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A. Introduction

Recent decades have seen significant advances in medicine and healthcare which have led to increased life expectancy and improvements in the overall level of health among all age groups in Israel. As a result of these positive changes, the amount of savings that an individual will need for retirement has increased. Older adults are becoming increasingly healthier and their ability to continue working is improving. These two factors — the need to work longer in order to increase retirements savings and the ability to continue working until an older age — have highlighted the issue of raising the official retirement age and even the possibility of eliminating it altogether. This study will relate to this issue from the perspective of the individual.

The goal of the study is to examine the effect of employment status and number of work hours on the subjective well-being (SWB) of individuals in the 60–80 age group. SWB, which is a measurable index, is a generally accepted tool in the analysis of the individual's level of happiness.[1] This study joins a

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1 The terms level of happiness, welfare, utility and level of life satisfaction are used interchangeably in this article as is the common practice in economic literature (see, for example, Easterlin, 2001; 2003).

growing body of literature that focuses on the individual's happiness and the economic and social factors that influence it. We thus adopt the approach that there exists a technology of happiness or in other words that there is a clear distinction between the goal, namely to be happy and to live a life full of meaning, and the means of achieving it, namely money, social relationships, health, social capital, and work (Bruni, 2004; Dolan, 2014).

The assumption is that individuals seek to raise their level of happiness and that their decisions relating to resource allocation — money, time, and effort — are directed toward maximizing this goal. In this study, the emphasis is on the division of time between work and leisure and on the decision whether to continue working or to retire. We focus on the variable "employed or not employed" and number of work hours in the case of those who are employed. Volunteerism is also touched on as a form of unpaid employment. Sociodemographic variables that have been found to have a statistically significant influence on the level of happiness in studies both in Israel and other countries are considered.

This study will emphasize the effect of employment, work hours, and retirement on the individual's level of happiness. We seek to determine the role played by work in the lives of older adults: Is work simply a means to material welfare, in which case people agree to work only for the money, or does it have non-monetary aspects? In recent years, it appears that the economic mainstream has been willing to accept an approach that differs from the neo-classical model and that recognizes the possibility that work is a means of achieving happiness and meaning in life (Cassar & Meier, 2018; Darity & Goldsmith, 1996; Kaplan & Schulhofer-Wohl, 2018). This change in approach is seen in the recognition that non-monetary aspects of work have a major effect on an individual's level of happiness and should also be included discussions of retirement age policy. Should retirement be mandatory? If so, at what age? If not, what are the effects of that decision on the labor market and on the individual's welfare? This research therefore focuses on the 60 to 80-year-old age group, the age group most relevant in this context. This is also the age group in which the question of whether to retire, which has been an issue on the public agenda for many years, is most relevant. Although there are those who retire at an earlier age or who continue to work after 80, they represent a relatively small group.

This study is divided into two parts: the first is based on the Survey of Health and Retirement in Europe (SHARE), a survey of health, old age, and retirement in Europe including Israel. The survey, which was launched in 2002, examines the economic, health-related, and social elements of aging in 27 countries. It consists of interviews with adults ages 50 and over and the gathering of micro data over time on health, socioeconomic status, and social and family relationships. Israel joined the project in 2004. To date, about 10,000 interviews have been conducted in Israel among more than 3,800 participants in four rounds over a period of about 10 years. The data gathered make it possible to examine the individual decisions in light of existing regulations and laws with respect to the age of eligibility for old-age pensions, retirement, employment pensions, and taxation.

The SHARE database includes data over a relatively long period (2004 to 2016). It does not differentiate between various populations, such as the Haredim (ultra-Orthodox Jews) and Arab Israelis, which have different work and happiness characteristics. In order to obtain a more reliable and precise picture, we distributed questionnaires among more than 500 non-Haredi Jewish Israelis between the ages of 60 and 80. The second part of the study is based on those questionnaires. The questionnaires were distributed in June 2019 and represent a more up-to-date picture of the situation in Israel. Their goal, in addition to obtaining information on employment decisions, is to shed light on the support of individuals for a change in the laws and regulations relating to retirement age and eligibility for retirement benefits.

The study emphasizes a central element in the decision of whether to continue working among individuals ages 60 to 80: Is the decision to continue working beyond the official retirement age (62 for women and 67 for men) positively correlated with the level of happiness? And no less important, do those who decide not to work do so out of choice since, from a happiness standpoint, retirement and a life of leisure are preferable to working, or because the jobs offered to them in the labor market are not suited to the human capital they have accumulated over the years?

The research methodology is based on econometric analysis of the data: the first section is based on an analysis of the SHARE data, while the second is based on the questionnaires that we distributed.

B. Employment and the happiness levels among older adults

The factors determining an individual's level of happiness have been discussed at length in the economic literature and studied extensively (Clark, 2018; Dolan, 2014; Dolan et al., 2008; Frey & Stutzer, 2002; Layard, 2005). Researchers in the economics of happiness have found a systematic link between measures of subjective well-being and seven main factors whose contribution to happiness can be ranked as follows (Layard, 2005). The top of the list is family relationships. Second is financial situation. The literature distinguishes between absolute and relative income and also between satisfaction with one's financial situation and the individual's satisfaction with available financial resources. The findings indicate that an individual who is satisfied with his financial resources is happier (Dolan, 2014; Sherman et al., 2020)[2]. The third factor is work as a source of income and also a source of satisfaction, pleasure, and meaning in life. The fourth is community and friends. Fifth is health where a distinction is made between objective and subjective health. Objective health status has been found to have relatively little impact on satisfaction from life, while subjective health has a large effect, both on happiness and on other variables, such as life expectancy and future health situation (Clark et al., 2018; Dolan et al., 2008). The final two factors are philosophy of life and personal values, and the perception of personal freedom in the public domain. The objective advantages of happiness for the individual and for society are reported on extensively in the literature (for example, Clark et al., 2018; Naudé et al., 2014; Stephan, 2018) with regard to health, income, social behavior, and performance at work (De Neve et al., 2013; Diener & Tay, 2017; Lyubomirsky et al., 2005; Oswald et al., 2015). As mentioned, the current study focuses on the connection between employment in those ages 60 to 80 and feelings of subjective well-being.

The increase in life expectancy and in turn the gradual rise in the official retirement age in the OECD countries (Axelrad & Mahoney, 2017) — the age of eligibility for employment pension and old-age pension — have led to an increase in the labor force participation rates of older adults and longer working lives. Previous studies that looked at the non-monetary aspects of work found that work itself has consumption value that makes a significant contribution to feelings of satisfaction and meaning during one's life (Cassar

2 For a discussion of the findings in the literature on the relationship between income and happiness, see Katz (2017) and Zussman and Romanov (2005).

& Meier, 2018; Darity & Goldsmith, 1996; Jahoda, 1981; Kaplan & Schulhofer-Wohl, 2018; Sherman & Shavit, 2012, 2017), in contrast to the "work as bad" thesis (Spencer, 2009). Accordingly, Bonsang and Klein (2012) found that, in Germany, forced retirement had a negative effect on satisfaction with life, apparently due to the drop in satisfaction from the products of labor (income and job satisfaction) and a smaller increase in satisfaction from leisure.

In a study carried out in Britain, Steptoe and Lassale (2018) identified a variety of factors that affect the satisfaction of older workers, including retirement and unemployment, but their findings were not unambiguous in that they did not find a difference in the satisfaction from life variable between individuals who had retired and those whose employment situation remained unchanged. Furthermore, their data did not include information on job characteristics. The discussion of work versus retirement must also relate to bridge employment, namely paid employment during the retirement period and even beyond, after the individual has begun to receive a pension (Ruhm, 1990). In the US, for example, only one-half of workers who retire completely are eligible for a pension. The rest continue to work, although they define themselves as "retirees" (Pleau & Shauman, 2013). Similarly, in Britain about one-half of the older workers plan to work after 65, the official retirement age (Calnan, 2017). A survey of retirement carried out by HSBC, which specializes in financial planning among older workers in 15 countries, found that the reasons for choosing partial retirement were primarily positive, and included: "I want to remain active/to keep my mind sharp" (44%) and "I love to work" (39%). Other reasons were "I cannot allow myself to retire completely" (23%) and "My household expenses are higher than I thought they would be" (13%) (HSBC, 2013). It should be mentioned that the possibility of extending one's working life is relevant in only certain employment circumstances (the self-employed and specific professions) and is dependent also on positive psychosocial conditions (a high level of control of task priority, control of work methods and work pace and balance between effort and compensation) and on good mental and physical health (Wahrendorf et al., 2017). Therefore, not every worker who is over 65 will choose to continue working. Bridge employment and the shift to full retirement have been discussed in many studies (for example, Cahill et al., 2005; Dingemans et al., 2015; Hébert & Luong, 2008; Kim & Feldman, 2000; Maxin & Deller, 2010). Nonetheless, the characteristics of bridge employment and its contribution to subjective satisfaction of those ages 60 to 80 have still not been fully investigated.

Another phenomenon that has been investigated in this context is "unretirement", i.e., people who return to work after full retirement. Platts and Glaser (2017) found that the likelihood of returning to work after retirement is higher among relatively young men in good health who have high levels of education and income. One of the possible reasons for this phenomenon is economic necessity. In a different study in the US, it was found that 39% of workers over 65 retired at some stage before reentering the labor market (Maestas et al., 2017).

Fonesca et al. (2014) used a simultaneous model of retirement, income and feeling of subjective well-being and found that income has no significant effect on depression or on satisfaction with life. This is in contrast to the correlation in the raw data which showed a statistically significant negative correlation between income and depression and a significant positive correlation between income and satisfaction with life. In addition, a relationship was found between bridge employment for economic reasons and a drop in satisfaction with life when compared to working after retirement for internal motives (Dingemans & Henkens, 2014).

