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Personality, Ageing, and the Midlife Low: Longitudinal Evidence from Australia, Germany, and the UK

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Personality, Ageing, and the Midlife Low: Longitudinal Evidence from Australia, Germany, and the UK

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Abstract: Using long-running panel data spanning at least 15 years from Australia, Germany and the UK, this study investigates longitudinal age–wellbeing trajectories by the Big Five personality traits. We estimate within-person (fixed effects) models separately for each country and for low/high trait subgroups, producing 30 distinct trajectories. Across all subgroups, we found the same ageing pattern: a decline in wellbeing into midlife, a clear midlife low and a subsequent recovery. However, the shape of this trajectory differs systematically across personality. Individuals high in conscientiousness, agreeableness, and emotional stability experience a steeper decline into midlife compared to those lower on these traits. In contrast, highly extraverted individuals show a more gradual early decline and a shallower midlife low, followed by a stronger recovery. These patterns are broadly consistent across the three countries. Openness, by comparison, is only weakly associated with well-being trajectories and exhibits inconsistent, country-specific patterns.

Key words: ageing, lifespan, personality traits, wellbeing.

JEL codes: I31, J14

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Personality, Ageing, and the Midlife Low: Longitudinal Evidence from Australia, Germany, and the UK

“Maybe midlife crises were just poorly marketed, maybe each one was profound and unique and it was only a few silly men in red convertibles who gave them a bad name.”
(p.54)

From Miranda July’s novel *All Fours* (2024)

“each of us goes through it [midlife] in his own way, experiences it with greater or lesser intensity, and emerges from it more or less reconciled to the years ahead. It is a ‘natural’ developmental crisis, and it is unavoidable” (Fried 1967, vii).

From an introduction by Murray Stein for an early book on midlife crisis

Introduction

One of the most frequently observed findings regarding age and wellbeing is a turning point in midlife. A rich body of longitudinal research has revealed a decline in wellbeing from young adulthood to midlife, and a subsequent recovery. These results have been found in countries with high quality longitudinal datasets such as Australia, Germany and the UK (for example, Cheng et al. 2017; Blanchflower and Piper 2022; Oparina et al. 2025; Chaudhuri and Piper 2025). The conclusion is also supported by cross-sectional studies from these countries and many other regions. Some studies even found a midlife low in apes (Weiss et al., 2012; Tucker-Gritt et al., 2025), suggestive of a possible biological grounding for the phenomenon. This tendency represents the average pattern, while the actual trajectory can differ in depth and turning point for different groups of individuals, as demonstrated by multiple studies discussed below. Before moving on, it is important to note that in this study, we treat wellbeing, happiness, and life satisfaction as synonymous.

Previous research has revealed significant group differences in well-being trajectories during the midlife: some people have a rather deep midlife low (the infamous midlife crisis); some encounter only a mild downturn (midlife malaises). Still others may escape the tendency altogether. For example, Clark et al. (2021), using both cross-sectional and panel analyses, show that individuals who are partnered are less likely to experience a pronounced midlife low. Other studies have compared individuals based on the quality of their working relationship with their boss, the nature of their employment contract (temporary versus permanent), and the length of time they have lived in their neighbourhood (Helliwell et al. 2021, Piper 2021). Lepinteur and Piper (2023) synthesise this evidence and suggest that the extent of suffering in midlife may have some links with feelings of belonging. Individuals who enjoy strong relationships with their partners, colleagues, and neighbours appear to experience a less pronounced midlife dip, likely because such ties provide security, ease, and peace of mind. These experiences are shaped by individuals’ ability to develop high-quality social bonds, which is in turn influenced by their innate personality traits such as extraversion and agreeableness. This example suggests that some of the interpersonal variation in midlife well-being may be attributable to personality traits.

The central argument of this study is that individuals with different personalities can have different trajectories of wellbeing over the lifecycle with some suffering more in midlife than others. Thus, in our investigation below, we consider how the relationship between age and

wellbeing is moderated by the Big 5 personality traits: conscientiousness; agreeableness; extraversion; neuroticism; and openness. We draw on three large-scale, long-running longitudinal data from Australia, Germany and the UK to investigate these relationships. The rest of the paper is structured as follows. The next section reviews the literature and discusses the potential reasons for midlife dip in wellbeing, supported with established theories and empirical findings. This review informs our predictions about how the age-wellbeing relationship may be moderated by each of the Big 5 personality traits. We then describe the data and present the longitudinal analysis, with a focus on within-individual changes in wellbeing across the life cycle. The final section offers concluding remarks.

Theory and evidence

This section will review theories and empirical evidence on the relationship between age and wellbeing, before discussing how personality may moderate this relationship. We conclude this section by presenting predictions on how age relates to wellbeing among individuals with distinct personality profiles, as defined by the Big Five personality traits.

Longitudinal research on ageing often uncovers a U-shaped relationship between age and wellbeing. Cheng et al. (2017) show this with data from Australia, Germany and the UK, the countries we investigate in this study. Chaudhuri and Piper (2025), investigating Germany and the UK, use specification curve analysis and show that a midlife low is robust across a variety of methodological choices. Oparina et al. (2025) use machine learning techniques and also uncover this pattern. In the present study, all our thirty estimations using fixed effects estimation also find this same midlife low and related turning point. In light of this evidence, we begin the literature review by examining theories of ageing and well-being, before turning to research on the midlife decline in well-being and the subsequent recovery following the turning point.

The travails, and turning point, of midlife

Perhaps most starkly, and most famously, the organisational psychologist Jaques (1965), portrayed midlife as a period marked by existential angst, triggered by a new awareness of mortality and the inevitability of death. His article, ‘Death and the midlife crisis’ suggests that this awareness plunges individuals into an existential crisis. While a midlife low has often been found empirically, most subsequent research does not support a quick plunge into despair in midlife, at least not on average. Instead, the typical longitudinal pattern is declining wellbeing to midlife; the term crisis is arguably unhelpful because the average coefficient sizes do not suggest a deep despair, but instead dissatisfaction.

Around the same time, Kohut (1966) also considered the sadness of midlife and viewed the acceptance of life’s transience as a central psychological challenge. Later on, Carstensen, through her Socioemotional Selectivity Theory, offered a more positive take by reframing this awareness as a turning point, suggesting that recognising our limited time can deepen emotional meaning, enhance appreciation of life, and ultimately contribute to improved wellbeing beyond midlife (Carstensen 1992; Carstensen et al. 1999). Carstensen and Löckenhoff (2003), for example, suggest that people focus on personal goals early in life, but later shift toward emotional goals that benefit family and community, appealing to evolutionary pressures. Other studies show that prioritising emotional and communal goals enhance personal

wellbeing (Martela and Ryan, 2016; Le et al. 2018). Socioemotional Selectivity Theory which has been, and remains, influential, was put forward by Blanchflower and Oswald (2008) in their multi-country investigation of age and wellbeing, as a potential theoretical reason for the midlife turning point (and subsequent uptick) in the relationship between age and wellbeing that they often found in many cross-sectional datasets. These theories help explain how individuals perceive aging and adjust their goals as they recognise the limits of their remaining time. Discussed further below, individuals with different personality traits may find each of these approaches more reflective of how they handle ageing and thus shape their wellbeing.

In his writings about the different stages of man, developmental psychologist Erikson (1950) discussed how individuals might differ in how they face and experience the turning point of midlife. He posed a tension for people in each of his eight stages of man and for his version of midlife. During his second stage of adulthood (between the ages of 40-65), the tension is between generativity and stagnation. Generativity is about feeling renewed, and achieved by doing things for others, having a desire to contribute to future generations. The sense of self-fulfilment associated with generativity is typically gained through parenting, mentoring, creativity and social involvement. A by-product of that is a greater feeling of connection to others, and a more purposeful, meaningful life.

