measured on the basis of what is relevant in each country but for the purpose of comparative analysis this has been recoded as: born in this country, born in another EU country, born elsewhere. Living arrangements have been collapsed into the following categories: living alone, living with spouse only, living with others (which may include the spouse if they are not the only other person in the household).

In presenting the results, we briefly describe and discuss each scale that was used in the ESAW study of self resources. Then, we give descriptive results for each scale:

- **Psychometric quality,**
- **Comparison across countries**,¹
- **Comparisons by intervening variables (age group, gender, urban/rural area, ethnicity¹, household composition, working/non-working; an indicator for socio-economic status has not yet been defined), including interactions of each intervening variable with country if significant.**
- **In addition, as the gender composition varies across age groups (the older the group, the higher the percentage of women), analyses of variance using gender and age group as factors will be performed in case of significant age group effects, in order to test whether the age group effect remains significant when gender is taken into account.**

For each scale, we give tables of means for each country, each subgroup defined by the intervening variables, and each country x subgroup combination.

**Criterion for statistical significance.** Due to the large sample size of above more than 12000 individuals, even very small differences become statistically significant. To

¹The Italian sample contained only one individual coming from “other European” countries. The “means” for this one individual are not reported, and Italy was not included in interpretations of country x ethnicity interactions.
adjust for this, we interpret only effects that have a significance level of .001 or below. Country differences and differences by intervening variables are described in the text whether they are significant or not. Interactions are described only if they are significant.

Sample sizes. Due to incomplete/missing data, sample sizes used in the descriptive analyses reported below are not identical with the overall sample sizes for each country. In computing scores for each scale, we included only participants who had given valid responses to at least 70% of the items in a scale. Therefore, actual sample sizes are lower than the overall sample sizes and differ across scales. The percentage of individuals that were excluded will be reported for each scale in the following.

Questionnaires: Some general remarks
As mentioned above, the core instruments in ESAW’s psychology section were adopted from the Global Aging Initiative (GAI), with ESAW being a European partner in this ambitious global research venture. ESAW researchers had only very limited influence on the choice of the core instruments for measuring each factor. With respect to the factor “self resources in old age”, not all of the choices made for this section within the GAI can be seen as optimal and actual instruments when challenged with actual scientific progress in the area of gerontopsychology. Various ESAW partners added actual, scientifically well established instruments in this section. However, results on these data are not included in the present report.

After the ESAW data collection in Austria had been completed, we invited a number of experienced interviewers to come to a feedback session. In this session, we went through the questionnaire with the interviewers and noted all their comments on potential problems with some of the items, response formats, and so on. This feedback turned to be a valuable source in understanding why some measures were not functioning as well as we might have expected. If any group working on the other sections of the questionnaire is interested in our interviewers’ feedback on the items of those sections, we are happy to share the information we received. In addition, it may be a good idea to conduct such feedback sessions in the other ESAW countries, too.

Results

Results are presented according to the sequence of the scales as used in the ESAW questionnaires, starting with the self-esteem scale, followed by the spheres of control scales, the resilience scale and the mental health battery.

Self-esteem scale (Rosenberg, 1965)

The reliability of the Rosenberg scale was very satisfactory (overall alpha = .83, country-wise alphas ranging from .80 to .87). The grand mean was quite high, M = 4.07 (SD = .64) on a scale from 1 to 5. This indicates a skewed distribution, which is also illustrated by the histogram (see figure 1 appendix) and implies that the scale items were not optimally suited to assess individual differences at higher levels of self-esteem. In spite of this general problem, results show some interesting individual
and country differences. A summary of the results is offered in table 1 of the appendix.

Country
Overall, there were significant differences in self-esteem between the six countries. Post-hoc Scheffé tests showed four homogeneous subsets of countries. Participants from the UK had the lowest level of self-esteem (M = 3.90). The Netherlands, Italy, and Sweden did not differ significantly, with means around 4.00. Luxembourg had the second-highest mean (4.15), and the highest mean self-esteem was reported in Austria (M = 4.29).

Age group
There was a general effect of age group, indicating an almost linear decline of self-esteem with age (from 4.12 in the 50- to 59-year-olds to 3.90 in the group aged 80 to 90). Significant correlations between age and self-esteem were found in all countries ranging from r = -.163 (p ≤ .000) to r = -.071 (p = .001) except in the UK (r = -.012 / p = .595).

Gender
Men and women differed significantly in self-esteem (men: M = 4.13, women: M = 4.01), which is a very common result in the psychological literature. Country-wise gender differences in self-esteem ranged from .04 (UK) to .20 (Sweden and Italy). In addition, the interaction of gender and country was at the critical significance level. The differences in gender bring up the question to what degree the age group effect is a consequence of differences between age groups in gender composition. An analysis of variance including age group and gender showed that both factors remain significant i.e. the effect is not a consequence of differences between age groups in gender composition.