The novelty of the current study is its emphasis on the individual's subjective well-being and the examination of employment's contribution to the subjective feeling of well-being in older adults (ages 60 to 80). We also estimate the correlation between employment and job characteristics on the one hand and the subjective feeling of well-being on the other.

C. Pensions in Israel

In this section, we survey the rules and conditions in Israel that regulate the National Insurance Institute (NII) pensions, the employment pension system, and the retirement age, as well as the laws and regulations that apply to older adults in the labor market.

1. The NII system of old-age pensions

The old-age benefit is one of the most important areas of social insurance provided by the NII. It is meant to ensure a fixed monthly income in old age. A resident who was born in Israel or who immigrated prior to the age of 60–62[3] and fulfils the NII conditions of eligibility can receive an old-age benefit.[4]

3 See An insured man and An Insured Woman on the NII site.

4 See Old Age on the NII site.

An individual who arrived in Israel after the age of 60–62 will receive a special old-age benefit under certain conditions. According to the NII rules, on arriving at the age of retirement, the individual is eligible for an old-age benefit and at the older age (after reaching the age of eligibility for an old-age benefit) eligibility is no longer contingent on income.

Table 1. The ages at which an individual is eligible for an old age pension from the NII and the age of absolute eligibility (2019)

	Women	Men	
Age of retirement	62*	67	No payment prior to retirement age.
Age of (absolute) eligibility	70	70	An individual who continues to work after retirement age will receive an old-age benefit upon cessation of work or at the age of absolute eligibility, at which point eligibility is not contingent on other income.

Note: In 2004, a gradual process began to raise the retirement age for women from 60 to 62.
Source: Hila Axelrad, Israel Luski and Arie Sherman, Taub Center | Data: Old Age and Aging, Kol Zchut website

An individual who decides not to receive the old-age benefit at retirement age and continues to work up to the age of eligibility receives an additional 5% per year. In contrast, individuals who retire before the official retirement age do not receive an old-age benefit and the amount of the old-age benefit is liable to diminish or not to change, according to the number of years worked. The old-age benefit is composed of a basic pension and additional payments according to the conditions of eligibility. As of 2020, the basic amount of the old-age benefit was NIS 1,558 for an individual up to the age of 80 and NIS 1,646 subsequently.

An income supplement is paid to recipients of the old-age benefit or survivors who have no income or a low income up to a level defined by law. The old-age benefit and the addition are paid at various rates according to age group: up to age 70, 70 to 79, and 80 and above.

2. The employment pension system

In the employment pension system, contributions and therefore the total saving is determined by income level and the contribution rate. The main goal of an employment pension is to provide the pensioner with a reasonable standard of living, similar to during his working life. The employment pension system

is comprised of several pension types: mandatory pensions; non-mandatory pensions, i.e., various types of saving that are meant to guarantee an income in old age, such as provident funds, bank savings, investment in rental real estate, etc.; budgetary pensions, in which the money is saved in one of the old pension funds and where there is no direct link between the deposits into the fund and the pension payments and in which a large portion of the return on the investment is subsidized by the government; and the new pension funds, in which there is a direct link between deposits and future pension payments and part of the investment in the fund is channeled to the capital market with no government subsidy.

Mandatory pension: In this type of pension, contributions are mandated by law. Part of the amount is paid by the worker and part by the employer. This applies to all employees but also to the self-employed (the inclusion of the self-employed within the mandatory pension framework has been in the process of legislation for several years, a process that is not yet complete).

In the case of mandatory pensions, deferring retirement and continuing to work increases future payments more than proportionately. For example, for an individual who works for 40 years and is expected to receive a pension for 20 years, lengthening the period of employment by 10% reduces the pension payment period by 20%, and increases the annual pension payment by more than 37%. In contrast, shortening the period of employment by 10% reduces the annual pension payment by about 25%. It can be assumed that most workers are unaware of this.

Non-mandatory pension: Beyond what the law mandates, an individual — whether employed or not — can save independently by various means: provident funds, managers insurance, bank deposits, stocks, bonds, etc. Each type of saving offers different conditions with respect to deposits, payments to the beneficiary, and the timing of disbursements.

Old funds: Members of the old pension funds have arrangements that vary between employers and according to the year they started working. In the case of budgetary pensions, for example, the employer continues to contribute to the fund even after the worker's retirement. The conditions and the amount are part of collective bargaining agreements and there is wide variation in the conditions for the receipt of the pension.

New funds: For those contributing in these funds, there is a direct link between the deposits and the pension payments and as a result there is a balance between the individual's deposits into the fund and future pension payments. A certain share of the money in the fund is invested in designated bonds and the rest is invested in the capital market under the management of the fund manager (and subject to regulatory restrictions).

In both the old and the new pension funds, deferring retirement and continuing to work increases future pension payments. For the new funds, the connection is direct while for the old funds the connection is dependent on the specific agreement with the labor unions.

Receipt of the pension: When the worker reaches retirement age and stops working, his monthly pension payment is calculated and is paid out for the rest of his life. Currently, the early retirement age is 60 for men and women and, in principle, individuals can begin receiving pension payments from that age, at a reduced amount. Under certain conditions, the accumulated savings can be withdrawn as a one-time pay-out. The amount of the pension payment is determined according to the amount of accumulated saving up to retirement age and divided by the coefficient of conversion. The result is the monthly pension payment.

The amount of the accumulated saving is dependent on a number of factors, such as the savings period (i.e., the number of years in which the worker contributed), the continuity of the saving, the size of the contribution during the individual's working life, the yield (the return on the money deposited in the fund), and the size of the fee paid by the saver to the financial institution managing the pension insurance.

The coefficient of conversion is determined according to life expectancy and the interest rate. Life expectancy is determined according to the population mortality tables and is calculated according to the saver's date of birth, gender, and marital status. The greater the life expectancy, the higher will be the coefficient of conversion. Coefficients of conversion are not uniform and vary between insurance companies and pension and provident funds.[5]

5 See the site Work Rights Portal (in Hebrew).

The age of retirement varies by place of work and between sectors. In many places, such as the defense sector (the professional army, the police, the fire department, and the prison service), the legal system (judges), the education system (kindergarten teachers), and religious services (rabbis), there is an early retirement age at which one can begin receiving pension payments and there is a mandatory retirement age.

3. The tax system

There are almost no exemptions for older adults in the tax system except that the old-age benefit is exempt from the NII deduction. Furthermore, under certain conditions there is a tax break on interest income. There is also a possibility of paying a lower income tax rate based on health status, but this requires a complicated application process at the NII. To the best of our knowledge, there are only a few eligible individuals who indeed receive this benefit.

4. The labor market for older workers

According to Bank of Israel data, the labor force participation rate of older adults is on an upward trend as a result of the gradual increase in the official retirement age (Bank of Israel, 2011; Kimhi & Shraberman, 2013). However, in many cases, older adults who are interested and able to continue working encounter employers who prefer not to employ them (Axelrad et al., 2013).

In Israel, according to the Law of Equality of Opportunity in Employment – 5748 (1988) discrimination on the basis of age is illegal. Nonetheless, it would appear to be widespread in Israel, as in many other countries. For example, in the OECD countries, the average hiring rate for individuals ages 50+ in 2006 was less than half the rate for those ages 25–49. The rates of returning to work from retirement among older workers is also low, reflecting, among other things, the lack of desire among employers to hire older workers (Keese et al., 2006).

Older unemployed adults often have great difficulty finding a new job, even if they are in good physical condition and have high cognitive abilities. Studies have shown that although employers view older workers as reliable and having good work habits, they also view them as resistant to change, reluctant to learn new technologies (Axelrad et al., 2013), lacking energy, possessing low productivity, and having high salary expectations (Axelrad et al., 2017; Henkens & Schippers, 2008). Other factors mentioned by employers are labor

costs and salary costs, which rise faster with age than productivity, a problem that is liable to threaten the place of work as a result of employee protection laws (laws that were meant to protect older workers close to retirement age) (Keese et al., 2006), a short career horizon (Posthuma & Campion, 2008) and the fact that young workers feel uncomfortable working with older colleagues (Turner & Reynolds, 2010). The problems encountered by older jobseekers in re-entering the labor market are apparently the result of the fact that their professional experience is not sufficiently appreciated and, in the eyes of many employers, is not sufficient to compensate for their lower cognitive and physical abilities.

Axelrad and James (2016) surveyed the various studies and examined the extent to which those attitudes indeed reflect stereotypes and ageism and found that the stereotype of a shorter career horizon is no longer correct. Thus, older workers increasingly wish or need to work for longer and the employment rates of these workers is rising accordingly. Furthermore, an older worker has less of a tendency to leave a job than a young one. Older workers are more reliable, which is an advantage for the employer, and in general when they leave their place of work it is planned and organized (Axelrad & James, 2016).

With respect to the claim they are not open to new technology, it was found that the number of older adults who use computers, tablets, and other digital technologies is on a continual upward trend (Hewitt, 2015). Moreover, the research shows that older workers are indeed interested in training to acquire advanced technological skills and tend to participate in such training when it is offered to them. It is often true that the employment of older workers involves higher costs; however, that cost is the price paid for greater experience rather than being due to age. Some of the difference in salaries may be offset by factors such as experience, fewer absences, greater reliability, and the ability to transfer knowledge to the younger generation.

