LETTER TO THE EDITOR

IMPORTANCE AND ATTAINMENT OF LIFE VALUES AMONG DISABLED AND NON-DISABLED PEOPLE

Personal view

The paper by Montgomery et al. "Importance and attainment of life values among disabled and non-disabled people" (4) in the December issue of the Scandinavian Journal of Rehabilitation Medicine brings forth a number of interesting issues with regard to quantitative approaches to the study of the experience of quality of life (QOL) among people with a disability or chronic disorder, as well as non-disabled persons.

Theoretically, one can distinguish three aspects of "values", as defined by the authors, and value attainment:

- 1. the actual accomplishment (A) in a particular area
- the goal a person has set him/herself for that area or domain (G)
- 3. the *importance* attached to the domain (I).

For instance: person A, from a family that stresses education, considers educational accomplishment very important. However, given his intellectual capabilities and the funds available, he sets himself modest sights—which he may or may not reach. Person B, however, gives less importance to education per se. She sets the same modest goals as person A; however, given her superior intelligence and easy availability of scholarships, she may easily exceed her original goals. It would seem that in order to determine the effect of the gap between actual (A) and goal (G) on well-being, it should be weighted by the importance (I) accorded to the domain in question.

Montgomery et al., instead of considering the weighted gap $[I \times (G - A)]$, or even the unweighted gap [G-A], use the difference between importance rating and actual accomplishment, as reported by the subject [I-A]. It would seem that this is the wrong comparison to make. It *may* be that in real life people have trouble keeping straight the distinction between how high their standards are for a particular domain, and how important that domain is, but no evidence is offered

that it is *impossible* to maintain the distinction in practice.

Other investigators of subjective quality of life have considered not the gap [G-A], nor the weighted gap [I × (G-A)], but $[I \times S]$, the product of importance of a domain and satisfaction with the actual status in that particular domain (2). The latter is an implicit measure of the gap between goals (standards, expectations, desires) for a particular domain, and actual accomplishments. The shortfall between aspirations and accomplishments [G-A] is a common description of subjective quality of life (1). Some researchers have offered evidence that, as in most situations where weighting is used, the weighted and unweighted QOL total scores are highly correlated, suggesting that importance ratings are an unnecessary step if one is not interested in the individual items (values) that make up a QOL (sub)total score (5, 7). Others have pointed out that there are serious questions as to the methodological status of a sum of products—that is, summing [I × S] across domains to obtain a QOL subscore or total score (3).

Qualitative research may provide answers to the question whether the typical person differentiates between the importance of a domain and the goals he/she sets within that domain, and whether the importance attached to various domains varies sufficiently within and between persons that there is a need to take those judgments into account.

Even if one agrees with the approach taken by Montgomery et al., their methodology has a few shortcomings that may affect some of the conclusions drawn. The measure of concordance applied by the authors uses the correlation (at the level of the individual subject) between visual analog scale (VAS) ratings of importance and of attainment for each of the 82 life values. However, a correlation is a poor choice

for determining agreement (6). Person C and person D may have the same correlation coefficient. But if person C rates his attainments on average 5 mm below his importances, and person D rates her attainments on average 25 mm below her importances, there is a difference in the level of agreement between the ideal and actuality. Person D has a much bigger gap, and could be expected to have, for example, a lower level of subjective well-being as measured by the mood adjective check list, unless the systematic gap is nothing more than the effect of one of those respondent tendencies (like naysaying and social desirability) that plague survey researchers. For instance, in the present study it is clear that persons with a neurological disorder of long duration rate all domains as less importantwith the exception of religion. Does this suggest a homogenization of values over time, or is a simple method effect at work?