Rural/urban
There were no significant differences between individuals living in rural and urban environments. However, there was a significant interaction of urban/rural environment with country, not all in the same direction. Relatively large differences were found in Italy (rural: M = 3.88, urban: M = 4.03), UK (rural: M = 3.96, urban: M = 3.84), and Sweden (rural: M = 3.93, urban: M = 4.03); differences in the other countries were small.

Ethnicity
There were neither a significant differences between participants from the national majority, individuals from non-European countries and participants from other European countries, nor a significant interaction of ethnicity with country.

Household composition
Household composition was a significant predictor of self-esteem, with individuals living alone reporting lower levels of self-esteem (M = 3.95) than individuals living with others (M = 4.10).

Working/non-working
Finally, groups in different working situations also showed significant differences. Working individuals (M = 4.20) reported higher self-esteem than non-working individuals (M = 4.00).
Generally, the group effects for age, gender, household composition and living location seem to be consistent with expectations that could be derived from the literature. It is more difficult to interpret the relatively large differences between countries and the significant interactions with country for gender and living area.

**Spheres of control: Personal control** (Paulhus, 1983)

We decided to use a short form of the personal control scale only including the 4 most reliable items. Due to translation problems we agreed on reducing the ratings for the personal control scale from 7 to 5 degrees.

The reliability of the Personal control scale was not very satisfactory (overall alpha = .66, country-wise alphas ranging from .70 to .52, with the Netherlands showing the lowest alpha). The grand mean was $M = .91$ (SD = .66) on a scale from -2 to +2 (see figure 2a appendix). A summary of the results is offered in table 2 of the appendix.

**Country**

Overall, there were significant differences in personal control between the six countries. Post-hoc Scheffé tests showed four homogeneous subsets of countries. Participants from the Netherlands had the lowest level of personal control ($M = .65$). Sweden had the second lowest mean ($M = .73$), followed by the UK with a mean of $M = .87$. Italy ($M = 1.04$), Luxembourg ($M = 1.06$) and Austria ($M = 1.09$) did not differ significantly and showed the highest level in personal control.

**Age groups**

There was a general effect of age group, indicating an almost linear decline of personal control with age. The 50- to 59-year olds ($M = .97$) did not differ significantly from the group aged 60 to 69 ($M = .94$). Both showed the highest level of personal control followed by the 70- to 79-year olds ($M = .84$). The group aged 80 to 90 had the lowest level of personal control ($M = .70$). Significant correlations between age and personal control were found in all countries ranging from $r = -.190$ ($p \leq .000$) to $r = -.120$ ($p \leq .000$) except in the UK ($r = -.042 / p = .074$).

**Gender**

Men and women differed significantly in personal control (men: $M = .99$, women: $M = .84$), which is a very common result in the psychological literature. There was no significant interaction of gender with country.

To test whether the age group effect is a consequence of differences between age groups in gender composition, an analysis of variance including age group and gender showed that both factors continue to stay significant i. e. the effect is not a consequence of differences between age groups in gender composition.

**Rural/urban**

There were neither a significant differences between individuals living in rural and urban environments, nor a significant interaction of urban/rural environment with country.
Ethnicity
There were no differences found in ethnicity. However the interactions with country were at a significant level with $p \leq .000$. As figure 2b illustrates, the distribution of means for ethnicity were quite diverse. In Austria, Luxembourg and Sweden, individuals from non-European countries showed the highest levels in personal control, whereas in the UK they ranged at the lowest level of personal control. Participants from other European countries had the highest level in personal control in the Netherlands, however in Austria and Luxembourg they showed the lowest level of personal control.

Household composition
Household composition was a significant predictor of personal control, with individuals living alone reporting lower levels of personal control ($M = .80$) than individuals living with others ($M = .94$).

Working/non-working
Finally, groups in different working situations also showed significant differences. Working individuals ($M = 1.00$) reported higher personal control than non-working individuals ($M = .86$).

Generally, the group effects for age, gender, household composition, and working environment seem to be consistent with expectations that could be derived from the literature. But strong country differences, differences in reliability among countries, and interactions with country need explanation.

Spheres of control: Interpersonal control (Paulhus, 1983)

We decided to use a short form of the interpersonal control scale including only the 5 most reliable items. Due to translation problems we agreed on reducing the ratings for the interpersonal control scale from 7 to 5 degrees.

The reliability of the (reduced) Interpersonal Control scale was generally satisfactory (overall alpha = .70, country-wise alphas ranging from .57 to .75, with the Netherlands showing the lowest alpha). The grand mean was not very high, $M = .51$ (SD = .76) on a scale from -2 to +2 (see figure 3 appendix). A summary of the results is offered in table 3 of the appendix.

Country
Overall, there were no significant differences in interpersonal control between the six countries.

Age groups
There was a general effect of age group. Post-hoc Scheffé tests indicating three homogeneous groups of age with an almost linear decline of interpersonal control with age group. The highest level of interpersonal control was found in the group

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2 The Italian sample contained only one individual coming from "other European" countries. The "means" for this one individual are not reported, and Italy was not included in interpretations of country x ethnicity interactions.
aged 50 to 59 (M = .61), followed by the 60- to 69-year olds (M = .52). The 70- to 79-year olds did not differ significantly from the 80- to 90-year olds. Both had the lowest level of interpersonal control (M = .38 and M = .35). Significant correlations between age and interpersonal control were found in all six countries ranging from r = -.176 (p \leq .000) to r = -.083 (p = .000).