Employer's claims of a drop in productivity among older workers is difficult to test. Some studies show that the strengths of older workers compensate for age-related weaknesses (Ng & Feldman, 2008). In general, older workers adopt safer behavior and there is no evidence of a drop in their productivity except when related to a specific health issue (Schultz & Edington, 2007). Finally, with respect to claims that young workers feel uncomfortable with older colleagues, there are findings which show that integrating older workers within the work force facilitates a mentoring process and even leads to a drop

in the number of absences and the turnover rate. Older workers who mentor younger colleagues gain recognition of their experience, and the transfer of knowledge between workers contributes to productivity.

The current situation, in which older adults wish to continue working and are able to do so while employers prefer not to hire them, lacks any logic. On the one hand, life expectancy and the retirement age have risen, older adults are in better health and they wish or need to continuing working, and on the other hand, employers prefer younger workers.

This phenomenon also has negative social implications since it pushes productive individuals with ability and experience to the margins of society and reduces their earning power and their ability to accumulate pension rights. Additionally, the phenomenon contributes to the cycle of poverty and distress and increases the pressure on the already overburdened welfare institutions, while reducing the economy's productivity and GDP.

It appears therefore that although the labor market ostensibly allows older adults to continue working, employers are reluctant to employ them and it is difficult for them to find work. The decision of the individual to retire, to retire early or to defer retirement are examined in this study by means of the decision's effect on the well-being of adults ages 60 to 80.

D. The theoretical model: the decision to work or retire

An individual's decision whether to continue working or to retire is dependent on a variety of variables, including salary level, non-labor income, leisure time activities, and the utility gains from work itself (whether positive or negative). Furthermore, the decision is affected by the individual's characteristics, such as gender, health status, and marital status. Individuals continue to work if their expected utility from doing so is higher than that from retirement. The number of work hours is determined so as to maximize future utility according to its present value.

The government can influence an individual's decision through two main channels. The first is by determining the age at which the individual is eligible for old-age benefits and the second is by setting the mandatory retirement age. In this situation, an individual who wants to continue working will have to find a place of work where there is no obligation to retire, although as a result the wage may be lower.

It should be emphasized that researchers are divided as to the direct influence of the age variable on personal happiness. Many psychologists (for example, Argyle, 2001; Diener et al., 1999) claim that subjective well-being is not influenced by age while prominent happiness economists (such as Blanchflower & Oswald, 2019) claim that the happiness function is U-shaped, such that during the years following the mid-life crisis (at around age 45) the utility of the individual rises continuously (see the discussion in Rauch, 2018). The tests we carry out show that age does not directly affect the happiness of an individual in the 60–80 age group. In an important empirical study, Branchflower and Oswald (2019) analyzed various databases in order to find the connection between level of happiness and age after controlling for the effect of a number of explanatory variables. In their study, the findings with respect to this connection were not clear-cut. Furthermore, the study did not control for two important variables: level of health and family income. Nikolova and Graham (2014) estimated an exponential function of age, but ignored level of health and due to the particularly high correlation between health and age, particularly after the age of 60, that omission did not make it possible to test the validity of the U-shape also for ages above 60.

The possible effect of age on the level of happiness in the range of ages relevant to this study is indirect, by way of the effect on health or income. In other words, for the same level of health and income, age does not have a clear effect on the level of happiness. On the one hand, health deteriorates as age increases and, as a result, there is a decline in happiness; on the other hand, we become wiser and more focused on the present as we age and, therefore, the level of happiness rises (see the detailed discussion in Castel, 2018). The connection between age and income is more complicated. It is likely that income will increase with age, particularly after 60. A possible explanation is that at those ages an individual starts to receive old-age benefits or employment pension payments, which increase both income and economic security. This is apart from the fact that certain expenditures associated with younger age (such as mortgage payments and children's educational costs) are reduced or non-existent.

The econometric model makes use of age as an instrumental variable. In view of the discussion with respect to the effect of age on happiness, we statistically tested the connection between age and happiness levels while controlling for other explanatory variables such as level of health and income, demographic variables, and employment variables. The results of the test show that the

hypothesis that there is no connection between age and happiness is not rejected at the 5% level of confidence; that is, this hints that the hypothesis is correct and should not be rejected.[6]

The econometric analysis suggests two ways in which to explain happiness. In the first, the following employment variables were added (in addition to the regular explanatory variables of income, gender, marital status, education, health, and immigration status): employed or not (a dummy variable), main characteristics of the job (whether it is physical, fosters abilities, and/or is pressured – with dummy variables to measure them) and a dummy variable for self-employment. In the second, the explanatory variable of employed/not employed is replaced by number of work hours (for the employed only, of course) while all the rest of the explanatory variables remain unchanged.

While conducting the research, a concern arose that the explanatory variable employed/not employed is not exogenous and indeed the Hausman test confirmed this (Hausman, 1978). Therefore, we used the 2SLS method of estimation, where in the first stage the dependent variable is the dummy variable for being employed (using a Probit model) and the instrumental variable is age. This is based on the discussion above, in which we assumed that it does not directly affect happiness among individuals aged 60–80. In the second stage, we used the forecast of this variable in order to estimate the happiness model. With respect to the explanatory variable of work hours in the second model, the Hausman test did not rule out the hypothesis that the variable is exogenous and therefore for working individuals we use the OLS estimation method.

E. The effect of employment on happiness levels

1. The samples

In this study, we use two databases: SHARE (Survey of Health, Aging and Retirement in Europe) and another database constructed specifically for the study. SHARE includes information on social status, health, and employment

6 The test of the effect of age on the level of happiness was carried out in two stages: in the first, the level of happiness was regressed onto a large number of explanatory variables (without age). This regression was used in the calculation of the residuals. In the second, a regression was estimated where the dependent variable is the calculated residuals and the explanatory variable is age. The test showed that the effect of age is not statistically significant.

among the populations of European countries ages 50 and older. SHARE data is based on face-to-face interviews; Israel is also included in the survey and the Israeli data has been collected consistently since 2004. So far, about 10,000 interviews have been conducted in Israel with more than 3,800 subjects in four rounds over a period of about ten years. More than 80% of the subjects were interviewed in two or more rounds.

In this study, we use the SHARE data for individuals in the 60–80 age group, including Haredim but excluding Arab Israelis. Since the survey does not differentiate between various groups in the population, the data are based on the entire population in Israel for the relevant ages, including Arab Israelis and Haredim, two populations whose work and happiness characteristics differ significantly from those of the rest of the population. We manage to identify the data for Arab Israelis, where the survey was in Arabic, in order to exclude them, but, in the case of Haredim, there was no way to do so and, therefore, they are included in the database we used.

The second database was, as mentioned, built specifically for this study, based on questionnaires designed to examine the effect of employment and work hours on the level of happiness. The questionnaires were distributed among more than 500 non-Haredi Jews ages 60–80. The main goal was to obtain an up-to-date picture of the situation in Israel as of 2019. This is in contrast to the SHARE database, which only goes to 2016. In recent years, there have been numerous changes that may have influenced older adult employment and their happiness levels. Some of them are due to changes in policy (such as the raising of the retirement age and changes in the structure of pensions) while others are due to local and global economic processes (such as less expensive travel abroad, the increased activity of companies and non-profit organizations in the area of leisure, and more).

The questionnaire provided additional information not included in the SHARE questionnaires, such as the reasons that led to the decision whether to retire or continue working, the desires of the individual with regard to the timing of retirement, the decline in work hours over the years, etc. This information can shed additional light on the findings based on the SHARE data.

In the questionnaire sample, respondents were asked to fill out a five-part questionnaire.[7] The first part asked about personal characteristics such as age, gender, income level, health and employment status. The questions in the second section were determined by whether the individuals is working or not.

7 The research questionnaire can be obtained from the authors.

Working individuals were asked about their number of work hours and the characteristics of their job and about the reason for their decision to continue working; individuals who were not working were asked about their age of retirement and the circumstances in which they opted for retirement. The third section asked about the individual's level of happiness based on a series of questions determined according to the accepted research methodology (which is used in, among others, the reporting of the Gallup organization and international happiness reports; for a description of studies that use this methodology, see, for example, Sherman & Shavit 2017; Sherman et al., 2020). The fourth section looked at the leisure habits of the respondents while the fifth examined opinions on the optimal retirement policy. Most of the questions were either closed (yes or no answers), multiple choice, or answered according to a Likert scale.

The questionnaires were completed by 512 Israeli citizens. The sampling of the research population was restricted by age, such that only individuals aged 60–80 were invited to participate. Haredim and Arab Israelis were not included in the sample in view of their unique characteristics.

The average age of participants was 66.7 (standard deviation of 4.7), 49.4% were men, 72.3% were married, 69.9% were Israeli-born, 73% were secular, 56.3% were employed, and 43.7% were not working. The questionnaire was distributed in June 2019 by means of an online survey company with a large sampling pool willing to answer surveys in this case for a nominal payment of NIS 5. The survey company invited a representative sample of individuals ages 60–80 from the pool to participate.

Both samples are liable to have biases. For example, the questionnaire sample included only individuals ages 60–80 with internet access. For its part, the SHARE survey was carried out face-to-face personal interviewers and may be subject to biases due to respondent embarrassment or sensitivity (for example, with respect to questions about problems encountered in physical activity or questions about income). In addition, the SHARE sample includes, as mentioned, Haredi subjects whose employment and happiness characteristics differ significantly from those of the rest of the population.

2. The variables[8]

Most of the questions appearing in the study questionnaire are identical to those in the SHARE database. The happiness variable, which is measured by level of satisfaction with life, relates to a cognitive component and an evaluation of overall satisfaction with life. The question makes use of a Cantril Ladder: "Please imagine a ladder with rungs numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom the worst possible life for you. At what rung of the ladder do you feel you are at this stage in your life?"

