WILL WORKING AFTER RETIREMENT MAKE YOU HAPPY? A Research Synthesis Using an Online Findings Archive

Wan-Chen Hsu¹, Nuan-Ching Huang², Susan C. Hu³ & Ruut Veenhoven⁴

ABSTRACT

As workers approach their pension age, they face an important life-choice—should they continue to work or should they make the decision to retire? If they do decide to continue working, should they remain in their current role or seek out an alternative option? One of the relevant factors when making that decision is the impact that these options are likely to have on workers' levels of happiness. In the light of this, it is worth exploring how people who have made such choices in the past have fared. Which option offered the greatest degree of happiness and for whom?

In this paper, we examine the available research findings on this issue. We utilized 13 studies, which collectively yielded 104 findings. We then applied a new review technique, using an online findings-archive that holds standardized descriptions of research findings; we provide links to these findings in this text.

The demonstrate that the cessation of paid work typically produced the most happiness. Post-retirement continuation of work enhanced an individual's happiness only in cases in which that individual was involved in steady, reliable, reduced-hours

¹ PhD student, Dpt. of Public Health, School of Medicine, National Cheng Kung University, Taiwan. jenny13929@gmail.com

² Postdoctoral Researcher, Healthy City Research Center, Innovation Headquarters, National Cheng Kung University, Taiwan. sunnynching@gmail.com.

³ Professor, Dpt. of Public Health, School of Medicine, National Cheng Kung University, Taiwan. shuhu@mail.ncku.edu.tw. Corresponding author.

⁴ Emeritus professor, Erasmus University Rotterdam, Erasmus Happiness Economics Research Organization and North-West University South Africa, Optentia Research Program. veenhoven@ese.eur.nl

employment that was undertaken for personal satisfaction rather than out of financial necessity.

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INTRODUCTION

As they approach pension age, workers face an important life-choice: should they stop working or continue to engage in paid employment? This is particularly the case in countries where a pension system and a legal pension age are established. A study in the Netherlands found that people start considering their post-retirement life about spears prior to reaching their expected retirement age. A total of 21% of study participants thought about continuing to work after retirement, but only 12% actually did (Solinge, 2023).

In deciding to continue working after retirement, elderly workers are likely to anticipate a number of advantages and disadvantages. Key advantages might include a higher income, contacts with colleagues, and a sense of purpose. Plausible disadvantages may relate both to the physical demands of the job and to the interference with family time or time spent on leisure activities. It is difficult to estimate the probability of these effects, and even more challenging to assess how the relevant advantages and disadvantages will balance out. Because that balance will be reflected in levels of life satisfaction, elderly workers will want to estimate how happy they will be if they choose to continue working or not.

Even on a broader scale, optimizing for happiness is a topic worthy of consideration. By nature, humans want to be happy and seek out ways to live a satisfying life. Happiness ranks highly on the list of value priorities, in particular in modern societies where, fortunately, mere survival is not a topic of concern for the vast majority of citizens (Welzel & Inglehart, 2010). The quest for happiness has been further fueled by rising individualism and the growing freedom of choice. Recently, the pursuit of happiness has been reinvigorated by research indicating that a satisfying life is possible for the majority of people (Veenhoven, 2021).

1.1 Information demand

Considering the foregoing discussion, elderly workers require answers to the following questions to effectively evaluate their options at the point of retirement:

- 1. Will I be happier if I continue working into retirement...
 - a) after exiting my primary career or full-time job?
 - b) after reaching the mandatory pension age?
- 2. If I continue working, what type of work should I undertake to maximize my happiness?
 - a) the same work or something new?
 - b) full-time or part-time work?
 - c) steady employment or a flexible job?
- 3. Will my current outlook on working after retirement make a difference?
 - a) Will the plans I have in mind make a difference?
 - b) Will the reasons why I consider working after retirement make a difference?

In considering these questions, it will be helpful to examine the outcomes of other people who made equivalent life-choices in the past (e.g., to look at the happiness levels of people who continued working post-retirement compared with the happiness levels of those who stopped working). In this regard, personal knowledge gleaned from observations is limited and can be misleading or unreliable. For that reason, elderly workers are best advised to look at the relevant scientific findings for more reliable data on which to base their decisions. This is called *evidence-based decision-making* (EBDM).

pustice () and in management (CEBMa). It is practiced not only by organizations, but also by individuals. By way of example, fewer people now smoke because they are aware that research has consistently indicated the negative health consequences of smoking. Likewise, many consumers base their purchasing decisions on comparative product tests by consumer unions. EBDM in the private sphere of life has seemed to gain ground in modern societies owing to rising levels of education. In this paper, we clear the way for EBDM on the topic of retirement.

1.2 Approach taken by this study

We examined the existing research findings on the impact of post-retirement work on happiness. For that purpose, we first delineated these concepts and selected appropriate measures. Research findings that fit the relevant demands were described in a standard format and using standard terminology on electronic "findingpages"; these were entered into an online finding archive: the World Database of Happiness. Next, we inspected this evidence-base for answers to the aforementioned questions that people need to consider to make an informed decision.

The availability of standardized descriptions of the findings on online findingpages enabled us to employ a new review technique, which is described later in the Methods section of this paper.

Structure of this paper

We began by defining the notions of 'working after retirement' and 'happiness,' and on that basis we selected empirical indicators that validly reflect these concepts;

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1.3

these are discussed in the Concepts and Measures section. In the Methods section, we explain how we gathered the research data and presented the standardized descriptions for this research review. Next, we examined the collected data for information that might enable us to respond to the previous considerations regarding the effects of retirement modes on happiness levels; this process is detailed in the Results section. Finally, we considered the strengths and limitations of this study in the Discussion section, before summarizing our findings in the Conclusions section.

2 CONCEPTS AND MEASURES

The terms 'happiness' and 'post-retirement work' can mean different things in different contexts. Therefore, before proceeding, it is essential that these concepts are defined; the selection of research data requires clear definitions and a subsequent selection of valid meticators of these concepts.

2.1 Happiness

2.1.1 Definition of happiness

The word 'happiness' is used to denote different things. In philosophy, the term is primarily used in the broad sense of 'living a good life' and can be synonymous with 'well-being.' In psychology, the term is often used to refer to a person's overall positive mental state and is also called 'psychological well-being.' Used in the latter sense, the term covers notions of adjustment to life that involve both objective aspects, such as effective coping, and subjective aspects, such as satisfaction with various aspects of life, including life-satisfaction.