**Gender**
Men and women differed significantly in interpersonal control (men: M = .58, women: M = .45). Country-wise gender differences in interpersonal control ranged from .07 (Luxembourg) to .19 (Netherlands). In addition, the interaction of gender and country was at the significance level of p \leq .000. The gender differences bring up the question as to what degree the age group effect is a consequence of differences between age groups in gender composition. An analysis of variance including age group and gender showed that both factors stay significant, i.e. the effect is not a consequence of differences between age groups in gender composition.

**Rural/urban**
There were no significant differences between individuals living in rural and urban environments. However, there was a significant interaction of urban/rural environment with country. Relatively large differences were found in Austria (rural: M = .42, urban: M = .55), Italy (rural: M = .41, urban: M = .57), and Sweden (rural: M = .35, urban: M = .48); differences in Luxembourg were small. There were also small differences found in the Netherlands but with individuals living in rural areas showing slightly higher interpersonal control (rural: M = .51) than those living in an urban environment (urban: M = .48). In the UK these differences were quite high (rural: M = .57, urban: M = .45).

**Ethnicity**
No significant differences were found in ethnicity.

**Household composition**
Household composition was a significant predictor of interpersonal control, with individuals living alone reporting lower levels of interpersonal control (M = .42) than individuals living with others (M = .53).

**Working/non-working**
Finally, groups in different working situations also showed significant differences. Working individuals (M = .68) reported higher interpersonal control than non-working individuals (M = .43). The country-wise working/non-working differences in interpersonal control ranged from .19 (Luxembourg) to .36 (Sweden).

Generally, the group effects for age, gender, household composition and working/non-working seem to be consistent with expectations that could be derived from the literature. It is more difficult to interpret the relatively large differences between countries and the significant interactions with country for gender and living area.
Spheres of control: Sociopolitical control (Paulhus, 1983)

We decided to use a short form of the sociopolitical control scale only including the 5 most reliable items. Due to translation problems we agreed on reducing the ratings for the sociopolitical scale from 7 to 5 degrees.

The reliability of the (reduced) Sociopolitical control scale was not very satisfactory (overall alpha = .69, country-wise alphas ranging from .57 to .72, with the Netherlands showing the lowest alpha). The grand mean was not very high, M = .05 (SD = .76) on a scale from -2 to +2 (see figure 4a appendix). A summary of the results is offered in table 4 of the appendix.

Country
Overall, there were significant differences in sociopolitical control between the six countries. Post-hoc Scheffé tests showed four homogeneous subsets of countries. Participants from the UK (M = -.12) and Italy (M = -.06) showed the lowest level of sociopolitical control. They are followed by Luxembourg (M = .00) and the Netherlands (M = .00), whereas Italy (M = -.06) is in-between and not significantly different from either of the two groups. Sweden had the second-highest mean (M = .13), and the highest mean in sociopolitical control was reported in Austria (M = .28).

Age groups
There was no general effect of age group for sociopolitical control. However interactions of age groups and country were found. The distributions of the means for the age groups in the six countries were quite heterogeneous. As described in figure 4b, Austria and Luxembourg showed an almost linear decline across age groups, the UK showed an increase across age groups, whereas the other countries had a heterogeneous distribution. Significant correlations between age and sociopolitical control were found in Austria (r = -.062 / p = .005), Luxembourg (r = -.088/ p ≤ .000), UK (r = .071 / p = .003) and Sweden (r = .032 / p = .113).

Gender
Men and women differed significantly in sociopolitical control (men: M = .10, women: M = .00). Country-wise gender differences in sociopolitical control ranged from .03 (Netherlands) to above .20 (Luxembourg). To test whether the age group effect is a consequence of differences between age groups in gender composition, analysis of variance was performed and showed that age group stays significant and gender not significant, i. e. the effect of age group is not caused by the differences in gender composition in the age groups.

Rural/urban
There were significant differences in socio-political control between individuals living in rural and urban environments. In addition, there was a significant interaction of urban/rural environment with country. Relatively large differences were found in Italy (urban: M = -.08, rural: M = .06) and the UK (urban: M = .04, rural: M = -.25). Small differences were reported in Austria (urban: M = .31, rural: M = .23)

Ethnicity
No significant differences were found in ethnicity.
**Household composition**
No significant differences were found for socio-political control in household composition.

**Working/non-working**
Finally, groups in different working situations showed significant differences. Working individuals (M = .09) reported higher sociopolitical control than non-working individuals (M = .02).

Generally, the group effects for gender, living area and working situation seem to be consistent with expectations that could be derived from the literature. The interpretation of the relatively large differences between countries and the significant interactions with country for gender and living area are more difficult to explain.