The questionnaire includes questions on other aspects of happiness. An emotional component is composed of positive emotions (joy and smiling) and negative emotions (worry and sadness) which the respondent experienced the day prior to completing the questionnaire, and a component corresponding to the classic view of the good life (eudaimonia), in which individuals valued the extent to which their life has meaning.

The work status variable makes use of a dummy variable that indicates whether or not the respondent is employed. The subsequent questions asked about other employment variables such as seniority in the work place, number of weekly work hours, satisfaction with the place of work, work characteristics (physically demanding, pressured, a job that allows me to develop my skills and grow, etc.), the reasons for continuing to work, and the intention to retire. For the non-employed, the subsequent questions involved variables such as age of retirement and the reasons and circumstances that led to retirement. All of the respondents were asked about the optimal age of retirement for men and women, which is a continuous variable.

Most of the statistical analyses relate only to Israel. However, in order to carry out a comparison the results for 18 European countries are also presented using dummy variables for the various countries (Austria, Belgium, Croatia, Czechoslovakia, Denmark, Estonia, France, Germany, Greece, Israel, Italy, Luxembourg, Poland, Portugal, Slovenia, Spain, Sweden, and Switzerland). Descriptive statistics for examining the relation between happiness levels and various sociodemographic variables — the SHARE data.

8 For the list of variables that appear in the statistical analysis later in the research, see Appendix Table 1.

3. Descriptive statistics for examining the relation between happiness levels and various sociodemographic variables — the SHARE data

The tables in this section present descriptive statistics for the relationship between happiness levels on the one hand and employment and sociodemographic variables on the other and are based on the SHARE sample data.[9]

Appendix Table 2 presents the descriptive statistics for Israel based on the SHARE sample. The data show that the employed report a significantly higher level of happiness than the non-employed. With respect to the effect of age, there is somewhat of a drop in happiness with age and a drastic drop in the employment rate. With respect to gender, there is almost no difference between men and women with respect to happiness levels; however, employment rates for women are significantly lower than for men.

Nonetheless, it should be remembered that these results are only averages and do not correct for other factors. Therefore they cannot be used to support a direct or causal relationship. In order to do so, we use econometric methods that make it possible to control for various factors and to indicate direct relationships.

Appendix Table 3 presents the averages for happiness in Israel for a cross-section of sociodemographic variables according to the SHARE sample. The data show that the highest level of happiness is found among individuals in a relationship, whether they are employed or non-employed. The lowest level of happiness found among those employed was among singles while among the non-employed, it was found among divorcees. The data on number of children show that, among the employed, happiness increases with number of children while among the non-employed the highest level of happiness was found among those with three children.

The health variable was calculated according to the Instrument Activities of Daily Living (IADL) index, which measures the individual's ability to carry out basic functions,[10] and a self-reported measure of health. The data again indicate that the level of happiness is reduced by poor health, both among the employed and the non-employed.

9 The descriptive statistics of the questionnaire sample are presented in the Appendix and in Appendix Tables 9, 10, and 11.

10 These are day-to-day activities with high levels of complexity such as use of a telephone, shopping, food preparation, housework, laundry, use of transportation, responsibility for taking medicine, and the ability to manage one's finances.

4. Econometric estimation of the effect of employment, job characteristics, and demographic variables on happiness levels

Appendix Table 5 presents the statistically significant estimation results of the model in which the dependent variable is level of satisfaction with life in Israel in the two databases.

As mentioned above, it became clear in the analysis that the employment variable is not exogenous and therefore we made use of the 2SLS estimation method. The estimation results of Stage I and State II are presented in Appendix Table 4 and 5.

Appendix Table 4 presents the results for Stage I of the 2SLS estimation (using OLS) where the dependent variable is the likelihood of being employed and the instrumental variables are the dummy variables for the age groups. These estimation results were used to carry out the Stage II estimation of the 2SLS model. This estimation allows us to draw conclusions also with respect to the effect of other variables on the likelihood of being employed. Most of the estimation results appearing in Appendix Table 4 are as expected. For example, in both of the samples, the likelihood of being employed declines with age, the employment rate of women is lower than that for men, and the health index variable influences the probability of being employed in an expected manner. For the SHARE sample, the academic variable has a positive and statistically significant effect on the likelihood of being employed while there is a negative and statistically significant correlation between volunteer activity and the likelihood of being employed.

In Stage II, the explanatory variables are sociodemographic and employment variables. The following are the main results from testing the effects of the sociodemographic variables on happiness level:

- Number of children: the individual level of happiness increases with the number of children in both samples.
- Level of family income: In the SHARE sample, family income is presented according to income quintiles. In both samples, it was found that the level of happiness increases with income when other variables are held constant.
- Health situation: As expected, the level of happiness increases as the individual's health status improves in both samples and using both methods for measuring health status.
- Gender: The effect of gender on happiness is not statistically significant in either sample.

- Higher education: The effect of having higher education is not statistically significant in either sample.
- Marital status: The effect of marital status is not statistically significant, except in the case of the SHARE sample in which divorcees report a lower level of happiness than others. In the questionnaire sample, the results were not statistically significant.
- Immigrants from Russia (or the former Soviet Union): Only in the SHARE sample was it found they express a lower level of happiness. In the questionnaire sample the results were not statistically significant.

The following are the main results for the effect of the employment variables on happiness levels:

- The effect of the employment variable on happiness levels among women is not statistically significant in either sample.
- The only variable that had a statistically significant effect on the level of happiness in both samples is being employed in a stimulating job, and in both, its effect on the level of happiness is positive.
- Being employed in a physically demanding job: The effect of having a physically demanding job on the level of happiness was not statistically significant in either sample.
- Being employed in a stressful job: In the SHARE sample, the effect of this variable on the level of happiness is negative and statistically significant at the 1% level while in the questionnaire sample the effect is significant only at the 10% level.
- Being employed in a job that is not physically demanding, stressful, or stimulating: The effect of this variable is not statistically significant at the 5% level (in the questionnaire sample, its effect is negative but significant only at the 10% level).
- Being self-employed: In the SHARE sample, the effect of this variable was found to be positive and statistically significant at the 5% level while in the questionnaire sample the effect is not statistically significant.
- Volunteer activity: The effect of this variable was found to be positively and statistically significant at the 1% level of confidence in both samples.

In order to test for the effect of employment versus non-employment on certain outcomes, we carried out a number of statistical tests of the hypotheses that the sum of the coefficients of employment and of employment of a particular type is equal to zero. In the questionnaire sample, it was found that individuals in a stressful job experience a lower level of happiness than the non-employed and that the difference is statistically significant. Among those employed in a stimulating job, the difference in level of happiness relative to the non-employed is not statistically significant. Among women and individuals employed in physically demanding jobs, there was no statistically significant effect at the 5% confidence level. In the SHARE sample, it was found that individuals employed in a stimulating job express a higher level of happiness than the non-employed and the difference is statistically significant. The level of happiness among individuals employed doing physically demanding or stressful work is not different from that of the non-employed.

A similar hypothesis was tested also for women. In the SHARE sample, employed women report a level of happiness that is not statistically different from that of non-employed women while in the questionnaire sample, there was a decline in the happiness of the employed that is statistically significant at the 10% confidence level.

Appendix Table 6 presents the estimation results of the model in which the explanatory employment variable is weekly work hours for the employed in the SHARE sample. As mentioned, since the work hours variable is not endogenous, we used OLS estimation (the right-hand column). For the sake of comparison, the left-hand column in the table presents the coefficients for the database of 18 OECD countries. The results for the employment variables show that the coefficient of number of work hours in stressful work is negative and statistically significant. In other words, working many hours in a stressful job reduces individual satisfaction levels. The coefficient of work hours in the case of stimulating work is positive and statistically significant. In other words, a large number of work hours in a stimulating job raises the individual's level of satisfaction. In the case of physically demanding work, the coefficient of number of work hours has weak statistical significance (less than 5%) and is negative. Overall, the number of work hours is not statistically significant and neither is the difference between men and women in this context.

In summary, Appendix Table 5 and 6 indicate that the effect of employment and work hours on the level of individual happiness is dependent to a large extent on the type of work. In a stressful job, the effect is negative and in a stimulating job it is positive.

In this paper, subjective well-being (SWB) is represented by the term "satisfaction with life." Since in the questionnaire sample there were other measurable components of happiness, we decided also to examine these components using the same method of estimation, i.e., 2SLS. Appendix Table 8 presents three models for the three components of SWB, respectively. In the first (Column A), the dependent variable is the cognitive component (satisfaction with life). In the second (Column B and C), it is the emotional component as measured by means of positive emotions11; while in the third (Column D and E), it is the perceived meaning of life. In the second and third models, two estimations are presented: one that includes variables whose effect is not statistically significant (Column B and D) and the other that does not (Column C and E). The results are similar across the three models. Overall, when all of the variables are at the same level, the level of a non-employed individual's happiness is higher than that of an employed one. Nonetheless, since happiness levels for those in stimulating work is generally higher, their level of happiness is not statistically different from that of the non-employed.

5. Discussion and conclusions based on the questionnaire and SHARE samples

As mentioned, the main difference between the datasets is the sample period: the SHARE data were gathered in Israel over a period of 12 years (2004–2016), during which time there were a large number of changes in the realm of employment – both worldwide and particularly in Israel. Some of these changes are related to globalization while others are due to the rise in the standard of living and quality of life, which was made possible by, among other things, the large decline in the cost of international travel and the continual improvement in the level of healthcare and in turn the level of health. In contrast, the questionnaires constructed for this study were distributed once in June 2019 and present an up-to-date picture of the situation in Israel.

Other differences include the method of data gathering and its scope: the SHARE questionnaires were distributed and filled out by personal interviewers while the questionnaires for this study were distributed and filled out online. Furthermore, the questionnaire sample is smaller than the SHARE sample.