In ancient philosophy, the word 'happiness' was sometimes used in reference to the subjective satisfaction with one's own life (e.g., by Democritus), and today the term is perhaps most commonly used in line with this understanding. In accordance with this conception of happiness, where the every state of the overall quality of his or her own life-as-awhole favorably, in other words: how much one likes the life one leads." In this conceptualization, happiness is an essentially subjective phenomenon. Differences with other notions of well-being are summarized in Figure 1 and Figure 2 and explained in more detail in Veenhoven (2022a).

2.1.2 Components of happiness

In assessing how pleased we are with the life we are living, we draw on two primary sources of information: 1) how well we feel most of the time and 2) the extent to which we perceive ourselves as getting what we want from life. Veenhoven (1984) interprets these appraisals as two components of happiness: *hedonic level of affect* (the affective component of happiness), and *contentment* (the cognitive component of happiness).

Hedonic level of affect refers to how well one feels most of the time. This is the degree to which positive affective (PA) experiences outweigh negative affective (NA) experiences, commonly referred to as "Affect Balance." An individual's hedonic level of affect can be assessed over different periods of time—an hour, a week, a year—as well across the span of a lifetime. The focus here is on "characteristic" hedonic level, that is, the average over an extended timespan, such as a month or a year.

Contentment is the degree to which one perceives that one's aspirations are being met. The concept presupposes that the individual has developed some conscious

wants, has formed an idea about their realization, and is able to ponder whether or not they are living a life that meets their aspirations. As such, the concept does not apply to infants.

Although they are typically related, these components do not necessarily coincide; one may feel good most of the time without perceiving that one's aspirations are being met. Likewise, one may have surpassed one's aspirations but feel miserable (Veenhoven 2020).

2.1.3 Measurement of happiness

Since happiness is on our consciousness, it can be assessed by questioning. Various ways of questioning have been used, including direct questions and indirect questions, open questions and closed questions, as well as one-time retrospective questions and repeated questions that are posed several times within a certain period of time. Examples of commonly used questions are:

Questions on overall happiness:

Taking all together, how happy would you say you are these days?

Questions on hedonic level of affect (affect balance):

Would you say that you are usually cheerful or dejected?

How is your mood today? (Repeated over several days)

Questions on contentment:

How important are each of these goals for you?

How successful have you been in the pursuit of these goals?

Not all questions used to assess happiness fit the above definitions. One example is the question of whether one believes themselves to be happier or less happy than one's age-mates, which is a question posed in the widely used Subjective Happiness Scale (Lyubomirski & Lepper, 1999). The main deficit of this question is that one can believe themselves to be happier than others, but still feel dissatisfied with life. A more technical point is that we typically do not know how happy other people are.

The World Database of Happiness, on which we draw, restricts to measures of happiness those that have passed a check for face validity, as explained ______e.

2.2 Retirement

2.2.1 Definition of retirement

The term 'retirement' denotes the cessation of paid work. In that sense, the term 'post-retirement work' can be misleading as it might imply a continuation with paid work. However, the term is commonly used for the following modes of what might be more accurately called *semi-retirement*.

2.2.2 Modes of post-retirement work

Post-career job. This is a phenomenon commonly observed in East Asian countries where people retire from their primary full-time career around the age of 55 years and take up a less demanding "bridge job" prior to fully retiring. With varying degrees of prevalence, this pattern can be seen across the globe, in particular in certain professions, such military careers.

Working after retirement age. This entails the continuation of paid work after reaching the legal retirement age and qualifying for a pension.

2.2.3 Post-retirement jobs

Post-retirement work can differ in terms of number of hours (e.g., full- or part-time); security (e.g., fixed or flexible work contract); sector (e.g., continuing one's preretirement work or seeking out an alternative). Post-retirement *work* should be distinguished from post-retirement *activity*, such as volunteering, or engaging in leisure activities.

2.2.4 Attitudes to post-retirement work

Intention to continue working refers to an individual's plan or desire to remain in the workforce after reaching the age of retirement. The intention to continue working can be understood as being influenced by two primary factors: a preference for entrepreneurship and/or a desire to continue working in paid employment.

Motivation to continue working after retirement age concerns the reasons for considering the continuation of paid employment. Common motivations are economic or social or relate to one's work enjoyment.

2.2.5 Measurement of working after retirement

Post-retirement working can be measured using objective indicators; these can be taken from human resources documentation or fiscal data and are typically measured by first assessing whether an individual receives a pension and is still working. Most studies use self-reporting, typically given in the context of a questionnaire study.

Types of post-retirement work are measured using questions on whether retirees worked full-time or part-time, and the duration of their post-retirement work. Retirees are additionally asked wider questions on their post-retirement activities, which determine whether they remained in their original role or opted for bridge employment.

Intention to continue working is measured by asking questions such as whether or not retirees had ever thought about returning to work, and whether or not they would ideally prefer to continue working given the option on reaching mandatory retirement age.

Motivation to continue working is assessed simply by asking participants what their significant motive was for re-entry into the labor force.

3 METHOD

We began by gathering research findings that fit the above-mentioned concepts and measurement demands. Next, we described these findings on electronic findingpages, which we stored in the World Database of Happiness. This enabled us to apply a new technique for research synthesis that involves the use of links to findings pages in the online findings archive.

3.1 Use of a findings archive: The World Database of Happiness

A findings archive is a collection of empirical research findings. Different from mere bibliographic systems, a findings archive not only lists publications but also provides extracts of the crucial research findings reported in these, such as the observed happiness level happiness of participants or the correlates of happiness in a given population.

A findings archive consists of electronic *finding-pages* on which research findings are described in a standardized format and using consistent terminology. An example of a finding-page is shown in Figure 4. Additional details about the notation of research findings on such pages can be found here. Finding-pages each have a unique internet address to which links can be made in review papers such as this one. The technique is described in Veenhoven et al. 2022.

