The Schedule for the Evaluation of Individual Quality of Life (SEIQoL): a Direct Weighting procedure for Quality of Life Domains (SEIQoL-DW)

Administration Manual

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SCHEDULE FOR THE EVALUATION OF QUALITY OF LIFE
(SEIQoL):
A Direct Weighting Procedure for Quality of Life Domains

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Street Lower, Dublin 2, Ireland.

1.0 Introduction

The Schedule for the Evaluation of Individual Quality of Life (SEIQoL) is an interview-based instrument for the assessment of quality of life (QoL) of the individual. The interview procedure associated with the full version of the SEIQoL (McGee et al, 1991; O’Boyle et al, 1992) requires considerable time to complete (10-20 minutes) and thus may be primarily suitable for research settings or clinical situations where the instrument is being used as part of the process of having the individual consider a range of options or outcomes in evaluating QoL. The SEIQoL has been used with a variety of patient groups, but its applicability may be limited in illnesses which impair cognitive functioning or motivational state. Successful completion of the SEIQoL requires, inter alia, insight into the factors which determine one’s quality of life, the ability to think abstractly and the ability to make judgments based on information presented in diagrammatic form. Therefore, its use with patients in whom these abilities are impaired may be problematic (Coen et al, 1993).

A direct weighting procedure for QoL domains that is more suitable for routine clinical use than Judgment Analysis (JA) and that may impose fewer demands on individuals with reduced cognitive function, has been developed for the SEIQoL. Psychometric information on the procedure has been obtained from a healthy adult population (Browne et al, in preparation).

The procedure for administering the method is as follows:

Administration of SEIQoL using the Direct Weighting (DW) Procedure

2.0 Administration

The SEIQoL and SEIQoL-DW is administered in the form of a semi-structured interview. The interviewer first elicits the five areas of life considered most important by the individual in determining his/her QoL. The level of satisfaction/functioning in each area is next recorded followed by the SEIQoL-DW task which allows the interviewer to determine the relative importance of each QoL area using the disk provided.

A SEIQoL interview form, SEIQoL-DW disk, pen and non-permanent marker pen are required for the interview.
2.1 Administration Procedure

Step 1: Introduction

Read the following to the respondent:

“For each of us, happiness and satisfaction in life depends on those parts or areas of life which are important to us. When these important areas are present or are going well, we are generally happy but when they are absent or going badly we feel worried or unhappy. In other words, these important areas of life determine the quality of our lives. What is considered important varies from person to person. That which is most important to you may not be so important to me or to your husband/wife/children/parents/friends (mention one or two of these groups as appropriate) … and vice versa”.

“I am interested in knowing what the most important areas of your life are at the moment. Most of us don’t usually spend a lot of time thinking about these things. Indeed, we often only notice that certain things are important when something happens to change them. Sometimes it is easier to identify what is important by thinking about the areas of life that would (or do) cause us most concern when they are missing or going badly”.

Step 2: Eliciting the Five Most Important Aspects of Life (Cues)

Ask the respondent:

“What are the five most important areas of your life at present – the things which make your life a relatively happy or sad one at the moment … the things that you feel determine the quality of your life?”.

If the respondent does not understand what is required the question may be rephrased in the following ways:

“What parts of your life are most important? …/ What things are most important? …/ ‘The most important things in my life are …’."

- Elicit areas NOT individuals, eg. marriage, not wife. Do not give examples.

- The meaning of each cue for the respondent must be documented at this stage on the Cue Definitions Record Form. Establish what the respondent means by each quality of life area named as being important. For example, if an individual were to name ‘golf’ as a cue, this may relate primarily to leisure activity, but equally it may represent social activity, or physical mobility. Similarly, if ‘religion’ were named as a cue it might relate to the respondent’s spiritual life, but might equally relate to being physically able to get to church, or to the social dimension of meeting one’s friends at church. This is particularly important for subsequent review of data, and of obvious relevance when respondents must be re-assessed at some future date in order to ensure that the same cues are being considered.

- Having defined what the respondent means by the cue, it is important that the cue, as labeled by the individual, be used by the interviewer and not the interviewer’s interpretation of what the respondent is saying.
• Should the respondent volunteer cues which resemble ‘quality of life’ in meaning (e.g., satisfaction, life quality), the interviewer should probe for more specific cues. Cues such as ‘happiness’, ‘attitude to life’, ‘morale’ are acceptable.

• If it is absolutely necessary to make some suggestions, then read the following list, excluding any cues already mentioned – family, relationships, health, finances, living conditions, work, social life, leisure activities, religion/spiritual life. This list is derived from our findings with a range of populations and represents the cues most commonly elicited, in descending order of frequency. It provides for consistency across the interviewers where such prompting is absolutely necessary.

