Healthy, wealthy, wise, and happy? An exploratory analysis of the interplay between aging and subjective well-being in low and middle income countries[*]

Gabriela Flores[†]

Michael Ingenhaag[‡]

Jürgen Maurer[§]

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Abstract

In this paper, we address the relationship between age and several dimension of subjective well-being. Whilst literature generally finds a U-shaped age-profile in subjective well-being, this age-pattern might only hold after controlling for objective life circumstances. The observed U-shaped age-profile might further not generalize to other dimensions of well-being and might vary across countries and cultures. Our study examines the relationship between age and several dimensions of well-being as well as the effect of objective life circumstances using the WHO Study on Global AGEing and Adult Health (SAGE). Our results suggest a decreasing age profile in the raw data associated with evaluative well-being, while experienced well-being shows a rather flat or slightly increasing pattern. However, age *per se* is not a cause of a decline in evaluative well-being. The negative age-profile in evaluative well-being is mainly explained by changes in life circumstances associated with aging. Controlling for socio-demographic factors, we find higher levels of well-being for older persons relative to their middle-aged counterparts. In contrast, we find that changes in life circumstances have a much smaller effect on experienced well-being.

Keywords: Aging, Subjective Well-being, Low and middle income countries

JEL Classification: I31, J14

[†]Faculty of Business and Economics, Institute of Health Economics and Management, University of Lausanne, Institute of Health Policy and Management, Erasmus University Rotterdam; **e-mail**: gabriela.flores@unil.ch

[‡]*Corresponding author:* Faculty of Business and Economics, Institute of Health Economics and Management, University of Lausanne; **e-mail**: michael.ingenhaag@unil.ch

[§]Faculty of Business and Economics, Institute of Health Economics and Management, University of Lausanne; RAND Corporation, Arlington, VA; **e-mail**: jurgen.maurer@unil.ch

1 Introduction

Aging is commonly seen as a process of decline (Nelson, 2004). Deteriorating physical health, declining cognitive functioning, lower levels of economic resources, weakening social networks or the loss of loved ones are but a few examples of adverse events that are often associated with older ages. These often drastic life changes suggest that aging may be associated with lower levels of psychological well-being, especially during later life.

Contrary to the view of old age as an unhappy time of physical, mental, economic and social decline, recent studies indicate that subjective well-being is stable or increasing with age (e.g., Blanchflower and Oswald, 2008, Stone *et al.*, 2010). For example, Blanchflower and Oswald (2008) analyze data on global life satisfaction for many countries around the world, including a large number of developing countries, and find a positive partial association between age and life satisfaction. Stone *et al.* (2010) show that older persons in the United States report higher levels of both evaluative and experienced well-being than their middle-aged counterparts. The findings also appear robust after controlling for additional demographic controls that might covary with age and well-being. Older persons may thus not be as disadvantaged in terms of health, economic and social status as is commonly thought and/or have certain coping strategies that protect - and even increase - their psychological well-being during later life.

However, there might be several limitations to the general finding of a positive (or U-shaped) age-profile of subjective well-being (Hansen and Slagsvold, 2012). This paper focuses on three potential limitations in the literature. The stable or increasing age-trajectory in subjective well-being may 1) hold only after controlling for objective life circumstances, 2) may not generalize to other dimensions of well-being, and 3) may not generalize to low and middle income countries.

First, most studies on the relation between age and subjective well-being are based on analyses that control for demographic and socio-economic factors, such as marital status, health and income. Glenn (2009), among others, argues that scientists should not control for other factors when studying the association between well-being and aging. Controlling for other factors that

are correlated with age and well-being, for instance health and income, might result in false conclusions about the actual association between age and well-being. Moreover, the use of inappropriate control variables might result in incorrect inference about the association between age and well-being.

This study aims at analyzing potential differences in well-being associated with age and the role of potentially confounding factors associated with aging. We start with a comparison of age-profiles in the raw data and controlling for objective life circumstances. This comparison allows us to identify actual versus pure aging effects and provides additional information about the relation of well-being and various life domains. In a second step, potential age differences in well-being are decomposed into contributions associated with the prevalence and the evaluation of different life circumstances as well as age-related heterogeneity that is unrelated to life circumstances.

Second, the general notion of a positive or U-shaped age-profile in well-being might not hold for other dimensions of well-being. Indeed, most studies on the association between age and well-being focus on life satisfaction (e.g., Chen, 2001, Blanchflower and Oswald, 2004, Powdthavee, 2005, Schilling, 2006, Clark, 2007, Blanchflower and Oswald, 2008, Van Landeghem, 2008, Lelkes, 2008, De Ree and Alessie, 2011, Frijters and Beatton, 2012) while only a few studies address other measures of well-being (e.g., Kunzmann *et al.*, 2000, Pinquart, 2001b, Charles *et al.*, 2001, Ehrlich and Isaacowitz, 2002, Stone *et al.*, 2010, Hansen and Slagsvold, 2012). However, the notion of psychological well-being comprises a range of concepts from evaluative well-being such as general life satisfaction, which focuses on cognitive judgments concerning life in general or specific aspects of it, to emotional or hedonic (experienced) well-being, which captures momentary affective experiences such as joy or anger. Reflecting this multifaceted nature of psychological well-being, comprehensive assessments of well-being require separate analyses of multiple well-being measures that may capture different points in the spectrum from evaluative to experienced well-being. Conducting such comprehensive assessments seems especially important since the association between psychological well-being and specific socio-demographic characteristics often varies across different aspects of well-being (Kahneman and Deaton, 2010, Knabe *et al.*, 2010,

Stone *et al.*, 2010).

We analyze four distinct measures of psychological well-being, which cover different points in the spectrum from evaluative to experienced well-being. First, our most evaluative measure of well-being is based on the survey item: "Taking all things together, how satisfied are you with your life as a whole these days," to which respondents provided answers ranging from 1 (Very satisfied) to 5 (Very dissatisfied), which we label *general life satisfaction.* Our second, somewhat more specific, measure of well-being corresponds to the *WHO quality of life index* (WHOQoL-8). WHOQoL-8 was constructed based on 5-point scale ratings of eight life domains, i.e., individuals' satisfaction with (1) their quality of life, (2) health, (3) energy for everyday life, (4) ability to perform activities of daily living, (5) themselves, (6) personal relationships, (7) ability to make personal needs, and (8) conditions of their living place, which were added up into a single composite well-being measure, the WHO quality of life index. Moving further toward the concept of emotional well-being, our third well-being measure is an *emotion score* that aggregates self-reports on the prevalence of three positive and eleven negative emotions for much of the day preceding the interview. Finally, our measure most closely related to the concept of experienced well-being is based on an abbreviated version of the Day Reconstruction Method (DRM) (Kahneman *et al.*, 2004b) which combines information on time-use and measures of affective experiences. For up to ten subsequent activities performed by the respondent during the previous day, respondents provide information on the prevalence, duration and intensity of two positive and five negative emotions. We use these self-reports to construct a duration-weighted index of emotional experiences during the performed activities of the previous day, which we label *experienced well-being.*

Third, the association between age and well-being might vary across countries and cultures (e.g., Diener and Suh, 1998, Blanchflower and Oswald, 2008, Deaton, 2008). Blanchflower and Oswald (2008) analyze data on global life satisfaction in several countries, including a large number of developing countries. Based on data from the World Values Surveys of 1981-2004 and the Latinobarometers and Asianbarometers of 1997-2005, they find that, conditional on other socio-demographic controls, age shows a positive partial association with life satisfaction in some, but

not all developing countries. However, the corresponding evidence for low and middle income countries appears somewhat mixed. In contrast, Deaton (2008) finds that life satisfaction is decreasing with age in low and middle income countries. These differences are likely to depend on differences in institutional settings, such as social security systems. An extensive literature further emphasizes the importance of cultural differences on subjective well-being (e.g., Diener *et al.*, 2003).

We use data from the WHO Study on Global AGEing and Adult Health (SAGE) conducted by the World Health Organization (WHO). This data allows us to study the relationship between age and different aspects of psychological well-being among persons aged 50 and older from five low and middle income countries: Ghana, India, China, South Africa and the Russian Federation. Analysis is performed on the country level. The country-specific analysis enables us to examine the hypothesis in a multi-country setting and therefore strengthens our results.

The descriptive analysis indicates that relative to middle-aged individuals, older persons in developing countries seem to be at a disadvantage in terms of evaluative well-being, but not in terms of hedonic experiences. General life satisfaction and WHO quality of life are statistically significantly decreasing with age both in the pooled as well as in all five country samples. Moving to more hedonic measures of well-being shows a somewhat different picture: For the emotion index, we find no clear evidence of any systematic relationship with age, which is sometimes even associated with higher levels of the emotion index. For the experienced well-being, the evidence is also mixed, though experienced well-being appears to more often increase than decrease with age.

However, keeping individual life circumstances fixed, older persons tend to have higher levels of well-being than their middle-aged counterparts. The negative age profile for evaluative well-being found in the raw data is mainly associated with changes in life circumstances. Controlling for these factors, age has a positive effect on evaluative well-being. In contrast, the results on experienced well-being are not substantially altered when controlling for socio-demographic factors.

We finally conduct a series of Oaxaca-Blinder decompositions of the disadvantage of older

relative to middle-aged persons in terms of their psychological well-being using the same set of controls as in the conditional analysis. These decompositions highlight that most of the well-being disadvantage of older persons relative to their middle-aged counterparts can be attributed to lower levels of health and economic resources. To a lesser extent, more limited community ties also appear to play some role in explaining the lower levels of psychological well-being toward later-life.

We proceed as follows. The next section gives an overview of the relevant literature. Then, we describe the data and the measures used in our analysis. Section 4 describes the methodology. Section 5 contains the empirical results of the conditional analyses and the decomposition analysis. The last section discusses the main implications and limitations and concludes.

2   Literature

Aging is commonly associated with deteriorating physical health, declining cognitive function, lower levels of economic resources, weakening social networks and the loss of loved ones, among others (Nelson, 2004). These changes in life circumstances suggest that aging may be associated with lower levels of psychological well-being, especially during later life.

Most studies find a decreasing age profile in raw life satisfaction. Chen (2001) studies life satisfaction of older individuals in Taiwan using the Survey of Health and Living Status of the Elderly in Taiwan (HLSET). He finds a significantly decreasing age-profile in life satisfaction when no correlates were controlled for. Schilling (2006) analyzes the association between age and life satisfaction using data from the German Socio-Economic Panel (GSOEP). The analysis is based on autoregressive (quasi-Markov) structural equation models with the aim to test for stability and variance of life satisfaction. He finds a slightly decreasing age-profile in mean levels of life satisfaction in old age. Using British data from the English Longitudinal Study of Ageing (ELSA), Demakakos *et al.* (2010) observe a decreasing age-profile in life satisfaction and quality of life. Frijters and Beatton (2012) analyze the relationship between age and happiness using German, British and Australian survey data. They find a decreasing age-profile in Germany, while the

British and Australian data suggest a weak U-shape with a substantial decline after the age of 75.

Contrary to the view of old age as an unhappy time of physical, mental, economic and social decline, recent studies provide cross-sectional and panel data evidence for a U-shaped age-pattern when controlled for life circumstances.[1] In an early analysis, Shmotkin (1990) examines, among others, the association between life satisfaction and age for a small sample of community dwelling subjects in Tel-Aviv, Israel. Applying a multivariate analysis of variance and covariance, he finds a relatively stable age-profile in the data. In contrast, Gerdtham and Johannesson (2001) find a U-shaped age-profile with a minimum of happiness for the age-group 45-64 years using data from Sweden. Di Tella *et al.* (2001) examine the effect of inflation and unemployment on life satisfaction using data from 12 European countries. They find evidence for a U-shaped age-profile in life satisfaction controlling for a comprehensive set of socio-demographic factors. Blanchflower and Oswald (2004) analyze the age-profile of happiness and life satisfaction using cross-sectional data from the US and Britain. The authors start with an unconditional analysis and find an inverse U-shape in the age-profile for the US, while in Britain the association between age and life satisfaction follows a U-shaped pattern. Allowing for a large set of controls, they find an inverted relationship in the US with age following a U-shaped pattern, while results for the UK remain stable. Powdthavee (2005) for South Africa and Lelkes (2008) for Europe provide further cross-sectional evidence for a U-shaped age profile.

Blanchflower and Oswald (2008) provide a comprehensive analysis of the association between age and global life satisfaction for many countries around the world, including a large number of developing countries. Based on data from the World Values Surveys of 1981-2004 and the Latinobarometers and Asianbarometers of 1997-2005, they find that, conditional on other socio-demographic controls, age shows a positive partial association with life satisfaction in some, but not all countries. Their study is, however, limited to the partial association between age and evaluative well-being, and therefore the corresponding evidence for low and middle income coun-

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[1]There is, however, a methodological discussion about the use of control variables measuring life circumstances associated with age and well-being (e.g., Blanchflower and Oswald, 2008, Glenn, 2009, Blanchflower and Oswald, 2009). Glenn (2009) argues that scientists should not control for other factors when studying the association between well-being and aging. He reenforces this methodological position by criticising the use of some inappropriate control variables, for instance marital status, which might result in wrong conclusions.

tries appears somewhat mixed.

More recent studies based on large scale panel data allow to control for cohort and time effects and therefore identify age effects. Cross-sectional studies on the relation between age and life satisfaction cannot distinguish between age, time and cohort effects. Longitudinal studies generally find a U-shaped age-profile with a decline for older ages after controlling for unobserved heterogeneity, cohort effects etc. Clark (2007) uses longitudinal data from the British Household Panel Survey (BHPS) to analyze the association between age and life satisfaction. Controlling for fixed cohort effects, he finds evidence for a U-shaped age pattern. Using data from the German Socio-Economic Panel (GSOEP), Van Landeghem (2008) also finds a convex relationship between age and well-being.

Most of the results discussed above rely on a descriptive analysis. Wunder *et al.* (2013) use data from the BHPS and GSOEP to examine life satisfaction over the life span. Using a semi-parametric analysis, they find evidence for a U-shaped age pattern until the age of 70 followed by a decrease in life satisfaction for the oldest old. Frijters and Beatton (2012) investigate the effect of unobserved heterogeneity and reverse causality on the association between life satisfaction and age. Using fixed effects in order to control for unobserved heterogeneity and reverse causality, they find an inverted U-shape in the association between age and life satisfaction. De Ree and Alessie (2011) provide a more general discussion of the identification problem of age, time and cohort effects in the context of the association between age and life satisfaction. They claim that the data does not bear any useful information to support any age-profile but that results depend on imposed assumptions, for instance imposed parameter restrictions and identifying assumptions.

Most studies on the association between subjective well-being and age use measures of evaluative well-being, i.e. general life satisfaction or happiness. When asked to assess their general life satisfaction (or happiness), respondents have to create a reference framework of what constitutes a satisfied life (Diener *et al.*, 1985). This requires a comparison of their own life circumstances with those of other people at the same time and also with their own life at other points in

time (Dolan and Kahneman, 2008). This comparative characteristic plays a smaller role for experienced well-being – the emotional quality of an individual's everyday experience (e.g., the frequency and intensity of experiences of joy, fascination, anxiety, sadness, anger and affection that make one's life pleasant or unpleasant). Kahneman and Krueger (2006) and Schwarz *et al.* (2009) suggest that measures of experienced well-being may have different predictors compared to global satisfaction. Income and health tend to get the primary attention in most evaluations of human well-being, whilst experienced well-being is primarily predicted by personality and the context in which activities are performed.[2]

Aging is, amongst others, associated with changes in cognitive processing of emotions (Mroczek and Kolarz, 1998, Carstensen *et al.*, 1999, Charles *et al.*, 2001, Carstensen *et al.*, 2003). Older persons remember relatively more positive information, which results in higher levels of reported well-being (e.g., Carstensen, 1995, Carstensen *et al.*, 2003). Charles *et al.* (2001) analyze the change in affects over time for different age groups using data from the Longitudinal Study of Generations (LSOG) in the US. They find that negative affects decrease over time for all age groups whilst positive affects remain rather stable except for individuals aged 60 and older, for which they observe a small decline. The changes in affects cannot be attributed to changes in other age-related factors such as health. Pinquart (2001a) provides a meta-analysis of the association between age and experienced well-being. Combining results from 125 studies, he finds a small age-associated decline of positive affect, and a small age-associated increase of negative affect. Ehrlich and Isaacowitz (2002) find similar evidence examining a sample of 280 older Americans. Positive affects remain relatively stable across age while negative affects significantly decline over age.

Stone *et al.* (2010) provide a comprehensive analysis of the age-distribution of psychological well-being in the US. They find that positive experienced well-being has a U-shaped age profile while negative experienced well-being substantially decreases with age. The combined effects result in a non-decreasing age profile of experienced well-being. They find similar results when

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[2]See Deaton (2008) and Krueger and Schkade (2008) for a discussion of the reliability of subjective well-being measures.

controlling for measures that potentially covary with age and affects.

Our paper is closely related to the main ideas of Chen (2001) and Hansen and Slagsvold (2012), and more generally Blanchflower and Oswald (2008). Chen (2001) and Hansen and Slagsvold (2012) both analyze the effect of control variables on the association between age and well-being. Chen (2001) provides an analysis of the association between age and age-related life circumstances and life satisfaction in Taiwan. This study finds a negative association between age and life satisfaction in the raw data. In contrast, controlling for demographics and other age-related life circumstances, Chen (2001) finds a significant increase in life satisfaction of older persons. Hansen and Slagsvold (2012) analyze the association between age and several dimensions of subjective well-being using the Norwegian Life Course, Ageing, and Generations (NorLAG) study. They find a rather stable association between age and subjective well-being until age 70 and a small decrease in advanced age both using cross-sectional and longitudinal data. This stable age-profile from age 40 - 70 exists both for evaluative and experienced well-being. Hansen and Slagsvold (2012) further analyze the effects of age-related life circumstances and find only small differences in the age-profile once controlled for changes in health, partnership, social factors etc.

3   Data

Data are from the WHO Study on Global AGEing and Adult Health (SAGE) conducted by the World Health Organization (WHO). This survey is a multi-country study collecting data on respondents aged 18+, with a strong emphasis on populations aged 50+, from nationally representative samples. A baseline cohort was created during the World Health Survey (WHS) in 2002 - 2004, collecting data on more than 65,000 adults aged 18 years and older. The present analysis is based on data of wave 1 (2007 - 2010), which implements the full SAGE in six low and middle income countries: China, Ghana, India, Mexico, the Russian Federation and South Africa. The SAGE project collects individual and household level data on several life domains, for instance socio-demographic information, information on household finance, social networks, health and health care.[3]

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[3]A detailed description of the SAGE can be found in World Health Organization (2006)

The data further includes a comprehensive subjective well-being and quality of life module. In particular, it collects information about general and domain specific satisfaction, emotional well-being and daily life experiences. The latter is based on the Day Reconstruction Method (Kahneman *et al.*, 2004b), a method that combines a time-use study with the measurement of affective experiences.

