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6. General discussion
Although the 21st century has seen average life expectancy in developed countries rapidly increases and has surpassed 80 years, healthy life expectancy has increased at a slower pace and is some 10 years lower. Life satisfaction remains stable or even increases until around age 70 and slowly declines thereafter, with many individuals maintaining a high life satisfaction even at advanced age. In their discussion of these findings, researchers have referred to, among other concepts, the disability paradox, the ageing paradox, and the well-being paradox, illustrating how counter-intuitive this high life satisfaction in older people is to many. There are still numerous unanswered questions around why some older people remain highly satisfied with their life in spite of physical decline and others do not. Understanding this supposed paradox is thus important as it could help maintain and improve life satisfaction in an ageing population. As this is now accepted as an important goal in healthcare and policy, the time is right to investigate this topic. In this dissertation, we have first investigated which characteristics separate older people with a high from those with a low life satisfaction in the face of disease and disability. We then investigated one mechanism through which life satisfaction possibly remains high in the face of disease and disability: changes in health norms and values.

Physical and Mental Health and Life Satisfaction

In the first chapter, we investigated which health characteristics separate those with high from those with low life satisfaction. Specifically, we compared physical and mental health characteristics. We showed that 1) at age 85 median life satisfaction score is still high: eight out of ten, 2) physical health has a weak association with life satisfaction that is not significant after adjusting for mental health, with the exception of functional status that remained a significant determinant of life satisfaction, and 3) mental health has a strong association with life satisfaction, and we found no evidence that this changes after adjusting for physical health.

We concluded that physical health is hardly relevant for life satisfaction at old age, and that differences in mental health may separate those with low from those with high life satisfaction in the face of disease and disability.
Our findings are more pronounced than those of previous studies that also suggested a limited relationship between physical health and life satisfaction\(^3\), possibly because our study population was representative of the general population and was one of the few studies to include objective physical health indicators. Our findings are also congruent with studies that showed a stronger role for mental than for physical health in predicting life satisfaction\(^7\). Finally, the data are also in line with studies that showed that functional status is the aspect of physical health that is most strongly associated with life satisfaction\(^7,8\). What other studies did not show before is that when adjusting the association between physical health and life satisfaction for mental health, only functional status has a unique correlation with life satisfaction.

The only likely explanation for the lack of unique variance between physical health and life satisfaction is that older people’s life satisfaction does not depend on physical health when they are in good mental health. We interpret this finding drawing on the vitality model\(^24\): a model that serves as an umbrella for many oft-cited theories on older people’s well-being at advanced age. The vitality model posits that physical decline will not lead to low life satisfaction if older people still pursue attainable goals that are valuable to them. Taking this into consideration, the interpretation of our findings is that declining health can pose challenges to older people’s engagement in such goals, and a good mental health is necessary to meet these challenges. Our data for functional decline suit this interpretation, as functional decline literally is the exception that proves the rule: when it comes to achieving goals, only functional decline cannot be fully compensated for by a good mental health.

**Psychosocial Factors and Age-specificity**

In chapter two, we elaborated on the role of functional decline in life satisfaction, and on how mental health relates to this. Specifically, we investigated the role of mental health and another potential moderating factor - social resources - in separating those with low from those with high life satisfaction in spite of age-related decline in a European cohort. This time with two elaborations to investigate the role of functional decline further: the first is that we split between disabilities in ADL and IADL. This allowed us to further tease apart which of these is associated with life satisfaction, and whether ADL and IADL disabilities are differently moderated by mental health and social resources. The second elaboration
was that we included participants of different ages ranging from midlife to old age. Therewith, we investigated if the limited association between functional status and life satisfaction, and the possible key role of mental health and social resources herein, is age-specific. We showed that 1) disabilities and social resources only have a small association with life satisfaction, whereas mental health has a large association 2) mental health and social resources do not influence the relationship between disabilities and life satisfaction and 3) the associations between disabilities and life satisfaction become smaller for older age groups.

We concluded two things: first, that ADL disabilities’ and IADL disabilities’ association with life satisfaction is independent of mental health and social resources. Second, that the association between physical health and life satisfaction is only modest, and becomes even smaller in older age groups. Similar to chapter one, these results showed that the association between physical health and life satisfaction is only modest. This was seen across all age groups, suggesting that people at all ages can adapt to functional decline in line with what we earlier proposed by hand of the vitality model. At the same time, the association between physical health and life satisfaction becomes even smaller with age, indicating that older people adapt better to disabilities than people at younger ages. This could be because older people compare themselves to their age-peers when making life evaluations, and age-peers increasingly face disease and disability. It could also simply be that older people have better emotional regulation. Our study is the first to investigate whether age decreases the association between functional status and life satisfaction, and to show that this is the case.