11 The results for negative emotions do not differ from those obtained in the other models and therefore are not presented.

In addition, it is important to mention that the questionnaire built for this study includes only non-Haredi Jews (i.e., Haredim and Arab Israelis were intentionally excluded) whose employment and happiness characteristics differ from those of the rest of the population, while the SHARE sample includes the entire population. For the sake of comparison between the two databases, we were able to isolate Arab Israeli respondents in the SHARE data but not Haredi respondents.

The comparison of results from the research questionnaires with those of the SHARE data (Appendix Table 5) indicates that the coefficient of the employment variable is not statistically significant in the estimation based on the SHARE data but is negative and weakly statistically significant (10%) in the estimation based on the questionnaire sample. It can be assumed that this difference is due to the different sample periods: the questionnaires relate to 2019 while the SHARE sample is based on data from the period 2004–2016, during which time there was a significant increase in leisure activity among retirees and a significant decline in the costs of international travel. Naturally, these developments influenced the decisions of the older population in recent years much more than during the early 2000s.

The coefficient of employment in a stimulating job was found to be positive and statistically significant for both databases. In contrast, a difference was found in the statistical significance of being employed in a stressful job: in the SHARE sample, the coefficient is negative and statistically significant, while in the questionnaire sample it is only weakly statistically significant (10%). Here again, it may be that the explanation lies in the different sample periods, since over the years, fewer and fewer older adults have been forced to remain in stressful jobs thanks to the rise in the standard of living.

With respect to the other variables, the coefficient of the income variable is positive and statistically significant in both cases. The coefficient of aliyah (from the former Soviet Union) is negative and statistically significant for the SHARE data but is not statistically significant for the questionnaires data. This difference can perhaps also be attributed to the different sample periods: in the early 2000s, immigrants from the FSU were still relatively new in the country while in 2019 the differences between them and the Israeli-born population had blurred to a large extent.

6. An international comparison – the SHARE data

The results presented in Appendix Table 4 and 6 make it possible to compare the results for Israel with those obtained for 18 OECD countries.

Appendix Table 5 shows that the non-employed in Europe enjoy a higher level of happiness than the employed in jobs that do not have any special characteristics while in Israel there is no statistically significant difference between the employed and the non-employed. The difference may be due to technical factors, such as the size of the sample or the characteristics of general employment. Nonetheless, it is possible that Europeans are happier after retiring due to the rich variety of leisure activities available in Europe and their attractiveness. Again, the data for Israel were gathered between 2004 and 2016, a period in which international travel was more expensive and there were fewer organizations involved in leisure activity for older adults and therefore the possibilities for leisure activities in Israel were more limited.

With respect to employment in jobs with special characteristics, the results for Israel are similar to those for European countries: employment in a stressful job is detrimental to happiness while employment in a stimulating job raises happiness levels. The level of happiness of a self-employed individual is higher than that of an employee both in Europe and Israel.

An examination of the other explanatory variables shows that the effect of number of children, income level, and level of health on happiness levels is similar in Israel and the 18 OECD countries. With respect to marital status, divorcees experience a lower level of happiness than married individuals both in Israel and the OECD. Among singles and widows/widowers, the effect on happiness in the OECD is negative and statistically significant while in Israel it is not statistically significant (this may be due to the different sample sizes).

With respect to the effect of work hours on happiness (Appendix Table 6), the main difference was again in the effect of regular work on happiness. In Europe, work hours have a positive and statistically significant effect on happiness while in Israel the effect is not statistically significant. In the case of work with special characteristics, the effects are similar in Europe and Israel: increasing the number of work hours in stressful work reduces happiness while in stimulating work, the level of happiness increases.

F. Retirement and pension data: Statistical analyses

The data in this section are taken from the research questionnaires. We first present the relevant descriptive statistics that were gathered in the questionnaire sample and following that we present an econometric analysis of those data.

1. Descriptive statistics of the retirement and pension data – the questionnaire sample

Table 2 presents the data on pensions for the questionnaire sample respondents. It can be seen that the average age reported for starting to receive an employment pension is lower than that reported for starting to receive old-age benefits. In addition, the starting age for receiving an employment pension is similar between men and women.

Table 2. Recipients of the old age pension and employment pensions according to gender

	Men	Women	All
Percentage of old-age benefit recipients	45.5%	72.6%	59.2%
Average age for starting to receive old-age benefit	66.8	62.8	64.3
Percentage of employment pension recipients	45.1%	52.1%	48.6%
Average age for starting to receive an employment pension	60.8	59.9	60.3

Source: Hila Axelrad, Israel Luski and Arie Sherman, Taub Center | Data: Questionnaires sample

Table 3 presents the retirement data for individuals who have already retired. It can be seen that the average age of retirement among men is 61.4 and among women is 58.9. However, when we asked employed individuals at what age they intend to retire, their answers were much higher: 70.3 among men and 67.1 among women. It is important to mention that, among workers with a post-secondary education, the age of intended retirement is consistent with the effective age of retirement (the actual age of retirement), which has risen since the 1990s: 68.5 for men and 65 for women (Bank of Israel, 2019). The gap between the theoretical preference and the actual average will be discussed below.

In the next stage, respondents were asked what in their opinion the official age of retirement in the country should be (the age at which an individual is eligible for old-age benefits). Table 3 shows that the preferences are in the range of 68–70 for men and 66–67 for women. In other words, according to this sample, there is no objection to raising the age of retirement.

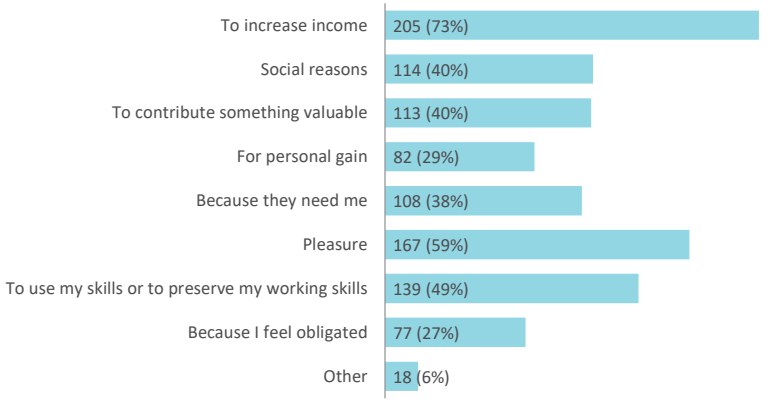
Table 3. Data on retirement and planned retirement according to gender

	Men	Women
Average age of retirement (among retirees)	61.4	58.9
Age at which an employed individual intends to retire	70.3	67.1
Optimal age of retirement according to men	69.4	67.1
Optimal age of retirement according to women	69.3	66.6
Optimal age of retirement according to employed individuals	70.1	67.6
Optimal age of retirement according to non-employed individuals	68.2	65.3

Source: Hila Axelrad, Israel Luski and Arie Sherman, Taub Center | Data: Questionnaire sample

Figure 1 presents the reasons for continuing to work after the age of 60. It can be seen that increasing one's income is the dominant reason for continuing to work (73%). At the same time, 27% of those who continue to work do so for non-economic reasons. Other important factors that motivate people to continue working include personal and social reasons: enjoyment from work (59%), using and maintaining work skills (49%), and social reasons (relations with other workers or with customers) (40%).

Figure 1. Reasons for continuing to work among employed individuals in the 60–80 age group



Note: Respondents had the option of giving more than one reason and therefore the total is more than 100%.
Source: Hila Axelrad, Israel Luski and Arie Sherman, Taub Center | Data: Questionnaire sample

Table 4 presents the circumstances of retirement. The most noticeable result is that more than half of the retirees in the sample retired of their own volition and therefore it is not surprising that they also have the highest average level of satisfaction. The share of individuals who were forced to retire for health reasons is also relatively high at 16%. Only 20% of the respondents reported that they were forced to retire.

Table 4. Circumstances for retirement and level of satisfaction with life (average)

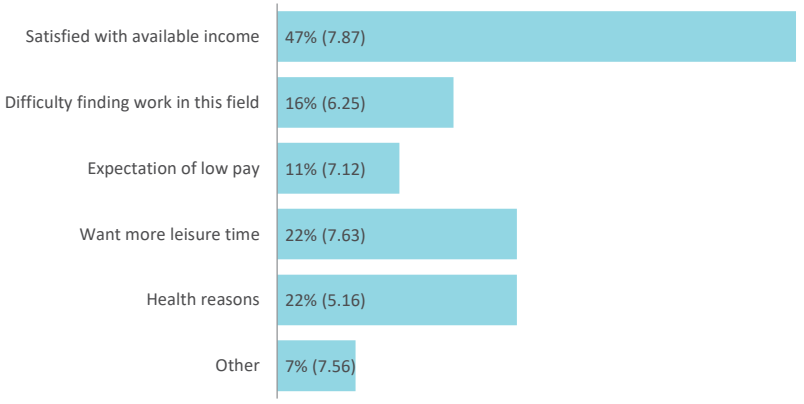
	Number of individuals	Percentage of individuals	Level of satisfaction
Retired of own free will	120	53%	7.71
Forced retirement	46	20%	7.15
Unemployed	17	8%	5.71
Unemployed (not looking for a job)	5	2%	7.80
Health reasons	37	16%	5.89

Source: Hila Axelrad, Israel Luski and Arie Sherman, Taub Center | Data: The questionnaire survey

The decision to retire stems from a variety of reasons. As can be seen in Figure 2, almost half of the retirees in the sample reported that they retired because their income was sufficient to do so. Meanwhile, 22% of the retirees cited health as the reason for retiring, 11% cited the expectation of a low wage, and 16% reported difficulty in finding a job in their profession. The last of these reasons has implications for public policy, such that a policy to help older jobseekers find appropriate employment will increase their employment significantly.