The World Database of Happiness is a "focused" findings archive that has a scope limited to findings on happiness that meet the definitions detailed above in section 2.1. Its selection on valid measurement of happiness is strict and rigorously implemented and is explained further here. A sharp conceptual focus is fundamental to enable accurate comparability. Comparability of the findings is further enhanced by homogenization of statistics, as explained here.

The World Database of Happiness is freely available on the internet at <u>https://worlddatabaseofhappiness.eur.nl</u>. Its structure is presented in Figure 4. As of May 2023, the archive held some 48,000 finding-pages, which can be filtered in many ways, such as by demographic, the research methods used, and the subject to which the happiness was related in a particular investigation. One of these subjects is retirement; this subject category held 269 findings, the collection of which was used for this paper.

3.2 Gathering of research findings

Research findings on happiness are gathered continuously to efficiently maintain the World Database of Happiness and keep findings up to date; the process is described

here. Over the years, that standard harvesting of happiness research has yielded many findings on the relationship between happiness and retirement. We completed that collection by initiating a focused search in the research literature and subsequently selecting new studies on valid happiness measurement. Valid findings obtained in these studies were added to the World Database of Happiness.

This provided us with a set of research findings that meet the following criteria:

Valid measurement of happiness in the sense of life satisfaction (as defined in section 2.1).

Measurement of one of the aspects of working after retirement (outlined in section 2.2.2).

Quantitative analysis of the relation between happiness and aspects of post-retirement working.

3.3 Studies found

We found 104 research findings, which resulted from 13 empirical studies; most studies reported more than one finding. There were 4 studies on working after reaching retirement age, and 9 studies specifically on working post-career. These studies are listed on Table 1. Reports on the findings of these studies have been published between 1983 and 2015 in a variety of channels, including journal articles (8), book chapters (1), and annual reports or working papers from research organizations (4). The studies came from multiple disciplinary fields, including gerontology, social psychiatry, and labor economics, as indicated by the reference list.

3.3.1 People investigated

Most studies on the relationship between working after retirement and happiness have been conducted in Western countries such as the United States (Defermany, the Netherlands, and other European nations. Only two studies were conducted using samples from non-Western countries (South Korea and South Africa). The samples surveyed in the studies used here included the general population of the relevant country as well as specific sub-groups, such as retired physicians and spouses, former immigrant retirees, workers transitioning to retirement, and those reaching retirement age.

3.3.2 Research methods used

The following methods have been used in studies on the relationship between postretirement work and happiness:

Cross-sectional: five studies inspected the same-time association; Longitudinal: seven studies tracked participants over an extended period of time; Experimental: one study utilized an experimental study design, which involved controlled interventions and a randomized assignment of participants; Cross-national: one study compared retirement pathways in South Korea, Germany, and Switzerland.

3.4 Format of this research synthesis

As noted in section 3.1, we applied a new review technique, using links to online finding-pages. This innovation takes advantage of the availability of an online findings archive and the change in academic publishing from printed paper to electronic files. Together, this allows for a more efficient presentation of research findings than would have been possible with traditional narrative reviews. Using links to online finding-pages we can provide readers with direct access to more detail than would be feasible using traditional references to publications, which the reader would then need to obtain and examine inspect to discover the relevant finding. Using links to online finding-pages, we can summarize research findings using a + or - sign or a coefficient, as we shall explain in more detail below. This enables us to present an abundance of findings in one table from which the reader can easily discern the pattern.

On a practical level, the use of an online findings archive saves a lot of space in a review paper and thereby circumvents the usual page constraints in academic journals. This allows for a more complete presentation of the available evidence, while the limitations of narrative reviews carry the risk of cherry picking when it comes to data selection. Another advantage is that such reviews can be easily updated by adding new findings to the result tables. A more detailed discussion of the benefits and limitations of this review technique is given in Veenhoven et al. (2022).

3.4.1 Links to online detail

We summarized the findings using signs: + for a positive relationship, \Box for a negative relationship, and 0 for a non-relation. All signs comprise an embedded link to an online finding-page in the World Database of Happiness through which the reader can find full details. Use the control key to click and open a finding-page.

3.4.2 Presentation of the findings

In the finding tables we present more detail than merely the presence of a positive or negative relationship. The symbols discussed above are printed in bold if there is a strong relationship (i.e., if the score is significantly distant from zero). The backslash "\" presents different results when using different measures of happiness. For instance, "+\--" signifies that in one measurement of happiness the effect is positive, while in another the effect is negative. The vertical bar "|" denotes contradictory results in different subgroups. For instance, "+|-" signifies that in one subgroup, a certain effect is positive, while in another subgroup, the effect is negative. In addition, we use colors to aid in the visualization of differences, such as using blue for findings among males and red for findings among females.

3.4.3 Organization of the findings

In <u>Table 2</u>, we sort the research findings in two ways; vertically we present the aspects of working after retirement reviewed in <u>section 2.2.3</u>, and horizontally we present the research methods used. As noted above in section 3.3.3, we distinguish three main methods: same-time correlation, over-time correlation, and experimental effect. Within each of these categories, we further distinguish between bi-variate (zero-order) correlation and partial correlation as assessed in multi-variate analysis.

The methodological distinctions are crucial for answering our questions about the causal effect of working after retirement on levels of happiness. Same-time correlations do not inform us about the direction of causality and can occur owing to the influence of happiness on the decision to continue working rather than representing an effect of post-retirement working on happiness. Over-time correlations are less vulnerable to such reversed causality, but it is still possible that earlier happiness enhances the chance of post-retirement working later. Experimental studies provide the strongest evidence for an effect on happiness of the continuation of paid work post-retirement.

In <u>Table 2</u>, we further distinguish between three methods of analysis: bi-variate correlation, partial correlation, and instrumental variables analysis. Bi-variate correlation can be misleading when spurious variables distort the view on the impact of post-retirement work on happiness; this can happen, for example, when poor health disguises an otherwise positive effect of post-retirement work on happiness. Such effects can to some extent be mitigated in multi-variate analysis, where partial correlations are computed from which the effects of potentially spurious variables are removed. But it is not possible to control all potential spurious effects, and this procedure can omit mediating variables such as when working after retirement harms health and thereby reduces happiness indirectly. Instrumental variable analysis (IV) is another way to deal with endogenous effects, but it is not easy to find variables that affect only post-retirement work without also affecting happiness in some way.