The interrelation between functional status, psychosocial factors and life satisfaction has been shown before. Chapter two adds to this body of knowledge by investigating if these associations fit a moderating model, in which the association between functional status and life satisfaction is altered by the psychosocial factors. We therewith show that psychosocial factors do not influence the association between disabilities and life satisfaction in older people.

**Measuring Change in Health Norms and Values**

We continued to investigate changes in health norms and values, as these could be involved in how older people maintain high life satisfaction in
the face of disease and disability. To investigate the nature of these changes in health appreciation, we compared which of various reports of change in health best reflected actual physical decline at old age. More specifically, reports of change in health made at a singular time-point (retrospectively) are not affected by changes in norms and values, in contrast to reports of change in health obtained by health ratings at multiple time points. If these shifts in norms and values occur, then such retrospective ratings should outperform reports of change at multiple points as a reflection of physical decline. Furthermore, if changes in norms and values are a way of coping, then self-reports over two time points should reflect physical decline less well than outsiders’ reports over the same time period. After all, in contrast to the older individuals themselves, an outsider would have nothing to gain from changing health perspectives. For this purpose, we included in our study the health evaluation provided by the research nurse of the participants. This research nurse annually conducted interviews with and performed measurements on the participants. Additionally, participants both rated their own health each year and rated retrospectively, whether and which change they felt in their health.

We made two comparisons: first, we compared both reports provided by the older person. Second, we compared the report provided by the nurse with the report of the participant, both over two time points, to determine which better reflected actual physical decline. Actual physical decline was measured as change in functional status over the same time period as the provided health evaluation. Second, we investigated the chance that older people would die in the year after the reports were given, to study which report of change in health best corresponded with this.

We found that 1) retrospective appreciation is a better reflection of functional decline than change in self-ratings and change in nurse-ratings, 2) change in nurse-ratings better reflects functional decline than change in self-ratings, and 3) only retrospective appreciation predicts one-year mortality.

The finding that retrospective appreciation reflected functional decline and predicted mortality best, suggests that change in health norms and values occur in older people. Specifically, it suggests that when making health evaluations at multiple instances, differences in assessment norms
and values between these time points indeed distort the concurrence with the actual change in health. These findings are congruent with an earlier study\textsuperscript{30}, but what sets this chapter apart is that this is the first study to investigate the effect of shifting norms and values on mortality predictions. Finally, an important novelty of chapter three is that we investigate whether shifting norms and values are an attempt at coping: we show that this is likely, as functional decline was better reflected by change in nurse-ratings – an outsider with nothing to gain from shifting norms and values - than by change in self-ratings. A possible alternative explanation is that the research nurse attached more importance to functional decline when assessing health, but this is ruled out in chapter four. The implication of these findings for clinicians and researchers is that retrospectively assessment of change in health is the preferable measure for asking about physical decline in older people.

**Health Perception at Old Age**

As indicated in chapter three and a number of other studies, older people shift in health norms and values\textsuperscript{26,28,30,111}. This raises the question which aspects of health still matter to older people. We investigated health perceptions of older people by studying the correlates of self-rated health. To explore how older people’s own perspectives compare to the view of a professional, we also compared self-rated health to physician- and nurse-rated health. We compared these ratings in two ways: first by determining agreement between self- and healthcare professional-rated health, and second by comparing the correlates of self-rated health with the professionals’. We found that 1) there is low agreement between older people and healthcare professionals, 2) depressive symptoms are more strongly associated with self-rated health than with physician- or nurse-rated health, 3) self-rated health does not predict mortality after adjusting for the geriatric giants, in contrast to the health-ratings of healthcare professionals, and 4) self-rated health is most strongly associated with life satisfaction.