**Step 3: Determining Levels**

Say to respondent:

“Now that you have named the five most important areas in your life, I am going to ask you to rate how each of these areas are for you at the moment. First I will show you an example of how the rating is done”.

Place the Sample Cue Levels Record Form between you and the respondent so that the respondent can clearly see how you carry out the rating.

“First look at this box (indicate). As you can see, there are spaces at the bottom in which I can write the five important areas of my life (indicate), and there is a scale along the left hand side (indicate). The scale ranges from ‘worst possible’ on the bottom to ‘best possible’ on the top, and passes through levels such as ‘very bad’ – ‘bad’ – ‘neither good nor bad’ – ‘good’ – and ‘very good’ between the two extremes.

The first important area of my life is X (use a cue not already nominated by the respondent and write it in the first space at the bottom of the rating box) and if this is going very well at the moment, I can show this by drawing a bar like this (draw a bar approx. 80mm high). I am using the scale (indicate) to decide how high my bar should be. The nearer I draw the bar to the bottom line, the poorer my rating of that area of my life and the nearer I draw it to the top line, the better my rating of that area of my life. A mark in the middle range would indicate that I am rating life as neither good nor bad, but somewhere in between”.

Now proceed with the ratings for the remaining cues:

Second cue – “if X₂ (use a cue not already nominated by the respondent and write it in the second space) is going well as is possible, I would rate it by drawing a bar like this …” (draw a bar 100mm high).

Third cue – “if X₃ (use a cue not already nominated by the respondent and write it in the third space) is going very badly, I would rate it like this …” (draw a bar approximately 15mm high).

Fourth cue – “if X₄ (use a cue not already nominated by the respondent and write it in the fourth space) is just all right, or ‘fifty/fifty’, I would rate it like this …” (draw a bar approximately 50mm high).
Fifth cue – $X_5$ (use a cue not already nominated by the respondent and write it in the fifth space) – (draw a random rating).

“This provides a picture of life as I might think of it at the moment”.

**Step 4: Elicit Rating of Present Life**

Place the Cue Levels Record Form between you and the respondent. Write the respondent’s five cues in the appropriate spaces under the box. Give the respondent a pen or pencil.

Say to the respondent:

**“Now I want you to rate the five most important areas of your life, as you see presented here (indicate). Firstly, draw a bar which represents how you would rate yourself on each of these areas at the moment. As in the example I’ve just shown you, the nearer you draw the bar to the bottom line, the poorer you are rating that area of your life and the nearer you draw it to the top line, the better your rating of that area of your life”**.

Have respondent draw bars.

**Step 5: Direct Weighting Procedure**

Say to respondent:

**“I would like you to show me how important the five areas of life you have nominated area in relation to each other, by using this disk (indicate SEIQoL-DW). People often value some areas in life as more important than others. This disk allows you to show me how important each area in your life is by giving the more important areas a larger area of the disk, and the less important areas a smaller area of the disk. In my life, for example, X (name cue not already chosen by respondent) is about this important (manipulate disk so that X represents 30% of space available). $X_2$ however is less important than X, so it has only this much of the pie (manipulate disk so that $X_2$ represents 20% of the space available). $X_3$ on the other hand is more important than X, so it has this much of the pie (manipulate DWP so that $X_3$ represents 40% of space available). Finally, $X_4$ and $X_5$ are the least important areas of life for me, and I value them about the same (manipulate disk so that $X_4$ and $X_5$ represent 5% each of space available). Now thinking about the five areas of life you have mentioned (write the name of each cue along the cut edge of one of the 5 coloured disks with a non-permanent marker [disks may also be marked with stick-on ‘post-it’ labels indicating the cues if preferred]). I would like you to show me how important these areas are in relation to each other by moving the disks around until their relative size represents your view of their importance”**.

### 2.2 Potential Problems in Administration

The following are the problems most commonly encountered in SEIQoL administration.
• **Nominating Important Life Areas:**

The respondent cannot think of 5 cues.

*Suggested Solution:* use prompt list provided.

• **Determining Cue Levels:**

The respondent conceives the task as drawing bars in terms of their importance rather than in terms of how these areas are for them at the moment.

*Suggested Solution:* Remind the respondent that the task is to “rate how each of these areas are for you at the moment”.

• **Determining Cue Weighting:**

The respondent conceives the task as dividing up the pie diagram in terms of current functioning in that area.

*Suggested Solution:* Remind the respondent that the task is to indicate how important each of the 5 areas are at present relative to each other.