An alternative explanation for the "duration of disability" effects found in this study may be the effects of ageing per se, or secular cohort effects. For instance, actual attainment of "knowledge" is strongly related to duration. This may reflect the fact that older cohorts (who more likely have a disability of long standing) received less education, in Sweden as in the USA. The duration effect of disability may reflect both the impact of progressive neurological disease, and disease-unrelated ageing. Thus, effects of disease progression are intermixed with effects of ageing, and also with secular developments. A cross-sectional study cannot tease out all such effects; however, the authors could use their existing data to assess the separate effects of duration of disability and current age, as well as their interaction, on attainments and importances.

Quality of life is an important area of study for those interested in rehabilitation medicine. We should maximize what is gained from every study. However, longitudinal studies that can better address the various competing explanations for findings as reported in the present study are also needed.

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Response to the Letter by Dijkers

Sir,

Dijkers first is critical of the fact that we have not explicitly considered the role of people's goals with respect to their experienced quality of life (QOL). We do not deny that knowledge about people's goals, or more exactly goal (aspiration) levels for particular life values, is of interest in order to understand how they experience their life situations. However, in the present study we did not try to collect data on goals, which we justify as follows:

- 1. To ask the subjects to rate the goal level for each value would lengthen an already quite long questionnaire by 82 items, or it would mean that we would need to reduce the number of values in order to give space for the goal ratings. The question is whether it is worthwhile to make such a great change to the questionnaire.
- We suspect that people do not always have clear conceptions of their goals with respect to a specific value domain, and that people have more

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precise ideas about importance than of goal levels. When things function smoothly one does not usually think of goals. A person who can walk well does not normally consider it a goal to be able to walk, but surely the person will consider it very important to have this ability. Moreover, a goal need not correspond to a specific level on a value dimension (which Dijkers seems to imply in his line of reasoning) but rather must correspond with a vaguer idea of "just wanting to improve one's position" on a value dimension. In such circumstances, people will not clearly distinguish between goals and importance; therefore it will be more natural to rate the importance (= how much one wants to improve one's position) than the goal level. Obviously, if subjects lack precise ideas of their goals, a request to make goal ratings might result in data which are very problematic to interpret.

3. In the present study we were not primarily interested in giving an overall measure of the subjects' experienced QOL, but rather in examining how disabled people adjust to their losses by means of changing their value orientations. This adjustment may be interpreted as an attempt to maintain a satisfactory QOL, but it is not equivalent to QOL as such. Thus it was not necessary to collect data on all aspects which may be relevant for measuring QOL, such as the gap between goals and value attainment. However, we do think that importance and attainment of life values are important components of perceived QOL. This hypothesis is supported by the correlation found between importance-attainment concordance and mood (where mood may be assumed to reflect experienced QOL). More specifically, we think that experienced QOL is related to the distance between importance and attainment for particular values (see Palys & Little, J Pers Soc Psychol 44: 1221–1230, 1983). However, we think it is perfectly reasonable that an overall experienced QOL measure also should include importance weighing of such differences although, as found in research referred to by Dijkers, this may be an unnecessary step since weighted and non-weighted scores are highly correlated.

Dijkers' second critical point concerns the fact that we used correlations for determining agreement between subjects' importance and attainment ratings. It should be noted that we were not primarily interested in measuring the overall distances between importance and attainment, which would serve as a QOL measure, but in the extent to which subjects were successful in finding a balance between what they want (importance) and what they have (attainment). The correlation coefficient can be interpreted as a measure of how good or bad subjects were at distributing their value priorities in a way that balances the value attainment (see Table I). We do not know any better measure than the correlation coefficient to achieve that aim.

Finally, we agree with Dijkers that longitudinal studies are needed to address competing explanations of the findings in the present study. However, Dijkers' conjecture that ageing per se could explain the "duration of disability effect" can be true only to a limited extent, since, as reported in the article, age was significantly correlated only with the attainment of health and mobility, whereas the "duration of disability effects" mainly concerned the importance of various value domains.

To conclude, Dijkers has brought up several important issues that are relevant for studies on how people cope with chronic disabilities, but we think that given the purposes of our study and the constraints provided by our data (e.g. no longitudinal data) our article can withstand the critical comments he makes.

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