We concluded that compared to the physician’s or nurse’s ratings, older people’s health ratings are less reflective of physical health, and instead more of mental health. The modest association of self-rated health with mortality is especially striking, as it is highly predictive of mortality at younger ages even after adjusting for physical health\textsuperscript{86}. Yet, it is congruent with recent literature that also found a decreasing association between
older people’s self-rated health and mortality. The finding that self- and professional-rated health ratings have a different focus is congruent with earlier studies. However, we further expand these studies’ findings since first, in this study we used a wide variety of health indicators (the geriatric giants), therewith providing a detailed account on the differences between the health ratings of older people and professionals. Also, second, previous studies have not investigated the correlates of other healthcare professionals other than physicians. Addressing this gap, in chapter four we showed that nurse-rated health differed from self-rated health in the same way as physician-rated health, and that nurse-rated health is a valuable reflection of a range of physical health indicators and life satisfaction as well as a strong predictor of mortality. The findings indicate that all three health-ratings can be used as a representation of older people’s state of health in research. While the healthcare professional’s ratings will more accurately reflect physical health, self-rated health will be more related to mental health, and could be indicative of psychosocial needs.

Finally, we show that older people and the research nurse attach the same importance to functional status when assessing health, ruling this out as an explanation for chapter three’s finding that nurse-rated health is more responsive to change in functional status than change in self-rated health.

Characteristics

In summary, the first question of this dissertation was which characteristics separate older people with low from those with high life satisfaction in the face of physical decline. To this end, chapter one investigated the associations between physical health (comorbidities, physical performance, cognitive function, functional status and residual lifespan) and mental health (depressive symptoms and loneliness) with life satisfaction in 85-year olds. Chapter two investigated the associations between physical health (functional status, distinguishing ADL and IADL disabilities), mental health (depressive symptoms and loneliness) and social resources (having a spouse, having children, contact frequency with children and participation in social activities) and life satisfaction in individuals aged 50 years and older. Chapter two additionally looked at the association between (I)ADL disabilities with life satisfaction over the
lifespan and the interaction between (I)ADL disabilities and mental health and disabilities and social resources.

Before answering the question which characteristics separate older people with low from those with high life satisfaction, we remark that physical health itself is not strongly associated with life satisfaction in older people, with explained variance not exceeding 2.8% for all health indicators combined (with the exception of self-rated health, but we believe that was for different reasons as explained below). In search for characteristics that do distinguish between those with low and high life satisfaction, we found that social resources are associated with older people’s life satisfaction, but associations were in the same order of magnitude as physical health. Only mental health strongly separated older people with low and high life satisfaction (> 20% explained variance). Investigating how mental health and social resources interacted with physical decline in predicting life satisfaction, we found two things: 1) mental health characteristics explained the covariance between physical health characteristics and life satisfaction, with the exception of functional health, and 2) depression and social resources did not have an influence on the relationship between disabilities and life satisfaction.

We conclude that using demographic characteristics, physical health indicators, mental health indicators, and social resources, our models still left the lion’s share of variance in life satisfaction unexplained, which is also why we could not find interactions between disabilities and the psychosocial variables. This lack of shared variance suggesting that external factors are only of minor importance for life satisfaction at old age. The fact that mental health indicators still explained far more variance than all the other variables only reaffirms this. After all, many mental health symptoms are largely caused and maintained by people’s own negative thoughts, feelings and behaviours, according to a dominant and widely accepted model in clinical psychology: the cognitive behavioural model. That life satisfaction is only slightly dependent on circumstantial factors is furthermore in line with longitudinal studies that find that life satisfaction is mostly stable over the lifespan. A likely explanation, suggested in a variety of ways by several theories, is that life satisfaction is stabilised in the face of changing circumstances due to processes within the individual.
processes may be more fruitful in explaining life satisfaction at old age, this is what we set out to study next.

**Changing Norms and Values**

The second question of this dissertation was: how is life satisfaction maintained in older people facing physical decline? Given that the large variety of characteristics we investigated could only explain a part of why some older individuals experience a low and others a high life satisfaction, we were interested in investigating whether older people shift in the norms and values that determine how they view their health, and in investigating which values become more important.

We found evidence for shifts in values and norms (chapter 3) as we showed that when making health evaluations at multiple instances, differences in norms and values between these time points distort the association with actual change in health. The study described in chapter four added to this, as we found that although self-rated health still predicted mortality, this was no longer significant after adjusting for objective physical health indicators. We take this as evidence of shifting norms and values because the lack of a unique association is in striking contrast with the general population, where self-rated health remains a strong predictor of mortality, even after adjusting for objective health.

These findings are concurrent with earlier literature and suggest that with increasing age, physical health becomes less important for self-evaluations of health, and mental health becomes more important.