4 Results: Answers to the research questions

We aimed to extrapolate answers to the following questions:
1) Will I be happier if I continue working after retirement?
2) If I continue working, how happy will I be and in what kind of work?
3) Will my outlook on working after retirement make a difference? (effection 1.1).
We gathered 104 results from empirical studies on the matter (cf. section 3.3), which we sorted by method into a) same-time correlation analysis, b) over-time correlation analysis, and c) experimental analysis (cf. section 3.4.3). In the sections that follow, we shall discuss what the relevant findings revealed.

4.1 Will I be happier if I continue working after retirement?

We identified a total of 58 correlational findings, which are presented in row <u>Question</u> <u>1 of Table 2</u>. Out of these findings, 32 were same-time correlations, and 25 findings were over-time correlations, with 1 finding observed in an experiment study. The majority of the findings were bi-variate correlations (31 findings).

4.1.1 Negative effect most common

The top segment of Table 2 provides a mixed picture of + and – signs, most of which are statistically insignificant. Taking a closer look, we can see that negative correlations dominate. In the upper row of <u>Table 2</u> are a total of 31 findings, of which 22 denote a negative relation between continuation of work and happiness, 4 denote non-relation and only 5 denote positive relationships. A total of 7 negative relations reached the standard for statistical significance. Thus, continuation of work mostly corresponded with lower levels of happiness. In other words: the fully retired were the happiest. This pattern is consistent across methodological variations.

No evidence for spurious distortion The few partial correlations are in line with the observed bi-variate correlations and do not change the picture. Noteworthy in this context is that almost all partial correlations controlled for physical health. Poor health would be likely to motivate people to pursue full retirement out of physical necessity and will thus reduce average happiness in that category. This could have resulted in lower levels of happiness among full retirees than among post-retirement workers, but that appears not to be the case. Apparently, the effect of not working prevails regardless of health.

Confirmed in follow-up. Of the 13 findings on change of happiness following continuation of work after retirement, 7 show a negative effect, of which 3 are significant, 3 show zero effect, and only 3 demonstrate a positive effect. Once again, continuation of work after early retirement appears to correspond with lower levels of happiness in the majority of cases.

More negative in multi-variate analysis. The negative effect is more pronounced when possible spurious factors are controlled for. In column 3 of Table 2 we can see that the Instrumental Variable Analysis changed a positive bi-variate correlation into a significant negative relationship.

In sum: the data presents a mixed picture in which the negative effects of the continuation of work on happiness dominate.

4.1.2 Minor differences across people and location

The findings summarized in Table 2 reflect how working after retirement had influenced the happiness of *most* people. Yet, when deciding whether to continue working after retirement or not, elderly people will want to know how similar people have fared. That requires focusing specifically on particular kinds of people and particular geographical locations. In <u>Table 3</u>, we present the available research findings (in total 80 findings from 11 studies).

Differences across people One study among females found a <u>positive effect</u> of working after retirement. A study that distinguished between people with high and

low levels of education found <u>no difference</u> in the degree of negative effect of working after retirement.

Differences across places

The negative effect of working after retirement on happiness was particularly noticeable in Australia (2004e, 2004b), South Africa, South Korea, and New Zealand. On the other hand, positive effects were observed in the United States (1981, 2001), Germany and the Netherlands.

4.2 If I continue working, how happy will I be and in what kind of work?

We looked at three aspects of post-retirement work: (1) continuing with the same job or transitioning to a different one, (2) undertaking full-time or part-time employment, and (3) being involved in the labor market on a steady vs. an intermittent basis. When we delve a bit deeper into these three aspects, we uncover 18 pertinent findings from four studies. These findings are shown in the section <u>Question 2 of</u> <u>Table 2.</u>

4.2.1 No difference between continuation in the same job or switching to another We found no significant difference in happiness between these two groups of retirees. Hence, the decision to change jobs or reduce working hours seemed to have little impact on overall happiness levels.

4.2.2 Happier when continuing to work part-time

When comparing full-time with part-time employment, retirees continuing in part-time jobs tend to experience a relatively higher level of happiness. Moreover, this effect

was magnified in the case of older individuals who spend longer durations engaged in post-retirement jobs.

4.2.3 Less happy in intermittent employment

We found a consistent negative correlation when it comes to intermittent work arrangements. Specifically, happiness levels significantly decreased for individuals in <u>South Korea</u> and <u>Germany</u> who were engaged in intermittent employment postretirement. Among retirees engaged in continuous employment, our study results showed a mixed and inconsistent pattern. In <u>South Korea</u>, retirees who remained in the labor force experienced a negative impact on post-retirement happiness. However, by contrast, in <u>Germany</u>, this same scenario resulted in a significant increase in happiness. Interestingly, in <u>Switzerland</u> there were no statistically significant differences in happiness levels between those in fixed employment and those with flexible work arrangements.

4.3 Will my outlook on working after retirement make a difference?

When investigating whether attitudes toward post-retirement work impacted the happiness levels of older workers, we specifically focus on two sub-questions: 3a) Will the plans I have in mind influence my level of happiness? 3b) Will the reason why I continue working make a difference to my happiness level? To examine these questions, we have compiled 28 relevant findings from four studies. These findings are presented in the bottom row in the section <u>Question 3 of Table 2</u>.

4.3.1 No clear difference in happiness of those who plan/do not plan to continue working In response to our investigation of the first question outlined above, we observed a mixed trend among retirees. Three negative findings suggest that retirees who are approaching pension age and intend to continue working tend to experience lower levels of happiness. Only those who typically leave their jobs at an earlier point, such as migrant workers, might experience a positive impact on their happiness. We observed no clear indication of any selection effect where happier individuals are more inclined to continue working.

4.3.2 People were happier when intentions are realized

Our review shows that only retirees who intended to return to work and managed to secure employment after retirement experienced an increase in happiness. In contrast, retirees who were unsuccessful at finding suitable employment post-retirement experienced a sharp decline in happiness levels; this was evident with regard to both over-time bi-variate and partial correlations.

4.3.3 Happier when continuing to work for social reasons or enjoyment

Retirees whose motivation for continuing to work related to social or enjoyment factors reported higher levels of happiness. Notably, those who worked primarily for enjoyment demonstrated a statistically significant increase in happiness in line with post-retirement work.

