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General subjective health status or age-related subjective health status: does it make a difference?

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Abstract

This study examines the agreement between two subjective health measures, a general question on subjective health and an age-related question on subjective health. The study identifies specific groups differing in their answer to the two questions. These measures are used frequently in health-related studies where a short measure is needed to estimate health. Therefore, it is important to understand how the population estimates its health. The study based on 793 telephone interviews shows that among respondents aged 65–75 with no reported diseases and those with less than 12 years of education with no reported diseases, the agreement between the two questions was poor. These two groups reported better health when they were asked to compare their health to people of their age and sex. Excellent agreement between the two questions was reported in those aged 55–64 with no diseases. The respondents having more years of education reported better health than the less educated but only when using the age-related subjective health measure. These findings demand caution when using different wordings in questions on subjective health in non-homogeneous populations.

Keywords: Subjective health; Education; Age; Elderly; Israel

Introduction

Self-rated health or subjective health (SH) has become one of the commonest variables used in health research in general and in gerontological research in particular. Measures of general health perceptions differ from other measures of health status in that they do not focus on a specific dimension of health status (i.e. physical, physiologic, mental or social). Instead, such measures ask respondents for an assessment or self-rating of their health in general. In principle, this difference in measurement makes it possible to assess both the objective and subjective information people have about their health and their evaluation of that information (Brook et al., 1979).

The research interest in SH has grown considerably since the discovery that it is a strong predictor of survival (or death) (Kaplan, Barell, & Lusky, 1988; Idler & Angel, 1990; Idler & Benyamini, 1997; Benyamini & Idler, 1999). A few studies also show, using a follow-up design, that poor self-assessed health is a good predictor to subsequent more disability (Kaplan, Strawbridge, Camacho, & Cohen, 1993; Idler & Kasl, 1995), morbidity (Ferraro, Farmer, & Wybraniec, 1997) and utilization of medical care (Angel & Gronfein, 1988; Idler, 1993; Idler & Benyamini, 1997). Most researchers considered it a valid and reliable indicator of one's overall health status, providing a valid, cost-effective means of health assessment in studies in which other forms of health information are lacking (LaRue, Bank, Jarvik, & Hetland, 1979; Ferraro et al., 1997).

A substantial body of work on the correlation of SH with other health status measurements, as well as with

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demographic, socio-economic and psychosocial variables has accumulated already. However, the correlations were not always consistent across studies. These inconsistencies may reflect true population differences, cultural attitudes towards health, reporting, or methodological differences between studies.

The operational definition of subjective health and the wording used in questionnaires in order to elicit the respondent's self-evaluation of his/her health status, differed across studies. Often, there is an emphasis on actual health ("these days", "at the present time") and sometimes on health "in general", "all in all". But in some studies a frame of reference is provided: "compared to others your age" or "in relation to yourself in the past". The U.S. National Health Interview Survey (NHIS) used until 1981 the question "Compared to other persons __'s age....", since 1982 the question has been changed to "Would you say __'s health in general is...." (Waidmann & Bound, 1992).

A large body of literature on SH determinants and risk factors has accumulated. However, our actual knowledge of the process underlying people's evaluation of their general health is very limited. Little is known about the subjective dimensions of health and researchers only speculate about the introspective processes that respondents must use to construct answers (Fienberg, Loftus & Tanur, 1985). There are some attempts to investigate how respondents answered to SH questions. Krause and Jay (1994) studied the frames of references used by respondents in order to rate their health status. Borawski, Kinney, and Kahana (1996), immediately following the usual SH survey question, asked elderly respondents to explain the reasons for their appraisal and responses were recorded verbatim. Benyamini, Leventhal, and Leventhal (1999) analyzed factors influencing how people make self-assessments of their health, such as subjectively experienced somatic information, and negative and positive affective experiences. Manderbacka, Lahelma, and Martikainen (1998) examined what self-rated health is understood to mean by survey respondents. Kempen, Miedema, van den Bos, and Ormel (1998) studied the associations between SH and several domain-specific measures of health. Jylha (1994) analyzed the arguments interviewees advanced when they were asked to evaluate their health and how the respondents construct their judgments.

Fienberg et al. (1985) raise many important issues on how respondents understand and answer health-related survey questions and they assume that SH probably involves a difficult process of comparison. Respondents may compare their current health with their health at other times, or they may compare themselves with other people of the same age. But perhaps some respondents, such as people who are chronically ill, perform other comparisons as well. Reference group theory, which assumes that subjective assessment of health depends on the individual's comparison group, is often used to explain elderly persons' positive health assessments. According to this perspective, elderly adults maintain positive health perceptions when confronting illness, adjusting their perceptions of health in relation to peers of their age (Levkoff, Cleary, & Wetle, 1987), or with the health of (stereotype) others of the same age or to their past health (Fienberg et al., 1985, Suls, Marco, & Tobin, 1991). Cockerham, Sharp, and Wilcox (1983) claim that judgements concerning one's health by aged people are often relative and seem to be based largely upon how they compare themselves with peers of their age, sex, and perhaps expectations others have of their health. Idler (1992) went further and inferred that if this is the accurate process, then the survey items which explicitly prompt a comparison ("compared to other people your own age") should produce answers which are not different from those which do not, because the process of comparison is implicit in all of them.

Idler (Idler, 1992; Idler & Benyamini, 1997) concluded that the concept of SH is relatively insensitive to linguistic variations in the questions used to elicit it. However, the influence of using different operational definitions of SH was not empirically analyzed. Tran (1992) raise the problem that even if we have evidence that SH is a valid and reliable measurement, because it was usually measured with a single item index, we lack an assessment of its measurement error. Since SH became so widely used and the findings accumulating show that it is a very useful and effective indicator, improving our methodology is very important.

The aim of this paper was to analyze the differences in the responses elicited by two measures of subjective health: general and age-related subjective health. The paper evaluates the influence of variables known from the existing literature to be correlated with SH and variables associated with SH in this study. Finally, we analyze the association of the independent variables with each one of the subjective health measurements.

Methods

The data presented in this paper were collected during a cross-sectional survey of adult Israeli residents (45–75 years old) by telephone interviews, conducted from October to December 1998.

Study population

A random sample of 2000 phone numbers was selected from the national phone company. From these, the fax numbers, commercial numbers, and numbers of households with no residents between the ages 45 and 75 were deleted, leaving 1531 eligible households. Five hundred and eighty three households were contacted at