**Resilience scale** (Wagnild & Young, 1993)
Due to translation problems we agreed on reducing the ratings for the resilience scale from 7 to 5 degrees.

The reliability of the (reduced) Resilience scale was very satisfactory (overall alpha = .89, country-wise alphas ranging from .73 to .93). The grand mean was quite high, M = 3.96 (SD = .53) on a scale from 1 to 5. Although the distribution is somewhat skewed, there does seem to be a major ceiling effect (see figure 5a appendix). A summary of the results is offered in table 5 of the appendix.

**Country**
Overall, there were significant differences in resilience between the six countries. Post-hoc Scheffé tests showed five homogeneous subsets of countries. Participants from the Netherlands had the lowest level of resilience (M = 3.75) followed by Sweden (M = 4.02) and Italy (M = 4.00). Austria and Luxembourg did not differ significantly. They had the highest level of resilience with means around 4.05. The highest level of resilience was reported in the UK (M = 4.13).

**Age group**
There was a general effect of age group, indicating the highest level of resilience in the groups aged 50 to 59 and 60 to 69 (means around 4.0). The 70 to 79-year olds showed a mean of M = 3.92 and were followed by the group aged 80 to 90 with the lowest level of resilience (M = 3.86). Furthermore there was an interaction of age group and country at a significance level of p = .000. As figure 5b shows, age group differences were relatively larger in Italy and somewhat larger in Luxembourg. There were no significant differences between age groups in Sweden. Significant correlations between age and resilience were found in all countries ranging from r = -.175 (p ≤ .000) to r = -.069 (p = .001) except in UK (r = .034 / p = .152). An analysis of variance including age group and gender showed that age group stays significant and gender not significant, i.e. the effect of age group is not caused by the differences in gender composition in the age groups.

**Gender**
There was no significant difference in resilience for men and women (Men: M = 3.97; Women: M = 3.96).
**Rural/urban**

Individuals living in rural and urban environments differ significantly, with people from rural environments having a higher level of resilience (M = 4.00) than people living in urban areas (M = 3.95).

**Ethnicity**

There was no significant difference in resilience for ethnicity. Interactions with country showed significance with p ≤ .000. Figure 5c shows no significant differences between the three ethnicity groups in Luxembourg, Netherlands and Sweden. In the other countries the distribution is more heterogeneous. Whilst the individuals from non-European countries had the lowest level of resilience in the UK, they show the highest level in Austria.

**Household composition**

Household composition was not a significant predictor of resilience. Individuals living alone reported the same level of resilience (M = 3.96) as those individuals not living alone.

**Working/non-working**

Finally, groups in different working situations showed significant differences, with working individuals (M = 4.00) reporting a higher resilience than non-working individuals (M = 3.94).

Generally, the group effects for age, living area, ethnicity and working situation seem to be consistent with expectations that could be derived from the literature. It is more difficult to interpret the relatively large differences between countries.

**Mental health status including the mental health scale (Fillenbaum, 1988)**

The suggested procedure for scoring the Mental Health scale was computing a SUM score across the 15 symptom items and categorizing scores by putting them in relation to life satisfaction items. As the rationale for this quite unusual method was not completely clear, we preferred to dichotomize the two items and include them in the SUM score. As the two items are semantically analogue to the 15 other items, there was no reason to include them in a different way.

The reliability of the mental health scale was quite satisfactory (overall alpha = .77, country-wise alphas ranging from .75 to .82). The grand mean was at M = .23 (SD = .19) on a scale from 0 to +1, with a lower score indicating a better mental health (see figure 6a appendix). A summary of the results is offered in table 6 of the appendix.

**Country**

Overall, there were significant differences in mental health between the six countries. Post-hoc Scheffé tests showed two homogeneous subsets of countries. Participants from the Netherlands (M = .19), the UK (M = .21) and Austria (M = .21)

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3 The Italian sample contained only one individual coming from "other European" countries. The "means" for this one individual are not reported, and Italy was not included in interpretations of country x ethnicity interactions.
showed the higher level of mental health. Luxembourg (M = .24), Sweden (M = .25) and Italy (M = .26) had a lower level of mental health.

**Age groups**

There was a general effect of age group for mental health. Post-hoc Scheffé tests showed three homogeneous subsets of age groups. The 50 to 59 year olds had the highest level of mental health together with the 60 to 69 year olds (M = .23 and M = .21). The individuals aged 70 to 79 had the second lowest level of mental health with M = .25. The lowest level was reported in the oldest group aged 80 to 90 years (M = .27). Interactions of age groups and country were found at a significance level of p ≤ .000. As illustrated in figure 6b, the distribution of the means for age group in all six countries are quite heterogeneous: Except for the UK, where there were no significant differences between age groups, in the other countries the 50 to 59 and the 60 to 69 year-olds show significantly higher levels of mental health than the two older age groups. In Sweden, however, the individuals aged 50 to 59 had significantly lower levels than the groups aged 60 to 69 and 70 to 79. Significant correlations between age and mental health were found in all countries ranging from r = .161 (p ≤ .000) to r = -.078 (p = .001) except for the UK and Sweden.