Following the findings in Table 4, which showed that people who had chosen to retire also have a very high average level of satisfaction (7.71), it can be seen that the distribution of reasons for retirement (Figure 2) indicates that those who manage on their income have the highest level of satisfaction (7.87).

Figure 2. The distribution of non-employed individuals according to reason for retirement and level of happiness in each group



Note: Respondents had the option of giving more than one reason and therefore the total is more than 100%.
Source: Hila Axelrad, Israel Luski and Arie Sherman, Taub Center | Data: Questionnaire sample

2. Econometric analysis of the gathered data – the questionnaire sample

In order to estimate the effect of the various factors on retirement age, an econometric model was estimated in which the dependent variable is the actual age of retirement (among the retirees) and the explanatory variables are a series of personal factors that are likely to be relevant in the retirement decision. The estimation results are presented in Appendix Table 7.

The results show that health status have a statistically significant effect: poor health status reduces the age of retirement by 6.5 years on average. Gender also has a statistically significant effect: the age of retirement among women is lower by 3.3 years on average than among men. Difficulty in finding a job reduces the age of retirement by 2.4 years on average and the ability to manage on one's current income reduces the retirement age by 2 years on average. The effect of the rest of the factors (marital situation, low salary, a desire for more leisure time) on the age of retirement was not statistically significant.

The findings of the analysis therefore clearly show that poor health status and difficulty in finding appropriate work are factors that lower the retirement age to a significant extent. Appropriate policy that would influence these factors, with emphasis on improving the health status of older adults and expanding the supply of jobs offered to them, is likely to increase rates of employment among this group to a significant degree.

G. Conclusion and recommendations

The goal of this study has been to examine the effect of employment and job characteristics on individual happiness levels with an emphasis on retirement age. The research focused on individuals in the 60–80 age group and on non-Haredi Jews. Two datasets were used: the SHARE survey which was carried out in Europe and Israel among the 50+ age group starting from the early 2000s and data gathered from online questionnaires among a representative sample of the non-Haredi Jewish population in Israel in June 2019. The SHARE data include the Haredi sector but not Arab Israeli respondents.

1. Employment and happiness

The main finding in this research is that the difference in happiness levels between employed and non-employed individuals ages 60–80, while holding other variables constant (income, health status, education, marital status, and number of children), is not statistically significant. An examination of job characteristics on happiness levels among the employed shows that individuals in stimulating jobs have a higher level of happiness than those in jobs with fewer opportunities for professional and personal growth and development. The analysis of the SHARE data show that in comparison to happiness levels among the non-employed, individuals in stimulating jobs experience a higher level of happiness while those in physically demanding jobs experience lower levels of happiness.[12]

The model also included various individual variables, and the results for most of them were as expected. Thus, income positively affects happiness levels, number of children also has a positive effect, and health status, of course, has a large effect happiness.

12 In the case of the employed, we tested the sum of the coefficients using a Wald test in order to ascertain the effect of various work characteristics on the level of satisfaction with life.

The variables whose effects were not found to be statistically significant include the following. Gender — men and women report the same happiness level with the other variables held constant. Family status (apart from the level of happiness of divorcees which was found to be lower than that of others). Immigration status of those in the questionnaire sample – immigrants who arrived after 1990. Most of these individuals are well integrated into Israeli society and the labor market and after about 20 or 30 years there is no statistically significant difference between them and native-born Israelis.
It is important to note that the variable for volunteer activity has a positive and statistically significant effect on the level of happiness in both databases, both for Israel only and for the 18 OECD countries.

2. Retirement age

As part of the questionnaire research, respondents — men and women, employed and non-employed — were asked to give their opinion on the optimal retirement age and the actual age of retirement (for those who had already retired) and hypotheses were presented for the difference between the two. The results indicate that the preferred age of retirement is 68–70 for men and about 67 for women. In other words, it can be said, on average, that the public accepts government policy regarding the retirement age for men and women.

In contrast, there is a considerable gap between the optimal age of retirement and the actual retirement age. It appears that among the non-employed, the average age of retirement of both men and women is 60. By means of regression analysis, we examined possible reasons for this gap and found that most of the gap — more than six years — can be explained by health reasons, although employment reasons also have a significant effect. The retirement age declines by about 2.4 years on average among individuals who do not find suitable employment or work with suitable financial compensation. Managing on one's existing income reduces the age of retirement by two years on average as well.

Although most of the individuals who reported continuing to work after 60 cited financial reasons, namely to increase their income, about one-quarter of those who continued to work cite other reasons, such as maintaining their personal abilities, social ties, and others.

3. Policy implications

As expected, this research shows the importance of health status in both its direct effect on happiness levels and through its effect on the age of retirement. The improvement in the level of happiness and the level of employment are due to the general increase in the level of healthcare and in the awareness of mental and physical health. Nevertheless, there is still room for greater government efforts to improve healthcare including preventive healthcare and to encourage the public to maintain their health and to engage in regular physical activity.

Early retirement is often the result of the difficulty encountered by older adults in finding a suitable job as well as the tendency of older adults to seek employment that uses their skills and offers appropriate financial compensation. Enforcing anti-ageism laws and developing vocational retraining programs for older adults may prove to keep these individuals in the labor market longer.

The main focus of the discussion here is on the direct effect of the various variables on happiness levels. The two most important insights that emerged from the analysis are that income has a positive effect on the level of happiness and that the level of happiness is quite similar between men and women. There is nonetheless a reservation attached to the second insight since it is based on the assumption that all other factors are fixed; however, it is known that the average wage is lower for women than for men and therefore the claim about happiness and gender must be treated with caution.

Furthermore, the analysis indicates employed individuals express lower levels of happiness than the non-employed when other factors are held constant. In theory, there is a contradiction between this finding and the one that many individuals choose to continue working at older ages. The explanation lies in the indirect effect of income: an individual who works increases his income and a larger income positively affects happiness levels.

4. Future research

This study has dealt at length with employment and happiness levels of older adults. It examined only non-Haredi Jews, while ignoring two other large groups in Israeli society —Haredim and Arab Israelis — due to their unique characteristics. In order to gain a comprehensive picture of the situation in Israeli society, additional research is needed for these groups.

Two additional areas of importance in the context of happiness which were only touched on in this study are volunteerism and the leisure time activities. The results obtained indicate that volunteer activity fulfills an important role in raising an individual's level of happiness and from a broader perspective it promotes civil and ethical behavior and contributes to social cohesiveness. These results justify future research in this direction. Furthermore, it is recommended that research efforts be devoted particularly to the area of leisure activities in order to further understand its effect on happiness and the possible implications for employment.

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Appendix

Appendix Table 1. List of variables

Variable	SHARE data	Questionnaire sample
Satisfaction with life	Likert scale 1–10	Likert scale 1–10
Age	Dummy variable: Age 62–64 = 1; Other = 0 Age 65–69 = 1; Other = 0 Age 70–80 = 1; Other = 0	Dummy variable: Age 62–64 = 1; Other = 0 Age 65–69 = 1; Other = 0 Age 70–80 = 1; Other = 0
Gender	Dummy variable: Male = 0; Female = 1	Dummy variable: Male = 0; Female = 1
Education	Years of schooling	Academic = 1; Other = 0
Family status	Dummy variable according to family status	Dummy variable: In relationship = 1; Other = 0
Number of children	Continuous 0–17	Continuous 0–12
Health status IADL	Number of physical limitations	Number of physical limitations
Health status index		Self-report: Healthy or very healthy = 1 Other = 0
Employment status	Dummy variable: Employed = 1	Dummy variable: Employed = 1
Work hours	Continuous variable	Continuous variable
Physical labor	Dummy variable: Physical labor = 1	Dummy variable: Physical labor = 1
Stressful work	Dummy variable: Stressful work = 1	Dummy variable: Stressful work = 1
Work that fosters growth	Dummy variable: Work that fosters growth = 1	Dummy variable: Work that fosters growth = 1
Volunteer activitiy	1 if volunteers	1 if volunteers
Self-employed	1 if self-employed	1 if self-employed
Income	By income quintiles: 1–5	Categories 1–10*
Russian immigrant	Russian immigrant = 1	

Note: * Income level — a categorical variable between 1 (up to NIS 2,500) and 10 (more than NIS 24,000) that represents net overall income (after taxes) of the members of the household from all income sources: work, pension, benefits, rental income, and the like.
Source: Hila Axelrad, Israel Luski, Arie Sherman, Taub Center | Data: SHARE and the Questionnaire sample

1. Descriptive statistics to examine the relation between happiness level and various sociodemographic variables — SHARE variables

Appendix Table 2. Israel: Happiness level by employment status, ages 60–80 and by gender — SHARE variables

	Employed: No of observations	Share who are employed (%)	Employed: Average level of happiness	Non-employed: Average level of happiness	Employed: Weekly work hours (average)
Men and women					
60–64	304	61.5	8.1	7.7	39.5
65–69	191	41.0	8.2	7.8	35.7
70–74	57	20.2	8.5	7.3	28.4
75–80	34	9.4	8.4	7.3	31.0
Total	586	36.6	8.2	7.5	36.7
Men					
60–64	159	75.3	8.2	7.4	43.7
65–69	104	50.7	8.2	8.0	41.7
70–74	35	26.7	8.9	7.3	34.0
75–80	26	15.0	8.5	7.5	33.1
Total for men	324	45.0	8.3	7.6	41.1
Women					
60–64	145	51.2	8.1	7.8	34.9
65–69	87	33.3	8.2	7.6	28.6
70–74	22	14.6	8.0	7.3	19.5
75–80	8	4.3	8.0	7.2	24.4
Total for women	262	29.7	8.1	7.5	31.2