The opposite is stagnation which, according to Erikson, is a feeling of disconnection or lack of purpose and sometimes characterised by self-absorption and feelings of malaise or emptiness; perhaps felt to differing degrees by different personality types. A useful frame, at least in part, to think about this conflict is generativity as connection and stagnation as disconnection (while noting that generativity does not have to lead to connection e.g. a solitary inventor or writer, and that connection is not necessarily generative, e.g. office gossip). Clearly generativity is better for wellbeing than stagnation, and the ability of different individuals to engage in generative actions and avoid stagnation in midlife and beyond will be different. Some of this difference might be related to personality traits, discussed further below. Generativity, aligning well with what Socioemotional Selectivity Theory, suggests people in midlife and beyond should seek more emotional meaning. Similarly, Hollis (1993) asserts that the midlife transition is about finding and pursuing a more personally meaningful life, subsequent to the first half of adult life when we largely follow scripts both learned in childhood and also given to us by society. Individuals with certain personality traits may be more or less capable of this change with a resulting association with wellbeing in midlife and beyond.

An evolutionary argument has also been advanced for midlife struggles. As articulated by Jamieson (2022), it states that a healthy society needs both young and older people in roughly equal measure, each bringing their own strengths. The young offer energy, boldness, and spontaneity, while older individuals contribute wisdom, experience, and foresight. Midlife is a transitional phase between these two roles, and midlife struggles are part of a process that helps shape formerly young people into wise elders who can guide society. Jamieson (2022) explores why humans—one of only two species with a long post-reproductive lifespan—continue to live well beyond their childbearing years. His conclusion is that this extended life stage exists for a reason: society needs people with the wisdom, compassion, and altruism to help guide humanity through future challenges, and that the midlife period is crucial for developing these attributes. Similarly, Rauch (2018) describes this shift as a change in emotional direction, preparing us for a new role in society. None of these arguments indicate that this transition is easy; rather than a simple change in mood or perspective, such change can take years and often

be challenging; a lengthy midlife transition is supported by the majority of the literature finding empirical evidence of a midlife low. As an indication of the challenge, some therapists find that such midlife issues account for a majority of their client base (e.g. Hollis 1993; Jamieson 2022). This is not new and was noted matter-of-factly nearly 90 years ago: “the depression of the middle age is something we frequently see in our consulting-rooms among people otherwise normal” (Brown, 1938, p.165).

The introduction mentioned a biological grounding for any midlife low, and that while most groups go through this tricky period (if not tricky enough to label a crisis) these groups go through it in different ways, with different levels of intensity. Having highlighted theories regarding the midlife transition, we discuss how individuals with different personality traits may experience the fall in wellbeing to midlife, midlife struggles, and an eventual recovery. The traits we consider are the Big-5 personality traits, specifically whether someone exhibits at least the median or less than for the following: conscientiousness; agreeableness; extroversion; neuroticism; and openness.

Personality, ageing, and wellbeing: predictions for the Big Five personality traits

The role of conscientiousness for wellbeing at the start of adulthood should be particularly conducive for wellbeing, being a helpful trait for the establishment and development of a career. Relatedly, conscientious people are perhaps well suited to following ‘society’s scripts’ and progressing well with societally accepted goals, tasks for the first half of adulthood. This argument is indirectly from Hollis (1993) and other psychotherapists (e.g. Zweig 2021) who, however, go on to suggest that too much conscientiousness might be a problem for wellbeing in midlife and beyond. Rather than seeking more emotionally meaningful relationships and situations, a task of personal development in midlife, conscientious individuals may stay loyal to jobs they do not like, and relationships that are overly unsatisfying. Clear cut predictions based on declining time horizons and the acceptance of mortality are difficult to make for the conscientious, however conscientious people may be better able to be ‘generative’ by being more competent mentors to those in younger generations, and more effective in voluntary and other roles; roles argued, by Erikson (1950) for example, to be particularly conducive to wellbeing in the second half of adulthood. There is a related individual maturation argument too (Hollis 1993). A brief summary table of these predictions, and those for the other traits, is found below.

In contrast to conscientiousness, agreeableness may be beneficial for wellbeing across the lifespan. A recurring finding in the wellbeing literature is the importance of social relationships for happiness and life satisfaction. For example, the 2025 World Happiness Report which covers more than 140 countries shows that among a wide range of commonly cited determinants of wellbeing, social support consistently emerges as the most important predictor (Helliwell et al., 2025). The magnitude of this association exceeds that of economic factors and remains robust across cultural contexts. This conclusion is supported by longitudinal evidence from the Harvard Grant Study, one of the longest-running studies of adult development. Over eight decades of follow-up, the study found that strong, warm relationships was the strongest predictors of health and longevity (Vaillant, 2012).

Among the Big Five personality traits, agreeableness is particularly relevant to the formation and maintenance of social relationships (Hogan et al., 1997; Dyrenforth et al., 2010). Characterised by warmth, empathy, and cooperativeness, agreeableness promotes reciprocity,

reduces interpersonal conflict, and facilitates effective conflict resolution. These processes serve as the foundation for stable and enduring relationships across the life span. In early adulthood, when individuals focus on establishing careers and long-term partnerships, higher levels of agreeableness tend to foster more positive marital and workplace relationships. In later adulthood, as the sources of happiness gradually shift from excitement and personal achievement toward contentment and meaningful social connection, agreeableness remains advantageous because it helps sustain harmonious interpersonal environments. This trait may be particularly protective during midlife. As discussed earlier, extensive evidence suggests that a strong sense of belonging derived from supportive marital, work, or community ties can buffer against the midlife dip in wellbeing (Lepinteur and Piper, 2023). Given the central role of agreeableness in fostering positive social bonds, it is reasonable to expect that highly agreeable individuals may navigate midlife transitions with less psychological turbulence than their less agreeable counterparts.

A similar line of reasoning can be applied to extraversion. Reflecting the brief discussion about the determinants of happiness at different ages, the wellbeing of younger people may be particularly helped by extraversion due to their seeking out of novelty and excitement. By simply being more sociable, extroverts would likely increase their network of friends and acquaintances, broadening the pool of possible jobs and relationships; these young individuals may be more successful in both the job and dating markets. Such benefits are likely cumulative. As one ages, perhaps these benefits of extraversion fade, as the midlife change towards more emotionally satisfying experiences is found in the quality of relationships rather than the quantity of them, which as we have seen supports wellbeing in midlife and beyond. In other words, extroverts may struggle to shift away from externally driven motivations (and Hollis's 'scripts'), potentially prolonging the midlife low. However, it is also possible that their tendency to engage with others could facilitate emotional processing and support, helping them navigate out of any midlife trough more quickly. Introverts (or individuals low in extraversion) may develop relationships characterized by greater depth and quality rather than greater quantity. This emphasis on relationship quality may be particularly beneficial in midlife and beyond. Whether extraversion is a positive or negative for wellbeing at different parts of the lifecycle is of course an open empirical question and is addressed below.

Neuroticism is bad for wellbeing generally (e.g. DeNeve and Cooper 1998), and individuals high in neuroticism may find midlife transitions particularly challenging, as their heightened sensitivity to stress and negative affect can amplify the uncertainty and emotional strain compared to their less neurotic counterparts. For example, if the fear of death and recognition of its inevitability emerges in midlife, as Jacques (1965) asserts, individuals high in neuroticism may find this a particularly difficult time of life. Similarly, they may find the acceptance of life's transience, the major challenge for midlife and beyond according to Kohut (1966), more difficult. More generally, change, important throughout life and arguably more so in midlife, as Campbell-Sills et al. (2006) suggest, may also be harder for neurotic people who may be less resilient compared to those less neurotic. Being overly neurotic may also make the ideas behind another purported midlife task conducive to wellbeing, generativity, harder to achieve. Individuals who are prone to emotional instability and persistence negative affect may find it harder to invest in supporting others or mentoring the next generation. Relatedly, highly neurotic people may also find it harder to form, develop, and enjoy emotionally meaningful relationships (Kelly and Conley 1987, and Gladstone et al. 2019). By contrast, emotionally

stable people are likely to fare better in midlife and beyond, finding the ‘maturation process’ of ageing more comfortable or at least less problematic. The developmental changes that are part-and-parcel of ageing are, on average, likely less to be perceived as a struggle by individuals low in neuroticism.