We focus on individuals aged 50 years and older. We select our sample by choosing the variables of interest both on the household and the individual level. Merging individual with household level data results in a loss of observations, since not all individuals can be uniquely attributed to a household. We drop all observations with missing values in at least one of the variables used in the analysis. In this step, information on the DRM suffers from a lot of missing information (nearly 3,700 observations). In total, around 13,000 observations are lost in the original sample.[4] Our final sample is based on N=19,926 observations. Table 3 presents descriptive statistics of our final sample. Results are comparable with other SAGE publications (e.g., He *et al.*, 2012).

— Insert Table 3 about here —

Average age is around 61 - 64 years and does not vary much across countries. In Ghana, India and China the samples consist of an equal distribution of males and females, whereas South Africa and Russia consist of a larger fraction of females. In Russia, this is mainly explained by the low life expectancy of Russian males (63 years at birth compared to 75 years for women (The World Bank, 2013)). In South Africa, the small fraction of males mainly results from the original sampling (43% males) and dropping observations with missing values. The fraction of individuals being married varies substantially across countries ranging from 48% in South Africa to 85% in China. In India, only a quarter of the respondents live in an urban area. Figures are much higher in Ghana and China (41% - 46%). South Africa and Russia show the highest

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[4]It is also worth noting that we drop Mexico from our analysis because of a large amount of missing values due to incomplete interviews.

urbanization. Years of education are around 4 to 6 years except for Russia with an average of eleven years of education.[5] The fraction of individuals working ranges from 29% in South Africa to 70% in Ghana.

3.1 Subjective Well-Being

The subjective well-being and quality of life module offers comprehensive information on individual well-being. In our analysis, we compare different measures of subjective well-being with each other. We use general life satisfaction and the WHO quality of life index as measures of evaluative well-being. Measures of experienced (hedonic) well-being are an emotion score and an index based on the DRM method (Kahneman *et al.*, 2004b). All well-being measures are standardized at the country level to have a mean of zero and a standard deviation of one. In addition, measures are transformed in such way that a higher score indicates higher well-being. This improves the comparability of our results across countries and across measures, in particular due to differences in response scales. The four measures are defined as follows.

General Life Satisfaction

Individuals are asked to answer the following question on a 5-point scale from 1 (Very satisfied) to 5 (Very dissatisfied): *"Taking all things together, how satisfied are you with your life as a whole these days?"*.

WHO Quality of Life Index

The WHO quality of life index is based on Power (2003). It is a composite measure of satisfaction in several life domains, including (1) quality of life, (2) health, (3) energy for everyday life, (4) ability to perform activities of daily living, (5) themselves, (6) personal relationships, (7) ability to meet personal needs, and (8) conditions of their living place. Each item is measured on a 5-point scale from 1 (Very satisfied) to 5 (Very dissatisfied). Based on these eight domains we construct the WHOQoL-8 index adding up all single item responses. The exact question wordings are given in Table 1.

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[5]These statistics also reflect the development status of the countries in our sample, showing a positive association between education and the ranking based on GDP per capita.

Emotion Score

The emotion score is based on a set of questions that asks respondents to report whether or not they experienced specific affects during much of the day preceding the interview. The set consists of eleven negative affects, e.g., feeling worried, rushed and stressed, and three positive affects, e.g., feeling calm or relaxed and smiling or laughing a lot. The emotion index equals the sum over positive affects minus the sum over negative affects. Table 1 provides detailed information about the individual components of the measure.

Experienced Well-being

Experienced well-being is based on the DRM developed by Kahneman *et al.* (2004b). The DRM is a combination of a time-use study and the measurement of affective experiences. Respondents are asked to produce a diary of all activities they engaged during the day preceding the interview. For the sake of simplicity and interview duration, the SAGE study randomly assigns respondents to one of three groups: morning, afternoon and evening. First, respondents are guided through that period of the day starting with the first thing they did. Respondents are asked to report what activities they were doing, for how long they were doing each activity, and whether they were interacting with other people during that activity. Finally, they are given a list of positive and negative affects and are asked to evaluate how strongly they were feeling this emotion during each specific activity on a three-point scale from 1 (Not at all), 2 (A little) to 3 (Very much). Positive affects are feeling calm or relaxed and enjoying. Negative affects consist of feeling worried, rushed, irritated or angry, depressed, and tense or stressed.

We define experienced well-being based on the definition of *net affect* following Kahneman and Krueger (2006).[6] Individuals' net affect u_{ia} during activity a is defined as

$$u_{ia} = \sum_l PA_{ia}^l - \sum_k NA_{ia}^k \tag{1}$$

where PA_{ia}^l is the l-th positive affect that person i reports for activity a, and NA_{ia}^k is the k-th

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[6]It is worth emphasizing that Kahneman and Krueger (2006) propose the *U-index* as an appropriate measure of subjective well-being based on the DRM. The U-index is defined as the proportion of time in which the highest-rated feeling was a negative one. This measure has the advantage of not requiring a cardinal concept of individual's feelings. However, the limited scale of the intensity of feelings during each activity in our data does not produce enough variation in the U-index across individuals to allow for a statistical analysis.

negative affect (see also Knabe *et al.*, 2010). We take the time-weighted average of positive and negative affect scores in order to control for multiple mentions of the same activity. Following Edgeworth (1881) and Kahneman *et al.* (2004a), experienced well-being is defined as "the integral of the stream of pleasures and pains associated with events over time". In discrete time, this gives

$$U_i = \sum_a t_{ia} u_{ia} \tag{2}$$

where t_{ia} is the fraction of non-sleeping time individual i spends on activity a. Note that we use time shares instead of duration as a weighting factor, since the DRM module in the SAGE data is limited to ten activities and the sample is split into morning, afternoon and evening groups. This results in an unequal distribution of (non-sleeping) time across these three groups and using time shares ensures comparability across groups. It is worth emphasizing that the construction of the measure as presented above requires some common assumptions. Notably, the aggregation of the activity-specific net affects to a global measure involves that net affects are cardinal measures, that the utility function is time-separable and that net affect is a meaningful representation of the utility derived from an experience.[7] Regarding the latter, Kahneman *et al.* (2004a) provide evidence of the correlation between net affect and objective circumstances suggesting that the measure adds useful information to our understanding of well-being.[8]

3.2 Control Variables

In our study, we aim at identifying and quantifying the role of life circumstances on the association between age and subjective well-being. We therefore extract information on respondents' age, gender, marital/partnership status, household composition, ethnic status, level of urbanity, level of education, household permanent income, individual employment status, disability and self-assessed pain, their level of community involvement, trust in other people, and their per-

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[7]See also Knabe *et al.* (2010) on a discussion of these assumptions

[8]See also Kahneman and Krueger (2006) and Krueger and Schkade (2008) for a more detailed discussion of different measures of subjective well-being.

ceived safety of their environment.[9]

We use the 12-item version of the WHO Disability Assessment Schedule (WHODAS) 2.0 to measure disability (Üstün *et al.*, 2010). The WHODAS 2.0 is a composite measure that captures different aspects of disability based on six domains following the definition of the International Classification of Functioning, Disability and Health (World Health Organization, 2001). The domains represent cognitive functioning, mobility, self-care, getting along, life activities, and participation. Self-assessed pain measures the degree of pain or bodily discomfort the respondent was experiencing during the last month, and whether this pain caused difficulties in everyday life. Community involvement, trust in other people and perceived safety are measures of social cohesion. Community involvement measures the degree of participation in social activities such as attending clubs or public meetings, or socializing with co-workers. Trust measures the degree of trust in different groups of people, in particular neighbors, co-workers or strangers. The third measure of social cohesion, safety, asks for an assessment of perceived safety in the neighborhood. A detailed description of all control variables in our analysis is given in Table 2.

4 Methodology

Recent literature has provided some cross-sectional evidence for a U-shaped age-pattern in well-being both in the raw data and conditional on control variables (e.g., Blanchflower and Oswald, 2008, 2009). In contrast, in some countries, for instance in the US, there is a difference between the raw and conditional association between age and well-being (e.g., Glenn, 2009). For example, Blanchflower (2009) finds that well-being in the US does not have a U-shape in age in the raw data whereas the conditional analysis often reveals a U-shape.

The first goal of our analysis is to compare the age-pattern in the raw data with the conditional age-pattern controlling for life circumstances and to describe potential differences. More specifically, we aim at identifying factors (i.e. objective life circumstances) that are associated

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[9]Kahneman and Krueger (2006) observe that socio-demographic variables predict life satisfaction more strongly than net affects. Personality variables, including sleep, depression and religiosity, predict both types of well-being equally well.

with potential differences in the raw and the conditional age-pattern and quantify their influence. It is worth emphasizing that we do not aim at identifying a causal effect of age but rather focus on comparing subjective well-being across age-groups and the effect of objective life circumstances.

A general concern in this type of analysis is the interpretation of the coefficient on age. This coefficient can represent age, cohort and period effects and cross-sectional data does not allow to distinguish between these three components (e.g., Rodgers, 1982). The contribution of each of these three components might further vary across well-being measures. One might expect that cohort effects play a bigger role in the cognitive evaluation of life and life domains. Evaluative well-being is based on a cognitive judgement (evaluation) of life as a whole or different domains. These judgements often depend on values and experiences (e.g., wars) that have been developed in the past. In contrast, emotional well-being might be less influenced by cohort effects and more by time and age effects.[10]

Second, we compare the association of age with different dimensions of subjective well-being. In particular, we examine differences in the association between age and evaluative and experienced well-being. On the one hand, evaluative measures are based on a cognitive evaluation of one's life while experienced measures refer to the emotional experiences. On the other hand, cognitive functioning and emotions are likely to depend on age (Mroczek and Kolarz, 1998, Carstensen *et al.*, 1999, Charles *et al.*, 2001, Carstensen *et al.*, 2003). Hence, we expect differences in the association of age and the two dimensions of subjective well-being under consideration.

We start our analysis with a descriptive analysis of the unconditional association between age and well-being followed by a conditional analysis controlling for potentially confounding factors. Each analysis is done on country level because subjective well-being measures strongly depend on the cultural background (Diener *et al.*, 2003). Cultural differences can result in unobserved heterogeneity yielding inconsistent estimators if not adequately controlled for. The cross-sectional nature of our data prevents us from appropriately controlling for unobserved heterogeneity not

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[10]In this context, the coefficient on age might also reflect a selection effect since one might claim that individuals that are "happier" tend to live longer. We are aware of these sources of bias when interpreting the association between age and subjective well-being.

associated to country differences. The country-specific analysis allows us to examine the hypothesis in a multi-country setting and therefore strengthen our results. Indeed, the coefficients measure associations in within country standard deviations.

We construct 10-year age bands to allow for a flexible age structure. We choose 10-year age bands based on a trade-off between flexibility and group size. We perform our analysis using different age-bands and an age-polynomial of order two as robustness analyses and find similar results.[11]

In the descriptive analysis, we compute averages of our dependent variables for each age-group controlling for gender.[12] The psychological literature provides some evidence for gender differences in well-being (e.g., Wood *et al.*, 1989, Fujita *et al.*, 1991, Lee *et al.*, 1991, Nolen-Hoeksema and Rusting, 2003). For example, Robinson and Johnson (1997) and Robinson *et al.* (1998) find evidence for gender-related differences in the reporting of emotions. In particular, women are more likely to report negative emotions than men. Hence, the descriptive analysis aims at highlighting how evaluative and experienced well-being differ across age, allowing for potential differences in the reported levels of well-being by gender.

In the conditional model, we control for age-related life circumstances such as health, income and other socio-demographic characteristics of the respondent. Controlling for life circumstances allows to assess the partial associations between age and well-being keeping socio-demographic and health characteristics of the respondent fixed. This is of particular interest as aging is usually associated with decreasing health, financial means and social ties (Nelson, 2004). The resulting estimated partial associations between age and well-being thus aim at highlighting how age itself (rather than potentially correlated socio-demographic and health characteristics) is associated with the respondents' average reported well-being. The estimated partial associations of the control variables give additional information about the relation of well-being and various life

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[11]Results are available from the authors upon request

[12]It is worth noting that this approach involves the risk of omitted variable bias if the model is not correctly specified. However, we do not interpret the coefficients on age-groups as causal effects but rather compare unconditional averages of subjective well-being across age-groups. The latter differences include all differences caused by confounding factors such as income and health, which are both related to age and well-being.

domains. To summarize, we consider the following linear regression models:

Descriptive analysis:

$$SWB_i = \alpha^d + \beta_1^d \mathbb{I}_{60-69} + \beta_2^d \mathbb{I}_{70-79} + \beta_3^d \mathbb{I}_{80+} + \beta_4^d Male_i + \epsilon_i^d \tag{3}$$

Conditional analysis:

$$SWB_i = \alpha^c + \beta_1^c \mathbb{I}_{60-69} + \beta_2^c \mathbb{I}_{70-79} + \beta_3^c \mathbb{I}_{80+} + \beta_4^c Male_i + X_i \gamma^c + \epsilon_i^c \tag{4}$$

where X_i is the vector of control variables. Age 50-59 represents the baseline age-group and co-efficients on the respective age dummies $\mathbb{I}_{60-69}$, $\mathbb{I}_{70-79}$ and $\mathbb{I}_{80+}$ are interpreted as the difference in subjective well-being compared to individuals aged 50 - 59.

We assume the same set of regressors in the conditional analysis of all four measures of psychological well-being. This is motivated along the following arguments: First, we aim at controlling for potentially confounding factors that are correlated with both aging and well-being, in particular life circumstances such as health, socio-economic status and social cohesion. This assumption allows to analyze and compare the *ceteris paribus* association between age and well-being, and to compare results across different dimensions of well-being. Second, we provide a decomposition in order to identify and quantify the factors driving potential age-related differences in the different measures of well-being. Again, we aim at checking the observed results against each other.

WHO Quality of life, emotion score and experienced utility are continuous variables and a linear regression model is used for the estimation. General life satisfaction is estimated using an Ordered Logit model, since this is an ordinal variable with a 5-point scale from 0 (Very dissatisfied) to 4 (Very satisfied). Note that this limits the comparability of results across measures, since partial effects in an Ordered Logit framework depend on the outcome probability. We report results of the Ordered Logit model in Tables 17 - 21. To ensure comparability across measures, the main analysis in Sections 5 uses linear regression models to analyze general life satisfaction.

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Ferrer-i Carbonell and Frijters (2004) provide evidence that using ordinal or cardinal methods for scores such as general life satisfaction or happiness makes little difference.[13]

In the second part of the paper, we use a decomposition analysis based on Neumark (1988) in order to analyze the unconditional disadvantage of older relative to middle-aged persons in terms of their subjective well-being. The decomposition analysis allows us to explore the role age-specific differences in the prevalence of respondents' socio-demographic and health characteristics play in the unconditional age differences of subjective well-being. We divide our sample into two age groups, middle-aged persons (respondents aged 50-59) and older persons (aged 60 and older).[14] The decomposition is based on estimating separate linear models for each age group as well as a pooled model. Following Neumark (1988), the difference in unconditional well-being can be expressed as follows:

$$
\begin{aligned}
\Delta &= \overline{SWB}^{old} - \overline{SWB}^{middle} \\
&= \overline{X}'^{old}\beta^{old} - \overline{X}'^{middle}\beta^{middle} \\
&= \underbrace{\left(\overline{X}^{old} - \overline{X}^{middle}\right)'\beta^p}_{Explained} + \underbrace{\left[\overline{X}'^{old}\left(\beta^{old} - \beta^p\right) + \overline{X}'^{middle}\left(\beta^p - \beta^{middle}\right)\right]}_{Unexplained} \qquad (5)
\end{aligned}
$$

where β^p is the vector of coefficients from the pooled model, and $\overline{Y}$ refers to the sample average of variable Y. The *explained* part of the decomposition refers to the difference in endowments, i.e. characteristics, between the two groups. It measures the contribution of differences in the prevalence of different factors in X between older individuals compared to their middle-aged counterparts. The *unexplained* part consists of differences in coefficients and age-related heterogeneity that is unrelated to explanatory factors. Differences in coefficients provide information about potential differences in the evaluation of certain life circumstances across age-groups. It is important to emphasize that the unexplained part also captures all potential effects of differences in unobserved variables through omitted variable bias or model mis-specification. Jones

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[13]Indeed, results of the linear regression model and the Ordered Logit model are qualitatively similar.

[14]This results in equally sized age-groups. We considered different age-groups and results remained qualitatively robust.

and Kelley (1984) and Jann (2008) further argue that the unexplained part has a meaningful interpretation only for variables that have a natural zero point.

Categorical data exacerbates the decomposition analysis described above. A non-linear decomposition analysis based on Ordered Logit models is computationally demanding. Along with the conditional analysis described above, we therefore use a linear decomposition to ensure comparability across measures. As a simple robustness check, we compare marginal effects of the Ordered Logit and the linear regression model. Potential differences in the linear and non-linear decomposition analysis would already appear in this stage as the decomposition is built upon differences in marginal effects and the prevalence of respondents' socio-demographic and health characteristics. There are no substantial differences between partial effects of the Ordered Logit and the linear regression model (Tables 17 - 21). The remainder of the study therefore focuses on the linear specification.

5 Results

In this section we present results of the empirical analysis. We start with a descriptive analysis of the raw association between age and subjective well-being controlling for gender. We then discuss the conditional analysis of the association between age and subjective well-being. The results will provide information about the *ceteris paribus* relation of age and subjective well-being, keeping potentially confounding factors constant. The analysis will also give insights about the factors that explain subjective well-being. We present the main results about the association between age and subjective well-being using figures. The regression outputs of the conditional analysis are presented in Appendix B (Tables 4 - 7) . The partial effects of other control variables such as socio-economic status and health will be discussed at the end of section 5.2.

5.1 Descriptive Analysis

Figures 1 and 2 show the association between age and evaluative well-being for the descriptive and the conditional analysis.[15] Consider first the results of the descriptive analysis (dark grey bars). We observe a decreasing age profile in general life satisfaction in all countries but South Africa (Figure 1). The association of age with general life satisfaction is largest in Ghana with a decrease of around 0.6 standard deviations in the oldest age group compared to middle-aged individuals (50 - 59 years). A similar pattern emerges for quality of life (Figure 2). The difference in quality of life associated with age is largest in Ghana with a difference of one standard deviation between the middle-age and the oldest age group in our sample. Similar to the analysis of general life satisfaction, South Africa shows the smallest difference of around 0.25 standard deviations for the oldest age group.