Source: Hila Axelrad, Israel Luski and Arie Sherman, Taub Center | Data: SHARE survey

Appendix Table 3. Israel: Happiness level by employment status and socio-demographic variables — SHARE variables

	Employeed		Not employed		Total sample	
	Number of observations	Average happiness level	Number of observations	Average happiness level	Number of observations	Average happiness level
Total	586	8.2	1,016	7.5	1,602	7.8
Family status	502					
In a relationship	502	8.3	832	7.6	1,334	7.9
Single	7	5.3	21	7.2	28	6.8
Divorced	55	7.8	66	6.6	121	7.1
Widowed	22	8.0	97	7.2	119	7.4
Number of children						
0	15	6.7	46	6.6	61	6.6
1	60	7.5	128	6.9	188	7.1
2	169	8.1	278	7.4	447	7.6
3	188	8.3	328	7.9	516	8.0
4	105	8.7	124	7.8	229	8.2
5	36	8.6	46	7.5	82	7.9
6+	13	9.2	66	7.6	79	7.8
IADL						
0	552	8.3	782	7.9	1,334	8.0
1–3 limitations	26	7.3	162	6.9	188	7.0
4–6 limitations	7	6.9	55	5.4	62	5.6
7–9 limitations	1	0	17	3.8	18	3.6
Education (years of schooling)						
Up to 8	44	7.8	153	7.1	197	7.3
9–12	192	8.3	351	7.4	543	7.7
13–14	95	8.4	153	7.5	248	7.8
15+	255	8.2	359	7.8	614	7.9
Academic degree	311	8.2	436	7.5	747	7.8
No degree	275	8.2	580	7.5	855	7.8
Income level						
1	60	7.7	181	6.5	241	6.8
2	83	7.6	230	7.1	313	7.2
3	124	8	211	7.9	335	8.0
4	143	8.4	212	8.1	355	8.2
5	176	8.6	182	8.0	358	8.3
Volunteers						
Yes	89	8.6	203	8.1	292	8.2
No	497	8.1	813	7.4	1,310	7.7

Appendix Table 3 (continued). Israel: Happiness level by employment status and socio-demographic variables — SHARE variables

	Employeed		Not employed		Total sample	
	Number of observations	Average happiness level	Number of observations	Average happiness level	Number of observations	Average happiness level
Type of work						
Physical	134	7.9			134	7.9
Stressful	175	7.9			175	7.9
Fostering growth	221	8.5			221	8.5

Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: SHARE survey

Appendix Table 4. Probability of being employed (Stage I) — PROBIT model

	Israel questionnaire data	Israel SHARE data
Dependent variable	Employed	Employed
Age 62–64	-0.217	-0.326***
	(0.196)	(0.121)
Age 65–69	-0.457**	-0.732***
	(0.184)	(0.113)
Age 70–80	-0.732***	-1.550***
	(0.190)	(0.116)
Female	-0.390***	-0.523***
	(0.118)	(0.073)
Married	-0.267*	
	(0.138)	
Single		-0.373
		(0.329)
Divorced		0.251*
		(0.133)
Widowed		-0.097
		(0.161)
Academic education	0.105	0.030***(1)
	(0.116)	(0.010)
Health index	0.219*	-0.174***(2)
	(0.120)	(0.046)
Number of children	0.081*	0.008
	(0.048)	(0.023)
Volunteers	0.566**	0.428**
	(0.127)	(0.094)
Constant	0.566**	0.428**
	(0.240)	(0.191)

Appendix Table 4 (continued). Probability of being employed (Stage I) — PROBIT model

	Israel questionnaire data	Israel SHARE data
Dependent variable	**Employed**	**Employed**
Number of observations	512	1,602
Pseudo R^2	0.05	0.19

Notes: Significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.
(1) Years of schooling; (2) IADL.
Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: SHARE survey and Questionnaire sample

Appendix Table 5. The influence of employment on happiness levels (Stage II) — OLS method

Every pair of columns presents estimate results including variables whose influence is not statistically significant. To compare to Israel, the fifth column presents results of the estimate for the 18 OECD countries from SHARE data.

	Israel Questionnaire sample		Israel SHARE data		18 OECD countries
	Satisfaction		Satisfaction		Satisfaction
Estimation method	OLS (Stage II) including non-significant variables	OLS (Stage II) excluding non-significant variables	OLS (Stage II) including non-significant variables	OLS (Stage II) excluding non-significant variables	OLD (Stage II)
Woman	-0.068		-0.081		0.000
	(0.789)		(0.204)		(0.016222)
Married	-0.057				
	(0.250)				
Single			-0.390	-0.391	-0.338***
			(0.512)	(0.511)	(0.039647)
Divorced			-0.353*	-0.357**	-0.407***
			(0.181)	(0.182)	(0.030017)
Widowed			-0.066	-0.077	-0.437***
			(0.182)	(0.179)	(0.026508)
Education	0.263	0.224	0.011	0.0112(1)	0.028***(2)
	(0.181)	(0.180)	(0.012)	(0.102)	(0.001904)
Health status	0.976***	0.888***			
	(0.208)	(0.199)			
Physical limitations IADL	-0.257***	-0.277***	-0.431***	-0.431***	-0.405***
	(0.083)	(0.081)	(0.054)	(0.053)	(0.01028)
No of children	0.199***	0.175***	0.177***	0.117***	0.060***
	(0.067)	(0.0654)	(0.030)	(0.030)	(0.005973)

Appendix Table 5 (continued). The influence of employment on happiness levels (Stage II) — OLS method

	Israel Questionnaire sample		Israel SHARE data		18 OECD countries
	Satisfaction		Satisfaction		Satisfaction
Russian immigrant	-0.047		-0.0589***	-0.661***	
	(0.465)		(0.154)	(0.166)	
Wave 6				0.290*	
				(0.162)	
Income	0.029***	0.240***			
	(0.047)	(0.052)			
Income quintile 2			0.202	0.202	0.211***
			(0.177)	(0.176)	(0.0248)
Income quintile 3			0.667***	0.666***	0.318***
			(0.158)	(0.158)	(0.024327)
Income quintile 4			0.806***	0.804***	0.439***
			(0.156)	(0.156)	(0.024173)
Income quintile 5			0.783***	0.781***	0.500***
			(0.161)	(0.161)	(0.024641)
Volunteers	0.525***	0.567***	0.327***	0.326***	0.442***
	(0.176)	(0.173)	(0.109)	(0.109)	(0.017844)
Employed (projection)	-1.670	-1.348*	0.060	0.914	-0.442***
	(01.112)	(0.763)	(0.311)	(0.220)	(0.051829)
Employed (projection) x Woman	-0.435		0.221	0.066	0.083***
	(1.384)		(0.418)	(0.189)	(0.028968)
Employed x Physical work	-0.295		-0.142	-0.145	-0.009**
	(0.345)		(0.140)	(0.140)	(0.036832)
Employed x Stressful work	-0.341	-0.390*	-0.403***	-0.406***	-0.109***
	(0.240)	(0.235)	(0.141)	(0.141)	(0.036237)
Employed x Work that fosters growth	0.855***	0.823***	0.601***	0.601***	0.471***
	(0.180)	(0.172)	(0.115)	(0.115)	(0.029823)
Employed x self-employed	-0.037		0.300**	0.305**	0.097***
	(0.234)		(0.133)	(0.133)	(0.032434)
Constant	5.270***	4.919***	6.855***	6.805***	
	(0.716)	(0.547)	(0.268)	(0.240)	
Observations	512	512	1,602	1,602	58,197
R^2	0.28	0.28	0.22	0.22	0.18

Notes: Significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.
(1) Academic education = 1; (2) Years of schooling.
Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: SHARE survey and Questionnaire sample

Appendix Table 6. The influence of work hours, work characteristics, and the remaining demographic variables on happiness levels for people employed one weekly hour or more — SHARE data[1]

	Israel	18 OECD countries
Dependent variable	Satisfaction	Satisfaction
Estimation method	OLS	2SLS (Stage II)
Woman	0.044	-0.048
	(0.348)	(0.1864)
Married	0.238)	
	(0.197)	
Single		-0.25**
		(0.0894)
Divorced		-0.20***
		(0.0412)
Widowed		-0.33***
		(0.0989)
Education (years)	0.067[3]	0.016**
	(0.131)	(0.0047)
Health status IADL	-0.420**	-0.470***
	(0.176)	(0.0572)
Number of children	0.210***	0.0460***
	(0.053)	(0.0219)
Russian immigrant	-0.649***	
	(0.22)	
Wave 6	0.396**	
	(0.139)	
Income quintile 2		0.11*
		(0.0565)
Income quintile 3		0.19***
		(0.0553)
Income quintile 4	0.288**[4]	0.33***
	(01.39)	(0.0707)
Income quintile 5		0.43***
		(0.0640)
Volunteers	0.114	0.10**
	(0.156)	(0.0406)
Weekly work hours[2]	-0.0029	-0.0096**
	(0.005)	(0.0037)
Hours x Woman	-0.004	0.0010
	(0.009)	(0.0056)
Hours x Physical work	-0.006*	-0.0005
	(0.003)	(0.0010)

Appendix Table 6 (continued). The influence of work hours, work characteristics, and the remaining demographic variables on happiness levels for people employed one weekly hour or more — SHARE data[1]