Finally, openness may be positive for wellbeing at all ages. Young people with high levels of openness may experience more novelty and excitement compared to those less open. In a subsequent stage of the lifecycle, openness may be associated with a smoother transition through midlife i.e. with less struggle – more acceptance – on the ‘anvil of crisis’ (Carl Jung’s phrase) through which formerly young people are slowly transformed into society’s wise elders, according to the evolutionary arguments put forward for midlife struggles (Jamieson 2022, for example). They are also more open to changes and new roles, including those important for promoting generativity. Similarly, they might be more willing to learn new skills and develop themselves to stave off stagnation.

Openness is also generally seen as being associated with creativity (e.g. McCrae 1987), which may aid a move towards living a more personally meaningful life rather than following society’s scripts (another asserted task of midlife) (e.g. Hollis 1993). O’Connor (1981) argues that successful mid-life crisis resolution involves being more reflective, which might find its expression in new creative pursuits. Further, openness is associated with the elevated ability of experiencing and expressing gratitude, a trait that has been shown to play a significant role in promoting and protecting well-being (Fagley, 2012). In turn, greater gratitude may help buffer against the intensity of the midlife dip. Overall, openness seems wholly positive for wellbeing at all ages, rather than at some ages in particular.

Below we summarise our predictions based on the three periods of life: the decline in wellbeing in the first half of adulthood (1), the midlife period (2), and the subsequent increase in wellbeing to approximately 70 years old (3). Our contribution lies in analysing *within-person* wellbeing trajectories over genuine ageing using large, nationally representative panel datasets from the UK, Germany, and Australia. Accordingly, we focus on ageing-related change by estimating fixed-effects models that capture within-individual variations over time. This approach allows us to isolate changes in wellbeing as individuals age, rather than emphasising between-individual differences in average well-being levels, which are reflected in model intercepts.

TABLE 1 HERE

Much of the existing literature has documented level effects associated with wellbeing and the Big 5 personality traits. For example, the highly-cited meta-analysis of DeNeve and Cooper (1998) shows that neuroticism is strongly and negatively associated with subjective well-being, while conscientiousness, extraversion, and agreeableness show positive associations, and openness has the weakest positive relationship overall. While these findings on level associations are well established, they do not address how personality relates to *within-person changes* in wellbeing across the life course. We therefore move beyond simple level associations by focusing on ageing-related change. We use the established level-effects literature as a contextual benchmark, but our primary tests concern the age-specific predictions summarised in Table 1, which we evaluate in the results and subsequent discussion sections.

Data and methods

Data

We employ three large-scale, nationally representative longitudinal datasets to investigate the impact of ageing on subjective well-being: the Household, Income and Labour Dynamics in Australia Survey (HILDA), the German Socio-Economic Panel (SOEP), and the UK Household Longitudinal Study (UKHLS). HILDA started in 2001 with an initial sample of 13,969 individuals across 7,682 households and has followed approximately 13,000 to 17,000 participants each year since. The SOEP is a representative, multi-stage random sample of the German population that has been running since 1984. In recent years, it has followed up more than 25,000 individuals from 15,000 households, with all household members re-interviewed annually.¹ The UKHLS started in 2009 with a representative sample of 26,000 households in England, Scotland, Wales, and Northern Ireland. In total, it has followed up approximately 100,000 individuals from 40,000 households in the UK for the last fifteen years. All three datasets include repeated measures of life satisfaction as well as rich information on demographic, socioeconomic, labour market, and family characteristics. Personality was measured in four waves of SOEP and HILDA and one wave of UKHLS. Our analysis uses HILDA waves from 2001-2020, SOEP waves from 2005-2021, and UKHLS waves from 2009-2023. Together, these panel datasets enable us to track life satisfaction trajectories across the life course and to assess how personality moderates these patterns in three distinctive national contexts.

Measures

The dependent variable is life satisfaction. All three datasets contain a measure of life satisfaction across all waves based on the question ‘All things considered, how satisfied are you with your life?’ (or a close variant). HILDA and SOEP both use an 11-point response scale ranging from 0 (completely dissatisfied) to 10 (completely satisfied) while the UKHLS uses a 7-point scale. To ensure comparability across surveys, the UKHLS life satisfaction responses were rescaled to 0 to 10.

The key independent variable is age. We constructed 11 five-year age group dummies covering ages 15 to 69. Personality is measured by the Big Five traits: openness, conscientiousness, agreeableness, extraversion, neuroticism, and openness. These measures are available in one wave of UKHLS and multiple waves of HILDA and SOEP. For each trait, we averaged the scores across all available waves to obtain an overall measure of individuals’ underlying personality disposition (see the Appendix for the measurement of the Big Five personality traits in each dataset). Using the median value of each trait, we classified respondents into high- (having at least the median score) and low-level groups. Finally, we included a set of controls that include employment status, household income, education, marital status, region, and survey years. Descriptive statistics for the samples in each country are presented in appendix Table A1.

¹ The particular German dataset used is Socio-Economic Panel (SOEP), data for years 1984-2021, SOEP-Core v38, EU Edition, 2023, doi:10.5684/soep.core.v38eu. See Goebel et al. (2019) for more details.

Analytical strategy

We used fixed effect models to estimate the impact of age on life satisfaction in HILDA, GSEOP and UKHLS. This approach controls for unobserved, time-invariant individual characteristics which could otherwise lead to omitted variable bias. As fixed effect modelling focuses on within-individual variations over time, the results reflect the impact of ageing *per se* rather than differences between different age groups. Specifically, the model takes the following form:

$$LS_{it} = \alpha_i + \sum_{j=2}^{11} \beta_j \cdot Age_Group_{jit} + \gamma X_{it} + \delta_t + \varepsilon_{it}$$

where LS_{it} represents life satisfaction for individual i at time t ; α_i captures individual fixed effects; Age_Group_{jit} are dummy variables for each five-year age group (with ages 15-19 as the reference category); β_j coefficients is the change in life satisfaction associated with each age category relative to the reference; X_{it} is a vector of time-varying control variables; δ_t is survey year fixed effects; and ε_{it} is the error term. This specification allows flexible estimation of non-linear wellbeing patterns over the life course. The β_j coefficients trace out the approximate U-shaped pattern of life satisfaction across age categories, net of individual fixed effects and time-varying characteristics controlled in the model.

To examine how personality moderates wellbeing trajectories over the life course, each sample was split into low- and high-trait groups using the median value of each Big Five trait. Separate fixed effect regressions were then estimated for each trait group in each country, yielding a total of thirty models (five traits \times two groups \times three countries). Our key focus is on the coefficients of the age-group dummies, which indicate how trajectories of life satisfaction differ between low- and high-trait individuals as people grow older. Comparing these coefficients allows us to assess the extent to which personality influences the evolution of life satisfaction over the life course in each country.

Results

This section presents the main results of the analysis, focusing primarily on within-person variation. Before discussing these main results, we briefly note the level effects. Consistently, we find that people in Australia report higher life satisfaction than those in Germany, who in turn report higher life satisfaction than individuals in the UK. Regarding the Big Five personality traits, our findings are largely consistent with the meta-analysis by DeNeve and Cooper (1998): individuals with higher levels of agreeableness, extraversion, conscientiousness, and emotional stability (i.e. those low in neuroticism) tend to report greater life satisfaction than those with lower levels. The relationship is weaker for openness, also consistent with previous research. The main deviation in our analysis concerns conscientiousness in Germany; contrary to the meta-analysis, here higher conscientiousness does not strongly predict greater life satisfaction, with differences between high- and low-levels being minimal.

Turning to the main results: we focus on the coefficients of the age dummy variables, which capture changes in life satisfaction across early adulthood (ages 15–44), midlife (ages 45–54), and later adulthood (ages 55–69). Our main interest is in the differences in the slopes of these life satisfaction trajectories, rather than on the intercepts, which capture absolute differences in wellbeing between high- and low-trait groups and have been extensively studied in prior research. For ease of interpretation, we plot the age-group coefficients in the figure below (Figure 1), in addition to reporting them in the tables.