— Insert Figures 1 and 2 about here —

Moving to the experienced well-being measures (Figures 3 and 4), we find different results. For the emotion score, we find no clear evidence of any systematic relationship with age. We find a negative association for Ghana and Russia. In India and China we do not find any differences, whilst in South Africa old age is associated with higher levels of the emotion score up to 0.4 standard deviations. For experienced well-being, evidence is also mixed but points toward an increasing age profile. Differences are largest in South Africa (up to 0.4 standard deviations).

— Insert Figures 3 and 4 about here —

In summary, relative to middle-aged individuals, older persons in developing countries seem to be at disadvantage in terms of evaluative well-being, but not in terms of experienced well-being. Our results on evaluative well-being are in line with those of Blanchflower and Oswald (2009), who find a decreasing age profile in raw life satisfaction using data from eight European

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[15]Results on the descriptive (unconditional) association between age and well-being are shown in Panel A of Tables 4, 5, 6 and 7

countries. Blanchflower and Oswald (2008) and Blanchflower and Oswald (2009) find contrasting results using Eurobarometer Surveys and the General Social Surveys in the US. There is only little evidence on the association in developing countries. On the other hand, Stone *et al.* (2010) provide an analysis of the age-distribution of psychological well-being in the US that is in line with our results on experienced well-being. They find that positive experienced well-being has a U-shaped age profile, while negative experienced well-being substantially decreases with age. The combined effects result in a non-decreasing age profile of experienced well-being.

The psychological literature provides some explanations for the differences in raw age profiles between evaluative and experienced well-being. When asked to assess their general satisfaction with life, respondents have to create a reference framework of what constitutes a satisfied life (Diener *et al.*, 1985). This requires a comparison of their own life circumstances with those of other people at the same time and with their own life at other points in time (Dolan and Kahneman, 2008). A decrease in financial resources, health and social inclusion (commonly associated with age) is likely to be reflected in evaluative well-being. This comparative characteristic plays a much smaller role for momentary experienced well-being. Kahneman and Krueger (2006) argue that socio-demographic factors only weakly predict experienced well-being. The reporting of affects and emotional well-being rather depends on personality (Mroczek and Kolarz, 1998, Kahneman and Krueger, 2006). Hence, we suspect that potentially confounding factors such as life circumstances might explain the negative association found for evaluative well-being but are less predictive for experienced well-being.

Differences in response scales underlying the evaluative and experienced well-being measures can also result in the observed differences in the association between age and subjective well-being. The evaluative measures strongly rely on a cognitive component and the creation of a reference framework, whilst the experienced measures rather depend on personality (Mroczek and Kolarz, 1998, Kahneman and Krueger, 2006). Individuals tend to interpret response categories differently, depending on the cognitive evaluation of one's situation and the reference group. This response scale bias is less distinct for experienced well-being measures (Diener *et al.*, 2009).

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5.2 Conditional Analysis

We conduct a conditional analysis in order to control for potentially confounding factors. The light grey bars in Figures 1 - 4 show the association between age and well-being controlling for standard individual demographics and life circumstances such as household composition, health, economic status as well as social conditions.

The conditional analysis shows a completely altered age profile for evaluative well-being compared to the descriptive analysis. Conditional on life circumstances, we find a positive association between age and general life satisfaction and WHO quality of life for three out of five countries. The partial effect of age is highest in China and South Africa with an age-related increase up to 0.4 standard deviations for individuals aged 80 years and older. The pattern is unclear for Russia, where partial effects are close to zero. Results for WHO quality of life are similar. Ghana and India do not show any clear age-pattern. In China, South Africa and Russia, well-being is increasing with age, showing partial effects around 0.4 standard deviations for the oldest age group.

Results on emotional well-being are less altered by the use of control variables. The emotion score shows some small changes in the age pattern compared to the descriptive analysis.[16] We observe a positive age profile in all countries. Ghana and Russia show an inversion of the age profile compared to the results above. Partial effects of age range from 0.04 - 0.14 standard deviations in Ghana to 0.3 - 0.7 standard deviations in South Africa. Results on experienced well-being (Figure 4) only change in magnitude but do not differ qualitatively from the descriptive analysis. Partial effects of age are positive and increasing in most countries except and Russia and range from around 0.2 standard deviations (Ghana, India and Russia) to 0.6 standard deviations in South Africa.

In summary, we find a reversal of the association between age and evaluative well-being once controlling for life circumstances whereas experienced well-being is less altered. Our results on

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[16]Tables 22 and 23 show results for the score over positive and negative emotions. Conditional on life circumstances, age is associated with an increase of positive emotions and a decrease in negative emotions. The unconditional association shows no clear age pattern.

evaluative well-being are in line with most cross-sectional evidence, finding a U-shaped age profile with the minimum well-being around the age of 40 to 50.[17] Age *per se* is not a cause of decline in subjective well-being. The negative association between age and general life satisfaction and quality of life observed in the descriptive analysis is mainly associated with changes in life circumstances. Once we control for socio-demographic factors usually accompanied by aging, we find a positive association between age and evaluative well-being. The conditioning on life circumstances reduces the comparative component inherent to evaluative measures. This might result in a change in the age-pattern, because the negative influence of a decline in the socio-economic situation or health is not captured in the age coefficient.

Our results on experienced well-being reinforce previous findings of a positive relationship with age (Stone *et al.*, 2010) and are in line with the theory of socio-emotional selectivity. Aging is amongst others associated with changes in cognitive processing of emotions (e.g., Mroczek and Kolarz, 1998, Carstensen *et al.*, 1999, Charles *et al.*, 2001, Carstensen *et al.*, 2003). Older persons remember relatively more positive information, which results in higher levels of reported well-being (Carstensen *et al.*, 2003). The results also show that the association between age and experienced well-being is less affected by objective life circumstances (Kahneman and Krueger, 2006). In addition, we do not find evidence for differences in the association between age and well-being across countries. Results do not seem to differ according to development status, as it is represented in our sample of low and middle income countries.

— Insert Tables 4, 5, 6 and 7 about here —

Tables 4, 5, 6 and 7 show the regression results of the conditional analysis. Our results are in line with previous literature on the determinants of well-being (Fernández-Ballesteros *et al.*, 2001, Gerdtham and Johannesson, 2001, Peiró, 2006). All measures of well-being are strongly related to economic resources and health. We observe smaller partial effects for experienced well-being. This result confirms that life circumstances play a minor role in explaining experienced

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[17]More recent literature provides evidence for a U-shaped age-profile but finds a decline in well-being for the oldest old (e.g., Kunzmann *et al.*, 2000, Blanchflower and Oswald, 2008, 2009, Wunder *et al.*, 2013)

well-being (Kahneman and Krueger, 2006).

Notably, disability and pain decrease general life satisfaction and WHO quality of life by around 0.3 - 0.4 standard deviations. The effect on experienced well-being is smaller but remains significant. Disability is a strong limitation in a person's everyday life and is associated with worse socio-economic outcomes and social exclusion. These effects are exacerbated in less developed countries as these countries often lack effective mechanisms for the protection of disadvantaged individuals. Worse socio-economic outcomes associated with disability might play a larger role for evaluative well-being through the comparative characteristic of these measures. A disabled person might rate overall satisfaction of life worse if comparing herself to an able-bodied person at the same age, whereas the experienced momentary utility, e.g., watching TV, might not differ much between disabled and able-bodied persons. In addition, an increasing body of literature provides evidence for emotional adaptation to life-threatening events (e.g., Frederick and Loewenstein, 1999). This could further explain why we observe a smaller effect of disability on experienced well-being in our data.

Working is associated with a significant increase in evaluative well-being (WHO quality of life), while the relation is negative for experienced well-being. Employment is seen as a desirable aspect of life, because it attributes a meaning to life and is associated with the availability of resources and social status (Clark, 2003). In contrast, working is associated with higher stress levels, being worried and rushed, which results in lower experienced well-being (Knabe *et al.*, 2010). Income is positively associated with well-being with a larger effect on evaluative well-being. Social ties such as community involvement, trust or safety significantly increase general life satisfaction and WHO quality of life but have no substantial effect on experienced well-being.

5.3 Decomposition Analysis

In this section, we decompose the unconditional age-related differences in well-being into contributions associated with the prevalence and the evaluation of different life circumstances as well as age-related heterogeneity that is unrelated to life circumstances. We aim at identi-

fying individual-specific life circumstances associated with the negative unconditional relation between age and evaluative well-being and to quantify their importance. Regarding experienced well-being, we aim at analyzing potential mediating mechanisms that might explain why we do not observe any relation between age and experienced well-being in the raw data.

We split the sample into two age-groups based on the age of the household head: 1) middle-aged individuals between age 50 and 59, and 2) older individuals with an age of 60+. The choice of the partition results in equal sample sizes for both age-groups. We perform the decomposition with different cut-offs and results remain qualitatively stable.

— Insert Table 8 about here —

Table 8 shows descriptive statistics by age group and associated differences for all countries. We observe major differences in socio-economic status, health and social cohesion. Older persons are significantly less educated than their middle-aged counterparts. This might capture a cohort effect as years of schooling show a positive time trend (e.g., The World Bank, 2013). Older persons are significantly less likely to work since the majority is already retired. This lower prevalence of working also results in a significantly lower income. We observe a significantly higher prevalence of disability and self-assessed pain among the older individuals. These variables also appeared to have the strongest predictive power in the conditional analysis above. Older persons show a lower participation in the community as well as slightly lower trust and perceived safety. Older persons are less likely to be married in all countries but South Africa. We observe a smaller proportion of male among the older persons, but the difference is significant only in China and the pooled sample. These differences in gender and marital status reflect a potential selection effect as females in general have a higher life expectancy. We find only minor differences in household compositions and ethnicity.

Regression results for the pooled sample and by age-group are reported in Tables 9, 10, 11 and 12. In general, we do not find a lot of evidence for differences in coefficients between the two age-groups. Regarding general life satisfaction (Table 9), we find some evidence for significant

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differences in the partial effects of being married and the number of children in the household.[18] We find significant differences in the partial effects of the number of adults in the household and to a lesser extent social inclusion variables for WHO quality of life (Table 10). Moving to the experienced well-being measures, we find evidence for different partial effects of disability and self-assessed pain (Tables 11 and 12). In particular, the effect of disability is quantitatively larger for the middle-aged group indicating differences in the evaluation of objective life circumstances.[19]

— Insert Tables 9, 10, 11 and 12 about here —

Table 13 shows the results of the decomposition of general life satisfaction. We find significantly lower general life satisfaction for the older age-group in all countries but South Africa. Differences range from 0.05 standard deviations in South Africa to 0.42 standard deviations in Russia with most of the difference being explained by differences in endowments (explained part). Disadvantages in health account for most of the observed explained differences followed by differences in economic resources and social ties. The combination of a positive partial effect of those variables on life satisfaction with a higher prevalence of disability, lower income and social ties associated with age result in the observed disadvantage in well-being for the older persons. In contrast, the large differences in years of education and the fraction of individuals working between the two age-groups do not explain the observed explained differences in general life satisfaction. This mainly results from small and insignificant coefficients on working and education in the pooled regression (Table 9).

— Insert Table 13 about here —

The differences due to the unexplained part of the decomposition favor older persons and result in a partial mediation of the disadvantage caused by differences in endowments in Ghana, China and South Africa (Table 13). However, this partial mediation cannot be attributed to

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[18]Table 24 reports coefficients based on an Ordered Logit model of general life satisfaction. One can see that the figures do not substantially differ from the analysis based on linear regressions. We therefore abstract from the analysis based on ordinal regression models for the sake of simplicity and comparability.

[19]Tables 25 and 26 report coefficients for the score over positive and negative emotions, respectively.

specific life circumstances but is rather a result of the aggregate effect of differences in partial effects (Table 9). The mostly insignificant differences in partial effects between the two age-groups translate into insignificant individual contributions to the unexplained part. The quantitatively rather small contribution of the unexplained part and the insignificance of the constant term lead to the conclusion that most of the differences are explained by differences in the prevalence of objective life circumstances. However, as we explained before, one should be careful when interpreting results of the unexplained part (Jones and Kelley, 1984, Jann, 2008).

We observe similar results for the decomposition of WHO quality of life (Table 14). Results indicate that persons aged 60 and older report a significantly lower quality of life in most countries in our sample. The difference ranges from 0.01 standard deviations in South Africa to 0.58 standard deviations in Russia. Differences in endowments explain a large part of the overall difference with the exception of South Africa. Health, economic resources and social ties appear to be the strongest predictors of disadvantages in well-being associated with age. In contrast to general life satisfaction, the difference in the fraction of working individuals does contribute to the explained difference in quality of life in some countries. This effect results from the combination of a positive partial effect of working on quality of life with a lower prevalence of working among older individuals.

— Insert Table 14 about here —

Differences in the evaluation of life circumstances (partially) mediate the disadvantage of older individuals resulting from differences in the prevalence. This effect is significant in China and South Africa, and for the latter we observe a complete mediation. Similar to the analysis of general life satisfaction, this mediation is mainly a result of the aggregate contribution of all factors while there is no evidence for single contributing factors.

To summarize, we find that the unconditional disadvantages in evaluative well-being associated with age are mostly explained by differences in the prevalence of socio-economic characteristics and health. In particular, disability, decreasing economic resources and social ties explain

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the lower general life satisfaction and quality of life. This finding confirms our results from the previous section that the raw age profile in evaluative well-being is mainly driven by differences in life circumstances, i.e. confounding factors that are both correlated with age and well-being. We find weak evidence for a mediating effect through differences in the evaluation of life circumstances favoring older individuals. This effect, however, cannot be attributed to specific factors but reflects an aggregate effect.

Tables 15 and 16 show results for the emotion score and experienced well-being, respectively. Contrary to evaluative well-being, the analysis does not find a reversal of the association between age and the emotion score and experienced well-being that could be attributed to confounding factors. The descriptive analysis provides evidence for a rather stable or slightly positive association between age and emotional well-being. Conditional on life circumstances, we observe a clear positive age-pattern for both measures of emotional well-being. The decomposition analysis can therefore be seen as a counterfactual analysis. This analysis allows us to examine whether the qualitative stability (in terms of signs) of the association between age and experienced well-being between the descriptive and the conditional analysis results from potential mediating mechanisms or whether the explanatory factors do not contribute to a difference at all.

Consider first the decomposition of the emotion score shown in Table 15.[20] We find a significantly lower emotion score for older persons in Ghana, whilst in South Africa older persons report significantly higher scores. We observe no age-related differences in the other countries in our sample. This finding reflects the unclear age pattern we observe in the descriptive analysis above. Differences in endowments, in particular health and economic resources, result in a disadvantage of older persons in terms of emotion scores similar to the analysis on evaluative well-being. The effect of working increases well-being of the older relative to the middle-aged persons in some countries and partially mediates the disadvantage of older persons caused by worse health and lower income, among others. This is a result of a negative effect of working on emotional well-being combined with a lower prevalence of working among older individuals. In other words, older people do not suffer from negative consequences of working such as stress

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[20]Tables 27 and 28 show the decomposition for the score over positive and negative emotions, respectively.

etc., which increases their emotion score relative to middle-aged individuals.

— Insert Table 15 about here —

The unexplained part of the decomposition analysis is in favor of older persons and partially mediates the negative contribution of the explained part due to differences in the prevalence of life circumstances (Table 15). In South Africa, differences in the evaluation of life circumstances are the main driving force and result in a significant advantage of older individuals in terms of emotion score. In China, the contribution of the unexplained part is also quantitatively larger than the explained part but the overall difference remains insignificant. Similar to the analysis of evaluative well-being, this partial mediation cannot be attributed to specific partial effects, except maybe for India with disability, but is rather a result of the overall effect of differences in partial effects and the constant.

Last, we examine the decomposition of experienced well-being (Table 16). Results indicate a significantly higher experienced well-being among older persons in three out of five countries. Differences in endowments result in a disadvantage of older persons but play only a minor role in determining the overall difference. A higher prevalence of disability and self-assessed pain and, to a lesser extent, decreasing financial means (Table 8) attribute to decreasing well-being over age. Among the contribution of differences in the prevalence of life circumstances, the effect of working partially mediates the disadvantage of older persons caused by worse health (India and Russia).

— Insert Table 16 about here —

Differences stemming from the unexplained part significantly favor older persons and represent the main contributor to the observed differences in raw experienced well-being (Table 16). Part of this effect is attributed to the effect of disability, in particular for the Indian and Russian samples. Older individuals seem to better cope with disability, or bad health in general.

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However, a large fraction of the unexplained difference is in the constant. On the one hand, the effect of the constant reflects age-related heterogeneity that is unrelated to life circumstances. On the other hand, this might indicate a more general issue of model mis-specification, e.g., through the choice of regressors in our analysis. Indeed, Kahneman and Krueger (2006) argue that experienced well-being is rather explained by personality factors that are not included in our analysis due to the lack of information in the data. Hence, one should be careful interpreting the contribution of the unexplained part.

The mixed results on the decomposition of the unconditional difference in experienced well-being and, to a lesser extent, in the emotion score are a result of two factors. First, the influence of differences in the prevalence of objective life-circumstances is quantitatively smaller than what we observe for evaluative well-being. This results from quantitatively smaller partial effects in the regressions of emotional well-being (Tables 4 - 7) which translate into a smaller influence of differences in endowments despite significant age-related differences in life circumstances.

Second, we find some evidence for mediating factors. On the one hand, we provide some evidence that the effect of working results in a decrease of experienced well-being. Older individuals suffer less from these negative consequences as they have a lower prevalence of working, resulting in an advantage of older persons in terms of experienced well-being. This positive effect partially offsets the decrease of experienced well-being associated with deteriorating health and income among older persons. On the other hand, the contribution of the unexplained part is larger in comparison to evaluative well-being. We find some differences in partial effects between middle-aged and older persons for the experienced well-being measures, for instance with respect to disability. However, a large proportion of the unexplained part is attributed to the constant term. This reflects the effect of (age-)group membership and unobserved factors that are both associated with age and well-being (Jann, 2008). However, the unexplained part also captures model mis-specification, in particular omitted variable bias (Jones and Kelley, 1984, Jann, 2008). Kahneman and Krueger (2006) observe that socio-demographic variables predict life satisfaction more strongly than net affects. Personality variables, including sleep, depression and religiosity, predict both types of well-being equally well. The observed increase in the contribution of the

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unexplained part for the experienced utility measures might therefore result from a mis-specified model through omitted variables.