**Gender**

Men and women differed significantly in mental health, with men showing a higher level of mental health (M = .19) than women (M = .26). In addition, the interaction of gender and country was at the significance level of p ≤ .000. Country-wise gender differences in sociopolitical control ranged from .03 (UK) to above .11 (Italy). To test whether the age group effect is a consequence of differences between age groups in gender composition, analysis of variance was performed. The analysis of variance showed that both factors stay significant, i.e. the effect is not a consequence of differences between age groups in gender composition.

**Rural/urban**

There were significant differences between individuals living in rural and urban environments, with participants living in urban areas showing a lower level of mental health (M = .24) than individuals living in a rural environment (M = .20). There was also a significant interaction of urban/rural environment with country. In all countries, individuals living in rural environments show a higher level of mental health (differences ranged from .00 (Sweden) to .07 (UK), except for Luxembourg (differences: .01), where individuals living in rural areas have a lower level of mental health than individuals from an urban environment.

**Ethnicity**

Ethnicity was a significant predictor of mental health, with individuals from non-European countries showing the lowest level of mental health (M = .31). The highest level of mental health was reported in the group of individuals from the national majority (M = .23). Participants from other European countries were in-between with a level of M = .27. A significant interaction of ethnicity and country at the level of p ≤ .000 was found. In Sweden, UK and Netherlands individuals from non-European

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4 The Italian sample contained only one individual coming from “other European” countries. The “means” for this one individual are not reported, and Italy was not included in interpretations of country x ethnicity interactions.
countries showed significantly lower levels of mental health than individuals from other European countries or individuals from the national majority. In Austria and Luxembourg the three groups did not differ significantly from one another. Sweden is the only country, where participants from the national majority and from other European countries differ significantly from one another (see figure 6c).

Household composition
Household composition proved to be a significant predictor of mental health with individuals living alone reporting lower levels of mental health (M = .27) than individuals living with others (M = .22).

Working/non-working
Finally, groups in different working situations also showed significant differences. Working individuals (M = .20) reported higher levels of mental health than non-working individuals (M = .24). The interactions with country were significant at the critical level of p = .001. Working individuals have a higher level of mental health than non-working individuals. Country-wise working situation differences in mental health ranged from .03 (Sweden) to above .07 (UK).

Generally, the group effects for age, gender, living area, ethnicity, household composition and working / non-working seem to be consistent with expectations that could be derived from the literature. More difficult to interpret are the many country – interactions. The language –translation problems may have here a particular relevant impact. Moreover the mental health scale is a very heterogeneous scale covering many different aspects of mental health.

Suggestions for Advanced Analyses

One general goal of the analyses in the Self-Resources domain is to define a composite index of “level of self resources in old age”, that is, to determine the best way to aggregate each individual’s scores in each of the scales subsumed here into one index. We believe that in order to decide how to build such an index, we first need to investigate whether an additive combination of all scores makes sense, or whether there are specific patterns of self-resources that differ in their relationships from other variables, in particular from life satisfaction. For example, there might be one group of individuals showing high self-esteem and low levels of perceived control, and another group showing low self-esteem and high levels of perceived control. Simply adding up a standardized form of the scores in the two scales would give these two groups the same overall score – which would only be justified if the groups do not differ in outcome variables such as life satisfaction. Therefore, we use cluster analyses to investigate whether such qualitatively (rather than quantitatively) different subgroups exist.

Discussion
The report presented was structured to be comparative across countries, according to the requirements of the ESAW project at the current stage. We found both significant differences between countries and significant interactions of other variables with country for most of the variables studied here. Irrespective of the interest in countrywise comparative presentation of European data in the general population and irrespective of the value of such a comparison for the researcher to
get a general understanding and feeling of the data, we consider the scientific value of such comparisons for psychological constructs to be doubtful. Among many other factors, country differences in ESAW results may be caused by (a) subtle differences in translation of the questionnaires, or (b) subtle differences in sampling and interviewing procedures across countries. Interpretation of such differences as “true” differences between countries therefore should be done only with the greatest caution. We therefore do not intend to interpret and discuss these differences here.

Generally, the overall results reported for each scale are quite consistent with the literature. Significant differences between age groups, with resource levels decreasing with increasing age, were found somewhat more often than would have been expected, given the general stability of self-resources in old age reported in the literature. Note, however, that these differences were generally small. They amounted to:

- 0.22 points on a five-point scale for Self-Esteem,
- 0.27 on a five-point scale for Personal Control,
- 0.26 on a five-point scale for Interpersonal Control,
- 0.01 on a five-point scale for Sociopolitical Control,
- 0.14 points on a five-point scale for Resilience, and
- 0.04 points on a 0-to-1 scale for Mental Health.

The small size of the differences suggests that these effects may not have been detected in earlier studies with smaller samples, and that they are not highly relevant from a substantive perspective. It will be interesting to study these individual differences in the context of the other factors studied in the ESAW project. Possibly, factors associated with a decline in self resources in very old age can be identified. For example, people might show losses in control or self-esteem only when they really become dependent on others’ direct personal support and the age group effect may be the result of a higher percentage of dependent individuals in the older age groups. Of course, for a clear interpretation, longitudinal studies, following individuals’ trajectories of development, would be required.