Starting with conscientiousness, it can be seen in Table 2.1 that all individuals have a similar decline of life satisfaction until their thirties, when those with higher levels of conscientiousness subsequently experience a steeper decline to midlife than their less conscientiousness counterparts. The pattern can be seen in all countries, although the effect is particularly strong in the UK. Although both groups exhibit a rebound from the midlife low, the magnitude of this recovery (measured as the difference between the midlife nadir and life satisfaction at ages 65–69) is weaker among highly conscientious individuals. By their 60s, highly conscientious people have not returned to their baseline levels (ages 15–19) in the UK and Germany, whereas those low in conscientiousness generally return to baseline (in the UK and Germany) or even exceed it (in Australia). The evidence is consistent with the negative views on the role of conscientiousness in shaping midlife wellbeing. Being less conscientious appears to buffer against a deep midlife low and, especially in Australia, is linked to an earlier recovery.

TABLE 2.1 HERE

The wellbeing trajectories of individuals with differing levels of agreeableness are shown in Table 2.2. Overall, these patterns closely mirror those observed for conscientiousness. Individuals high in agreeableness experience a steeper decline in life satisfaction during early adulthood, resulting in a more pronounced midlife nadir, although these differences are smaller in Australia than in Germany and the UK. In later adulthood, life satisfaction increases for both groups, indicating recovery from the midlife low. However, the rebound is stronger among individuals with lower agreeableness in Australia and Germany, whereas in the UK the recovery trajectories are broadly similar across groups. For example, in Germany, highly agreeable individuals do not return to baseline levels of life satisfaction by their late 60s, while those low in agreeableness reach baseline by their early 60s. Overall, individuals with lower levels of agreeableness appear to experience less turbulent midlife transitions.

TABLE 2.2 HERE

Turning to extraversion, the wellbeing trajectories in early adulthood shown in Table 2.3 show that individuals high in extraversion experience a much less pronounced and more gradual decline in life satisfaction, resulting in a shallower midlife low, which is consistent with the positive perspective on the role of extraversion. Beyond midlife, highly extraverted individuals also appear to recover more strongly, either fully returning to baseline levels in Germany and the UK or exceeding them in Australia. By contrast, introverts return to baseline only in Australia and the UK by their late 60s, and remain below baseline in Germany throughout.

TABLE 2.3 HERE

The pattern for neuroticism runs counter to theoretical expectations about its detrimental effects on individuals' adjustment to midlife challenges. A striking pattern shown in Table 2.4 suggests that individuals high in neuroticism experience a much smoother wellbeing trajectory during early and mid-adulthood, with a noticeably milder midlife dip than their emotionally stable counterparts in the UK. Similar patterns can be seen in Australia and Germany, although the differences are smaller between the high- and low-trait groups. In later adulthood, those high in neuroticism also exhibit a faster and stronger recovery, with larger rebound magnitudes observed across all three countries. These results suggest that although individuals with high levels of neuroticism tend to have lower overall wellbeing, they navigate the midlife dip more smoothly, experiencing a milder decline and a stronger recovery.

TABLE 2.4 HERE

Finally, the evidence on the influence of openness on wellbeing trajectories is mixed. Table 2.5 shows that in Australia, individuals high in openness experience a deeper midlife low than those low in openness, whereas the opposite pattern is found in Germany. In the UK, trajectories are broadly similar for the two groups. The patterns in later adulthood are also inconsistent between countries: lower openness is associated with a stronger rebound in Australia, while higher openness is associated with a stronger recovery in Germany. In the UK, both groups show a broadly comparable degree of recovery. Overall, these results provide little support for the view that openness systematically moderates the midlife transition, consistent with prior research suggesting that openness is the Big Five trait least associated with subjective wellbeing.

TABLE 2.5 HERE

FIGURE 1 HERE

Concluding discussion

Our work fully supports previous longitudinal research finding an ageing-based decline to midlife and subsequent upturn. This is the case for all personality types in all three countries. Notably, the midlife low is less pronounced and the decline to it ends earlier in Australia than in the UK and Germany. Moreover, Australians exhibit a stronger post-midlife recovery in wellbeing compared with their counterparts in the UK and Germany. This may reflect the notion, from Graham and Pozuelo (2017), of people in 'happier' countries having their midlife low, on average, earlier in life and spending less time in misery over the life span.

Although prior cross-sectional research has linked conscientiousness to higher levels of subjective well-being, our fixed-effect analyses paint a different picture on its role in ageing. From a within-individual perspective, conscientiousness is associated with a stronger decline of wellbeing in midlife. This pattern is most pronounced in the UK and is also evident in Germany, albeit to a lesser extent. In Australia, the contrast is particularly striking among individuals in their 60s: lower levels of conscientiousness are associated with particularly high well-being (higher than at any point between ages 15 and 59).

The findings are similar for agreeableness and emotional stability (i.e., low neuroticism). In all three countries, individuals with higher levels of agreeableness or emotional stability tend to

experience a deeper midlife well-being dip, although the effects are weaker in Australia and Germany than in the UK. On one hand, our results confirm previous research that agreeable and emotionally stable people have higher overall well-being (as reflected in model intercepts); on the other hand, when viewed from a developmental ageing perspective, the influence of these traits appears far less positive. Like conscientiousness, these seemingly positive traits do not appear to confer advantage during the midlife transition.

Our prediction about extraversion for the young were largely borne out. The literature suggests that extraversion boosts young people's wellbeing through sociability and networking by helping them experience more novelty and excitement and possibly do better in employment and dating. The literature was more ambiguous regarding the role of extraversion in midlife and beyond. However, our empirical findings indicate that its association with well-being remains relatively positive beyond youth. This may reflect a greater capacity for generativity, identified by Erikson (1950) as the central developmental task of middle adulthood (40-65), which involves mentoring and developing others and contributing to the welfare of the next generation.

Finally, our prediction about the role of openness was not borne out by the analysis. The only notable age-based difference was found in Germany: those low in openness have a deeper midlife decline in wellbeing. The only country where the level effects are notably different is Germany. The trajectories for Australia and the UK for those with high and low levels of openness are similar. In general, openness shows only a weak association with well-being trajectories across the lifespan. This is consistent with prior research showing that among the Big Five personality traits, openness tends to be the least strongly related to subjective well-being.

In summary, this study has examined thirty distinct groups longitudinally (below/above median \times five personality traits \times three countries). All groups exhibited a decline in well-being leading to a midlife low, followed by a subsequent increase. Australians were generally the happiest, followed by Germans, with the UK showing the lowest average well-being. While some of our predictions based on the literature were confirmed (e.g., the positive effect of extraversion), others, particularly for agreeableness, conscientiousness, and neuroticism, contradicted our initial expectations. These counterintuitive findings are intriguing. The reasons why people with seemingly positive personality traits (high conscientiousness, high agreeableness, or low neuroticism) appear to fare worse during midlife warrants further investigations.

One possible explanation is that individuals with these traits tend to attract greater demands, both professionally and personally. Midlife may involve prioritising deeper, and more personally meaningful goals over externally imposed obligations. Highly conscientious people may remain wedded to societal expectations rather than pursuing what is personally fulfilling. Similarly, highly agreeable people may continue to focus on the needs of others rather than cultivating inward-directed growth. Excessive agreeableness may even lead to "people-pleasing" rather than true generativity.

Our analysis also shows that emotionally stable individuals fare worse than their more neurotic peers in midlife. Previous research has shown that emotionally stable people are more likely be approached and selected for roles that involve greater responsibility compared to their highly neurotic peers, and this may add to the already demanding lifestyle typical of midlife. Because a central task in midlife is to identify what is personally meaningful and adjust one's life

accordingly, those high in conscientiousness, agreeableness, or emotional stability may struggle more. Their commitment to societal scripts and externally driven roles may exacerbate the challenges of midlife, intensifying the midlife dip in well-being. These speculations require further empirical investigations.