6 Conclusion

This study provides a detailed analysis of the relationship between age and different aspects of psychological well-being among persons aged 50 and older from five low and middle income countries (China, Ghana, India, the Russian Federation and South Africa). The first goal of this study was to analyze the differences in well-being associated with age and the role of potentially confounding factors associated with aging. The second goal was to compare the effect of aging on evaluative well-being with emotional and experienced well-being.

We find substantial differences in raw age-profiles between evaluative and experienced well-being. Age is associated with decreasing evaluative well-being while we observe a rather positive association moving toward experienced well-being. Our finding regarding evaluative well-being is in contrast to recent literature that finds a U–shaped age profile with a minimum appearing between age 40-50 (Blanchflower and Oswald, 2008) in the raw data. Results on the association between age and experienced well-being confirm previous findings (Stone *et al.*, 2010).

The conditional analysis shows that age per se is not a cause of a decline in evaluative well-being. The negative age profile is mainly associated with changes in life circumstances. Age is a process of decline associated with decreasing health, financial means and social ties (Nelson, 2004). Controlling for these factors, age has a positive effect on evaluative well-being. In contrast, the results on experienced well-being are not substantially altered by the inclusion of socio-demographic factors. Experienced well-being measures are rather a result of personality traits and depend less on life circumstances (Mroczek and Kolarz, 1998, Kahneman and Krueger, 2006). Aging is associated with changes in cognitive processing of emotions (Mroczek and Kolarz, 1998, Carstensen *et al.*, 1999, Charles *et al.*, 2001, Carstensen *et al.*, 2003). Older persons remember relatively more positive information resulting in higher levels of reported well-being.

This effect is not captured in our explanatory variables.

Regarding the decomposition of differences in well-being associated with age, results confirm our previous findings that age-related differences in evaluative well-being are mainly a result of changing life circumstances. The disadvantages in terms of health, financial means, and social ties that older persons face explain most of the observed difference in well-being. This does not hold for experienced well-being. First, changes in life circumstances have a much smaller effect on experienced well-being. Disadvantages in health etc. experienced by older persons result in smaller differences in well-being. Second, the lower prevalence of working among older persons partially compensates for differences in well-being caused by other factors because working is related to lower emotional well-being.

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A   List of Variables

Table 1: Description of measures of subjective well-being

VARIABLE	DESCRIPTION
General Life Satisfaction	*"Taking all things together, how satisfied are you with your life as a whole these days?"*
	Item scale: 1 (Very dissatisfied) to 5 (Very satisfied).
WHOQoL-8 Index	*"Do you have enough energy for every day life?"; "Do you have enough money to meet your needs?"; "How satisfied are you with your health?"; "How satisfied are you with yourself?"; "How satisfied are you with your ability to perform your daily living activities?"; "How satisfied are you with your personal relationship?"; "How satisfied are you with the conditions of your living place?"*
	Item scale: 1 (Very dissatisfied) to 5 (Very satisfied).
Emotion Score	Score over the following emotion questions
	Positive emotions include: *"Did you feel … calm or relaxed …?"; "Were you enjoying what you were doing for much of the day yesterday?"; "Did you smile or laugh a lot yesterday?"*

Table 1: (continued)

Variable	Description
	Negative emotions include: *"Did you feel ... worried ... for much of the day yesterday?"; "Did you feel ...rushed... for much of the day yesterday?"; "Did you feel ...irritated or angry... for much of the day yesterday?"; "Did you feel ...depressed...?"; "Did you feel ...tense or stressed... for much of the day yesterday?"; "Did you feel ...lonely... for much of the day yesterday?"; "Did you feel ...bored...?"; "Did you feel ...physical pain... for much of the day yesterday?"; "Did you feel ...sleepiness...?"; "Did you have stomach ache at any time yesterday?"; "Did you have a headache at any time yesterday?"*
	Item scale: 1 (Yes), 0 (No)
Experienced Well-being	Positive affects include: *"How calm or relaxed were you feeling?"; "How much were you enjoying what you were doing?"*
	Item scale: 0 (Not at all), 1 (A little), 2 (A lot)
	Negative affects include: *"How worried were you feeling?"; "How rushed were you feeling?"; "How irritated or angry were you feeling?"; "How depressed were you feeling?"; "How tense or stressed were you feeling?"*
	Item scale: 0 (Not at all), -1 (A little), -2 (A lot)

Table 2: Description of explanatory variables

VARIABLE	DESCRIPTION
Demographics	
Age	Age of respondent
Male	1 Male, 0 Female
Married	1 Married or partnered, 0 Single, Divorced, Separated
Ethnic minority	1 Belongs to ethnic minority, 0 Does not belong to ethnic minority
# children in HH	# children (Age< 15) living in the household
# adults in HH	# adults (Age $\geq$ 15) living in the household
Urban area	1 Urban area, 0 Rural area or village
SES	
Education years	Years of education
HH Permanent Income	Total household permanent income.
Currently working	Respondent currently working
Health	
WHODAS-12 Disability Score[21]	"Over the last 30 days, how much difficulties did you have in ...":

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[21]See Üstün *et al.* (2010)

VARIABLE	DESCRIPTION
	learning a new task; making new friendships or maintaining current friendships; dealing with strangers; standing for a long period; taking care of your hh responsibilities; joining community activities (...) in the same way as anyone else can; emotionally affected by health conditions; concentrating on doing sth. for 10 minutes; walking a long distance such as one kilometer; bathing/washing your whole body; getting dressed; in your day to day work Item scale: 1 (None) to 5 (Extreme/Cannot do)
Self-Assessed Pain	"Overall in the last 30 days, ...": *"how much of bodily aches or pains did you have"; "how much bodily discomfort did you have"; "how much difficulty did you have in your daily life because of your pain"* Item scale: 1 (None) to 5 (Extreme/Cannot do)
Social Cohesion	
Community Involvement	Score based on the following questions: *"How often in the last 12 months have you":*

Table 2: (continued)

Variable	Description
	"attended any public meeting in which there was discussion of local or school affairs;" "met personally with someone you consider to be a community leader;" "attended any group, club, society, union or organizational meeting;" "worked with other people in your neighborhood to fix or improve something; had friends over to your home;" "been in the home of someone who lives in a different neighborhood than you do or had them in your home;" "socialized with co-workers outside work;" "attended religious services (not including weddings and funerals);" "gotten out of the house/your dwelling to attend social meetings, activities, programs or events or to visit friends or relatives?"
	Item scale: 1 (Never) to 5 (Daily)

Table 2: (continued)

Variable	Description
Trust	Score based on the following two questions: *"First, think about people in your neighborhood. Generally speaking, would you say that you can trust them?"; "Now, think about people whom you work with. Generally speaking, would you say that you can trust them?"; "And how about strangers? Generally speaking, would you say that you can trust them?"* Item scale: 1 (To a very great extent) to 5 (To a very small extent)
Safety	Score based on the following two questions: *"In general, how safe from crime and violence do you feel when you are alone at home?"; "How safe do you feel when walking down your street alone after dark?"; "In the last 12 months, have you or anyone in your household been the victim of a violent crime, such as assault or mugging?" (1 Yes, 0 No)* Item scale: 1 (Completely safe) to 5 (Not safe at all)

B Tables

Table 3: Descriptive statistics by country

	Pooled	Ghana	India	China	South Africa	Russia
Age	62	63	61	62	61	63
Male	48%	52%	51%	49%	38%	43%
Married	73%	58%	76%	85%	48%	61%
Urban	47%	41%	25%	44%	60%	72%
Years of education	7	4	4	5	6	11
Working	44%	71%	43%	45%	29%	43%
Observations	19926	2904	4620	8229	1824	2349

Source: SAGE

Note: The entries in each column are country-specific averages using population weights.

Table 4: Partial association between age and general life satisfaction

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	−0.15***	−0.13**	−0.18***	−0.01	0.05	−0.29**
70-79	−0.25***	−0.24***	−0.21***	−0.07	0.09	−0.47***
80+	−0.46***	−0.61***	−0.48***	−0.23***	−0.04	−0.63***
Male	0.15***	0.16***	0.17***	0.06**	0.12*	0.20**
Constant	0.10***	0.06	0.02	−0.00	−0.09	0.12
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	0.04	0.09**	0.01	0.15***	0.20***	−0.04
70-79	0.16***	0.19***	0.09**	0.31***	0.31***	0.04
80+	0.25***	0.11	0.07	0.42***	0.42***	0.26
Male	−0.04	−0.13***	−0.15***	−0.07***	−0.09	0.05
Married	0.02	0.17***	−0.02	0.08**	0.15**	0.02
Ethnic minority	−0.08	0.05	−0.11*		0.21***	
Urban	−0.03	0.04	−0.14**	0.01	0.03	0.06
# Adults in HH	−0.01	−0.01	0.01	−0.04***	0.01	−0.07
# Children in HH	−0.00	−0.02*	−0.01	−0.02	−0.01	0.01
Education years	−0.00	0.00	0.00	−0.00	−0.02**	−0.01
Working	0.03	0.11*	0.01	0.14***	0.13*	−0.04
HH Permanent Income	0.21***	0.16***	0.15***	0.20***	0.24***	0.16***
WHO Disability Index	−0.35***	−0.38***	−0.36***	−0.36***	−0.33***	−0.36***
Self-Assessed Pain	−0.10***	−0.10***	−0.06***	−0.20***	−0.10***	−0.06
Community Involvement	0.07***	0.02	0.09***	0.05**	−0.04	0.10*
Trust	0.06***	0.05**	0.04**	0.09***	−0.03	0.05
Safety	0.10***	0.04	0.03	0.10***	0.11***	0.17***
Constant	0.27***	0.44***	0.67***	0.18***	0.27**	0.62***
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The pooled regression includes country fixed effects.

Table 5: Partial association between age and WHO quality of life

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	−0.21***	−0.26***	−0.26***	−0.07**	0.05	−0.31***
70-79	−0.45***	−0.48***	−0.40***	−0.21***	−0.02	−0.77***
80+	−0.65***	−0.90***	−0.62***	−0.44***	−0.16	−0.85***
Male	0.23***	0.25***	0.32***	0.09***	0.17**	0.28***
Constant	0.22***	0.12**	0.01	0.03	−0.09	0.18
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	0.07**	0.00	−0.01	0.12***	0.25***	0.09
70-79	0.12***	0.04	0.02	0.26***	0.26***	0.05
80+	0.33***	−0.04	0.14	0.38***	0.43***	0.39**
Male	−0.05*	−0.02	−0.18***	−0.05**	−0.10	0.03
Married	0.09***	0.02	0.07	0.07**	0.19***	0.17***
Ethnic minority	−0.10**	0.06	−0.18***		0.28***	
Urban	−0.03	0.05	−0.04	0.09*	0.02	−0.09
# Adults in HH	−0.02**	−0.01*	0.00	−0.05***	−0.01	−0.11***
# Children in HH	0.01	−0.02***	0.01*	0.01	−0.02	−0.02
Education years	0.00	0.01	0.01*	0.00	−0.01	−0.01
Working	0.12***	0.20***	0.09**	0.19***	0.23***	0.21**
HH Permanent Income	0.27***	0.23***	0.22***	0.22***	0.29***	0.17***
WHO Disability Index	−0.43***	−0.43***	−0.42***	−0.49***	−0.31***	−0.46***
Self-Assessed Pain	−0.17***	−0.12***	−0.09***	−0.26***	−0.18***	−0.18***
Community Involvement	0.05***	0.07***	0.12***	0.05**	0.06**	0.02
Trust	0.08***	0.07***	0.08***	0.12***	−0.03	0.04
Safety	0.11***	0.05**	0.07***	0.11***	0.11***	0.17***
Constant	0.33***	0.54***	0.69***	0.27***	0.30***	0.78***
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* $(p < 0.10)$, ** $(p < 0.05)$, *** $(p < 0.01)$

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The pooled regression includes country fixed effects.

Table 6: Partial association between age and emotion score

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	−0.01	−0.10*	−0.00	0.04	0.20**	−0.05
70-79	−0.03	−0.11*	−0.03	0.08*	0.22**	−0.14
80+	−0.22***	−0.25***	−0.06	−0.08	0.38***	−0.49***
Male	0.22***	0.15***	0.34***	0.10***	0.21***	0.22**
Constant	0.23***	−0.01	−0.17***	−0.07*	−0.20**	−0.01
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	0.15***	0.04	0.13***	0.12***	0.30***	0.18*
70-79	0.30***	0.14**	0.18***	0.30***	0.39***	0.34***
80+	0.36***	0.14*	0.38***	0.37***	0.69***	0.21
Male	0.07**	−0.00	0.17***	0.02	0.04	0.06
Married	0.04	0.12**	−0.05	0.14***	0.22***	0.11
Ethnic minority	−0.13**	−0.09*	0.00		−0.05	
Urban	0.02	0.04	0.07	0.16***	0.08	−0.08
# Adults in HH	0.01	−0.02	0.01	−0.02	−0.02	−0.03
# Children in HH	−0.01	0.01	0.00	−0.01	−0.02	−0.13
Education years	−0.00	−0.00	−0.00	−0.00	0.00	−0.01
Working	−0.03	0.29***	−0.14***	−0.02	0.06	0.10
HH Permanent Income	0.15***	0.09***	0.13***	0.11***	0.07	0.14**
WHO Disability Index	−0.29***	−0.01	−0.30***	−0.25***	−0.11*	−0.31***
Self-Assessed Pain	−0.15***	−0.19***	−0.17***	−0.24***	−0.12**	−0.10**
Community Involvement	0.01	0.13***	0.01	0.04**	0.10**	−0.03
Trust	0.03**	−0.11***	0.01	0.04**	−0.01	0.07
Safety	0.04***	0.10***	0.01	0.10***	−0.01	0.03
Constant	0.37***	0.04	0.53***	0.04	−0.05	0.46*
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* $(p < 0.10)$, ** $(p < 0.05)$, *** $(p < 0.01)$

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The pooled regression includes country fixed effects. The raw score ranges from 0-14 with 14 the highest score reporting no negative emotions and all positive emotions. The analysis is based on a standardized score with mean zero and standard deviation one.

Table 7: Partial association between age and experienced well-being

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	0.07*	0.13***	0.05	0.07**	0.29***	0.09
70-79	0.13**	0.11**	0.12*	0.14***	0.17	0.16
80+	−0.06	0.07	−0.16	0.13**	0.35***	−0.13
Male	0.13***	0.10**	0.17***	0.06***	0.15**	0.16
Constant	0.27***	−0.12**	−0.12**	−0.06	−0.20**	−0.13
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	0.13***	0.17***	0.11**	0.12***	0.37***	0.08
70-79	0.26***	0.20***	0.21***	0.24***	0.28*	0.21
80+	0.24***	0.24**	0.05	0.38***	0.56***	0.12
Male	0.07*	0.06	0.09	0.01	0.02	0.09
Married	−0.02	0.02	−0.09*	0.09**	0.24***	−0.09
Ethnic minority	−0.04	−0.19***	−0.11		−0.20	
Urban	0.06	0.06	0.08	0.29***	0.01	0.02
# Adults in HH	−0.01	−0.03**	0.01	−0.05**	−0.08*	0.00
# Children in HH	0.01	0.00	0.01	−0.01	0.04	−0.12
Education years	0.00	−0.00	0.01	0.00	0.01	−0.01
Working	−0.15***	0.03	−0.11**	−0.02	−0.04	−0.31***
HH Permanent Income	0.12***	0.07**	0.07**	0.12***	0.09**	0.15**
WHO Disability Index	−0.22***	−0.10***	−0.24***	−0.10***	−0.16***	−0.28***
Self-Assessed Pain	−0.03	0.02	−0.04	−0.07***	−0.08*	0.00
Community Involvement	−0.02	0.08***	−0.05*	0.05**	−0.04	−0.04
Trust	−0.01	0.02	0.01	0.02	−0.02	−0.06
Safety	0.10***	0.04*	0.10***	0.14***	−0.03	0.09*
Constant	0.41***	0.11	0.31***	−0.09	0.18	0.45*
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The pooled regression includes country fixed effects.

Table 8: Summary statistics of explanatory variables by age-group and country

	Pooled				Ghana			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	48.00	46.02	50.20	−4.18**	52.48	51.67	53.64	−1.97
Married	73.43	64.14	83.79	−19.65***	58.89	52.44	68.14	−15.69***
Urban	47.17	47.98	46.28	1.71	41.78	40.11	44.18	−4.07
Ethnic minority	0.10	0.10	0.11	−0.01	0.51	0.50	0.51	−0.01
# Adults in HH	3.20	3.06	3.35	−0.30***	3.60	3.52	3.70	−0.18*
# Children in HH	0.81	0.84	0.77	0.08	1.89	1.79	2.04	−0.24***
Education years	6.76	5.99	7.63	−1.64***	4.30	3.14	5.96	−2.83***
Working	44.02	26.76	63.24	−36.48***	70.76	60.52	85.45	−24.94***
HH Permanent Income	0.56	0.44	0.69	−0.25***	−0.01	−0.07	0.08	−0.15***
WHO Disability Index	0.96	1.21	0.68	0.53***	1.18	1.45	0.79	0.67***
Self-Assessed Pain	1.08	1.25	0.89	0.37***	1.41	1.58	1.17	0.41***
Community Involvement	0.00	−0.17	0.19	−0.37***	0.00	−0.10	0.15	−0.25***
Trust	−0.00	−0.06	0.07	−0.13***	−0.00	0.03	−0.04	0.07
Safety	−0.00	−0.05	0.05	−0.10**	0.00	−0.02	0.04	−0.06

	China				India			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	49.42	48.24	50.86	−2.62**	51.51	50.39	52.64	−2.25
Married	85.16	78.74	92.96	−14.22***	76.05	64.70	87.58	−22.88***
Urban	44.54	48.81	39.34	9.47***	25.04	26.58	23.47	3.11*
Ethnic minority	0.01	0.01	0.01	−0.00	0.14	0.14	0.14	−0.01
# Adults in HH	2.48	2.38	2.60	−0.22***	4.86	4.93	4.78	0.15
# Children in HH	0.22	0.22	0.23	−0.01	1.93	2.17	1.67	0.50***
Education years	5.39	4.69	6.23	−1.54***	3.78	3.16	4.42	−1.26***
Working	44.90	31.95	60.67	−28.72***	43.52	30.93	56.31	−25.39***
HH Permanent Income	−0.00	−0.15	0.18	−0.34***	−0.00	−0.04	0.04	−0.08
WHO Disability Index	0.45	0.59	0.28	0.31***	1.44	1.70	1.18	0.52***
Self-Assessed Pain	0.70	0.78	0.61	0.17***	1.41	1.60	1.21	0.39***
Community Involvement	0.00	−0.09	0.11	−0.20***	0.00	−0.15	0.15	−0.30***
Trust	−0.00	0.01	−0.01	0.01	0.00	−0.07	0.07	−0.13***
Safety	−0.00	−0.06	0.06	−0.12***	−0.00	−0.00	0.00	−0.01

	South Africa				Russia			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	38.43	37.27	39.64	−2.38	43.39	39.67	47.54	−7.87
Married	48.40	47.31	49.54	−2.22	61.17	49.85	73.79	−23.94***
Urban	60.33	58.52	62.23	−3.71	72.20	68.07	76.80	−8.73
Ethnic minority	0.25	0.27	0.23	0.04	0.13	0.13	0.14	−0.00
# Adults in HH	3.10	3.06	3.14	−0.09	2.19	1.88	2.52	−0.64***
# Children in HH	0.97	0.94	0.99	−0.05	0.18	0.13	0.23	−0.10
Education years	6.23	5.64	6.86	−1.22***	11.39	10.32	12.58	−2.27***
Working	29.40	14.71	44.76	−30.05***	43.59	16.44	73.84	−57.40***
HH Permanent Income	−0.01	0.04	−0.07	0.11	0.00	−0.23	0.26	−0.50***
WHO Disability Index	1.13	1.43	0.83	0.60***	0.96	1.37	0.51	0.85***
Self-Assessed Pain	1.17	1.28	1.05	0.22***	1.10	1.38	0.78	0.61***
Community Involvement	0.01	−0.13	0.15	−0.28***	−0.00	−0.29	0.32	−0.61***
Trust	−0.01	−0.00	−0.01	0.01	−0.00	−0.14	0.15	−0.29***
Safety	0.00	0.00	0.00	−0.00	−0.00	−0.09	0.10	−0.19*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: Differences across age-groups are computed by running a regression of the respective explanatory variable on the age-dummy. The reported significance of the difference between age-groups is based on a standard t-test. The entries in each column are country-specific averages by age-group and the associated difference in sample averages. Household permanent income, WHO disability index, self-assessed pain, community involvement, trust and perceived safety are standardized measures hence differences are measured in standard deviations.