### 3.0 Scoring the SEIQoL

#### 3.1 Recording Scores

Record on the Interview Record Form:

- The length of time the respondent took to complete the task
- The interviewer’s rating of the respondent’s understanding of the method
- Whether the interviewer felt that the respondent become fatigued/bored during the task
- The interviewer’s overall rating of the validity of the information obtained
- Scores of the weights assigned to SEIQoL-DW for each cue

#### 3.2 Deriving SEIQoL Outcome Data

(i) Cue labels and their definitions
(ii) Cue levels
(iii) Cue weights
(iv) The SEIQoL Index

(i) **Cue Labels and their Definitions**

During Step 2 (eliciting the five most important aspects of life), the meaning of each cue for the respondent is summarized on the Cue Definitions Record Form, together with the label that the respondent used for each cue. For example, different respondents may use “religion” as a cue label, but it can have various meanings: a spiritual activity; a social activity (meeting friends at services) or a physical activity reflecting mobility (being able to walk to services). The definition is important for subsequent understanding of what was meant by the cue label. It is also important in summarising cues from a number of respondents for grouped data presentation.
(ii) Cue Levels

The cue levels are elicited during Step 3 when the respondent draws five bars on the Cue Levels Record Form. Levels are scored by measuring the vertical height of each bar in millimetres. This yields five scores which are independent continuous measurements, ranging from 0 to 100. They can be analysed using parametric statistical methods.

(iii) Cue Weights

To calculate weights from SEIQoL-DW, align edge of green disk tab with the ‘0’ (zero) gradation and note the weight (0-100) given to each of the 5 life areas by reading the amount of disk space assigned against the gradation on the outer edge of the disk. Divide each weight by 100 since the weights when calculating the SEIQoL Index range from 0.00-1.00 in order that the overall Index (levels X weights) sum from 0-100.

(iv) The SEIQoL Index

The SEIQoL is intended primarily as an individual measure. Where group comparisons are required, a global index can be calculated which may be used in within-subject or between-subject study designs. As the index is a continuous measure ranging from 0 to 100 it can be analysed using parametric statistical methods. Having obtained levels and weights for each of the five cues, as described previously, the SEIQoL Index is calculated as follows:

• For each cue multiply the level by the weight, then sum these products across the five cues: \( \text{SEIQoL Index} = \sum (\text{levels} \times \text{weights}) \)

Care should always be taken in interpreting the index, as it is the sum of the products of individual cue levels by cue weights, each of which may vary independently. The index should be interpreted in the context of the pattern of levels and weights generated for each respondent.

3.3 Presenting Data

The data from each individual respondent can be presented in tabular form giving the elicited cues, the levels and the weights. For grouping data SEIQoL Index scores may be presented (cf. McGee et al., 1991, O’Boyle et al., 1992).

3.3 Using SEIQoL-DW in Prospective Study Designs

In prospective study designs, or in situations where SEIQoL-DW is employed over time to evaluate an intervention, recommended practice is that new cues are elicited at each assessment. Cue nominated at the initial assessment should then be provided to the individual and the SEIQoL-DW procedure gone through again, in order to facilitate direct comparison between initial and subsequent assessments.

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References


O’Boyle C A. The Schedule for the Evaluation of Individual Quality of Life (SEIQoL). *International Journal of Mental Health* 1994;23:3-23


Joyce C R B. How can we measure individual quality of life? *Schweizerische Medizinische Wochenschrift* 1994;124: 1921-6


Addendum

## CUE DEFINITIONS RECORD FORM

<table>
<thead>
<tr>
<th>DESCRIPTION OF CUE</th>
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(Tick any cues elicited by reading list to person)
SAMPLE CUE LEVELS RECORD FORM

BEST POSSIBLE

VERY GOOD

GOOD

NEITHER GOOD NOR BAD

BAD

VERY BAD

WORST POSSIBLE
CUE LEVELS RECORD FORM

BEST POSSIBLE

WORST POSSIBLE
INTERVIEW RECORD FORM

1. TIME TAKEN

2. UNDERSTANDING OF METHOD
   • Not Understood
   • Poor/Uncertain Understanding
   • Understood

3. FATIGUE/BOREDOM
   • None
   • Some
   • A Lot

4. OVERALL VALIDITY OF INFORMATION (in light of 2 & 3 above)
   Definitely Invalid
   Uncertain
   Valid

5. WEIGHTS ASSIGNED TO CUES
   Cue 1: Weight (%)
   Cue 2: Weight (%)
   Cue 3: Weight (%)
   Cue 4: Weight (%)
   Cue 5: Weight (%)