Limitations and Directions for Future Research

Despite the contributions, this study has several limitations. First, the median split of personality traits might miss patterns at the extremes (e.g. with agreeableness). As the first systematic examination of wellbeing trajectories and personality traits, this study aimed to provide an initial analysis of how personality moderates the age-wellbeing relationship. However, this may obscure some other patterns. Some of the predictions were, overall, ambiguous though the data leaned one way rather than another on occasion. We do not know if the reasons put forward by psychologists/psychotherapists and others are the specific reason for that. These literatures were consulted because this is where the in-depth consideration of midlife and personal development has taken place, but we could not directly test specific predictions regarding why.

Our discussion highlighted the importance of personal development and maturation. Some scholars suggest that each development stage (e.g. Erikson's stages of man) needs to be undertaken successfully to progress to subsequent stages. This gives rise to the possibility of a cumulative accounting for wellbeing. Although individual trajectories broadly follow a typical pattern, they may diverge depending on how effectively individuals have met the challenges of earlier developmental periods. For example, Piper (2025) finds that males who are antagonistically narcissistic do not recover from their midlife lows, which could be seen as a failure of maturation or unresolved tasks from earlier stages of life. This general idea could be extended, with cohort data, to investigate childhood circumstances and family relations, often argued to be important for our later wellbeing, and put forward by Lepinteur and Piper (2023) among others for as a reason for wellbeing gaps between different groups in midlife.

In addition to investigating the theoretical mechanisms underlying the observed patterns, future studies could also split the personality traits into 3 (or more) groups, a broad middle and the extremes at either end, rather than a median split. Such an analysis might be particularly informative for agreeableness, where our arguments suggested that the extremes of that trait – being very agreeable or very disagreeable – may produce less wellbeing than a more moderate amount of agreeableness, all over the lifecycle and perhaps particularly in midlife. A dedicated study regarding agreeableness could support or challenge our findings and add nuance.

Future research could also delve more into the other traits. For example, some analysts consider neuroticism to have six different aspects, and a more detailed study could investigate each aspect further. A good quality nationally representative panel dataset is not yet available for such a thorough investigation, but the overall point remains: future research can introduce more nuance and test specific predictions in contrast to our general median-split inspection. Future research could also consider combinations of the Big 5 personality traits. Some combinations might be particularly conducive, or particularly detrimental, to wellbeing trajectories at different parts of the adulthood. Investigating these interactive patterns would provide a more

nuanced understanding of how difficult personality configurations shape well-being across the lifespan.

This multi-country investigation of the age-wellbeing trajectory provides a foundation for future work to add more nuance and understanding to the patterns uncovered. We hope it inspires future work adding to the knowledge provided above.

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Tables and figures

Table 1 Predictions formed by a consideration of the literature and theory related to ageing and midlife

Trait	Life stage	Effect	Prediction
Conscientiousness	Early	+	Helpful for early-stage career development and skills building
	Midlife	+/-	Too wedded to societal roles and less able to change, but perhaps more competent for successful generativity
	Later	-	Broadly less flexible, and may find peace of mind and contentment less readily
Agreeableness	Early	+	Perhaps helpful at early stages of career and social relationships formation
	Midlife	-	Too much alignment with others (whether that is employees or society in general)
	Later	-	Similar to midlife, but perhaps increasingly problematic
Extroversion	Early	+	Good for career and relationship building; potentially good for seeking out novelty and excitement
	Midlife	+/-	Difficult to 'turn inwards' to find, and then pursue, what is personally meaningful; better at discussing troubles with others
	Later	+/-	May be good at acts associated with generativity in society, but it is perhaps harder to have emotionally meaningful experiences and contentment
Neuroticism	Early	-	May impede excitement and novelty
	Midlife	-	May discourage being reflective and patient
	Later	-	May hinder being generative
Openness	Early	+	May help with new experiences and excitement, and good social relationships
	Midlife	+	May help with being thoughtful and rising to the challenges of midlife, more open to change
	Later	+	More creative, more willing to contribute to society, and more willing to engage in generative acts

Table 2.1 Life satisfaction and Conscientious: Australia, Germany, and UK

	High Conscientious			Low Conscientious		
	AU	DE	UK	AU	DE	UK
Age 20-24	-0.19*** (0.02)	-0.12** (0.06)	-0.27*** (0.08)	-0.20*** (0.02)	-0.22*** (0.03)	-0.27*** (0.04)
Age 25-29	-0.27*** (0.03)	-0.25*** (0.07)	-0.37*** (0.10)	-0.27*** (0.03)	-0.26*** (0.04)	-0.38*** (0.05)
Age 30-34	-0.33*** (0.04)	-0.33*** (0.08)	-0.46*** (0.11)	-0.28*** (0.04)	-0.29*** (0.05)	-0.38*** (0.07)
Age 35-39	-0.36*** (0.05)	-0.38*** (0.08)	-0.58*** (0.12)	-0.25*** (0.05)	-0.30*** (0.05)	-0.46*** (0.08)
Age 40-44	-0.38*** (0.05)	-0.44*** (0.09)	-0.69*** (0.14)	-0.23*** (0.06)	-0.36*** (0.06)	-0.49*** (0.10)
Age 45-49	-0.34*** (0.06)	-0.50*** (0.10)	-0.80*** (0.15)	-0.17** (0.07)	-0.37*** (0.07)	-0.49*** (0.11)
Age 50-54	-0.29*** (0.07)	-0.50*** (0.11)	-0.76*** (0.17)	-0.07 (0.08)	-0.35*** (0.08)	-0.44*** (0.13)
Age 55-59	-0.21*** (0.08)	-0.49*** (0.11)	-0.69*** (0.18)	0.05 (0.09)	-0.27*** (0.09)	-0.30** (0.14)
Age 60-64	-0.12 (0.09)	-0.39*** (0.12)	-0.53*** (0.20)	0.28*** (0.10)	-0.08 (0.10)	-0.12 (0.16)
Age 65-69	0.02 (0.10)	-0.22 (0.13)	-0.44** (0.22)	0.46*** (0.12)	0.04 (0.11)	0.05 (0.18)
Midlife low (β_{\min})	-0.38	-0.50	-0.80	-0.28	-0.37	-0.49
Rebound strength ($\beta_{65-69} - \beta_{\min}$)	0.4	0.28	0.36	0.74	0.41	0.54
Control	Yes	Yes	Yes	Yes	Yes	Yes
Constant	8.18*** (0.08)	7.37*** (0.11)	7.39*** (0.21)	7.69*** (0.08)	7.43*** (0.07)	6.62*** (0.15)
R ²	0.02	0.02	0.02	0.02	0.01	0.04
Num. obs.	106923	119087	107113	103790	159011	145173

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Reference group is age 15-19. Controls include: employment status, household income (log), education, marital status, region, and survey years.

Table 2.2 Life satisfaction and Agreeableness: Australia, Germany, and UK

	High Agreeableness			Low Agreeableness		
	AU	DE	UK	AU	DE	UK
Age 20-24	-0.21*** (0.02)	-0.24*** (0.04)	-0.27*** (0.06)	-0.20*** (0.02)	-0.18*** (0.04)	-0.27*** (0.05)
Age 25-29	-0.31*** (0.03)	-0.33*** (0.05)	-0.44*** (0.07)	-0.27*** (0.03)	-0.23*** (0.05)	-0.33*** (0.06)
Age 30-34	-0.35*** (0.04)	-0.42*** (0.06)	-0.47*** (0.09)	-0.28*** (0.04)	-0.25*** (0.05)	-0.36*** (0.07)
Age 35-39	-0.35*** (0.05)	-0.45*** (0.07)	-0.61*** (0.10)	-0.30*** (0.05)	-0.28*** (0.06)	-0.44*** (0.09)
Age 40-44	-0.38*** (0.06)	-0.52*** (0.07)	-0.67*** (0.12)	-0.28*** (0.06)	-0.33*** (0.07)	-0.50*** (0.10)
Age 45-49	-0.33*** (0.07)	-0.57*** (0.08)	-0.71*** (0.13)	-0.21*** (0.07)	-0.35*** (0.08)	-0.57*** (0.12)
Age 50-54	-0.27*** (0.08)	-0.55*** (0.09)	-0.65*** (0.15)	-0.14* (0.08)	-0.33*** (0.08)	-0.54*** (0.14)
Age 55-59	-0.15* (0.09)	-0.50*** (0.10)	-0.52*** (0.17)	-0.05 (0.09)	-0.29*** (0.09)	-0.44*** (0.15)
Age 60-64	-0.01 (0.10)	-0.38*** (0.11)	-0.34* (0.18)	0.12 (0.10)	-0.11 (0.10)	-0.29* (0.17)
Age 65-69	0.16 (0.11)	-0.21* (0.12)	-0.22 (0.20)	0.26** (0.11)	0.01 (0.11)	-0.15 (0.18)
Midlife low (β_{\min})	-0.38	-0.57	-0.71	-0.30	-0.35	-0.57
Rebound strength ($\beta_{65-69} - \beta_{\min}$)	0.54	0.36	0.49	0.56	0.36	0.42
Control	Yes	Yes	Yes	Yes	Yes	Yes
Constant	8.07*** (0.08)	7.46*** (0.09)	6.98*** (0.19)	7.80*** (0.08)	7.40*** (0.08)	6.93*** (0.16)
R ²	0.02	0.02	0.04	0.02	0.01	0.02
Num. obs.	105227	124945	120573	105510	152360	131748