Table 9: Regression analysis of general life satisfaction by age-group

	Pooled				Ghana			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.02	−0.02	−0.05	0.02	−0.11**	−0.09	−0.19***	0.10
Married	−0.02	−0.08	0.11	−0.19**	0.14***	0.15**	0.16*	−0.00
# Adults in HH	−0.00	−0.00	−0.00	−0.00	−0.01	−0.02	−0.00	−0.02
# Children in HH	−0.00	0.00	−0.01	0.01	−0.02**	−0.04***	0.02	−0.05***
Urban	−0.03	−0.01	−0.06	0.05	0.03	0.04	0.02	0.02
Ethnic minority	−0.08	−0.03	−0.12	0.09	0.04	0.06	0.02	0.04
Education years	−0.01	−0.00	−0.00	−0.00	−0.00	−0.00	0.01	−0.01
Working	−0.02	−0.04	0.06	−0.10	0.08	0.08	0.17*	−0.09
HH Permanent Income	0.17***	0.17***	0.17***	0.00	0.17***	0.18***	0.14***	0.04
WHO Disability Index	−0.33***	−0.32***	−0.37***	0.05	−0.37***	−0.39***	−0.35***	−0.04
Self-Assessed Pain	−0.10***	−0.10***	−0.09**	−0.02	−0.10***	−0.07*	−0.15***	0.09*
Community Involvement	0.06***	0.09***	0.04	0.05	0.02	0.01	0.04	−0.03
Trust	0.06***	0.07***	0.05*	0.01	0.06**	0.07**	0.03	0.04
Safety	0.10***	0.10***	0.10***	−0.00	0.04	0.05	0.02	0.02
Constant	0.37***	0.47***	0.14	0.33***	0.55***	0.60***	0.35**	0.25
Country Dummies	Yes	Yes	Yes	Yes				

	China				India			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.04	−0.03	−0.09**	0.06	−0.13***	−0.10	−0.17***	0.07
Married	0.01	0.01	0.12	−0.11	−0.05	−0.08	0.03	−0.11
# Adults in HH	−0.05***	−0.04**	−0.03	−0.01	0.01	0.00	0.01	−0.01
# Children in HH	−0.02	−0.08**	0.04	−0.12**	−0.00	0.00	−0.01	0.02
Urban	0.05	0.04	−0.00	0.05	−0.13**	−0.13**	−0.14**	0.00
Ethnic minority					−0.11*	−0.07	−0.14**	0.07
Education years	−0.01*	−0.01	0.01	−0.01*	0.00	0.01	0.00	0.00
Working	0.08**	0.12**	0.14***	−0.03	−0.00	0.03	0.00	0.02
HH Permanent Income	0.18***	0.19***	0.20***	−0.01	0.16***	0.17***	0.14***	0.02
WHO Disability Index	−0.31***	−0.33***	−0.36***	0.03	−0.36***	−0.34***	−0.39***	0.06
Self-Assessed Pain	−0.21***	−0.21***	−0.20***	−0.00	−0.05***	−0.08***	−0.02	−0.06
Community Involvement	0.05**	0.06***	0.02	0.04	0.09***	0.07**	0.10***	−0.03
Trust	0.10***	0.09***	0.11***	−0.02	0.04*	0.07**	0.02	0.05
Safety	0.10***	0.07***	0.14***	−0.07**	0.03	0.04	0.02	0.01
Constant	0.39***	0.46***	0.10	0.37***	0.69***	0.71***	0.65***	0.06

	South Africa				Russia			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.07	−0.11	−0.05	−0.06	0.05	0.04	0.12	−0.07
Married	0.15**	0.05	0.25**	−0.21*	0.01	−0.13	0.22	−0.35**
# Adults in HH	0.01	0.02	0.02	0.01	−0.07	−0.03	−0.12	0.08
# Children in HH	−0.01	−0.01	0.00	−0.01	0.00	−0.03	0.05	−0.08
Urban	0.01	0.06	−0.01	0.07	0.06	0.05	0.03	0.02
Ethnic minority	0.21***	0.21**	0.21*	−0.00				
Education years	−0.02**	−0.01	−0.02*	0.01	−0.02	−0.01	−0.02	0.01
Working	0.05	0.01	0.17*	−0.16	−0.04	−0.32**	0.15	−0.47**
HH Permanent Income	0.26***	0.26***	0.21***	0.05	0.16***	0.18**	0.15**	0.03
WHO Disability Index	−0.30***	−0.31***	−0.38***	0.07	−0.33***	−0.31***	−0.41***	0.10
Self-Assessed Pain	−0.13***	−0.10*	−0.10*	0.00	−0.07	−0.05	−0.11	0.06
Community Involvement	−0.05	−0.04	−0.04	−0.01	0.09	0.15**	0.02	0.14
Trust	−0.02	−0.01	−0.03	0.02	0.04	0.04	0.05	−0.01
Safety	0.10***	0.13***	0.07*	0.05	0.18***	0.18***	0.16**	0.01
Constant	0.46***	0.50***	0.26*	0.25	0.67***	0.66***	0.64	0.02

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation.

Table 10: Regression analysis of WHO quality of life by age-group

	Pooled				Ghana			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.03	−0.05	−0.05	0.00	−0.02	−0.05	0.02	−0.07
Married	0.04	0.03	0.12*	−0.09	0.02	0.09	−0.08	0.17
# Adults in HH	−0.01	0.00	−0.02*	0.02*	−0.01*	−0.03**	0.01	−0.04**
# Children in HH	0.01	0.01	0.01	−0.00	−0.02***	−0.03***	−0.01	−0.02
Urban	−0.03	0.00	−0.06	0.06	0.05	0.04	0.06	−0.02
Ethnic minority	−0.10**	−0.08	−0.11*	0.03	0.06	0.08	0.03	0.05
Education years	0.00	0.00	0.00	−0.00	0.01	0.00	0.01	−0.00
Working	0.08**	0.06	0.16***	−0.10	0.20***	0.16***	0.34***	−0.17
HH Permanent Income	0.21***	0.18***	0.24***	−0.06*	0.23***	0.25***	0.19***	0.06
WHO Disability Index	−0.40***	−0.40***	−0.44***	0.03	−0.43***	−0.44***	−0.41***	−0.03
Self-Assessed Pain	−0.17***	−0.18***	−0.16***	−0.02	−0.12***	−0.12***	−0.13***	0.02
Community Involvement	0.05***	0.07***	0.03	0.05	0.07***	0.08***	0.05*	0.02
Trust	0.07***	0.07***	0.08**	−0.00	0.07***	0.07**	0.05*	0.02
Safety	0.11***	0.10***	0.12***	−0.02	0.05**	0.07**	0.03	0.03
Constant	0.43***	0.48***	0.27**	0.22*	0.55***	0.62***	0.38***	0.24
Country Dummies	*Yes*	*Yes*	*Yes*	*Yes*				

	China				India			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.03	−0.03	−0.07*	0.04	−0.17***	−0.17***	−0.15**	−0.02
Married	0.01	0.01	0.10	−0.09	0.05	−0.01	0.12	−0.13
# Adults in HH	−0.06***	−0.03*	−0.07***	0.04*	0.00	0.01	−0.01	0.02
# Children in HH	0.01	−0.04	0.06	−0.10*	0.01	0.01	0.02	−0.00
Urban	0.12**	0.16**	0.02	0.14**	−0.04	−0.03	−0.05	0.02
Ethnic minority					−0.18***	−0.18**	−0.18***	0.01
Education years	−0.01	−0.01*	0.01	−0.01**	0.01*	0.01	0.01	−0.00
Working	0.13***	0.17***	0.17***	−0.00	0.09**	0.11**	0.06	0.05
HH Permanent Income	0.21***	0.21***	0.23***	−0.03	0.22***	0.20***	0.24***	−0.04
WHO Disability Index	−0.45***	−0.46***	−0.55***	0.10	−0.41***	−0.41***	−0.41***	0.00
Self-Assessed Pain	−0.26***	−0.25***	−0.27***	0.03	−0.10***	−0.10***	−0.08***	−0.02
Community Involvement	0.05**	0.06***	0.02	0.04*	0.12***	0.15***	0.09***	0.07**
Trust	0.13***	0.12***	0.13***	−0.02	0.08***	0.09***	0.08***	0.01
Safety	0.10***	0.08***	0.13***	−0.05**	0.07***	0.10***	0.05**	0.04
Constant	0.45***	0.43***	0.29***	0.13	0.70***	0.71***	0.67***	0.04

	South Africa				Russia			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.08	−0.13*	−0.05	−0.09	0.03	−0.02	0.11	−0.14
Married	0.18***	0.18***	0.18*	0.00	0.17**	0.16**	0.20*	−0.04
# Adults in HH	−0.01	−0.01	0.01	−0.02	−0.12***	−0.10***	−0.15**	0.05
# Children in HH	−0.03	−0.00	−0.04	0.04	−0.04	−0.09	0.04	−0.13
Urban	0.01	0.09	−0.04	0.13	−0.10	−0.11	−0.12	0.02
Ethnic minority	0.27***	0.20***	0.38***	−0.18				
Education years	−0.01	−0.00	−0.01	0.01	−0.01	−0.00	−0.02	0.01
Working	0.15**	0.15	0.22**	−0.07	0.18*	−0.02	0.37***	−0.39**
HH Permanent Income	0.31***	0.30***	0.25***	0.04	0.17***	0.12**	0.22***	−0.11
WHO Disability Index	−0.27***	−0.26***	−0.41***	0.15**	−0.42***	−0.39***	−0.59***	0.20
Self-Assessed Pain	−0.20***	−0.18***	−0.16***	−0.02	−0.19***	−0.22***	−0.17***	−0.05
Community Involvement	0.05*	0.04	0.07	−0.03	0.01	0.05	−0.01	0.06
Trust	−0.02	−0.01	−0.03	0.02	0.04	0.04	0.03	0.01
Safety	0.11***	0.16***	0.05	0.11*	0.16***	0.13***	0.19***	−0.06
Constant	0.48***	0.48***	0.36**	0.11	0.91***	0.86***	0.86*	0.01

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation.

Table 11: Regression analysis of emotion score by age-group

	Pooled				Ghana			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	0.11***	0.09**	0.07*	0.02	0.02	−0.01	0.03	−0.04
Married	−0.03	−0.05	0.11	−0.16**	0.10*	0.10	0.14*	−0.05
# Adults in HH	0.01	0.02**	−0.00	0.03	−0.02	−0.01	−0.03	0.02
# Children in HH	−0.00	−0.01	−0.01	0.01	0.01	0.01	0.00	0.01
Urban	0.03	0.01	0.04	−0.03	0.04	0.01	0.10	−0.10
Ethnic minority	−0.13**	−0.21**	−0.02	−0.19	−0.10*	−0.08	−0.11	0.03
Education years	−0.00	0.00	−0.01	0.01	−0.01	−0.00	−0.01	0.01
Working	−0.11***	−0.05	−0.05	−0.00	0.27***	0.27***	0.30***	−0.03
HH Permanent Income	0.12***	0.09***	0.15***	−0.05	0.10***	0.07**	0.11***	−0.04
WHO Disability Index	−0.26***	−0.23***	−0.39***	0.16***	0.01	0.02	−0.07	0.09
Self-Assessed Pain	−0.15***	−0.18***	−0.11***	−0.07**	−0.19***	−0.18***	−0.19***	0.00
Community Involvement	0.00	0.01	0.02	−0.01	0.13***	0.14***	0.09**	0.05
Trust	0.03*	0.04**	0.01	0.03	−0.11***	−0.11***	−0.10***	−0.01
Safety	0.04***	0.00	0.08***	−0.08***	0.10***	0.12***	0.06**	0.06
Constant	0.56***	0.57***	0.38***	0.19**	0.12	0.07	0.14	−0.07
Country Dummies	*Yes*	*Yes*	*Yes*	*Yes*				

	China				India			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	0.05*	0.06**	−0.00	0.07	0.22***	0.23***	0.13	0.10
Married	0.07*	0.03	0.28***	−0.24**	−0.11**	−0.10*	0.01	−0.11
# Adults in HH	−0.02	−0.01	−0.02	0.01	0.01	0.02	0.01	0.01
# Children in HH	−0.01	−0.04	0.02	−0.06	0.01	0.00	−0.00	0.01
Urban	0.20***	0.19***	0.16**	0.03	0.08	0.11**	0.01	0.10
Ethnic minority					0.01	−0.07	0.07	−0.14
Education years	−0.01***	−0.01***	0.01	−0.02**	−0.00	0.00	−0.01	0.01
Working	−0.08*	−0.06	−0.02	−0.05	−0.18***	−0.15***	−0.14*	−0.02
HH Permanent Income	0.10***	0.12***	0.09***	0.03	0.13***	0.12***	0.14***	−0.01
WHO Disability Index	−0.21***	−0.26***	−0.14*	−0.12	−0.29***	−0.24***	−0.39***	0.15***
Self-Assessed Pain	−0.24***	−0.21***	−0.29***	0.08	−0.17***	−0.19***	−0.13***	−0.06
Community Involvement	0.04**	0.06***	0.02	0.03	0.01	−0.02	0.04	−0.06
Trust	0.05***	0.05***	0.03	0.02	0.00	0.03	−0.02	0.05
Safety	0.10***	0.06***	0.15***	−0.09***	0.02	−0.01	0.04	−0.04
Constant	0.23***	0.33***	−0.14	0.47***	0.61***	0.57***	0.62***	−0.05

	South Africa				Russia			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	0.07	0.05	0.06	−0.01	0.07	0.08	0.08	0.01
Married	0.21**	0.06	0.38***	−0.32**	0.08	−0.01	0.16	−0.17
# Adults in HH	−0.03	−0.01	−0.02	0.01	−0.05	0.04	−0.07*	0.11*
# Children in HH	−0.03	0.03	−0.07	0.10*	−0.13	−0.17**	−0.13	−0.04
Urban	0.06	0.06	0.11	−0.06	−0.09	−0.21	0.03	−0.24
Ethnic minority	−0.06	−0.10	0.00	−0.10				
Education years	0.00	0.01	−0.00	0.02	−0.02	0.01	−0.05	0.05
Working	−0.05	−0.19	0.16	−0.35**	−0.02	0.16	0.02	0.13
HH Permanent Income	0.09*	0.10*	0.01	0.09	0.15***	0.01	0.24***	−0.23***
WHO Disability Index	−0.05	−0.03	−0.23*	0.20	−0.28***	−0.24***	−0.42***	0.19
Self-Assessed Pain	−0.15***	−0.21***	0.01	−0.21**	−0.09**	−0.19***	−0.00	−0.18**
Community Involvement	0.09*	0.03	0.15**	−0.12*	−0.04	−0.01	0.00	−0.01
Trust	0.00	0.01	0.01	0.00	0.06	0.06	0.04	0.02
Safety	−0.02	0.04	−0.07	0.11	0.03	−0.04	0.10**	−0.14**
Constant	0.21	0.31**	−0.16	0.47	0.69***	0.49**	0.83*	−0.34

* (p < 0.10), ** (p < 0.05), *** (p < 0.01)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The raw score ranges from 0-14 with 14 the highest score reporting no negative emotions and all positive emotions.The analysis is based on a standardized score with mean zero and standard deviation one.