Gender differences were significant for self-esteem, personal control, interpersonal control, sociopolitical control, and mental health (but not for resilience), with men in all cases showing higher levels than women; as with age groups, the mean differences are generally small. These findings, while being in good agreement with the literature, are especially interesting in light of the fact that there is no gender difference in resilience. Women may be as resilient as men to the losses of old age, but they may be using partly different ways of coping with these losses. Again, it will be interesting to study this finding in the context of the other factors, e.g., social support. Older women are often the “maintainers” of social networks for their husbands (e.g., Baltes, Freund, & Horgas, 1999). One could speculate that women use external resources, such as social support, friends and family, to a higher degree than men in maintaining their well-being.

Significant (though, again, small) differences between individuals living in rural and urban areas were found for sociopolitical control, resilience, and mental health; however, significant interactions of rural/urban area with country were found for all variables except personal control and resilience, and in some cases, mean
differences were reversed across countries. Therefore, a general interpretation of these differences is difficult; presumably, there are differences in the socio-economic characteristics of country/city inhabitants in the different countries.

Differences between ethnicities were significant for self-esteem, resilience, and mental health; again, they were generally small. In all cases, individuals from the national majority reported the highest levels of self-resources, individuals from non-European countries reported the lowest levels, and individuals from other European countries were in between.

Household composition was also a rather general predictor of self-resources, with significant effects differences in self-esteem, personal control, interpersonal control, and mental health. In all cases, individuals living alone reported (slightly) lower levels, on average, than individuals living with others. This effect might be related to the more general gender effect, as more women than men are living alone in old age due to the lower life expectancy for men.

Finally, there were significant differences related to working status in all scales measured here. Working status may actually be a very interesting variable in explaining age differences, as the changes in life situation usually associated with old age are highly associated with retirement. Before retiring, individuals may not be “feeling old” at all.

While these descriptive analyses are clearly interesting, we believe that the most interesting analyses of self resources will focus on the interplay of losses in other domains (health, functional capacity, social support) and self-resources in their effect on life satisfaction: Do self-resources allow people to maintain well-being even if they face major losses in functional or relational domains?
References


Rationale, development and reliability. International Journal of Aging and Human Development, 8, 9-42.


Sleek, S. (1996). Practitioners will eventually have to meet steeper criteria to practice geropsychology, experts predict. APA Monitor, 27, 17.


APPENDIX A

TABLES
Table 1: Self-Esteem Scale Weighted (Rosenberg, 1965) Min: 1; Max: 5; ItemNo.: 5 (5= max. self-esteem)

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| Urban       | .55   | .78   | .57  | .78  | .53  | .80  | .48  | .80  | .48  | .87  | .45  | .70  | .45  | .70  | .77   | 50 - 59 |
| Rural       | .42   | .78   | .41  | .72  | .49  | .85  | .51  | .85  | .35  | .89  | .57  | .68  | .49  | .72  | .77   | 60 - 69 |

| National Majority | .50   | .78   | .55  | .78  | .51  | .81  | .50  | .81  | .48  | .87  | .52  | .69  | .51  | .76  | .50   | 50 - 59 |
| Other European   | .53   | .82   | .60  | .86  | .56  | .86  | .58  | .86  | .42  | .85  | .33  | .81  | .49  | .82  | .53   | 60 - 69 |
| Non-European    | .62   | .77   | .55  | .92  | .75  | .62  | .35  | .62  | .33  | .91  | .46  | .72  | .45  | .73  | .62   | 70 - 79 |

| not alone      | .51   | .78   | .57  | .78  | .52  | .80  | .51  | .80  | .52  | .86  | .55  | .68  | .53  | .75  | .53   | 80 - 89 |
| Alone          | .45   | .78   | .44  | .76  | .48  | .84  | .43  | .84  | .34  | .89  | .39  | .70  | .42  | .77  | .42   | 80 - 89 |

| non-working    | .41   | .78   | .49  | .77  | .46  | .81  | .42  | .81  | .33  | .88  | .46  | .70  | .43  | .76  | .41   | 80 - 89 |
| working        | .69   | .76   | .68  | .77  | .65  | .79  | .67  | .79  | .69  | .81  | .66  | .65  | .68  | .73  | .69   | 80 - 89 |
Table 4: Spheres of Control: Sociopolitical Control Weighted (Paulhus, 1983) Min: -2; Max: +2; ItemNo.: 5 (2=Max. soc.-pol. control)

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Self-Resources - Report on Section D (version 5.6.2003)
### Table 5: Resilience Scale Weighted (Wagnild & Young, 1993) Min: 1; Max: 5; ItemNo.: 20 (5= max. resilience)

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APPENDIX B

FIGURES
Figure 1: Self-esteem: Frequencies

Figure 2a: Personal Control: Frequencies
**Figure 2b: Personal Control: Profilplot: Ethnicity**