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Reference group is age 15-19. Controls include: employment status, household income (log), education, marital status, region, and survey years.

Table 2.3 Life satisfaction and Extraversion: Australia, Germany, and UK

	High Extraversion			Low Extraversion		
	AU	DE	UK	AU	DE	UK
Age 20-24	-0.18*** (0.02)	-0.14*** (0.04)	-0.18*** (0.05)	-0.23*** (0.02)	-0.27*** (0.04)	-0.34*** (0.05)
Age 25-29	-0.25*** (0.03)	-0.18*** (0.05)	-0.29*** (0.07)	-0.33*** (0.03)	-0.37*** (0.05)	-0.44*** (0.06)
Age 30-34	-0.26*** (0.04)	-0.23*** (0.05)	-0.29*** (0.08)	-0.37*** (0.04)	-0.43*** (0.06)	-0.49*** (0.08)
Age 35-39	-0.24*** (0.04)	-0.24*** (0.06)	-0.40*** (0.10)	-0.41*** (0.05)	-0.48*** (0.07)	-0.59*** (0.09)
Age 40-44	-0.23*** (0.05)	-0.29*** (0.07)	-0.46*** (0.12)	-0.43*** (0.06)	-0.55*** (0.07)	-0.65*** (0.10)
Age 45-49	-0.15** (0.06)	-0.31*** (0.08)	-0.51*** (0.13)	-0.40*** (0.07)	-0.59*** (0.08)	-0.71*** (0.12)
Age 50-54	-0.04 (0.07)	-0.26*** (0.08)	-0.47*** (0.15)	-0.36*** (0.08)	-0.60*** (0.09)	-0.66*** (0.13)
Age 55-59	0.08 (0.08)	-0.19** (0.09)	-0.32* (0.17)	-0.28*** (0.09)	-0.57*** (0.10)	-0.58*** (0.15)
Age 60-64	0.25*** (0.09)	-0.05 (0.10)	-0.17 (0.19)	-0.15 (0.10)	-0.41*** (0.11)	-0.41** (0.16)
Age 65-69	0.40*** (0.10)	0.13 (0.11)	-0.06 (0.20)	0.02 (0.11)	-0.29** (0.12)	-0.27 (0.18)
Midlife low (β_{\min})	-0.26	-0.31	-0.51	-0.43	-0.60	-0.71
Rebound strength ($\beta_{65-69} - \beta_{\min}$)	0.66	0.44	0.45	0.45	0.31	0.44
Control	Yes	Yes	Yes	Yes	Yes	Yes
Constant	8.00*** (0.07)	7.48*** (0.08)	7.10*** (0.18)	7.87*** (0.08)	7.40*** (0.09)	6.83*** (0.17)
R ²	0.02	0.01	0.03	0.02	0.01	0.03
Num. obs.	108415	142678	111400	102373	135481	140886

Notes: * p < 0.1, ** p < 0.05, *** p < 0.01. Reference group is age 15-19. Controls include: employment status, household income (log), education, marital status, region, and survey years.

Table 2.4 Life satisfaction and Neuroticism: Australia, Germany, and UK

	High Neuroticism			Low Neuroticism		
	AU	DE	UK	AU	DE	UK
Age 20-24	-0.20*** (0.02)	-0.19*** (0.04)	-0.13*** (0.05)	-0.21*** (0.02)	-0.21*** (0.04)	-0.41*** (0.05)
Age 25-29	-0.26*** (0.03)	-0.26*** (0.05)	-0.25*** (0.07)	-0.31*** (0.03)	-0.28*** (0.04)	-0.51*** (0.06)
Age 30-34	-0.30*** (0.04)	-0.30*** (0.06)	-0.24*** (0.08)	-0.32*** (0.04)	-0.34*** (0.05)	-0.58*** (0.08)
Age 35-39	-0.29*** (0.05)	-0.35*** (0.07)	-0.34*** (0.10)	-0.35*** (0.05)	-0.35*** (0.06)	-0.70*** (0.09)
Age 40-44	-0.28*** (0.06)	-0.41*** (0.08)	-0.45*** (0.12)	-0.36*** (0.05)	-0.41*** (0.06)	-0.72*** (0.11)
Age 45-49	-0.22*** (0.07)	-0.44*** (0.09)	-0.52*** (0.13)	-0.32*** (0.06)	-0.44*** (0.07)	-0.76*** (0.12)
Age 50-54	-0.17** (0.08)	-0.43*** (0.10)	-0.46*** (0.15)	-0.23*** (0.07)	-0.42*** (0.08)	-0.73*** (0.13)
Age 55-59	-0.04 (0.09)	-0.38*** (0.11)	-0.34** (0.17)	-0.16* (0.08)	-0.38*** (0.09)	-0.63*** (0.15)
Age 60-64	0.13 (0.10)	-0.18 (0.12)	-0.13 (0.19)	-0.03 (0.09)	-0.27*** (0.10)	-0.49*** (0.16)
Age 65-69	0.31*** (0.11)	0.01 (0.13)	-0.02 (0.21)	0.12 (0.10)	-0.17 (0.11)	-0.35* (0.18)
Midlife low (β_{\min})	-0.30	-0.44	-0.52	-0.36	-0.44	-0.76
Rebound strength ($\beta_{65-69} - \beta_{\min}$)	0.61	0.45	0.50	0.48	0.27	0.41
Control	Yes	Yes	Yes	Yes	Yes	Yes
Constant	7.77*** (0.08)	7.08*** (0.09)	6.24*** (0.18)	8.10*** (0.08)	7.78*** (0.08)	7.56*** (0.17)
R ²	0.02	0.01	0.03	0.02	0.02	0.02
Num. obs.	110449	135179	109995	101602	143072	142332

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Reference group is age 15-19. Controls include: employment status, household income (log), education, marital status, region, and survey years.