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Table 12: Regression analysis of experienced well-being by age-group

	Pooled				Ghana			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	0.10***	0.15***	−0.02	0.17**	0.10**	0.10*	−0.00	0.10
Married	−0.07	−0.03	−0.07	0.04	−0.01	0.01	0.06	−0.05
# Adults in HH	−0.01	0.00	−0.02	0.02	−0.03**	−0.02	−0.05*	0.02
# Children in HH	0.01	0.01	0.01	−0.00	−0.00	−0.00	0.01	−0.01
Urban	0.06	0.15***	−0.03	0.17*	0.05	−0.00	0.15*	−0.16*
Ethnic minority	−0.03	−0.01	−0.06	0.05	−0.19***	−0.21***	−0.16**	−0.04
Education years	0.00	−0.01	0.01	−0.02*	−0.01**	0.00	−0.01**	0.01*
Working	−0.22***	−0.21***	−0.11**	−0.09	−0.01	−0.01	0.15	−0.16
HH Permanent Income	0.10***	0.12***	0.09**	0.03	0.08**	0.04	0.10*	−0.06
WHO Disability Index	−0.20***	−0.18***	−0.32***	0.14***	−0.08***	−0.06*	−0.21***	0.16*
Self-Assessed Pain	−0.03	−0.04	−0.01	−0.03	0.02	0.01	0.05	−0.04
Community Involvement	−0.02	−0.01	−0.02	0.01	0.08***	0.05	0.13***	−0.08
Trust	−0.01	−0.00	−0.02	0.01	0.03	0.03	0.00	0.03
Safety	0.10***	0.11***	0.09***	0.02	0.04*	0.01	0.08**	−0.07
Constant	0.58***	0.53***	0.53***	−0.01	0.27**	0.26**	0.10	0.16
Country Dummies	*Yes*	*Yes*	*Yes*	*Yes*				

	China				India			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	0.03	0.05*	−0.03	0.08*	0.14**	0.12	0.07	0.05
Married	0.03	0.05	0.07	−0.02	−0.14***	−0.08	−0.11	0.03
# Adults in HH	−0.05**	−0.03	−0.06**	0.03	0.01	0.01	0.01	−0.00
# Children in HH	−0.02	−0.08**	0.07*	−0.15***	0.01	0.01	0.01	−0.00
Urban	0.33***	0.26***	0.36***	−0.11	0.09	0.12	0.04	0.08
Ethnic minority					−0.11	−0.10	−0.14	0.04
Education years	−0.00	−0.00	0.01	−0.01**	0.00	0.01*	−0.00	0.01
Working	−0.08	−0.11*	0.05	−0.15**	−0.15***	−0.11*	−0.11*	0.00
HH Permanent Income	0.11***	0.12***	0.12***	−0.00	0.08**	0.09**	0.06*	0.03
WHO Disability Index	−0.06*	−0.09***	−0.08	−0.01	−0.24***	−0.20***	−0.32***	0.12**
Self-Assessed Pain	−0.07***	−0.08***	−0.06*	−0.02	−0.03	−0.05	−0.02	−0.03
Community Involvement	0.05**	0.05*	0.05	−0.00	−0.05*	−0.09**	−0.01	−0.08*
Trust	0.03	0.03	0.02	0.01	0.00	0.02	−0.01	0.03
Safety	0.14***	0.14***	0.15***	−0.02	0.10***	0.10***	0.10***	0.00
Constant	0.09	0.17**	−0.14	0.31***	0.39***	0.33***	0.44***	−0.10

	South Africa				Russia			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	0.05	−0.15	0.20	−0.35*	0.10	0.30***	−0.09	0.39*
Married	0.23**	0.08	0.37***	−0.29*	−0.11	−0.15	−0.13	−0.03
# Adults in HH	−0.09*	−0.00	−0.14**	0.13**	−0.01	0.07	−0.04	0.11
# Children in HH	0.03	0.04	0.04	0.00	−0.12	−0.01	−0.23	0.22
Urban	0.00	0.06	−0.04	0.10	0.01	0.20*	−0.28	0.48**
Ethnic minority	−0.21	−0.33	−0.06	−0.27				
Education years	0.01	0.01	0.01	−0.00	−0.01	−0.02	0.01	−0.03
Working	−0.15*	0.01	−0.11	0.12	−0.38***	−0.48***	−0.30**	−0.18
HH Permanent Income	0.11**	0.08*	0.07	0.01	0.15**	0.17***	0.12	0.04
WHO Disability Index	−0.11**	−0.17***	−0.15*	−0.02	−0.26***	−0.21***	−0.54***	0.33**
Self-Assessed Pain	−0.11**	−0.08	−0.09	0.01	0.00	0.00	0.08	−0.07
Community Involvement	−0.05	−0.11	0.05	−0.16	−0.04	0.03	−0.10	0.12
Trust	−0.02	0.04	−0.06	0.10	−0.06	−0.07	−0.02	−0.05
Safety	−0.03	0.03	−0.06	0.09	0.09*	0.11**	0.02	0.09
Constant	0.42***	0.43***	0.21	0.22	0.58***	0.31	0.81*	−0.50

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation.

Table 13: Decomposition analysis of general life satisfaction by country

	Ghana	India	China	South Africa	Russia
Age 60 +	−0.10**	−0.11**	−0.02	0.01	−0.20*
Age 50-59	0.14***	0.11**	0.03	−0.04	0.22*
difference	−0.24***	−0.22***	−0.05	0.05	−0.42***
explained	−0.35***	−0.24***	−0.21***	−0.15**	−0.42***
unexplained	0.10**	0.03	0.16***	0.20***	−0.00
Panel A. Explained Differences					
Male	0.002	0.003	0.001	0.002	−0.004
Married	−0.023*	0.011	−0.002	−0.003	−0.003
Urban	−0.001	−0.004	0.005	−0.001	−0.005
Ethnic minority	−0.001	0.001		0.008	
# Adults in HH	0.002	0.001	0.010*	−0.001	0.044
# Children in HH	0.005	−0.002	0.000	0.001	−0.000
Education years	0.007	−0.003	0.010	0.023	0.036
Working	−0.021	0.000	−0.022*	−0.014	0.025
HH Permanent Income	−0.025**	−0.012	−0.062***	0.028	−0.082*
WHO Disability Index	−0.247***	−0.185***	−0.095***	−0.176***	−0.285***
Self-Assessed Pain	−0.041***	−0.021*	−0.036***	−0.028*	−0.040
Community Involvement	−0.006	−0.026**	−0.009*	0.013	−0.056
Trust	0.004	−0.006	0.001	−0.000	−0.013
Safety	−0.002	−0.000	−0.013**	−0.000	−0.034
Panel B. Unexplained Differences					
Male	0.055	0.038	0.030	−0.024	−0.034
Married	−0.004	−0.090	−0.098	−0.100	−0.225*
Urban	0.009	0.001	0.017	0.043	0.016
Ethnic minority	0.020	0.009		−0.000	
# Adults in HH	−0.060	−0.050	−0.016	0.022	0.188
# Children in HH	−0.103**	0.035	−0.027	−0.012	−0.015
Education years	−0.052	0.016	−0.082*	0.038	0.106
Working	−0.077	0.007	−0.027	−0.062	−0.188*
HH Permanent Income	0.002	0.000	−0.003*	−0.004	0.001
WHO Disability Index	−0.049	0.080	0.004	0.045	0.074
Self-Assessed Pain	0.113	−0.082	−0.001	0.012	0.051
Community Involvement	−0.002	−0.000	0.001	−0.002	0.007
Trust	−0.001	0.000	−0.000	−0.000	−0.001
Safety	0.000	−0.000	−0.001	0.000	0.001
Constant	0.250	0.065	0.367**	0.245	0.015

* $(p < 0.10)$, ** $(p < 0.05)$, *** $(p < 0.01)$

Note: The entries in each column are country-specific decomposition results. Reported changes are measured in standard deviation. Standard errors are calculated using bootstrap methodology with 500 replications.

Table 14: Decomposition analysis of WHO quality of life by country

	Ghana	India	China	South Africa	Russia
Age 60 +	−0.19***	−0.17***	−0.07	−0.01	−0.27***
Age 50-59	0.25***	0.17***	0.08*	−0.02	0.31***
difference	−0.44***	−0.34***	−0.15***	0.01	−0.58***
explained	−0.45***	−0.35***	−0.28***	−0.21***	−0.64***
unexplained	0.01	0.01	0.13***	0.22***	0.05
Panel A. Explained Differences					
Male	0.000	0.004	0.001	0.002	−0.002
Married	−0.003	−0.012	−0.002	−0.004	−0.040*
Urban	−0.002	−0.001	0.012*	−0.000	0.008
Ethnic minority	−0.001	0.001		0.010	
# Adults in HH	0.003	0.001	0.013**	0.001	0.077**
# Children in HH	0.006*	0.007	−0.000	0.001	0.004
Education years	−0.015	−0.010	0.008	0.012	0.029
Working	−0.051***	−0.022*	−0.037**	−0.044	−0.104
HH Permanent Income	−0.034**	−0.017	−0.072***	0.033	−0.087**
WHO Disability Index	−0.287***	−0.215***	−0.138***	−0.159***	−0.360***
Self-Assessed Pain	−0.051***	−0.037***	−0.046***	−0.045*	−0.115**
Community Involvement	−0.018**	−0.035***	−0.009*	−0.015	−0.007
Trust	0.005	−0.011*	0.002	−0.000	−0.010
Safety	−0.003	−0.001	−0.013**	−0.000	−0.032
Panel B. Unexplained Differences					
Male	−0.035	−0.008	0.021	−0.033	−0.060
Married	0.105	−0.101	−0.083	0.001	−0.027
Urban	−0.009	0.005	0.057*	0.080	0.014
Ethnic minority	0.023	0.001		−0.045	
# Adults in HH	−0.134*	0.093	0.086	−0.061	0.106
# Children in HH	−0.038	−0.009	−0.023	0.037	−0.025
Education years	−0.009	−0.008	−0.088*	0.046	0.142
Working	−0.139	0.021	−0.012	−0.032	−0.174*
HH Permanent Income	0.002	0.000	−0.003	−0.004	0.001
WHO Disability Index	−0.025	0.001	0.026	0.129*	0.134
Self-Assessed Pain	0.022	−0.029	0.019	−0.013	−0.057
Community Involvement	0.002	−0.001	0.001	−0.002	−0.007
Trust	−0.000	0.000	−0.000	−0.000	−0.000
Safety	0.001	−0.000	−0.001	0.000	0.000
Constant	0.244	0.040	0.134	0.114	0.006

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific decomposition results. Reported changes are measured in standard deviation. Standard errors are calculated using bootstrap methodology with 500 replications.

Table 15: Decomposition analysis of emotion score by country

	Ghana	India	China	South Africa	Russia
Age 60 +	−0.05	−0.01	0.02	0.10	−0.07
Age 50-59	0.07	0.01	−0.02	−0.12	0.09
difference	−0.13**	−0.02	0.04	0.22*	−0.17
explained	−0.19***	−0.15***	−0.11***	−0.07	−0.29***
unexplained	0.07	0.12***	0.14***	0.28***	0.13*
Panel A. Explained Differences					
Male	−0.000	−0.005	−0.001	−0.002	−0.005
Married	−0.015	0.026*	−0.010	−0.005	−0.019
Urban	−0.001	0.002	0.019**	−0.002	0.008
Ethnic minority	0.001	−0.000		−0.002	
# Adults in HH	0.003	0.002	0.005	0.003	0.030
# Children in HH	−0.002	0.003	0.000	0.001	0.013
Education years	0.022	0.004	0.015**	−0.000	0.040
Working	−0.066***	0.047***	0.024	0.015	0.009
HH Permanent Income	−0.014*	−0.010	−0.033***	0.010	−0.073*
WHO Disability Index	0.003	−0.149***	−0.063***	−0.029	−0.241**
Self-Assessed Pain	−0.078***	−0.065***	−0.042***	−0.034	−0.055*
Community Involvement	−0.032***	−0.002	−0.009*	−0.024	0.024
Trust	−0.008	−0.001	0.001	0.000	−0.017
Safety	−0.006	−0.000	−0.012**	0.000	−0.007
Panel B. Unexplained Differences					
Male	−0.019	0.051	0.034	−0.004	0.002
Married	−0.031	−0.097	−0.222*	−0.155*	−0.103
Urban	−0.042	0.024	0.009	−0.034	−0.172
Ethnic minority	0.014	−0.019		−0.026	
# Adults in HH	0.078	0.068	0.016	0.026	0.226
# Children in HH	0.016	0.015	−0.014	0.098	−0.005
Education years	0.053	0.031	−0.115*	0.093	0.599
Working	−0.029	−0.017	−0.034	−0.115*	0.000
HH Permanent Income	−0.000	0.000	−0.002	−0.006	0.007
WHO Disability Index	0.086	0.202**	−0.051	0.178	0.134
Self-Assessed Pain	0.007	−0.082	0.053	−0.239*	−0.200*
Community Involvement	0.003	−0.001	0.001	−0.003	−0.024*
Trust	0.000	−0.000	−0.000	0.000	0.002
Safety	0.001	0.000	−0.001	0.000	0.001
Constant	−0.070	−0.050	0.470***	0.473	−0.342

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific decomposition results. Reported changes are measured in standard deviation. Standard errors are calculated using bootstrap methodology with 500 replications.

Table 16: Decomposition analysis of experienced well-being by country

	Ghana	India	China	South Africa	Russia
Age 60 +	0.05	0.03	0.07	0.12*	0.02
Age 50-59	−0.06	−0.03	−0.03	−0.14	−0.05
difference	0.11**	0.05	0.10***	0.25**	0.07
explained	−0.04	−0.06*	−0.03	−0.04	0.01
unexplained	0.15***	0.11**	0.13***	0.29***	0.07
Panel A. Explained Differences					
Male	−0.002	−0.003	−0.001	−0.001	−0.008
Married	0.002	0.032**	−0.005	−0.005	0.027
Urban	−0.002	0.003	0.031**	−0.000	−0.001
Ethnic minority	0.002	0.001		−0.008	
# Adults in HH	0.006	0.001	0.011*	0.008	0.005
# Children in HH	0.000	0.006	0.000	−0.001	0.012
Education years	0.028*	−0.006	0.003	−0.008	0.025
Working	0.002	0.037**	0.022	0.045	0.216***
HH Permanent Income	−0.011	−0.006	−0.038***	0.012	−0.075*
WHO Disability Index	−0.055**	−0.123***	−0.018	−0.065*	−0.222**
Self-Assessed Pain	0.008	−0.013	−0.013**	−0.025	0.002
Community Involvement	−0.021*	0.016	−0.010	0.013	0.025
Trust	0.002	−0.001	0.000	−0.000	0.017
Safety	−0.002	−0.001	−0.018**	0.000	−0.018
Panel B. Unexplained Differences					
Male	0.056	0.024	0.042	−0.134	0.169
Married	−0.034	0.016	−0.024	−0.141	−0.009
Urban	−0.067	0.021	−0.048	0.061	0.353*
Ethnic minority	−0.022	0.006		−0.066	
# Adults in HH	0.084	−0.010	0.081	0.416*	0.232
# Children in HH	−0.022	−0.005	−0.035**	0.002	0.039
Education years	0.052	0.048	−0.086*	−0.030	−0.304
Working	−0.133	−0.007	−0.085*	0.004	−0.074
HH Permanent Income	0.001	0.000	−0.004*	−0.004	0.003
WHO Disability Index	0.140	0.157*	−0.012	−0.052	0.207
Self-Assessed Pain	−0.055	−0.036	−0.011	0.018	−0.054
Community Involvement	−0.005	−0.001	0.000	−0.006	−0.000
Trust	−0.001	−0.000	−0.000	−0.001	−0.005
Safety	−0.001	0.000	−0.000	0.000	0.006
Constant	0.161	−0.103	0.310**	0.223	−0.496

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific decomposition results. Reported changes are measured in standard deviation. Standard errors are calculated using bootstrap methodology with 500 replications.

Table 17: Ordered Logit Model: Partial association between age and general life satisfaction. Partial effects for Prob(Very Dissatisfied)

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	0.00**	0.00*	0.00***	0.00	−0.00	0.01
70-79	0.00**	0.01***	0.00**	0.00	−0.00	0.02*
80+	0.01***	0.02***	0.01***	0.00*	−0.00	0.02**
Male	−0.00**	−0.00**	−0.00***	−0.00*	−0.00	−0.01
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	−0.00	−0.00*	−0.00	−0.00**	−0.01**	0.00
70-79	−0.00***	−0.01***	−0.00*	−0.00***	−0.01**	0.00
80+	−0.00**	−0.01*	−0.00	−0.00***	−0.01**	−0.01
Male	0.00	0.00**	0.00**	0.00**	0.00	−0.00
Married	−0.00	−0.01**	0.00	−0.00*	−0.00*	−0.00
Urban	0.00	−0.00	0.00**	−0.00	−0.00	−0.00
Ethnic minority	0.00	−0.00	0.00*		−0.01**	
# Adults in HH	0.00	0.00	−0.00	0.00**	−0.00	0.00
# Children in HH	0.00	0.00*	0.00	0.00	0.00	0.00
Education years	0.00	−0.00	−0.00	0.00	0.00*	0.00
Working	−0.00	−0.00	−0.00	−0.00**	−0.00	0.00
HH Permanent Income	−0.00***	−0.01***	−0.00***	−0.00***	−0.01***	−0.01
WHO Disability Index	0.01***	0.01***	0.00***	0.00***	0.01***	0.01**
Self-Assessed Pain	0.00**	0.00***	0.00**	0.00***	0.00*	0.00
Community Involvement	−0.00**	−0.00	−0.00***	−0.00*	0.00	−0.00
Trust	−0.00**	−0.00	−0.00*	−0.00**	0.00	−0.00
Safety	−0.00***	−0.00*	−0.00	−0.00***	−0.00*	−0.01*
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. The pooled regression includes country fixed effects.

Table 18: Ordered Logit Model: Partial association between age and general life satisfaction. Partial effects for Prob(Dissatisfied)

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	0.02***	0.02**	0.02***	0.00	−0.01	0.04**
70-79	0.03***	0.04***	0.02***	0.01	−0.02	0.07***
80+	0.05***	0.09***	0.05***	0.02***	−0.01	0.09***
Male	−0.02***	−0.03***	−0.02***	−0.01**	−0.03*	−0.02**
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	−0.00	−0.02*	−0.00	−0.01***	−0.05***	0.01
70-79	−0.02***	−0.03***	−0.01*	−0.03***	−0.06***	0.00
80+	−0.03***	−0.03*	−0.01	−0.04***	−0.09***	−0.02
Male	0.01	0.02**	0.02***	0.01**	0.02	−0.00
Married	−0.00	−0.03***	0.00	−0.01**	−0.03**	−0.00
Urban	0.00	−0.01	0.02**	−0.00	−0.00	−0.01
Ethnic minority	0.01	−0.01	0.01*		−0.06***	
# Adults in HH	0.00	0.00	−0.00	0.00***	−0.00	0.01
# Children in HH	0.00	0.00**	0.00	0.00	0.00	0.00
Education years	0.00	−0.00	−0.00	0.00	0.00*	0.00
Working	−0.01	−0.01	−0.00	−0.01***	−0.03*	0.00
HH Permanent Income	−0.02***	−0.03***	−0.02***	−0.02***	−0.05***	−0.02**
WHO Disability Index	0.04***	0.06***	0.04***	0.03***	0.06***	0.04***
Self-Assessed Pain	0.01***	0.02***	0.01***	0.02***	0.02**	0.01
Community Involvement	−0.01***	−0.01	−0.01***	−0.00**	0.01	−0.01
Trust	−0.01***	−0.01*	−0.01*	−0.01***	0.01	−0.00
Safety	−0.01***	−0.01*	−0.00*	−0.01***	−0.02***	−0.02**
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. The pooled regression includes country fixed effects.