4.3.4 Lower happiness levels when financially motivated

Retirees who continued to work out of financial necessity experienced a significant decrease in their levels of happiness.

5 DISCUSSION

5.1 Main findings

Broadly speaking, we have found that retirees are happiest when they stop working entirely. Exceptions to this rule occur when retirees 1) do not need to continue working for financial reasons, 2) work for enjoyment motives, 3) are steadily employed and, 4) work fewer hours. When these conditions are met, retirees can experience an increase in happiness levels alongside their engagement in postretirement work. These empirical findings contradict the theoretical speculations recently advanced by Siegel and Sexauer (2023).

5.2 Why does full retirement maximize happiness?

The main reasons for full retirement maximizing happiness appear to be as follows: 1) for many retirees their pre-retirement work was not sufficiently satisfying to motivate continuation into old age, 2) elderly workers are particularly dissatisfied with work, 3) retirees can choose other ways of life owing to a good pension system and lavish leisure opportunities tend to opt for that alternative. In this view, the outcome is a result of rational lifestyle choice. Below we expand on these possible explanations.

5.2.1 Working not sufficiently satisfying

One obvious reason why the fully retired tend to be the happiest is that they have come to find work dissatisfying, or at least insufficiently satisfying. Few people would work if it was not necessitated by financial constraints. Work can be particularly dissatisfying as individuals move further into old age. The reasons why working can be dissatisfying have been described in the literature on *disutility of work*. A radical example is Braverman's (1998) 'Degradation work in the 20th century,' which holds that workers have largely lost control and autonomy over the production process. Management monopolizes planning and design knowledge, which limits workers to operating pre-programmed machines and carrying out repetitive tasks. This degradation of work deprives them of self-esteem, an opportunity to utilize their skills, and a sense of fulfillment in their roles. Further dis-utilities of work discussed in the literature are low wages, long working hours, unfavorable working conditions, and a lack of job security. If Braverman's view reflects the reality of contemporary labor, people will work only if financially necessary and thus they are likely to stop once they can live on a pension (Braverman, 1998; Spencer, 2014). We expand on this idea further in section 5.2.3.

In addition, there exists a body of literature on the positive functions (*utilities*) of work. Beyond financial compensation, work can provide meaningful activity, structures one's day, instill a sense of purpose, facilitate social contacts, and shape self-identity. These effects are linked to the gratification of human needs, particularly higher needs such as the needs for self-esteem and self-actualization (Jahoda, 1982; Spencer, 2003; Marshall, 2009). In this context, Siegel and Sexauer (2023) theorize that such positive effects may also be present when it comes to post-retirement work. However, our findings showing an increase in happiness levels following full retirement indicate that these utilities typically do not compensate for the dis-utilities.

Dissatisfying for <u>etd</u>erly people in particular

Working can be especially dissatisfying at older ages. Obvious reasons for this relate

to physical limitations and a lack of opportunity to acquire new skills. Ageism and the associated difficulties presented by younger colleagues may also create problems. For example, employers often prefer cheaper, younger workers and treat elderly employees less favorably, presenting them with the least attractive tasks. (Armstrong-Stassen, 2008; Marshall, 2009; Mackenzie et al., 2011).

5.2.2 No necessity to work

Pension systems have been installed in all developed nations, which largely eliminates the need to continue to work owing to financial necessity. In this context, retirees have the freedom to choose how to live, allowing them to shape their lives in accordance with their preferences. This enhances their well-being and sense of happiness (Veenhoven, 2000; Dingemans & Henkens, 2019).

5.2.3 Alternative ways of life

For many elderly workers, their middle-age was dominated by work, which served both as a means of livelihood and a way to combat boredom. However, as society has advanced and living standards have improved, more diverse options have emerged, enabling people to enjoy vibrant lives after retirement.

A sizable leisure industry has emerged, which amounts to some 10% of the gross domestic product in modern nations (Calderwood & Soshkin, 2019). This industry provides elderly people with unprecedented options for how to pass their time. For example, retirees can participate in leisure and entertainment activities such as travel, sightseeing, movies, concerts, and sports. These activities can provide enjoyable experiences and make life fulfilling. Elderly people can continue to engage in selfdevelopment throughout old age by enrolling in courses, workshops, and educational activities, allowing them to develop new skills or pursue personal interests. Engaging in social activities and volunteer work also keeps retirees socially connected and active, adding richness to their lives.

Moreover, the proliferation and growth of mainstream media means that retirees have consistent access to information and entertainment, empowering them to stay informed about the world, gain knowledge, and enjoy visual entertainment. The expansion of social media networks further enables them to stay connected with friends and family. To summarize, modern society offers a wider array of choices than ever before, allowing retirees to maintain meaningful and fulfilling lives post-retirement, compensating for the positive aspects of work they may have left behind.

5.3 Why some retirees are happier when continuing to work

Only a minority of elderly people became happier when they continued working after retirement. Crucially, these individuals were not motivated to work out of financial necessity but because they enjoyed their work and the associated social contact it offered. As such, their work arrangement more closely mirrored the leisure life described above in section 5.2. Overall, their job situation was pretty relaxed, involving part-time and stable work hours, which also fits the interpretation of working as a leisure activity.

5.4 Where more data are needed

The goal of this research review was to inform elderly people regarding how the decision about whether or not to continue working after retirement might impact their happiness levels. The result is that *most* people become happier when they stop working. Although this provides a clue as to how best to proceed, elderly people

would benefit further by examining how *similar* people have fared, that is, people like them with respect to things like personality, family situation, and job history. As yet, only a few such characteristics have been considered (gender, education, and work conditions; see <u>Table 3</u>) and these have been considered in isolation rather than in combination. Thus, a task for future research would be to explore the differences in subgroups, which will require large datasets.

5.5 Implications of this review

During the 1980s and 1990s, retirement policies in developed nations aimed to encourage older individuals to retire early, creating employment opportunities for younger workers. However, with the growing elderly population, as well as the rising costs of pensions and shortage of labor, the policy focus shifted toward encouraging older individuals to continue working. However, the results of this review show that merely encouraging elderly people to continue working will not be sufficient to facilitate change. Most elderly people choose to stop working and they have solid justifications for their decision. Promotive communications risk being misleading.