Table 2.5 Life satisfaction and Openness: Australia, Germany, and UK

	High Openness			Low Openness		
	AU	DE	UK	AU	DE	UK
Age 20-24	-0.21*** (0.02)	-0.17*** (0.04)	-0.26*** (0.05)	-0.21*** (0.02)	-0.23*** (0.04)	-0.27*** (0.05)
Age 25-29	-0.30*** (0.03)	-0.22*** (0.05)	-0.35*** (0.07)	-0.28*** (0.03)	-0.33*** (0.05)	-0.39*** (0.06)
Age 30-34	-0.36*** (0.04)	-0.27*** (0.06)	-0.38*** (0.08)	-0.28*** (0.04)	-0.38*** (0.06)	-0.42*** (0.08)
Age 35-39	-0.36*** (0.05)	-0.29*** (0.06)	-0.51*** (0.10)	-0.28*** (0.05)	-0.42*** (0.06)	-0.49*** (0.09)
Age 40-44	-0.38*** (0.06)	-0.33*** (0.07)	-0.56*** (0.11)	-0.27*** (0.06)	-0.50*** (0.07)	-0.57*** (0.11)
Age 45-49	-0.34*** (0.07)	-0.38*** (0.08)	-0.62*** (0.13)	-0.20*** (0.07)	-0.51*** (0.08)	-0.61*** (0.12)
Age 50-54	-0.26*** (0.07)	-0.35*** (0.09)	-0.61*** (0.15)	-0.13* (0.08)	-0.51*** (0.09)	-0.55*** (0.14)
Age 55-59	-0.17** (0.08)	-0.30*** (0.10)	-0.47*** (0.17)	-0.02 (0.09)	-0.46*** (0.10)	-0.46*** (0.15)
Age 60-64	-0.04 (0.10)	-0.13 (0.11)	-0.30* (0.18)	0.16 (0.10)	-0.33*** (0.11)	-0.29* (0.17)
Age 65-69	0.11 (0.11)	0.01 (0.12)	-0.18 (0.20)	0.33*** (0.11)	-0.18 (0.12)	-0.16 (0.18)
Midlife low (β_{\min})	-0.38	-0.38	-0.62	-0.28	-0.51	-0.61
Rebound strength ($\beta_{65-69} - \beta_{\min}$)	0.49	0.39	0.44	0.61	0.33	0.45
Control	Yes	Yes	Yes	Yes	Yes	Yes
Constant	7.85*** (0.07)	7.55*** (0.08)	6.97*** (0.18)	7.99*** (0.09)	7.36*** (0.09)	6.91*** (0.17)
R ²	0.02	0.01	0.03	0.02	0.02	0.03
Num. obs.	109106	138627	113353	110449	139119	138558

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Reference group is age 15-19. Controls include: employment status, household income (log), education, marital status, region, and survey years.

Table A1 Descriptive statistics

<i>Variable</i>	AU (HILDA) (person-year obs. = 269,024)		GE (SOEP) (person-year obs. = 336,127)		UK (UKHLS) (person-year obs. = 562,184)	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Life satisfaction	7.87	1.47	7.25	1.73	5.11	1.47
Household income (log)	11.15	1.05	3.72	1.03	8.15	0.78
Conscientiousness	5.05	0.93	5.82	0.82	5.47	1.05
Agreeableness	5.38	0.83	5.41	0.86	5.61	0.99
Extroversion	4.45	1.00	4.91	1.04	4.59	1.26
Neuroticism	2.88	0.95	3.77	1.10	3.65	1.39
Openness	4.24	0.97	4.61	1.07	4.59	1.24
Age group						
Age group: 15-19	0.09	0.29	0.03	0.18	0.08	0.27
Age group: 20-24	0.10	0.30	0.07	0.26	0.09	0.29
Age group: 25-29	0.10	0.30	0.07	0.26	0.08	0.28
Age group: 30-34	0.10	0.30	0.09	0.28	0.08	0.28
Age group: 35-39	0.10	0.30	0.11	0.31	0.09	0.29
Age group: 40-44	0.10	0.30	0.12	0.33	0.10	0.30
Age group: 45-49	0.10	0.30	0.13	0.33	0.10	0.31
Age group: 50-54	0.09	0.29	0.12	0.32	0.10	0.30
Age group: 55-59	0.08	0.28	0.10	0.30	0.09	0.29
Age group: 60-64	0.07	0.26	0.09	0.28	0.09	0.28
Age group: 65-69	0.06	0.24	0.08	0.28	0.08	0.27
Employment status						
Employment status: 1	0.48	0.50	0.54	0.50	0.55	0.50
Employment status: 2	0.23	0.42	0.07	0.26	0.09	0.28
Employment status: 3	0.03	0.17	0.05	0.21	0.06	0.23
Employment status: 4	0.02	0.12	0.08	0.28	0.11	0.32
Employment status: 5	0.07	0.25	0.05	0.21	0.19	0.39
Employment status: 6	0.18	0.38	0.07	0.25		
Employment status: 7			0.11	0.32		
Employment status: 8			0.03	0.17		
Education						
Education: 1	0.05	0.21	0.28	0.45	0.28	0.45
Education: 2	0.05	0.23	0.59	0.49	0.10	0.30
Education: 3	0.14	0.35	0.14	0.34	0.13	0.34
Education: 4	0.09	0.29			0.30	0.46
Education: 5	0.22	0.41			0.19	0.39
Education: 6	0.16	0.37				
Education: 7	0.29	0.45				
Marital status						
Marital status: 1	0.47	0.50	0.59	0.49	0.51	0.50
Marital status: 2	0.16	0.37	0.03	0.16	0.49	0.50
Marital status: 3	0.03	0.17	0.09	0.29		

Marital status: 4	0.06	0.23	0.02	0.15		
Marital status: 5	0.02	0.13	0.27	0.44		
Marital status: 6	0.27	0.44				
Region						
Region: 1	0.17	0.37	0.03	0.18	0.04	0.19
Region: 2	0.13	0.33	0.02	0.13	0.10	0.30
Region: 3	0.18	0.38	0.09	0.29	0.08	0.28
Region: 4	0.07	0.26	0.01	0.09	0.07	0.26
Region: 5	0.10	0.30	0.21	0.41	0.09	0.28
Region: 6	0.12	0.32	0.07	0.26	0.08	0.27
Region: 7	0.06	0.24	0.05	0.21	0.14	0.35
Region: 8	0.03	0.17	0.12	0.32	0.12	0.32
Region: 9	0.07	0.25	0.15	0.36	0.07	0.26
Region: 10	0.02	0.15	0.01	0.10	0.06	0.24
Region: 11	0.03	0.18	0.04	0.19	0.08	0.28
Region: 12	0.01	0.09	0.04	0.20	0.06	0.24
Region: 13	0.02	0.14	0.02	0.15		
Region: 14			0.07	0.25		
Region: 15			0.04	0.19		
Region: 16			0.04	0.19		

Notes:

Employment status

HILDA: 1. Employed full-time, 2. Employed part-time, 3. Unemployed, looking for full-time work, 4. Unemployed, looking for part-time work, 5. Not in the labour force, marginally attached, 6. Not in the labour force, not marginally attached.

SOEP: 1. Employed, 2. Self-employed, 3. Government employed, 4. Not employed, 5. In education, 6. Unemployed, 7. Retired, 8. Apprentice.

UKHLS: 1. Employed, 2. Self-employed, 3. Unemployed, 4. Retired, 5. Other economic inactivity.

Education

HILDA: 1. Postgraduate - masters or doctorate, 2. Graduate diploma, certificate, 3. Bachelor or honours, 4. Advanced diploma, diploma, 5. Certificate iii or iv, 6. Year 12, 7. Year 11 and below.

SOEP: 1 More than high school, 2 High school, 3. Less than high school.

UKHLS: 1 Degree and above, 2. Professional qualifications, 3. Higher secondary, 4. Lower secondary, 5. None.

Marital status

HILDA: 1. Legally married, 2. De facto, 3. Separated, 4. Divorced, 5. Widowed, 6. Never married and not defacto.

SOEP: 1 Married, 2. Separated, 3. Divorced, 4. Widowed, 5. Single.

UKHLS: 1 Partnered, 2. Not partnered

Region:

HILDA: 1. Sydney, 2. Balance of NSW, 3. Melbourne, 4. Balance of Victoria, 5. Brisbane, 6. Balance of QLD, 7. Adelaide, 8. Balance of SA, 9. Perth, 10. Balance of WA, 11. Tasmania, 12. Northern Territory, 13. ACT.

SOEP: 1. Schleswig-Holstein, 2. Hamburg, 3. Lower Saxony, 4. Bremen, 5. North-Rhine-Westfalia, 6. Hessen, 7. Rheinland-Pfalz, 8. Baden-Wuerttemberg, 9. Bavaria, 10. Saarland, 11. Berlin, 12. Brandenburg, 13. Mecklenburg-Vorpommern, 14. Saxony, 15. Saxony-Anhalt, 16. Thuringa.

