

## **Computation of Standard Values for Physical and Mental Health Scale Scores Using the SOEP Version of SF-12v2**

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### **1. Computation of Scale Values for SF-12v2**

In the year 2002, the Socio-Economic Panel (SOEP) fundamentally revised its questions on the general physical condition of respondents (Schupp/Wagner, 2007). Since then, indicators of a generally accepted and internationally applied inventory of health measures – the so-called SF-12v2 indicators – have been surveyed in two-year intervals (Wagner et al., 2007).<sup>1</sup> The “SF-12v2™ Health Survey” is a 12-item subset of the SF-36v2™ that measures the same eight domains of health.<sup>2</sup> As a brief, reliable measure of overall health status, it is frequently embedded in longer, condition-specific surveys because of its brevity.

The goal of the present paper is to develop an algorithm to compute physical and mental scale scores using SOEP data (which includes a specific version of the SF-12v2 questionnaire) and to establish representative health scores for the population in Germany on this basis, which may serve as a benchmark values for similar analyses.<sup>3</sup> The SOEP is one of the largest representative surveys in Germany and is therefore provides a very appropriate basis for developing an algorithm to calculate scales analogous to SF-12v2. The SOEP results for the year 2004 can also be used as German reference values (norm sample) for all further surveys conducted using this questionnaire, just as the 1998 US population forms the norm sample for calibration of almost all original SF instruments. In comparison to the vast majority of comparable surveys both in Germany and internationally, SOEP has the distinct advantage of its large sample size of over 20,000 cases.

In the following, we describe this algorithm. We also provide it as an SPSS syntax file that can be imported and used directly, along with accompanying descriptive comments.

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<sup>1</sup> An objective non-invasive measurement of grip strength was added as well in 2006 (cf. Hank et al., 2006).

<sup>2</sup> See <http://www.qualitymetric.com/products/sf-12v2.aspx>.

<sup>3</sup> See Nübling et al. 2006 for a German version of the technical details of the SF-12v2.