Hence, greater labor participation of elderly people must be achieved in other ways, using either 'sticks' or 'carrots.' The primary stick approach is to lower pensions or to increase pension age; this policy is currently practiced in most developed nations. The results of this review show that this involves a decrease in happiness levels among elderly citizens. The carrot approach is to make the continuation of work more attractive for elderly people. This latter approach requires a better understanding of the quality of working life for elderly people, which is a task for future research.

Siegel and Sexauer (2023) may be correct in their enumeration of the probable

positive societal impact of longer working lives, yet they failed to see that this is likely to come at the cost of individual happiness. The policy dilemma is how to balance the macro gains against the micro losses in happiness of encouraging people to work until later in life. This requires first of all that the negative happiness impact is acknowledged and, furthermore, that the direct and indirect effects are quantified as far as possible. Once again, this is a worthy task for future research.

5.6 Dissemination of research results

The aim of this study is to inform elderly people about how the decision about whether or not to continue working post-retirement is likely to impact their happiness levels. However, few such people will read this article. As is typically the case with scientific information, public enlightenment goes through intermediaries, such as journalists and information officers. Reception by these go-betweens is not guaranteed since the message is new and the information conveyed is not always welcomed. There is no vested interest in telling the truth: that full retirement is likely to provide the highest levels of happiness among the elderly population.

5.7 Strengths and limitations

5.7.1 Strengths and weakness of this review method

This study differs from the typical narrative reviews of the research literature on a topic. The main differences are as follows: 1) There is a focus on findings (observations) rather than on interpretations as in most narrative reviews. 2) Our review offers a presentation of research findings that can be accessed on online finding-pages and that the reader can open with the click of a mouse rather than merely mentioning a source in the reference list. 3) We have maintained a standard

format and terminology when describing findings, which allows better comparison than the descriptions in narrative review typically do. 4) We have utilized summary tables to give an easy overview of the findings. 5) Updating the data as required is substantially easier; new findings can be added to the findings archive, links to which can be added to review papers like this one. 6) An advantage particular for the use of the World Database of Happiness is the sharp conceptual focus. While narrative reviews often cover different aspects of sensitizing concepts, this review deals with the definite concept of happiness in the sense of life satisfaction.

Notably, there are also some disadvantages: 1) The disadvantage of using symbols to indicate the direction of the observed correlation in the summary table is that many details cannot be observed directly through symbols, especially regarding the effect sizes and control variables used. However, readers can get more information by clicking on the signs. 2) This method of using symbols is applicable only to electronic text and requires the existence of an online archive, such as the World Happiness Database in this case. 3) The available descriptions in the excerpts are not always sufficient to assess the quality of the method, so a link to the full text of the original article is required. 4) This new presentation will be unfamiliar to some readers and thus there may be some adapting required.

5.7.2 Limitations to the populations studied

This review is primarily based on studies conducted in developed Western countries. In these countries, pensioners are often financially well-off and have access to a wide range of leisure activities. This may not necessarily be the case in other countries or regions where retirees may face radically different financial or lifestyle considerations.

This study analyzed the characteristics and outcomes of post-retirement work among employees who retired between the years of 1983 and 2015. With the continuous development of technology, many of the older people considered here may lack the skills required for fruitful continuation of work in our rapidly changing environment.

6 Conclusions

Retirees are typically happiest when they stop working completely. Post-retirement work is attended by greater happiness only among retirees who 1) do not need to continue working for financial reasons, 2) are motivated by enjoyment of their work 3) are steadily employed and, 4) work fewer hours.

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Table 1

13 studies on working after statutory age and happiness

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
Participants aged 50–70,	Intention to	Self-report of their intention to work after retirement in	Life satisfaction	Abolhassani &
Germany,	continue working	past seven months.		Alessie (2013)
Followed 1994–2009,		Received pension and intended to work for pay		
N= 10,275		Received pension and no intention to work for pay		
*		(reference group)		
	Working after a	Self-reported the changes in activity after retirement.	Life satisfaction	Austrom et al.
	career	Continue working: maintained regular position with		(2003)
Retired physicians and		reduced schedule		
spouses,		Fully retired: solely to leisure activity (reference)		
USA, 2000	Post-retirement	Self-reported the changes in activity after retirement.		
N = 678	jobs: Continuation	Maintained regular position with reduced hours		
	of one's pre-	Accepted a different position (reference)		
	retirement work or			

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
	another kind of work			
Elderly, USA, Followed: 1992–2004, N = 2,389	Working after a career	Self-reported their retirement process Continue working: workers partly retired after fully employed Fully retired: workers fully retired after fully employed (reference)	Affect Balance	Calvo et al. (2007)
People in eligible pension age, New Zealand, Pooled sample: 2008– 2012, N = 4,224	Working after retirement age Post-retirement jobs: working time	Self-reported their current employment status by working hours <i>Continue working: Participants who were in pension</i> <i>age but still had full-time work or part-time work</i> <i>Fully retired (reference)</i> Self-report their current employment status by working hours <i>Full-time work</i> <i>Part-time work</i>	Life satisfaction	Cameron et al. (2015)

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
50+ aged wage workers,	Working after a	Fully retired (reference) Self-reported their current employment status		Cho & Lee
3 countries: Germany, Switzerland, South Korea Followed 2000–2007,	career	Continue working: employees with intermittent unemployment or reduced working hours Fully retired: directly retired from full-time employment to full retirement (refe rence)		(2014): Germany
Germany: N = 2,602 Switzerland: N = 639 South Korea: N = 820	Post-retirement jobs: security	Self-reported their current employment status Intermittent unemployment Reduced work hours Fully retired (reference)	Life satisfaction	Cho & Lee (2014): Switzerland Cho & Lee (2014): South Korea
Female pensioners, USA, Followed 1982–1991,	Working after retirement age	Participants who received Social Security benefits and self-reported number of years in post-retirement job after retirement	Life satisfaction	Choi (2001)