**Figure 3: Interpersonal Control: Frequencies**
European Study on Adult Well-Being (ESAW)

**Figure 4a: Sociopolitical Control: Frequencies**

**Figure 4b: Sociopolitical Control: Profilplot: Agegroups**
European Study on Adult Well-Being (ESAW)

Figure 5a: Resilience: Frequencies

Figure 5b: Resilience: Profilplot: Agegroup

Self-Resources - Report on Section D (version 5.6.2003)
Figure 5c: Resilience: Profilplot: Ethnicity
**Figure 6a: Mental Health Status: Frequencies**

**Figure 6b: Mental Health Status: Profilplot: Agegroups**
Figure 6c: Mental Health Status: Profilplot: Ethnicity
APPENDIX C

SCALES
**SELF-ESTEEM SCALE** (Rosenberg, 1965)

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<td>2. On the whole, I am satisfied with myself.</td>
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<td>3. I feel I do not have much to be proud of</td>
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<td>4. I feel that I have a number of good qualities.</td>
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<td>5. At times I think I am no good at all.</td>
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<td>6. I take a positive attitude toward myself.</td>
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<td>7. I wish I could have more respect for myself.</td>
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<td>8. I am able to do things as well as most other people.</td>
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<td>9. All in all, I am inclined to feel that I am a failure.</td>
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<td>10. I feel that I'm a person of worth, at least on an equal plane with others.</td>
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Items written in italics were reversed in valence to assure correct computation in the Self-Esteem scale. Values > 3 stand for high self-esteem; values < 3 stand for low self-esteem. The ratings were as follows:

1. Strongly Agree
2. Agree
3. Undecided
4. Disagree
5. Strongly Disagree
**SPHERES OF CONTROL: Personal Control Section** (Paulhus, 1983)

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1. When I get what I want it's usually because I worked hard for it.

2. When I make plans I am almost certain to make them work.

3. I prefer games involving some luck over games requiring pure skill.

4. I can learn almost anything if I set my mind to it.

5. My major accomplishments are entirely due to my hard work and ability.

6. I usually don't set goals because I have a hard time following through on them.

7. Competition discourages excellence.

8. Often people get ahead just by being lucky.
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9. On any sort of exam or competition I like to know how well I do relative to everyone else.

10. It’s pointless to keep working on something that’s too difficult for me.

We decided to use a short form of the personal control scale only including the 4 most reliable items (*bold letters). The items written in italics were reversed in valence to assure correct calculation in the personal control scale. Due to translation problems we agreed on reducing the ratings for the personal control scale from 7 to 5 degrees as follows (values > 5 show higher personal control; values < 5 show lower personal control):

(1) Strongly Disagree => Strongly Disagree (1)
(2) Disagree => Disagree (2)
(3) Moderately Disagree => Disagree (2)
(4) Undecided => Undecided (3)
(5) Moderately Agree => Agree (4)
(6) Agree => Agree (4)
(7) Strongly Agree => Strongly Agree (5)
**SPHERES OF CONTROL: Interpersonal Control Section** (Paulhus, 1983)

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</tbody>
</table>

1. Even when I'm feeling self-confident about most things, I still seem to lack the ability to control social situations.
2. I have no trouble making and keeping friends.
3. I'm not good at guiding the course of a conversation with several others.
4. I can usually establish a close personal relationship with someone I find attractive.
5. When being interviewed I can usually steer the interviewer toward the topics I want to talk about and away from those I wish to avoid.
6. If I need help in carrying off a plan of mine, it's usually difficult to get others to help.
7. If there's someone I want to meet I can usually arrange it.
We decided to use a short form of the interpersonal control scale only including the 5 most reliable items (*bold letters). The items written in italics were reversed in valence to assure correct calculation in the interpersonal control scale. Due to translation problems we agreed on reducing the ratings for the interpersonal control scale from 7 to 5 degrees as follows (values > 5 show higher interpersonal control; values < 5 show lower interpersonal control):

(1) Strongly Disagree
(2) Disagree
(3) Moderately Disagree
(4) Undecided
(5) Moderately Agree
(6) Agree
(7) Strongly Agree

=> Strongly Disagree (1)
=> Disagree (2)
=> Disagree (2)
=> Undecided (3)
=> Agree (4)
=> Agree (4)
=> Strongly Agree (5)
### SPHERES OF CONTROL: Sociopolitical Control Section (Paulhus, 1983)

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Moderately Disagree</th>
<th>Undecided</th>
<th>Moderately Agree</th>
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</tbody>
</table>

**1. By taking an active part in political and social affairs we, the people, can control world events.**

**2. The average citizen can have an influence on government decisions.**

3. It is difficult for people to have much control over the things politicians do in office.

4. Bad economic conditions are caused by world events that are beyond our control.

**5. With enough effort we can wipe out political corruption.**

**6. One of the major reasons we have wars is because people don't take enough interest in politics.**

7. There is nothing we, as consumers, can do to keep the cost of living from going higher.
<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
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</table>

8. When I look at it carefully I realize it is impossible to have any really important influence over what big businesses do.