	Israel	18 OECD countries
Dependent variable	**Satisfaction**	**Satisfaction**
Hours x Stressful work	-0.012***	-0.0052***
	(0.003)	(0.0010)
Hours x Work that fosters growth	0.012***	0.0073***
	(0.003)	(0.0009)
Hours x Self-employed	0.000	0.00091
	(0.003)	(0.0009)
Number of observations	583	10,273
R^2	0.20	0.16

Notes: Significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.
(1) This regression includes only those who are employed and so there may be an econometric issue of a truncated sample. Since there is no data on work characteristics for those who are not employed, this issue could not be corrected.
(2) The hypothesis that the number of work hours is an exogenous variable could not be discounted by the Hausman test.
(3) Academic education = 1.
(4) For Israel, quintiles 4 and 5 were combined.
Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: SHARE survey

Appendix Table 7. Linear regression to test the influence of socio-demographic variables on retirement age

	Coefficient	Standard error	t
Satisfied with income (dummy)	-1.96**	1.001253	-1.96
Difficulty finding work in this field	-2.42**	1.178989	-2.05
Low pay	-0.50	1.404032	-0.35
Want more leisure time	0.95	0.959084	0.99
Health reasons	-6.49***	1.371438	-4.73
Woman	-3.30***	0.904695	-3.65
Married	-1.08	1.042774	-1.03
Income	-0.20	0.236622	-0.84
Constant	66.53***	1.828578	36.38
Number of observations	224		
R^2	0.16		

Notes: Significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.
Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: Questionnaire sample

Appendix Table 8. Factors that influence the components of happiness levels (Stage II) — Questionnaire sample

Model	A	B	C	D	E
Dependent variable	Life satisfaction	Good life		Meaning in life	
Employed (projection)	-1.348*	-0.286	-2.042***	-0.878	-2.438***
	(0.763)	(0.858)	(0.569)	(1.336)	(0.844)
Gender		0.286		0.208	
		(0.572)		(0.911)	
Gender x employed		-0.611		0.453	
		(0.996)		(1.578)	
Married/In a relationship		0.161	0.2557	0.199	0.055
		(0.201)	(0.386)	(0.279)	(0.768)
Divorced			0.176		0.092
			(0.392)		(0.772)
Widowed			0.011		0.067
			(0.457)		(0.844)
Volunteers	0.567***	0.494***	0.503***	0.797***	0.755***
	(0.173)	(0.145)	(0.144)	(0.220)	(0.217)
No of children	0.175***	0.062	0.073	0.207**	0.272***
	(0.0654)	(0.049)	(0.048)	(0.093)	(0.092)
Academic education	0.224	-0.046	-0.028	0.010	0.042
	(0.180)	(0.029)	(0.028)	(0.040)	(0.0399)
Health status	0.888***	0.955***	0.996***	0.848***	1.069***
	(0.199)	(0.162)	(0.158)	(0.244)	(0.225)
Physical limitations	-0.277***	-0.344***	-0.357***	-0.005	-0.013
	(0.081)	(0.061)	(0.063)	(0.109)	(0.105)
Income level	0.567***	0.221***	0.219***	0.125**	0.112*
	(0.173)	(0.044)	(0.046)	(0.056)	(0.057)
New immigrant		-0.367	-0.482	-0.328	-0.456
		(0.318)	(0.323)	(0.537)	(0.556)
Employed x Physical labor		-0.066	-0.107	-0.383	-0.425
		(0.252)	(0.256)	(0.371)	(0.373)
Employed x Stressful work	-0.390*	-0.279	-0.251	-0.237	-0.225
	(0.235)	(0.193)	(0.197)	(0.262)	(0.261)
Employed x Work that fosters growth	0.823***	0.588***	0.620***	1.371***	1.431***
	(0.172)	(0.135)	(0.137)	(0.195)	(0.196)
Constant	4.919***	0.5.813***	6.088***	4.385***	5.337***
	(0.547)	(0.555)	(0.519)	(0.842)	(0.859)
Observations	512	512	512	512	512
R^2	0.28	0.36	0.35	0.21	0.18

Notes: Significance levels: *p < 0.1; **p < 0.05; ***p < 0.01.
Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: Questionnaire sample

3. Descriptive statistics to examine the relation between happiness level and various socio-demographic variables — Questionnaire sample

The tables in this section present the descriptive statistics for average level of happiness found in the Questionnaire sample among different groups of respondents, without controls for other variables.

Age and employment: The results indicate a decline in employment rates with age. Nevertheless, separating those employed and those not employed does not give a clear effect on happiness levels. Among employed men age 65 and older, happiness levels are higher than men under 65 who are not employed; and among women who are employed and between 60 and 80 years old, happiness levels are lower than women in this age range who are not employed (Appendix Table 9).

Family status: Results show that, on average, those in a relationship have higher happiness levels than the average among divorcees, individuals who are single or widowed (Appendix Table 10).

Number of children: The results indicate that as the number of children increases, so do reported happiness levels. When discussing those in the 60–80 age range, it can be assumed that more children also means more grandchildren which also has an influence on happiness levels (Appendix Table 10).

Health status: There is a clear and strong connection between health status and levels of happiness. Poor health is linked to lower levels of happiness (Appendix Table 10).

Education: Results show that those with higher education, on average, have higher happiness levels than those without higher education (Appendix Table 10).

Income level and employment: Results point to a clear connection between income and level of happiness (Appendix Table 11). As expected, as income rises, average happiness levels also rise (although the rate of increase becomes more moderate). The main results are: income has a clear, positive influence on level of happiness. When the sample is divided by those who are employed and those who are not employed, at the highest income levels, those who are not employed express higher happiness levels than those who are employed,

while at the lowest income levels, the average happiness levels of those employed is higher than the average among those not employed (Appendix Table 11).

Volunteering and employment: On average, and without controlling for the effects of other variables, volunteering is linked to higher average levels of happiness both among those who are employed and those who are not (Appendix Table 11).

Appendix Table 9. Employment rate by age (60–80), gender and happiness level (cognitive component) — Questionnaire sample

	Employed (number of observations)	Employment rate (%)	Employed: Happiness level	Not employed: Happiness level
Men and women				
60–64	129	66.2	6.97	7.03
65–69	99	55.0	7.43	7.21
70–74	45	45.0	7.33	7.05
75–80	15	40.5	7.66	7.45
Total	288	56.2	7.22	7.14
Men				
60–64	60	71.4	7.06	7.17
65–69	58	59.2	7.69	6.87
70–74	26	50.0	7.84	7.23
75–80	9	40.9	7.78	7.69
Total men	153	59.8	7.47	7.14
Women				
60–64	69	622	6.88	6.95
65–69	41	50.0	7.07	7.53
70–74	19	39.6	6.63	6.89
75–80	6	40.0	7.50	7.11
Total women	135	52.7	6.93	7.15

Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: Questionnaire sample

Appendix Table 10. Happiness level by socio-demographic variables among those employed and those not employed — Questionnaire sample

	Employed		Not employed		Total sample	
	Number of observations	Average happiness level	Number of observations	Average happiness level	Number of observations	Average happiness level
Total	288	7.22	224	7.14	512	7.19
Family status						
In a relationship	205	7.49	167	7.31	372	7.41
Single	13	5.69	6	5.66	19	5.68
Divorced	56	6.66	35	6.57	91	6.62
Widowed	14	7.00	16	7.13	30	7.07
Number of children						
0	17	6.29	14	5.36	31	5.87
1	19	6.84	16	6.19	35	6.54
2	80	6.96	71	7.48	151	7.21
3	106	7.41	80	7.10	186	7.27
4	47	7.49	36	7.75	83	7.60
5	11	7.91	2	7.00	13	7.77
6+	8	7.75	5	6.80	13	7.38
Number of physical limitations						
0	237	7.41	169	7.58	406	7.48
1–3 limitations	43	6.51	46	6.11	89	6.30
4–6 limitations	7	5.71	7	3.71	14	4.71
7–9 limitations			2	6.00	2	6.00
10 limitations	1	3.00			1	3.00
Health status — self report						
Not at all good	5	6.20	8	5.37	13	5.69
Not so good	19	5.47	30	5.13	49	5.27
Reasonable	72	6.82	54	6.76	126	6.79
Good	125	7.38	85	7.72	210	7.52
Very good	67	7.92	47	8.13	114	8.01
Education						
Didn't finish high school	9	6.44	4	7.50	13	6.77
Finished high school	86	6.97	77	6.71	163	6.85
Academic education	159	7.39	114	7.66	273	7.50
Vocational education	34	7.29	29	6.21	63	6.79

Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: Questionnaire sample

Appendix Table 11. Happiness level by monthly income level among those employed and those not employed — Questionnaire sample

	Employed		Not employed		Total sample	
Income	Number of observations	Average happiness level	Number of observations	Average happiness level	Number of observations	Average happiness level
Up to ₪2,500	6	6.67	5	3.60	11	5.27
₪2,501–₪4,000	10	6.00	10	5.60	20	5.80
₪4,001–₪5,000	15	5.57	6	5.33	21	5.43
₪5,001–₪6,500	15	6.00	15	5.80	30	5.90
₪6,501–₪8,000	29	6.62	26	6.92	55	6.76
₪8,001–₪10,000	36	7.14	20	6.80	56	7.02
₪10,001–₪13,000	**51**	7.47	50	7.24	101	7.36
₪13,001–₪17,000	64	7.56	47	7.64	111	7.59
₪17,001–₪24,000	34	7.65	33	8.27	67	7.96
More than ₪24,000	28	7.36	12	8.28	40	8.08
Volunteers	83	7.80	74	7.81	157	7.81
Does not volunteer	205	6.99	150	6.81	355	6.91

Source: Hila Axelrad, Israel Luski, and Arie Sherman, Taub Center | Data: Questionnaire sample

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