Table 19: Ordered Logit Model: Partial association between age and general life satisfaction. Partial effects for Prob(Neutral)

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	0.05***	0.03**	0.05***	0.00	−0.02	0.10**
70-79	0.08***	0.06***	0.06***	0.02	−0.03	0.16***
80+	0.15***	0.13***	0.15***	0.07***	−0.01	0.21***
Male	−0.05***	−0.04***	−0.06***	−0.02**	−0.03*	−0.05**
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	−0.01	−0.02*	−0.01	−0.04***	−0.04***	0.02
70-79	−0.04***	−0.04***	−0.03**	−0.10***	−0.06***	0.01
80+	−0.08***	−0.03*	−0.03	−0.13***	−0.09***	−0.05
Male	0.01	0.03**	0.04***	0.02**	0.02	−0.01
Married	−0.01	−0.03***	0.01	−0.02**	−0.03**	−0.01
Urban	0.01	−0.01	0.04**	−0.01	−0.00	−0.02
Ethnic minority	0.02	−0.01	0.03*		−0.05***	
# Adults in HH	0.00	0.00	−0.00	0.02***	−0.00	0.02
# Children in HH	0.00	0.00**	0.00	0.00	0.00	0.00
Education years	0.00	−0.00	−0.00	0.00	0.00*	0.00
Working	−0.01	−0.02	−0.00	−0.05***	−0.03*	0.00
HH Permanent Income	−0.06***	−0.04***	−0.04***	−0.07***	−0.04***	−0.05***
WHO Disability Index	0.10***	0.08***	0.10***	0.10***	0.06***	0.09***
Self-Assessed Pain	0.03***	0.02***	0.02***	0.07***	0.02**	0.02
Community Involvement	−0.02***	−0.01	−0.03***	−0.01**	0.01	−0.03
Trust	−0.02***	−0.01*	−0.01*	−0.03***	0.01	−0.01
Safety	−0.03***	−0.01*	−0.01*	−0.03***	−0.02***	−0.05***
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. The pooled regression includes country fixed effects.

Table 20: Ordered Logit Model: Partial association between age and general life satisfaction. Partial effects for Prob(Satisfied)

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	−0.05***	−0.04**	−0.04***	−0.00	0.02	−0.14**
70-79	−0.08***	−0.08***	−0.05***	−0.02	0.03	−0.22***
80+	−0.15***	−0.19***	−0.11***	−0.06***	0.01	−0.29***
Male	0.05***	0.05***	0.04***	0.02**	0.04*	0.07**
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	0.01	0.03*	0.00	0.04***	0.06***	−0.03
70-79	0.04***	0.06***	0.02*	0.09***	0.08***	−0.01
80+	0.08***	0.05*	0.02	0.12***	0.12***	0.07
Male	−0.01	−0.04**	−0.03***	−0.02**	−0.02	0.01
Married	0.01	0.05***	−0.00	0.02**	0.04**	0.01
Urban	−0.01	0.01	−0.03***	0.00	0.00	0.02
Ethnic minority	−0.02	0.02	−0.02*		0.07***	
# Adults in HH	−0.00	−0.00	0.00	−0.01***	0.00	−0.03
# Children in HH	−0.00	−0.01**	−0.00	−0.00	−0.00	−0.01
Education years	−0.00	0.00	0.00	−0.00	−0.00*	−0.01
Working	0.01	0.02	0.00	0.04***	0.04*	−0.00
HH Permanent Income	0.06***	0.05***	0.03***	0.06***	0.06***	0.07***
WHO Disability Index	−0.10***	−0.11***	−0.07***	−0.09***	−0.08***	−0.12***
Self-Assessed Pain	−0.03***	−0.03***	−0.01***	−0.06***	−0.03**	−0.02
Community Involvement	0.02***	0.01	0.02***	0.01**	−0.01	0.04
Trust	0.02***	0.01*	0.01*	0.03***	−0.01	0.01
Safety	0.03***	0.01*	0.01*	0.03***	0.03***	0.07***
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. The pooled regression includes country fixed effects.

Table 21: Ordered Logit Model: Partial association between age and general life satisfaction. Partial effects for Prob(Very Satisfied)

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	−0.02***	−0.01**	−0.03***	−0.00	0.01	−0.01
70-79	−0.03***	−0.02***	−0.04***	−0.01	0.02	−0.02**
80+	−0.06***	−0.06***	−0.09***	−0.02***	0.00	−0.03**
Male	0.02***	0.02***	0.03***	0.01**	0.02*	0.01**
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	0.01	0.01*	0.00	0.02***	0.04***	−0.00
70-79	0.02***	0.02***	0.02**	0.04***	0.05***	−0.00
80+	0.04***	0.02*	0.02	0.05***	0.08***	0.01
Male	−0.01	−0.01**	−0.03***	−0.01**	−0.01	0.00
Married	0.00	0.02**	−0.00	0.01**	0.03**	0.00
Urban	−0.00	0.00	−0.03**	0.00	0.00	0.00
Ethnic minority	−0.01	0.01	−0.02*		0.05***	
# Adults in HH	−0.00	−0.00	0.00	−0.01***	0.00	−0.00
# Children in HH	−0.00	−0.00*	−0.00	−0.00	−0.00	−0.00
Education years	−0.00	0.00	0.00	−0.00	−0.00*	−0.00
Working	0.01	0.01	0.00	0.02***	0.02	−0.00
HH Permanent Income	0.03***	0.02***	0.03***	0.03***	0.04***	0.01**
WHO Disability Index	−0.04***	−0.05***	−0.07***	−0.04***	−0.05***	−0.02**
Self-Assessed Pain	−0.01***	−0.01***	−0.01***	−0.03***	−0.02**	−0.00
Community Involvement	0.01***	0.00	0.02***	0.01**	−0.01	0.00*
Trust	0.01***	0.01*	0.01*	0.01***	−0.01	0.00
Safety	0.01***	0.01*	0.01*	0.01***	0.02**	0.01*
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. The pooled regression includes country fixed effects.

Table 22: Partial association between age and score over positive emotions

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	−0.03	−0.06	−0.01	0.01	0.11	−0.10
70-79	−0.00	−0.02	0.03	0.10**	0.16*	−0.14
80+	−0.25**	−0.13	−0.12	−0.06	0.21	−0.51**
Male	0.04	0.00	0.00	0.01	0.22***	0.09
Constant	0.11***	0.03	−0.00	−0.03	−0.16**	0.06
Country	*Yes*	*No*	*No*	*No*	*No*	*No*
Panel B. Conditional Regression						
60-69	0.06	0.03	0.09*	0.04	0.16*	0.02
70-79	0.19***	0.15**	0.19**	0.17***	0.26***	0.13
80+	0.14	0.14	0.22**	0.14	0.41***	0.01
Male	−0.05**	−0.09*	−0.15**	−0.01	0.08	−0.04
Married	0.08*	0.02	0.09*	−0.01	0.21***	0.12
Urban	0.08	0.11	0.06	0.27***	0.10	−0.03
Ethnic minority	−0.02	−0.12**	0.13		−0.10	
# Adults in HH	−0.01	−0.02	0.00	−0.02	−0.01	−0.03
# Children in HH	0.01	−0.01	0.02	0.01	−0.00	−0.07
Education years	−0.01	−0.00	−0.01	−0.00	0.01*	−0.00
Working	−0.08**	0.13**	−0.07	−0.05	0.10	−0.12
HH Permanent Income	0.17***	0.14***	0.12***	0.07***	0.08*	0.22***
WHO Disability Index	−0.20***	−0.02	−0.20***	−0.11***	−0.03	−0.29***
Self-Assessed Pain	0.00	−0.04	−0.03	−0.10***	−0.01	0.12*
Community Involvement	0.07***	0.21***	0.11***	0.10***	0.05	−0.02
Trust	0.02	−0.12***	−0.03	0.03	−0.06	0.09*
Safety	0.06***	0.10***	0.01	0.09***	0.02	0.09
Constant	0.12*	0.06	0.24**	0.04	−0.32**	0.22
Country	*Yes*	*No*	*No*	*No*	*No*	*No*

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The pooled regression includes country fixed effects. The raw score over positive emotions ranges from 0-3 with 3 the highest score of positive emotions. The analysis is based on a standardized score with mean zero and standard deviation one.

Table 23: Partial association between age and score over negative emotions

	Pooled	Ghana	India	China	South Africa	Russia
Panel A. Unconditional Regression						
60-69	−0.01	0.11**	0.01	−0.03	−0.20*	−0.04
70-79	0.05	0.15***	0.06	−0.03	−0.24**	0.15
80+	0.18***	0.28***	0.03	0.08	−0.37***	0.46***
Male	−0.27***	−0.18***	−0.40***	−0.12***	−0.15*	−0.29***
Constant	−0.24***	0.01	0.19***	0.07**	0.18*	0.07
Country	Yes	No	No	No	No	No
Panel B. Conditional Regression						
60-69	−0.16***	−0.01	−0.11***	−0.12***	−0.30***	−0.25**
70-79	−0.26***	−0.08	−0.12*	−0.29***	−0.40***	−0.31**
80+	−0.34***	−0.07	−0.35***	−0.39***	−0.67***	−0.14
Male	−0.13***	−0.03	−0.28***	−0.04	0.00	−0.13
Married	−0.02	−0.15***	0.09	−0.16***	−0.19**	−0.12
Urban	−0.00	−0.01	−0.08	−0.05	−0.04	0.07
Ethnic minority	0.17***	0.08	0.07		0.03	
# Adults in HH	−0.01	0.01	−0.01	0.01	0.03	0.04
# Children in HH	0.02	−0.01	0.00	0.01	0.02	0.18*
Education years	0.00	0.01*	0.00	0.00	0.00	0.02
Working	0.01	−0.32***	0.15***	−0.01	−0.04	−0.15
HH Permanent Income	−0.12***	−0.04	−0.11***	−0.10***	−0.05	−0.09
WHO Disability Index	0.25***	−0.02	0.28***	0.27***	0.13**	0.21**
Self-Assessed Pain	0.20***	0.23***	0.19***	0.25***	0.14**	0.22***
Community Involvement	0.02	−0.07***	0.03	0.00	−0.10*	0.03
Trust	−0.03**	0.09***	−0.02	−0.04**	−0.03	−0.05
Safety	−0.03*	−0.08***	−0.01	−0.08***	0.04	−0.01
Constant	−0.40***	−0.03	−0.53***	−0.05	−0.11	−0.50**
Country	Yes	No	No	No	No	No

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The pooled regression includes country fixed effects. The raw score over negative emotions ranges from 0-11 with 11 the highest score of negative emotions. The analysis is based on a standardized score with mean zero and standard deviation one.

Table 24: Partial association between age and (ordinal) life satisfaction by age-group

	Pooled				Ghana			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.01	−0.01	−0.02	0.01	−0.03*	−0.01	−0.06	0.01
Married	−0.01	−0.02	0.03	−0.05	0.04**	0.04	0.04	−0.05
# Adults in HH	−0.00	−0.00	−0.00	0.00	−0.00	−0.01	−0.00	0.00
# Children in HH	−0.00	−0.00	−0.00	0.00	−0.01**	−0.01	0.00	0.00
Urban	−0.01	−0.01	−0.02	0.01	0.01	0.01	0.00	0.01
Ethnic minority	−0.02	−0.01	−0.03	0.03	0.01	0.03	0.00	0.03
Education years	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00	0.00	−0.00
Working	−0.00	−0.01	0.02	−0.03	0.02	0.02	0.03	−0.03
HH Permanent Income	0.05***	0.06	0.04	0.01	0.06***	0.07	0.04	0.01
WHO Disability Index	−0.09***	−0.10	−0.09	−0.01	−0.11***	−0.13	−0.10	−0.01
Self-Assessed Pain	−0.03***	−0.03	−0.02	−0.01	−0.03***	−0.02	−0.05	−0.01
Community Involvement	0.02***	0.03	0.01	0.02	0.01	0.00	0.02	0.02
Trust	0.02***	0.02	0.01	0.01	0.01*	0.02	0.00	0.01
Safety	0.03***	0.03	0.03	0.00	0.01*	0.02	0.01	0.00
Country Dummies	Yes	Yes	Yes	Yes				

	China				India			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.01	−0.01	−0.02	0.01	−0.03***	−0.03	−0.03	0.01
Married	0.00	0.00	0.03	−0.05	−0.01	−0.02	0.00	−0.05
# Adults in HH	−0.02***	−0.02	−0.01	0.00	0.00	0.00	0.00	0.00
# Children in HH	−0.00	−0.02	0.01	0.00	−0.00	0.00	−0.00	0.00
Urban	0.02	0.01	0.00	0.01	−0.03**	−0.03	−0.02	0.01
Ethnic minority					−0.02*	−0.02	−0.02	0.03
Education years	−0.00*	−0.00	0.00	0.03	0.00	0.00	0.00	−0.00
Working	0.02**	0.04	0.04	−0.00	−0.00	0.00	−0.00	−0.03
HH Permanent Income	0.06***	0.06	0.06	−0.03	0.03***	0.04	0.02	0.01
WHO Disability Index	−0.08***	−0.09	−0.09	0.01	−0.07***	−0.08	−0.06	−0.01
Self-Assessed Pain	−0.06***	−0.06	−0.06	−0.01	−0.01***	−0.02	−0.00	−0.01
Community Involvement	0.01**	0.02	0.00	−0.01	0.02***	0.02	0.02	0.02
Trust	0.03***	0.03	0.03	0.02	0.01*	0.02	0.00	0.01
Safety	0.03***	0.02	0.04	0.01	0.01*	0.01	0.00	0.00

	South Africa				Russia			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.02	−0.03	−0.01	0.01	0.01	0.03	0.02	0.01
Married	0.04*	0.01	0.07	−0.05	0.01	−0.07	0.08	−0.05
# Adults in HH	0.00	0.00	0.00	0.00	−0.03	−0.02	−0.04	0.00
# Children in HH	−0.00	−0.00	0.00	0.00	−0.01	−0.03	0.01	0.00
Urban	0.00	0.01	−0.00	0.01	0.02	0.02	−0.01	0.01
Ethnic minority	0.07***	0.08	0.06	0.03				
Education years	−0.00**	−0.00	−0.00	−0.00	−0.01	−0.01	−0.01	0.03
Working	0.02	0.01	0.05	−0.03	0.01	−0.16	0.08	−0.00
HH Permanent Income	0.06***	0.05	0.06	0.01	0.07***	0.09	0.05	−0.03
WHO Disability Index	−0.07***	−0.06	−0.10	−0.01	−0.12***	−0.12	−0.11	0.01
Self-Assessed Pain	−0.03***	−0.02	−0.03	−0.01	−0.03	−0.03	−0.04	−0.01
Community Involvement	−0.01	−0.01	−0.01	0.02	0.04	0.09	−0.01	−0.01
Trust	−0.01	−0.00	−0.01	0.01	0.01	0.02	0.01	0.02
Safety	0.03***	0.03	0.02	0.00	0.07***	0.08	0.06	0.01

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. Standard errors are calculated using bootstrap methodology with 500 replications.

Table 25: Partial association between age and score over positive emotions by age-group

| | Pooled | | | | Ghana | | | |
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.03	0.02	−0.09	0.11*	−0.06	−0.02	−0.15	0.13
Married	0.04	−0.02	0.16	−0.18**	−0.00	−0.02	0.05	−0.07
Urban	0.08	0.15	−0.03	0.18*	0.11	0.11	0.13	−0.03
Ethnic minority	−0.01	−0.10	0.10	−0.20**	−0.12**	−0.06	−0.21	0.15*
# Adults in HH	−0.00	0.02	−0.02	0.04***	−0.02	−0.02	−0.01	−0.00
# Children in HH	0.01	0.01	0.00	0.01	−0.01	−0.01	−0.01	0.00
Education years	−0.01	−0.00	−0.01	0.01	−0.00	−0.00	0.00	−0.00
Working	−0.13***	−0.10	−0.10	0.00	0.10*	0.11	0.15	−0.05
HH Permanent Income	0.14***	0.09	0.20	−0.11***	0.14***	0.15	0.11	0.03
WHO Disability Index	−0.18***	−0.17	−0.25	0.08	−0.01	0.03	−0.11	0.14**
Self-Assessed Pain	0.00	−0.04	0.04	−0.08*	−0.04	−0.04	−0.02	−0.02
Community Involvement	0.07***	0.08	0.05	0.03	0.20***	0.23	0.17	0.05
Trust	0.02	0.04	−0.02	0.06**	−0.12***	−0.12	−0.12	−0.01
Safety	0.06***	0.04	0.07	−0.03	0.10***	0.11	0.09	0.03
Constant	0.23***	0.19	0.18	0.01	0.14	0.08	0.14	−0.06
Country Dummies	*Yes*	*Yes*	*Yes*	*Yes*				

| | China | | | | India | | | |
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	0.00	0.02	−0.04	0.06	−0.10*	−0.07	−0.20	0.13
Married	−0.04	−0.08	0.09	−0.17**	0.04	0.02	0.12	−0.10
Urban	0.30***	0.29	0.28	0.01	0.07	0.19	−0.11	0.30**
Ethnic minority					0.14	0.03	0.24	−0.21**
# Adults in HH	−0.02	−0.01	−0.04	0.03	0.00	0.02	−0.01	0.03*
# Children in HH	0.00	−0.03	0.04	−0.07	0.02	0.02	0.00	0.01
Education years	−0.01	−0.01	0.00	−0.01*	−0.01	−0.00	−0.01	0.00
Working	−0.08*	−0.07	−0.04	−0.04	−0.11**	−0.06	−0.09	0.02
HH Permanent Income	0.07***	0.09	0.05	0.03	0.12***	0.08	0.17	−0.09*
WHO Disability Index	−0.09***	−0.11	−0.06	−0.05	−0.18***	−0.19	−0.19	0.00
Self-Assessed Pain	−0.10***	−0.11	−0.10	−0.01	−0.02	−0.03	−0.03	−0.00
Community Involvement	0.10***	0.11	0.09	0.02	0.10***	0.10	0.10	0.00
Trust	0.03*	0.05	0.01	0.04	−0.03	−0.01	−0.05	0.04
Safety	0.09***	0.06	0.13	−0.07**	0.01	0.00	0.04	−0.03
Constant	0.14**	0.19	−0.07	0.25**	0.31***	0.25	0.37	−0.12

| | South Africa | | | | Russia | | | |
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	0.10	−0.09	0.24	−0.33**	−0.04	0.12	−0.15	0.27
Married	0.20***	0.24	0.19	0.05	0.11	−0.03	0.20	−0.23
Urban	0.09	0.12	0.06	0.05	−0.03	−0.00	−0.21	0.21
Ethnic minority	−0.10	−0.16	−0.00	−0.16				
# Adults in HH	−0.02	−0.01	−0.02	0.01	−0.03	0.06	−0.08	0.14*
# Children in HH	−0.01	0.05	−0.05	0.10*	−0.07	−0.08	−0.10	0.02
Education years	0.01	0.02	0.01	0.01	−0.00	0.02	−0.05	0.07*
Working	0.03	−0.07	0.19	−0.26	−0.15**	−0.15	−0.17	0.02
HH Permanent Income	0.10**	0.12	0.02	0.11	0.22***	0.07	0.34	−0.27***
WHO Disability Index	0.01	−0.02	−0.01	−0.01	−0.28***	−0.19	−0.57	0.39**
Self-Assessed Pain	−0.03	−0.06	0.04	−0.10	0.13*	0.04	0.26	−0.22**
Community Involvement	0.04	−0.04	0.12	−0.16**	−0.02	0.03	−0.02	0.04
Trust	−0.06	−0.03	−0.08	0.05	0.09*	0.11	0.05	0.06
Safety	0.02	0.00	0.04	−0.04	0.09	0.08	0.04	0.04
Constant	−0.17	−0.10	−0.42	0.32	0.28	−0.15	1.09	−1.25**

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The raw score over positive emotions ranges from 0-3 with 3 the highest score of positive emotions. The analysis is based on a standardized score with mean zero and standard deviation one.