**Converging Theories**

The way in which older people deal with physical decline can be discussed drawing on numerous theories. These theories are overlapping in content and can roughly be divided in two different coping pathways: people can either change their circumstances or change how they appreciate their circumstances. In the first, people actively seek to solve the difficulties posed on them by their declining health in doing what they want to do. Models such as Selection, Optimisation and Compensation (SOC) cover this. Coping by changes in how circumstances are perceived falls under theories such as response shift (we drew from this model when discussing changes in norms and values in chapter three) and the hedonic treadmill.
Other theories cover both, including Calman’s gap, disability paradox, optimization in primary and secondary control, and the vitality model.

The data presented in this thesis support both types of coping pathways. First, evidence that people try to actively solve their health-related problems can be found in the fact that functional status was the only health indicator associated with life satisfaction independently of mental health. The second coping pathway, that people shift in norms and values, is supported by the fact that change in self-rated health reflected functional decline and one-year mortality less well than retrospective appreciation of change in health.

**Parallels between Self-Rated Health and Life Satisfaction**

Some connections between self-rated health and life satisfaction become evident from the data presented in this thesis. As shown in chapter two, self-rated health explained a lot (17.2%) of the variance in life satisfaction, making it the only (intended) indicator of physical health to be strongly associated with life satisfaction. We also note that both health and life evaluations have a decreasing association with physical health over age, and an increasing association with mental health. As changes in norms and values can occur in the self-evaluation of any construct, it could be that very same shift in a certain norm or value influences both self-rated health and life satisfaction.

These parallel shifts in norms and values between self-rated health and life satisfaction are relevant in two ways: first, chapter two’s finding that life satisfaction becomes increasingly dissociated from functional status with age can be seen as a further indication that response shift occurs for older people. Second, shared shifts in norms and values may play a role in the strong association between self-rated health and life satisfaction. It is likely that these shared norms and values are the true driver behind the large association between self-rated health and life satisfaction, whereas other physical health indicators have only a small association with life satisfaction. In fact, self-rated health should not be used as a physical health indicator in investigating the relationship between physical health and life satisfaction, as is commonly done.
True Effect vs Response Tendency

The finding that self-rated health has a strong link with life satisfaction could mean that a mild perception of your health will cause you to be satisfied with life or vice versa, pleading for adaptive effects of shifting in norms and values. However, as we cannot infer causality from our observational data, we cannot exclude alternative explanations. Some considerations however do make these alternative explanations less plausible.

One alternative explanation is that both life satisfaction and self-rated health are driven by other internal or external factors, such as neuroticism. While these factors may indeed play a role in the association between life satisfaction and health ratings, it is unlikely that they can explain the systematic way in which the correlates of both life satisfaction and self-rated health shift in aging individuals. As levels of neuroticism probably stay constant in old age, it is hard to envision how this personality factor could decrease the association between physical health and both life satisfaction and self-rated health with increasing age. Instead we would expect an age-consistent association between physical health and life satisfaction and life satisfaction.

Another alternative explanation is that the norms and values that are used for reporting simply are response tendencies. In other words: it could be that the correlation between self-rated health and life satisfaction is due to shared mild norms that affect reporting only, and is independent of the true qualitative experience of life. However, we note that if response tendencies were to explain the large association between self-rated health and life satisfaction, they should also explain the association between other self-reported variables and life satisfaction. We find the opposite to be the case: depressive symptoms and functional status were both self-reported, yet only depressive symptoms were strongly associated with life satisfaction. Also, one-item measures are more susceptible to reporting bias than multi-item questionnaires, yet experienced loneliness (1-item measure) and depressive symptoms (multi-item questionnaire) had equal associations with life satisfaction, if depressive symptoms’ association was not stronger. Therefore, we need to attribute at least most of the variance between self-rated health and life satisfaction to the content of the items rather than the response tendencies. There are also studies attesting for the validity of life
satisfaction. In other words: it measures satisfactorily what it is thought to measure.

