

## Eight Item Short Form

Re: *Concerns emerging from a preliminary examination of the eight item Short Form (SF-8) self-reported health status survey in an Irish population*

In line with the quest for shorter health measures, this study briefly examined the eight-item Short Form (SF-8) self-report health status survey.<sup>1</sup> The SF-8 includes eight single items assessing self-reported health across the following domains: General Health; Physical Functioning; Role Physical; Bodily Pain; Vitality; Social Functioning; Mental Health; Role Emotional. Using responses to the SF-8 it is also possible to create two summary scales, the Physical Component Summary scale and the Mental Component Summary scale.

The SF-8 is the latest self-report health status survey to emerge from the prestigious Short Form 'family' of questionnaires, which includes the well known SF-36 and the SF-12. Although Irish population norms exist for the SF-36 and the SF-12, no evidence of prior use of the SF-8 in Ireland was identified in the literature.

Despite its prestigious lineage, at first glance the SF-8 health survey appears to be subject to a fundamental design error in relation to the wording of question responses. All answers to the SF-8 are worded in such a way that positive responses are on the left-hand side of the page, while negative responses are on the right-hand side of the page. This ordering is the opposite of that suggested by some authors<sup>2</sup> but more importantly leaves the questionnaire vulnerable to problems of response set bias.<sup>3</sup> This is a situation in which when all questions are worded in the same direction or polarity respondents choose only one end of the scale. Some authors have suggested that the issue of the response set has been overrated,<sup>4</sup> while others have called for more research on this topic.<sup>5</sup>

In order to explore this issue in more detail two versions of the SF-8 were handed out at the same time to an opportunistic sample of 485 undergraduate students (69% female, 31% male; ranging in age from 18–21 years, mean age =

19.1,  $sd = 0.84$ ). One version was the standard SF-8 plus basic demographic questions, while the second, although looking very similar, had the likert scale of responses to every second question on the SF-8 reversed.

Preliminary analysis revealed a number of significant differences among both males and females between scores on the revised and standard items. Among males a significant difference was noted on the Social Functioning scale ( $p = .045$ ,  $t = -2.019$ ,  $df = 153$ ) between the two versions, while among females a significant difference was noted on the Bodily Pain scale ( $p = 0.28$ ,  $t = 2.203$ ,  $df = 362$ ). These differences may indicate a 'response tick' among some respondents on the standard version of the SF-8.

The validity of single item scales to measure whole health constructs is at best questionable. Compounding the difficulties of such a venture, the authors of the SF-8 have chosen to ignore basic questionnaire design methodologies. Ultimately this may hinder widespread adoption of the SF-8. Further and more in-depth evaluation of the SF-8 is required.

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### References

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