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
N = 4,748				
54-69 aged men,	Intention to	Self-reported the preference of work after mandatory	Life satisfaction	Crowley (1986)
USA,	continue working	retired	Affect balance	
1981,		Intention to continue working: participants prefer to		
N = 1,200		continue working past mandatory retirement age if		
		allowed		
		No intention to continue working: participants did not		
		prefer to continue working beyond mandatory		
		retirement age (reference)		
18+ aged general public,	Working after a	Self-reported their current employment status	Life satisfaction	Cummins et al.
Australia,	career	Semi-retired		(2004b)
Pooled sample:		Fully retired (reference)		
combined 9–12 waves				
N = 6,651				

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
18+ aged general public,	Working after a	Self-reported their current employment status	Life satisfaction	Cummins et al.
Australia,	career	Semi-retired		(2004b)
2004		Fully retired (reference)		
N = 1,997				
18+ aged general public,	Working after a	Self-reported their current employment status	Life satisfaction	Cummins et al.
Australia,	career	Semi-retired		(2004b)
2004,		Fully retired (reference)		
N = 2,000				
18+ aged general public,	Working after a	Self-reported their current employment status	Life satisfaction	Cummins et al.
Australia,	career	Semi-retired		(2004b)
2004–,		Fully retired (reference)		
Pooled sample:				
combined 9–10 waves,				
N =3,147				
18+ aged general public,		Self-reported their current employment status	Life satisfaction	

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
Australia,	Working after a	Semi-retired	Affect of	Cummins et al.
2004,	career	Fully retired (reference)	happiness	(2004b)
Pooled sample:				
combined 9–10 waves,				
N = 3,125				
18+ aged general public,	Working after a	Self-reported their current employment status	Life satisfaction	Cummins et al.
Australia,	career	Semi-retired		(2004e)
2004,		Fully retired (reference)		
N = 2,000				
18+ aged general public,			Affect of	Cummins et al.
Australia,			happiness	(2004e)
2004,				
Pooled sample:				
combined 9–11 waves,				
N =4,901				

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
50-64 aged who transition into retirement, Netherlands, Followed 2001–2011, N = 1,248	Working after retirement age Intention to continue working	 Self-reported their working status Continue working: participants who received retirement benefit and took a bridge job. Fully retired: participants who received retirement benefit without an intention for bridge employment (reference group) Participants who received retirement benefit and self-reported their current working status With an intention for bridge employment and successful at finding a bridge job With an intention for bridge employment but unsuccessful at finding a bridge job Without an intention for bridge employment put (reference group) 	Life satisfaction	Dingemans & Henkens (2014)

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
	Motivation of continue work	Participants who received retirement benefit and self- report on their main motive for re-entry into the labor force <i>Financial motive (reference: No)</i> <i>Enjoyment motive (reference: No)</i> <i>Social motive (reference: No)</i> <i>Other motive (reference: No)</i>		Dingemans & Henkens (2014)
50+ aged, Australia, Followed: 1998–2002, N = 358	Working after a career	Self-reported their retirement process Continue working: workers reduced work hours or commitment or resumed work after a period of unemployment in retirement Fully retired: workers retired from full/part-time work to no paid work. (reference)	Affect Balance Life satisfaction	DeVaus et al. (2007)
50+ aged males, USA,	Working after a career	Changed for employment status Continue working: from full-time employed to part- time employed	Life satisfaction	Dobson (1985)

People, Place, Time, Number	Aspect	Measurement	Measurement of happiness	Source
Followed 1964–1974,		Fully Retired: from full-time employed to fully retired		
N = 1,870		(reference)		
	Working after a	Changed for employment status		
	career	Took a part-time job		
		Fully retired (reference)		
Ex-migrant retirees,	Working after a	Self-reported their retirement process	Overall	Moller (1985)
South Africa,	career	Continue working: workers smoothing retired by	happiness	
1984,		working for shorter hours, working at lighter or		
N = 253		staying at home for longer periods		
		Fully retired: workers retired from one day to the next		
		(reference)		
	Intention to	Self-reported preference for entrepreneurship in	Life satisfaction	Moller (1985)
	continue working	retirement		
		Yes		
		No (reference)		

People, Place, Time, Number	Aspect	Measurement of happiness		Source
	Intention to continue working	Self-report on single question: "Have you ever thought about returning to town to find another job?" <i>Intention to continue work: Often or Sometimes</i> <i>No intention to continue work: Hardly ever or Never</i> <i>(reference)</i>	Life satisfaction	Moller (1985)
60+ retired people, USA, Experiment in 1981, N = 54	Post-retirement jobs: Working time	Comparing between retirees who had part-time work and no work through the experimental study	Life satisfaction	<u>Soumerai &</u> <u>Avorn (1983)</u>

Table 2

104 findings on relations between happiness and working after retirement:

Modes of retirement	Observed relation with happiness							
modes of retrement	Same-time correlation			Over-time correlation			Experiment	
	Bi-variate	Partial	IV	Bi-variate	Partial	IV		
Q1: Will I be happier if I continue wo	rking retirement? (vs.	fully retired)						
After exiting my main career or full-	0 - +\\	- -		- 0	0 - +			
time job (<i>31 findings)</i>	\- + -\-	- -		- 0	- + - -\0 +			
After reaching pension age		-L-		+ +	- + + +		+	
(<mark>27</mark> findings)	+ + + + - 0	+ -	- - + -	+ + - - +	- + + + +		Ť	
Q2: If I continue working, how happy	/ will I be in what kind	l of work?						
The same work or something else?								
same work at reduced work hours (vs		- -						
change job)		I						
Full-time or part-time?	1	<u> </u>	1		1		-1	
Full-time job (vs not)	+	+	-					

Part-time job (vs not)	+	-	-			+
Remained full-time employed (vs	_					
part-time)						
Years of post-retirement work				+	+	
Fixed or flex employment?		I		I	I	<u> </u>
Intermittent employment (vs not)						
Continuous employment by reduced						
hours					- + +	
Q3 Will my outlook on working after	retirement make a di	fference?				<u> </u>
Will the plans I have in mind make a	difference?					
Exit career and intention to continue	+/+ +/+	+ + + +				
work						
Reach pension age and Intention to	-\					
continue work						
With intention and finding a job				+ +		
With intention but failure on finding a				- -	-	
job						

Financial necessity	0	-	-	
Social motives	+	+	+	
Enjoyment motives	-	+	+	
other motives	+	-	+	
Meaning of signs:				
Bold indicates that the effect of re	esults are significant.			
+: positive direction.				
-: negative direction.				
"0": the effect of results is near z	ero.			
: different group shows different	or same direction. For example:			
+ -: positive in one group, negativ	/e in another (and vice versa).			
+ +: positive in one group, also po	ositive in another (same in negative s	signs).		
	piness shows different direction.			
\ : different measurement on happ				
	appiness, negative with another (an	d vice versa).		