UKHLS: 1. North Eas, 2. North West, 3. Yorkshire & Humber, 4. East Midlands, 5. West Midlands, 6. East of England, 7. London, 8. South East, 9. South West, 10. Wales, 11. Scotland, 12. Northern Ireland.

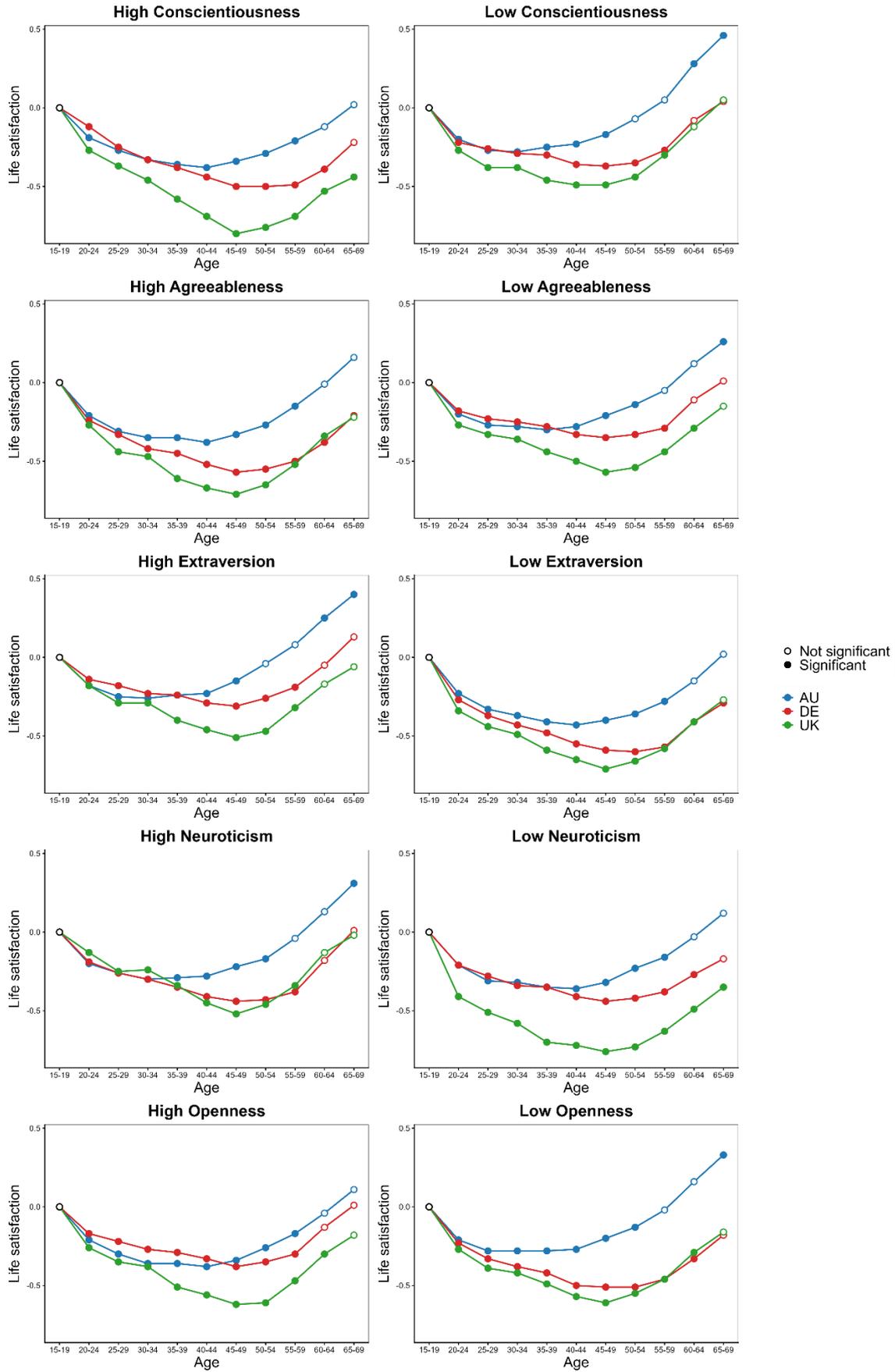


Figure 1 Life satisfaction and personality: Australia, Germany, and UK

Appendices

TABLE A1 HERE

A2. Big 5 personality items: HILDA, GSOPE, and UKHLS

HILDA

How well do the following words describe you?

Conscientiousness

1. Orderly
2. Systematic
3. Inefficient (R)
4. Sloppy (R)
5. Disorganised (R)
6. Efficient

Scale: 1 (Does not describe me at all) to 7 (Describe me very well)

Agreeableness

1. Sympathetic
2. Kind
3. Cooperative
4. Warm

Scale: 1 (Does not describe me at all) to 7 (Describe me very well)

Extraversion

1. Talkative
2. Bashful (R)
3. Quiet (R)
4. Shy (R)
5. Lively
6. Extroverted

Scale: 1 (Does not describe me at all) to 7 (Describe me very well)

Emotional stability (Neuroticism)

1. Envious (R)
2. Moody (R)
3. Touch (R)
4. Jealous (R)
5. Temperamental (R)
6. Fretful (R)

Scale: 1 (Does not describe me at all) to 7 (Describe me very well)

Openness

1. Deep
2. Philosophical
3. Creative
4. Intellectual
5. Complex
6. Imaginative

Scale: 1 (Does not describe me at all) to 7 (Describe me very well)

SOEP

I see myself as someone who (Ich bin jemand, der):

Conscientiousness

1. does a thorough job (gründlich arbeitet).
2. tends to be lazy (R) (eher faul ist).
3. does things effectively and efficiently (Aufgaben wirksam und effizient erledigt).

Scale: 1 (Not at all / Trifft überhaupt nicht zu) to 7 (Absolutely / Trifft voll zu)

Agreeableness

1. is sometimes somewhat rude to others (R) (manchmal etwas grob zu anderen ist).
2. has a forgiving nature (verzeihen kann).
3. is considerate and kind to others (rücksichtsvoll und freundlich mit anderen umgeht).

Scale: 1 (Not at all / Trifft überhaupt nicht zu) to 7 (Absolutely / Trifft voll zu)

Extraversion

1. is communicative, talkative (kommunikativ, gesprächig ist).
2. is outgoing, sociable (aus sich herausgehen kann, gesellig ist).
3. is reserved (R) (zurückhaltend ist).

Scale: 1 (Not at all / Trifft überhaupt nicht zu) to 7 (Absolutely / Trifft voll zu)

Neuroticism

1. worries a lot (sich oft Sorgen macht).
2. gets nervous easily (leicht nervös wird).

3. is relaxed, handles stress well (R) (entspannt ist, mit Stress gut umgehen kann).

Scale: 1 (Does not apply to me at all / Trifft überhaupt nicht zu) to 7 (Applies to me perfectly / Trifft voll zu)

Openness

1. is original, comes up with new ideas (originell ist, neue Ideen einbringt).
2. values artistic, aesthetic experiences (künstlerische, ästhetische Erfahrungen schätzt).
3. has an active imagination (eine lebhaftige Phantasie, Vorstellungen hat).

Scale: 1 (Not at all / Trifft überhaupt nicht zu) to 7 (Absolutely / Trifft voll zu)

UKHLS

The following questions are about how you see yourself as a person. Please tick the number which best describes how you see yourself where 1 means 'does not apply to me at all' and 7 means 'applies to me perfectly'. I see myself as someone who...

Conscientiousness

1. does a thorough job.
2. tends to be lazy.
3. does things efficiently.

Agreeableness

1. is sometimes rude to others.
2. has a forgiving nature.
3. is considerate and kind to almost everyone.

Extraversion

1. is talkative.
2. is outgoing, sociable.
3. is reserved.

Neuroticism

1. worries a lot.
2. gets nervous easily.
3. is relaxed, handles stress well.

Openness

1. is original, comes up with new ideas.
2. values artistic, aesthetic experiences.
3. has an active imagination.

Scale: 1 (Does not apply to me at all) to 7 (Applies to me perfectly)