**Quality of Life and Well-Being**

Research on life satisfaction falls both in the study of quality of life and the study of well-being. As outlined in the introduction, determining the good life is often done by investigating objective life circumstances, the subjective appreciation thereof or both. Choosing an approach matters, as objective life circumstances and measures that combine subjective and objective characteristics show a rapid decline from middle age onwards and respond strongly to physical decline (which should come as no surprise as correlations with health indicators are used as a criterion for the validity of quality of life measures), while the same cannot be said for subjective evaluation. Even more remarkable, we find that subjective evaluations of life are almost equally high for individuals with and without comorbidities. Naturally, this does not mean that older people do not care if they are sick or not. Instead, it means that even when things such as health, which people deeply care about, are taken from them, this does not necessarily lower their life satisfaction, most likely because they adapt. In this way, instruments that use objective life circumstances are useful for measuring how optimal lives are, for as for as this can be determined for the target population. This makes these measures less useful for studies with a psychological focus, but they can be a fitting outcome measure to study those objective life circumstances that the authors deem important. This always needs to be done bearing in mind that 1) the life circumstances that the authors deem important should match the circumstances that the target population finds important, 2) that even if successful, individuals will still then differ in what they find important in the target population 3) the target population will adapt to life circumstances that they used to find important so that these circumstances no longer or only slightly affect their life satisfaction. As such, these measures of objective circumstances can never be interpreted as measures of how quality of life is experienced by the individual.

Within the study of well-being, contrary to other aspects of well-being, life satisfaction uniquely includes expectations and desires in addition to perceived reality, and that people can adjust these to maintain their satisfaction with life. Because of this unique feature of life satisfaction to shift in norms and values, it is possible that a hedonistic or eudemonic
approach towards well-being would have yielded stronger associations with physical health and the psychosocial variables than we found for life satisfaction. However, if change in norms and values is an effective way of coping, this could of course also lead to more positive and less negative emotions and a greater sense of meaning and fulfilment. Indeed, some evidence suggests that many affective states do not become worse at old age, and even that positive emotions are unrelated to physical health for older people.

Implications

Assisting Older People

The research presented in this dissertation points at possible directions to improve life satisfaction for older people. In particular, since we found that functional status, depressive symptoms and loneliness are associated with life satisfaction at old age, these are fertile targets for interventions and preventive measures. Research on therapy at old age is scarce, but some evidence indicates that depression can still be treated effectively at advanced age, be it less effective than at younger ages. More importantly, our data shows that subclinical depressive symptoms also lower life satisfaction. Thus perhaps it is in alleviating these symptoms where most gains can be made. Research has identified several effective interventions that reduce older people’s sub-clinical depressive symptoms and feelings of loneliness. Prevention could be the most effective measure, as older people who are still in good mental health and at a younger age are better able to participate in interventions. Such preventive interventions for depressive symptoms could include mindfulness, life review, positive psychological interventions such as gratitude diaries, exercising and engaging in new activities. Successful interventions for loneliness could also focus on teaching social skills, accommodating ways in which older people can make social contacts (computer courses, internet access, improving public transport and accessibility for people with disabilities), providing sufficient low-threshold social activities in the community, coaching and animal-human contact.

Perhaps more importantly, the relatively small associations of demographic, psychosocial and physical health factors with life satisfaction, as well as the stability of life satisfaction across the lifespan
found in other studies show that older people excel in adjusting. More than any intervention, enabling and supporting them to find their own way to adjust may be the most effective strategy to optimise life satisfaction. This includes among others ensuring that societies are designed to provide the resources that older people need. Under the header of enabling older people to adjust, we can also place abovementioned suggestion of targeting functional status in older people, both in ADL and IADL. This also means that when independence is no longer possible, institutional care can ensure that older people can still live somewhat autonomous lives. Contemporary institutional culture is still criticised for not doing enough in this domain, and perhaps that is why institutionalisation was the only demographic variable associated with life satisfaction in chapter one. Finally, further understanding these adjustment processes could lead to coaching interventions for older people. This dissertation contributes that older people shift in norms and values and that this possibly plays a role in adjustment processes at this age, though we did not investigate whether shifts in norms and values actually lead to a higher life satisfaction.

How this dissertation can help doctors

Apart from the above, the message arising from this dissertation for medical doctors is that when older patients say that they are in poor health, this could especially be indicative of mental health problems and that reports of good health may understate physical health problems. The same can be said for life satisfaction. However, answers given in our research setting may not be the same answers older people provide during actual medical consults.

Another message for doctors comes from the lack of agreement found between medical professionals’ and older individuals’ health rating: doctors cannot assume to know what patients find important for their health. Therefore, doctors should take care that their treatment plans are devised in accordance with the older patient’s wishes, when these patients are well-informed.