Table 26: Partial association between age and score over negative emotions by age-group

	Pooled				Ghana			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.16***	−0.14	−0.12	−0.02	−0.04	0.00	−0.09	0.09
Married	0.04	0.04	−0.05	0.09	−0.14***	−0.14	−0.17	0.04
Urban	−0.01	0.03	−0.06	0.09	−0.01	0.05	−0.10	0.15
Ethnic minority	0.16***	0.23	0.07	0.16	0.08	0.08	0.08	0.00
# Adults in HH	−0.01	−0.02	−0.01	−0.01	0.01	0.00	0.03	−0.03
# Children in HH	0.02	0.01	0.02	−0.01	−0.01	−0.02	0.00	−0.02
Education years	0.00	−0.00	0.00	−0.00	0.01**	−0.00	0.02	−0.02**
Working	0.09***	0.03	0.02	0.01	−0.31***	−0.30	−0.36	0.06
HH Permanent Income	−0.09***	−0.09	−0.09	−0.00	−0.05	−0.02	−0.08	0.06
WHO Disability Index	0.22***	0.20	0.35	−0.15***	−0.02	−0.02	−0.02	−0.00
Self-Assessed Pain	0.20***	0.21	0.17	0.04	0.23***	0.22	0.24	−0.02
Community Involvement	0.02*	0.02	0.00	0.02	−0.07***	−0.07	−0.07	−0.00
Trust	−0.03*	−0.03	−0.03	−0.00	0.08***	0.08	0.09	−0.01
Safety	−0.03*	0.01	−0.07	0.08***	−0.08***	−0.11	−0.06	−0.05
Constant	−0.57***	−0.60	−0.41	−0.19**	−0.07	−0.04	−0.09	0.05
Country Dummies	Yes	Yes	Yes	Yes				

	China				India			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.06**	−0.07	−0.01	−0.06	−0.32***	−0.31	−0.25	−0.06
Married	−0.10**	−0.09	−0.23	0.14	0.14**	0.13	0.02	0.11
Urban	−0.09**	−0.08	−0.04	−0.04	−0.09*	−0.05	−0.11	0.06
Ethnic minority					0.06	0.10	0.04	0.06
# Adults in HH	0.02	0.01	0.00	0.01	−0.02	−0.01	−0.01	−0.00
# Children in HH	0.02	0.04	0.00	0.04	0.00	0.00	0.01	−0.01
Education years	0.01***	0.01	−0.00	0.02*	0.00	−0.00	0.01	−0.01
Working	0.05	0.04	−0.02	0.05	0.18***	0.16	0.13	0.03
HH Permanent Income	−0.09***	−0.11	−0.10	−0.01	−0.11***	−0.12	−0.09	−0.03
WHO Disability Index	0.22***	0.28	0.15	0.13	0.26***	0.21	0.37	−0.16***
Self-Assessed Pain	0.25***	0.22	0.31	−0.10*	0.19***	0.22	0.15	0.07
Community Involvement	0.00	−0.01	0.02	−0.03	0.04	0.07	−0.01	0.08**
Trust	−0.05***	−0.04	−0.04	0.01	−0.01	−0.04	0.01	−0.04
Safety	−0.08***	−0.04	−0.12	0.07**	−0.01	0.01	−0.02	0.03
Constant	−0.25***	−0.33	0.06	−0.39***	−0.59***	−0.59	−0.55	−0.05

	South Africa				Russia			
	Pooled	Age 60+	Age < 60	Difference	Pooled	Age 60+	Age < 60	Difference
Male	−0.03	−0.07	0.04	−0.11	−0.15	−0.16	−0.14	−0.02
Married	−0.18**	−0.01	−0.39	0.39**	−0.10	−0.07	−0.11	0.04
Urban	−0.02	0.02	−0.11	0.13	0.08	0.20	−0.11	0.31*
Ethnic minority	0.03	0.07	−0.00	0.07				
# Adults in HH	0.03	0.02	0.02	0.00	0.06*	−0.00	0.06	−0.06
# Children in HH	0.03	−0.02	0.06	−0.09	0.18*	0.23	0.15	0.07
Education years	0.01	−0.00	0.01	−0.01	0.02	0.00	0.03	−0.02
Working	0.08	0.20	−0.12	0.32*	−0.03	−0.24	−0.08	−0.16
HH Permanent Income	−0.08	−0.08	−0.00	−0.08	−0.10	−0.02	−0.13	0.12
WHO Disability Index	0.07	0.04	0.29	−0.25*	0.20**	0.17	0.30	−0.12
Self-Assessed Pain	0.17***	0.22	0.01	0.21*	0.21***	0.27	0.16	0.10
Community Involvement	−0.08*	−0.04	−0.13	0.09	0.04	−0.00	0.00	−0.01
Trust	−0.04	−0.04	−0.04	0.01	−0.04	−0.02	−0.06	0.04
Safety	0.04	−0.03	0.11	−0.15	−0.01	0.08	−0.12	0.20***
Constant	−0.37**	−0.50	0.01	−0.51*	−0.73***	−0.61	−0.54	−0.07

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific partial effects. Reported changes are measured in standard deviation. The raw score over negative emotions ranges from 0-11 with 11 the highest score of negative emotions. The analysis is based on a standardized score with mean zero and standard deviation one.

Table 27: Decomposition analysis of score over positive emotions by country

	Pooled	Ghana	India	China	South Africa	Russia
Age 60 +	−0.02	−0.02	−0.00	0.01	0.06	−0.08
Age 50-59	0.02	0.03	−0.00	−0.02	−0.07	0.10
difference	−0.04	−0.05	−0.00	0.04	0.13	−0.18
explained	−0.12***	−0.12***	−0.10***	−0.03*	−0.04	−0.21**
unexplained	0.08**	0.06	0.10**	0.07**	0.17**	0.03
Panel A. Explained Differences						
Male	0.001	0.001	0.002	−0.000	−0.002	0.003
Married	−0.007	0.000	−0.008	0.006	−0.005	−0.026
Urban	0.001	−0.004	0.002	0.028***	−0.003	0.003
Ethnic minority	0.000	0.002	−0.001		−0.004	
# Adults in HH	0.001	0.003	0.001	0.005	0.001	0.019
# Children in HH	0.001	0.003	0.009	−0.000	0.000	0.007
Education years	0.010	0.010	0.010	0.008	−0.014	0.003
Working	0.046**	−0.025	0.027*	0.022*	−0.008	0.087
HH Permanent Income	−0.041***	−0.021**	−0.009	−0.023***	0.011	−0.111***
WHO Disability Index	−0.098***	−0.004	−0.098***	−0.027***	0.004	−0.238***
Self-Assessed Pain	0.001	−0.016	−0.010	−0.018***	−0.006	0.075*
Community Involvement	−0.024**	−0.051***	−0.031***	−0.021***	−0.012	0.013
Trust	−0.002	−0.008	0.004	0.000	−0.000	−0.025
Safety	−0.006	−0.006	−0.000	−0.011***	0.000	−0.018
Panel B. Unexplained Differences						
Male	0.052	0.070	0.068	0.028	−0.126*	0.114
Married	−0.142*	−0.043	−0.082	−0.152*	0.024	−0.137
Urban	0.085*	−0.011	0.074*	0.004	0.031	0.157
Ethnic minority	−0.021*	0.076	−0.029*		−0.039	
# Adults in HH	0.138*	−0.014	0.162	0.076	0.041	0.290
# Children in HH	0.009	0.001	0.019	−0.016	0.098	0.005
Education years	0.066	−0.022	0.014	−0.078	0.044	0.776*
Working	−0.009	−0.040	0.002	−0.024	−0.086	0.016
HH Permanent Income	−0.001	0.002	0.000	0.000	−0.005	0.002
WHO Disability Index	0.065	0.130	−0.002	−0.022	−0.021	0.279*
Self-Assessed Pain	−0.084*	−0.023	−0.006	−0.006	−0.109	−0.225*
Community Involvement	−0.000	0.002	−0.000	0.001	−0.002	−0.016
Trust	0.001	−0.000	−0.000	−0.000	−0.000	0.004
Safety	0.000	0.000	−0.000	−0.001	−0.000	0.006
Constant	0.013	−0.064	−0.122	0.255*	0.318	−1.245*

* $(p < 0.10)$, ** $(p < 0.05)$, *** $(p < 0.01)$

Note: The entries in each column are country-specific decomposition results. Reported changes are measured in standard deviation. Standard errors are calculated using bootstrap methodology with 500 replications.

Table 28: Decomposition analysis of score over negative emotions by country

	Pooled	Ghana	India	China	South Africa	Russia
Age 60 +	0.01	0.07*	0.02	−0.01	−0.10**	0.06
Age 50-59	−0.01	−0.09**	−0.02	0.01	0.12	−0.07
difference	0.02	0.16***	0.04	−0.02	−0.22**	0.13
explained	0.17***	0.19***	0.14***	0.12***	0.06	0.28***
unexplained	−0.15***	−0.03	−0.10**	−0.14***	−0.29***	−0.15*
Panel A. Explained Differences						
Male	0.007*	0.001	0.008	0.002	0.001	0.012
Married	−0.008	0.023*	−0.033**	0.014**	0.004	0.024
Urban	−0.000	0.000	−0.003	−0.009*	0.001	−0.007
Ethnic minority	−0.001	−0.001	−0.000		0.001	
# Adults in HH	0.004	−0.002	−0.002	−0.004	−0.003	−0.039
# Children in HH	0.001	0.003	0.002	−0.000	−0.001	−0.018
Education years	−0.003	−0.028*	−0.002	−0.015**	−0.008	−0.045
Working	−0.032**	0.078***	−0.045***	−0.015	−0.024	0.015
HH Permanent Income	0.026***	0.007	0.009	0.031***	−0.009	0.050
WHO Disability Index	0.119***	−0.016	0.139***	0.068***	0.042	0.166**
Self-Assessed Pain	0.071***	0.095***	0.076***	0.045***	0.038*	0.125**
Community Involvement	−0.008	0.018**	−0.011	−0.000	0.023	−0.022
Trust	0.004	0.006	0.002	−0.001	−0.000	0.012
Safety	0.003	0.005	0.000	0.009***	0.000	0.003
Panel B. Unexplained Differences						
Male	−0.013	0.048	−0.032	−0.033	−0.043	−0.009
Married	0.072	0.025	0.100	0.127	0.187*	0.026
Urban	0.043	0.064	0.015	−0.015	0.082	0.230
Ethnic minority	0.016	0.001	0.009		0.018	
# Adults in HH	−0.033	−0.100	−0.002	0.024	0.008	−0.114
# Children in HH	−0.007	−0.043	−0.015	0.009	−0.082	0.012
Education years	−0.016	−0.104*	−0.035	0.103*	−0.082	−0.273
Working	0.027	0.048	0.020	0.037	0.105*	0.001
HH Permanent Income	0.000	0.001	−0.000	0.002	0.006	−0.009
WHO Disability Index	−0.111**	0.003	−0.206**	0.053	−0.221	−0.085
Self-Assessed Pain	0.040	−0.025	0.090	−0.066	0.238	0.117
Community Involvement	0.004*	−0.001	0.001	−0.001	0.003	0.022
Trust	0.000	0.000	0.000	0.000	−0.000	−0.000
Safety	0.000	−0.000	0.000	0.001	−0.000	0.001
Constant	−0.191	0.051	−0.046	−0.387**	−0.505	−0.068

* ($p < 0.10$), ** ($p < 0.05$), *** ($p < 0.01$)

Note: The entries in each column are country-specific decomposition results. Reported changes are measured in standard deviation. Standard errors are calculated using bootstrap methodology with 500 replications.

C   Figures

Figure 1: Average change in general life satisfaction relative to age 50 - 59. Unconditional refers to the descriptive analysis controlling only for gender.
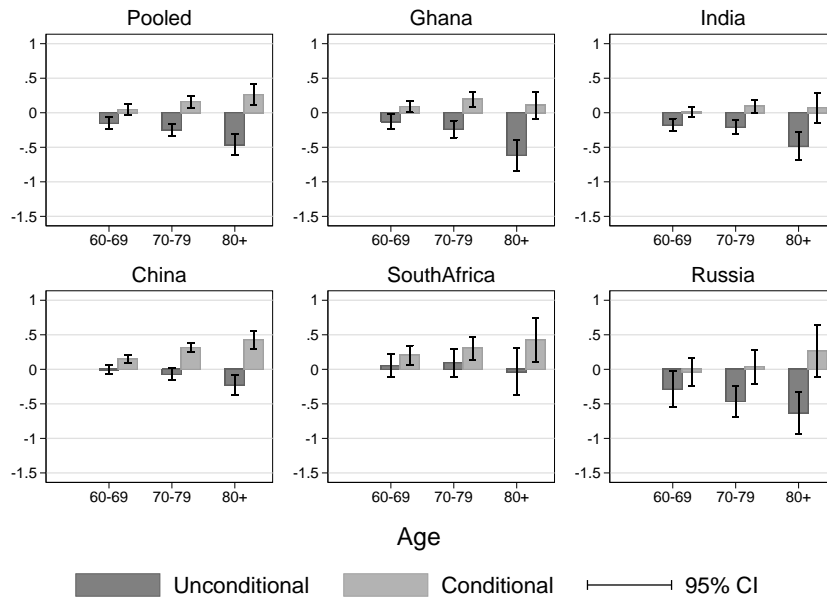
Figure 2: Average change in WHO quality of life relative to age 50 - 59. Unconditional refers to the descriptive analysis controlling only for gender.
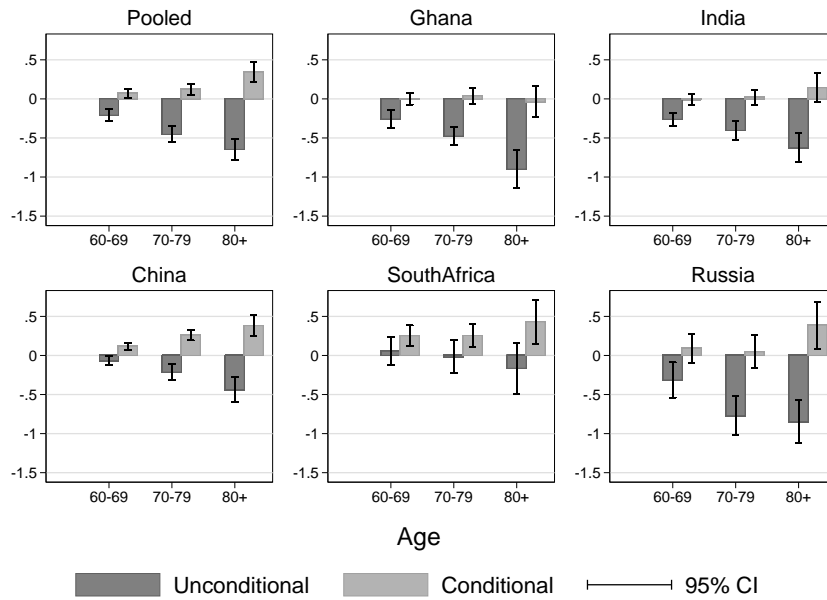

Figure 3: Average change in emotional score relative to age 50 - 59. Unconditional refers to the descriptive analysis controlling only for gender.
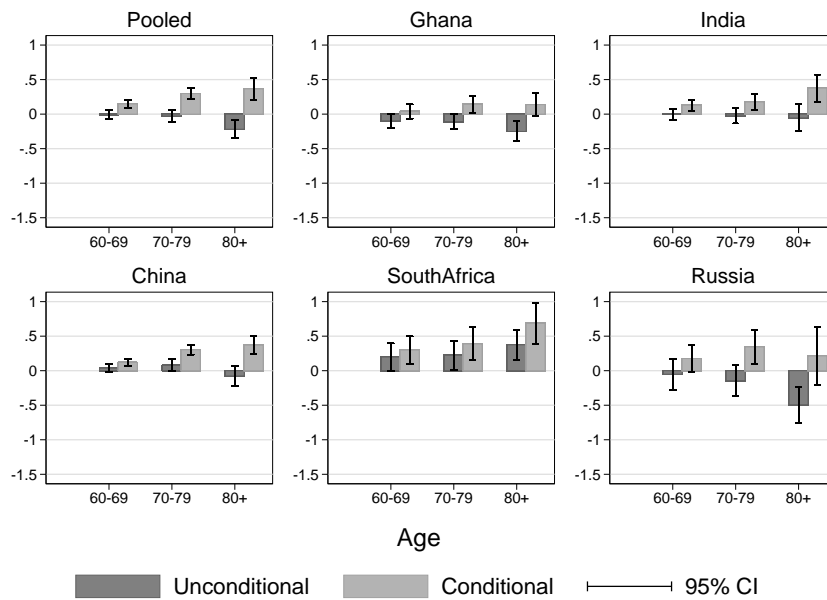
Figure 4: Average change in experienced well-being relative to age 50 - 59. Unconditional refers to the descriptive analysis controlling only for gender.