9. I prefer to concentrate my energy on other things rather than on solving the world’s problems.

*10. In the long run we, the voters, are responsible for bad government on a national as well as a local level.

We decided to use a short form of the Sociopolitical control scale only including the 5 most reliable items (*bold letters). The items written in italics were reversed in valence to assure correct calculation in the sociopolitical control scale. Due to translation problems we agreed on reducing the ratings for the sociopolitical control scale from 7 to 5 degrees as follows (values > 5 show higher sociopolitical control; values < 5 show lower sociopolitical control):

1. Strongly Disagree ➞ Strongly Disagree (1)
2. Disagree ➞ Disagree (2)
3. Moderately Disagree ➞ Disagree (2)
4. Undecided ➞ Undecided (3)
5. Moderately Agree ➞ Agree (4)
6. Agree ➞ Agree (4)
7. Strongly Agree ➞ Strongly Agree (5)
# RESILIENCE SCALE (Wagnild & Young, 1993)

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
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</tbody>
</table>

1. When I make plans I follow through with them.
2. I usually manage one way or another.
3. I am able to depend on myself more than anyone else.
4. Keeping interested in things is important to me.
5. I can be on my own if I have to.
6. I feel proud that I have accomplished things in my life.
7. I usually take things in stride.
8. I am friends with myself.
9. I feel that I can handle many things at a time.
10. I am determined.
11. I seldom wonder what the point of it all is.
12. I take things one day at a time.
<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
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<td>13. I can get through difficult times because I've experienced difficulty before.</td>
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<td>15. I keep interested in things.</td>
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<td>16. I can usually find something to laugh about.</td>
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<tr>
<td>17. My belief in myself gets me through hard times.</td>
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<td>18. In an emergency, I'm someone people generally can rely on.</td>
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<td>19. I can usually look at a situation in a number of ways.</td>
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<td>20. Sometimes I make myself do things whether I want to or not.</td>
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<tr>
<td>21. My life has meaning.</td>
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<tr>
<td>22. I do not dwell on things that I can't do anything about.</td>
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<tr>
<td>23. When I'm in a difficult situation, I can usually find my way out of it.</td>
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</table>
Due to translation problems we agreed on reducing the ratings for the resilience scale from 7 to 5 degrees as follows (values > 5 show higher resilience; values < 5 show lower resilience):

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</tbody>
</table>

24. I have enough energy to do what I have to do.

25. It's okay if there are people who don't like me.
MENTAL HEALTH STATUS

1. How often would you say that you worry about things - very often, fairly often, or hardly ever?
   ___ Very often → YES
   ___ Fairly often → YES
   ___ Hardly ever → NO
   ___ Not answered → Not answered

2. In general, do you find life exciting, pretty routine, or dull?
   ___ Exciting → NO
   ___ Pretty routine → NO
   ___ Dull → YES
   ___ Not answered → Not answered

3. Taking everything into consideration, how would you describe your satisfaction with life in general at the present time -- good, fair, or poor?
   ___ Good
   ___ Fair
   ___ Poor
   ___ Not answered

4. OARS SCALE (Fillenbaum, 1988)

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you wake up fresh and rested most mornings?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is your daily life full of things that keep you interested?</td>
<td></td>
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<tr>
<td>3. Have you, at times, very much wanted to leave home?</td>
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<tr>
<td>4. Does it seem that no one understands you?</td>
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<tr>
<td>5. Have you had periods of days, weeks, or months when you couldn't take care of things because you couldn't get going?</td>
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<td>6. Is your sleep fitful and disturbed?</td>
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<tr>
<td>7. Are you happy most of the time?</td>
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<tr>
<td>8. Are you being plotted against?</td>
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<tr>
<td>9. Do you feel useless at times?</td>
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<tr>
<td>10. During the past few years, have you been well most of the time?</td>
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<tr>
<td>11. Do you feel weak all over much of the time?</td>
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<tr>
<td>12. Are you troubled by headaches?</td>
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<tr>
<td>13. Have you had difficulty in keeping your balance in walking?</td>
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<tr>
<td>14. Are you troubled by your heart pounding and by a shortness of breath?</td>
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</tr>
<tr>
<td>15. Even when you are with people, do you feel lonely much of the time?</td>
<td></td>
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</tr>
</tbody>
</table>
5. How would you rate your mental or emotional health at the present time -- excellent, good, fair, or poor?
   ___ Excellent
   ___ Good
   ___ Fair
   ___ Poor
   ___ Not answered

6. Is your mental or emotional health now - better, about the same, or worse -- than it was five years ago?
   ___ Better
   ___ About the same
   ___ Worse
   ___ Not answered

Items 1 and 2 from the Mental Status were dichotomized as displayed above. In the OARS scale (item 4; Fillenbaum, 1988), items written in italics were reversed in valence to assure correct calculation in the mental health scale. By now, items 3, 5 and 6 of the mental health status evaluation were not included in the calculation of the mental health status.