Table 3

80 Findings on relationship between happiness and working post-retirement: split by individual characteristics and countries.

	Observed relation with happiness						
Modes of retirement	Same-time correlation			Over-time correlation			Experiment
	Bi-variate	Partial	IV	Bi-variate	Partial	IV	
Difference across individual cha	racteristics:						
Working after exiting my main care	er or full-time job						
Male	+			0			
Married		-					
Retirees aged 65 and older		-					
1 year after retirement					-\0		
3 years after retirement					-\+		
Working after reaching pension age	e						
Female				+	+		
Voluntary retired	+ +			+ +			
Involuntary retired	-			- -			

Post-secondary education			- +				
No post-secondary education			- -				
Difference across countries							
Working after exiting my main care	er or full-time job						
United States	0 +	- -		- 0	0		
Australia	- +\\				- -\0 +		
South Africa	-\-	- -					
South Korea					-1-		
Germany					- +		
Switzerland					- +		
Working after reaching pension age	e	I	1	I	1	I	I
Netherlands	+ +			+ +	- + + +		
	+ + - 0			+ + - -	1.1.1.		
New Zealand	+ +	+ -	- - + -				
United States				+	+		+

Meaning of signs:

Bold indicates that the effect of results are statistically significant.

- +: positive direction.
- -: negative direction.
- 0: the effect of results is near zero.
- | : different group shows different or same direction. For example:
- +|-: positive in one group, negative in another (and vice versa).
- +|+: positive in one group, also positive in another (same in negative signs).
- \: different measurement on happiness shows different direction.
- +\-: positive on one measure of happiness, negative with another (and vice versa).
- +\+: positive on one measure of happiness, also positive in another (same in negative signs).

Figure 1

Difference between happiness and other qualities of life

	Outer qualities	Inner qualities
Life chances	Livability of one's environment	Life-ability of the person
Life results	Usefulness of line	Satisfaction with life
		(Happiness)

Source: Veenhoven (2000)

Figure 2

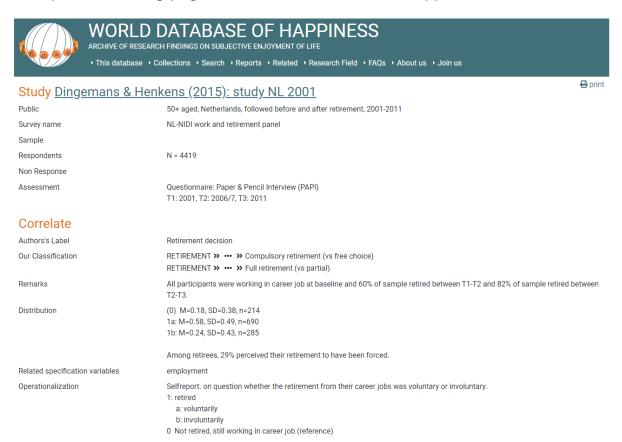
Difference of happiness with other satisfactions

	Passing	Enduring
Life aspects	Pleasure	Domain satisfaction
Life as a whole	Peak experience	Life satisfaction
		(Happiness)

Source: Veenhoven (2022a)

Figure 3

Example of a finding-page in the World Database of Happiness



Observed Relation with Happiness

Happiness Measure	Statistics	Elaboration / Remarks
M-CO-u-mq-v-5-b	<u>b-fix</u> = +.08 ns	T1-T3 CHANGE happiness by Voluntarily retired (vs working in career job)
<u>M-CO-u-mq-v-5-b</u>	<u>b-fix</u> =15 p < .05	T1-T3 CHANGE happiness by INvoluntarily retired (vs working in career job) All b-fix controlled for T1-T3 CHANGE in: - age - living with partner - health problems - personal monthly income
<u>M-CO-u-mq-v-5-b</u>	<u>b-fix</u> = +	T1-T3 CHANGE happiness by retirement + bridge job (vs working in career job) Voluntary retirees: no bridge job (fully retired): b-fix= +.07(ns) had bridge job: b-fix= +.15(05)
<u>M-CO-u-mq-v-5-b</u>	<u>b-fix</u> = +/-	<pre>T1-T3 CHANGE happiness by retirement + bridge job (vs working in career job) INvoluntary retirees: no bridge job (fully retired): b-fix=16(01) had bridge job: b-fix= +.05(ns) All b-fix controlled for T1-T3: ageing living with partner health problems personal monthly income perceived self-efficacy</pre>

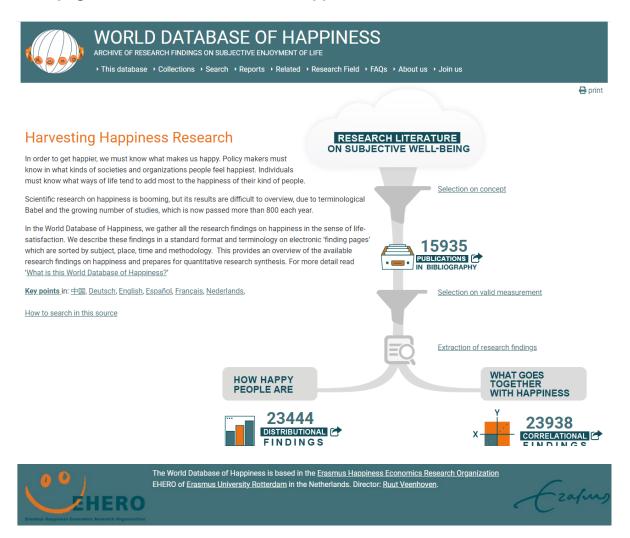


The World Database of Happiness is based in the <u>Erasmus Happiness Economics Research Organization</u> EHERO of <u>Erasmus University Rotterdam</u> in the Netherlands. Director: <u>Ruut Veenhoven</u>.

Erafung

Figure 4

Start page of the World Database of Happiness



Source: https://worlddatabaseofhappiness.eur.nl

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