How this dissertation can help policy makers

Rising healthcare costs spark debate on how limited healthcare resources should be allocated. As many health problems do not lead to mortality
but do pose discomfort in daily life, the life satisfaction of older people facing different chronic health states can be used as an argument in this healthcare allocation. The main message is that if maximising life satisfaction is the goal, which is today more often the case, preventions or inventions targeting mental health could be more successful than those targeting physical health. However, we note that treating full-blown mental health disorders may be more difficult for people at advanced age, and that evidence for the efficacy on clinical psychological treatment at this age is still insufficient. As noted, however, treating subclinical symptoms could already be highly effective as below-threshold experienced loneliness and depressive symptoms were already strongly associated with life satisfaction. Interventions that target functional status may also be effective in optimising life satisfaction.

One method proposed to decide on matters of healthcare allocation, is that of quality-adjusted life years. According to this method, a treatment should cost no more than a fixed amount for each year of life gained, adjusted for the quality of those years. This is fraught with the philosophical problem that even an ‘objective’ quality of life is not necessarily the same as how satisfied patients are with their lives. Indeed, we show that physical health factors only weakly correlate with life satisfaction. When society has determined according to objective criteria that the quality of life given a health status is low, but many patients in this health status are nevertheless still satisfied with life, then these lives are still worth paying for.

The best predictor of how life satisfaction will be in the future is how it was in the past. After all, life satisfaction is stable through the lifespan, with only a ‘bump’ around serious life events that is restored within a few years thereafter. Taking a life satisfaction approach to quality of life, the only valid way of adjusting remaining life years for its quality is therefore to look at how life satisfaction was before the ‘bump’. Of course, if such a model was used to adjust life years for their quality, this would mean that some individuals have more quality-adjusted years than others, and therefore that they are entitled to a bigger piece of the healthcare budget. This is tremendously ethically flawed, as treatment should be equally accessible to all. A more ethical way of applying the life satisfaction perspective to healthcare allocation is simply to invest in well-informed and thought out patient decision making. The large between- and small within-differences in life satisfaction reflect that patients who are well-
informed can best predict their own future life satisfaction. In a Dutch report on healthcare reform that appeared in 2015, it was argued that doctors treat more than they – and more importantly – than their patients really want. Still, treatment is continued nonetheless, because neither the doctor nor the patient makes this explicit during consultations. Of course, when an informed patient does not want treatment, healthcare should not be allocated to this individual. Budgetary restriction can in this way be enforced by training the doctor to reflect with the patient on what is in the best interest of the patient.

How this Dissertation can help Researchers.

While measures of quality of life that are based on pre-determined values of what a good life should be show a large association with physical health, the same cannot be said for global evaluations of quality of life that enable people to respond using their own values: life satisfaction. It appears that older people may fare poorly in aspects of their lives that generally everyone care about such as health, but this does not relate to their appreciation of life living under these circumstances. Both are different constructs. This does not mean that objective quality of life is useless: we found a very small association between diseases and life satisfaction at old age, yet it is wrong to infer that older people barely care if they get malignancies, diabetes or a cardiac arrest or not. Our criticism of objective quality of life merely entails that once these malignancies are there, people adapt. Professionals working with quality of life should determine if they are interested in well-being that is determined by personal values after adaptation has occurred, or by quality of life as determined by normative, pre-determined values. This depends entirely on the question they want to ask.

If we take a psychological interest in how older people experience their life, then objective measures of life circumstances clearly do not measure this, and subjective measures are necessary. If on the other hand we are interested in how an intervention, policy or treatment affects quality of life, objective measures are recommendable as they are more sensitive to measure change in the objective circumstances that people find important. This is important, as even people for whom poor health does not affect their life satisfaction care about their health. More specifically: they are not unaffected because they do not care; they are unaffected because they adapt. As such, measuring change in objective
circumstances can be useful for effect studies and comparative studies, based on which objective circumstances the researchers deem important. However, we stress once more that these may not be the circumstances that the target population finds important and the target population can adapt even if they find it important. As we ultimately care about the subjective experience of life, including a subjective evaluation always provides useful additional information to measures of life circumstances.

Considering the differences both in concept and correlates, any attempt to combine the objective and subjective components into one quality of life digit provides an internally contradictory construct of which no one is entirely sure what it is. This divide in meaning may grow even stronger for older people, as chapter two showed.

Another message for researchers from this dissertation is that findings from younger populations cannot be assumed to count for older populations. When it comes to the effect of health on well-being, we need more age-specific research, as well as longitudinal research that shows how people change over time.