

The HIVTSQ

Background

The HIV Treatment Satisfaction Questionnaire (HIVTSQ) was designed specifically to measure satisfaction with medication for people infected with HIV (Woodcock and Bradley, 2001; 2006). The HIVTSQ was based on the format of the eight-item Diabetes Treatment Satisfaction Questionnaire (DTSQ) (Bradley and Lewis, 1990; Bradley 1994), used extensively with people with Type 1 and Type 2 diabetes (e.g. Bradley and Speight, 2002; DAFNE Study Group, 2002; Witthaus et al 2001). The original HIVTSQ (Woodcock and Bradley, 2001) is now referred to as the status version (HIVTSQs) in order to distinguish it from the HIVTSQ change version (HIVTSQc). The change version of the DTSQ (DTSQc) was developed to overcome ceiling effects (i.e. where respondents score maximum or near-maximum satisfaction at baseline and can show little or no improvement at follow-up). Such ceiling effects are common with satisfaction measures in general (Bradley 1999). The DTSQ has been found to be valuable in improving sensitivity to change (Bradley et al 2000; Howorka et al 2000). Following this work on the DTSQc, the HIVTSQc has also been developed to overcome potential ceiling effects (Woodcock and Bradley, 2006). Translations of the HIVTSQs and the HIVTSQc are available in several languages.

Availability

The HIVTSQs and c can be obtained from: Prof Clare Bradley [address below].

Fax: +44 (0)1784 414657. E-mail: c.bradley@rhul.ac.uk.

Website: www.healthpsychologyresearch.com

HIVTSQs and HIVTSQc: Choosing which version to use and when

People may use just the HIVTSQs without the HIVTSQc. Although the HIVTSQs has proved sensitive to change (e.g. Jordan et al), the HIVTSQc enhances that sensitivity by allowing those who were satisfied at baseline to express even greater satisfaction at follow-up (Woodcock et al, 2006). Whether or not you use the HIVTSQc, you should always use the HIVTSQs at least once during your study, preferably at the beginning. This will anchor your findings on the HIVTSQc, if you do go on to use the change version as well as the status version. The HIVTSQc will tell you how people's satisfaction has changed; it doesn't tell you whether it was high or low to start with, or where it is at endpoint. We recommend that you use the HIVTSQs at baseline and endpoint (and at one or more interim points in a 12-month trial) and the HIVTSQc (if used) at one follow-up only.

1. HIVTSQs

1.1 Using the HIVTSQs

We recommend use of the HIVTSQs at follow-up to provide a 'difference' score for comparison with earlier studies that used the HIVTSQs alone. However, if you use the HIVTSQs *and* the HIVTSQc at follow-up, it is important to administer the HIVTSQs before the HIVTSQc.

If you are having a long gap between baseline and endpoint (e.g. a year or more), you may wish to repeat the HIVTSQs in order to have a picture of how satisfied people are during that period. The HIVTSQs can usefully be given at intervals throughout a treatment period and when steady increases in HIVTSQs scores are seen, this provides evidence that scores are determined by experience and are not simply an initially hopeful response to a new treatment, which subsequently declines.

1.2 Scoring the HIVTSQs

The status version has 10 items and produces the following measures:

- *Treatment Satisfaction:*

All the items are summed to produce a Treatment Satisfaction score (range: 0 to 60). The higher the score, the greater the satisfaction with treatment.

- *Individual satisfaction with treatment can be considered separately for each item:*
All rated: 6 (very satisfied, convenient, flexible, etc.) to 0 (very dissatisfied, inconvenient, inflexible, etc.). The higher the score, the greater the satisfaction with each aspect of treatment.

2. HIVTSQc

2.1 *Choosing the HIVTSQc*

If you have a study with a series of follow-ups over a long period (say 2 years), we recommend that you use the HIVTSQc just once. It is possible that one year is as long a gap as can be managed before there is too great a risk of the patient forgetting what the experience of the previous treatment was like. Thus, it is recommended that the HIVTSQc is used at 12 months in a study that is of 12 months duration or longer. The status version, HIVTSQs, can nevertheless be used at any later time point.

Please state clearly in your protocol when you plan to administer the HIVTSQs and the HIVTSQc.

2.2 *Scoring the HIVTSQc*

The change version has the same 10 items as the status version, with a small alteration to the wording of Item 9. The HIVTSQc instructions and response options differ from those of the HIVTSQs to produce measures of relative change in satisfaction rather than measures of absolute satisfaction:

- *Treatment Satisfaction (Change):*
All the items are summed to produce a Treatment Satisfaction (change) score (range: +30 to -30). The higher the score, the greater the improvement in satisfaction with treatment; the lower the score, the greater the deterioration in satisfaction with treatment. A score of 0 represents no change.
- *Individual satisfaction with treatment change items can be considered separately for each item:*
All rated: +3 ('much more satisfied', 'much more convenient', 'much more flexible', etc.) to -3 ('much less satisfied', 'much less convenient', 'much less flexible', etc.). The higher the score, the greater the improvement in satisfaction with each aspect of treatment and the lower the score, the greater the deterioration in satisfaction with each aspect of treatment.

2.3 *Wording of the HIVTSQc instructions*

The wording at the beginning of the instructions needs to relate to the particular intervention in your study. Thus it may need to be changed to be suitable for your particular study. We have produced a wording for the beginning of the introduction that is as generic as possible to minimise the need for changes, but you may need to adapt the wording to be suitable for the study duration and type of intervention. The wording has been based on the study design in which it is most commonly used (i.e. a randomised controlled trial). It may therefore need to be changed for use in an observational type of study. Please note that the last two sentences beginning "Please answer each question...", are the same for all occasions. These latter sentences should not be changed.

Please include in your protocol the details, in English, of any change to the wording of the HIVTSQc instructions for your particular study. If a run-in treatment period is included and involves a change of treatment for at least some people, the comparison is probably best made with treatment prior to commencement of the study. For crossover studies we would recommend that you make one comparison at the very end of the

study, asking participants to compare their current treatment with the previous treatment¹.

Selected references

HIVTSQs and background references to the DTSQs

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- Witthaus E, Stewart J and Bradley C (2001) Treatment satisfaction and psychological well-being with insulin glargine compared with NPH in patients with Type 1 diabetes. *Diabetic Medicine* **18**, 619-625.
- Woodcock A and Bradley C (2001) Validation of the HIV Treatment Satisfaction Questionnaire (HIVTSQ). *Quality of Life Research*, **10**, 517-531.
- Woodcock A and Bradley C (2006) Validation of the Revised 10-Item HIV Treatment Satisfaction Questionnaire Status Version and New Change Version. *Value in Health* **9**, 5, 320-333.

HIVTSQc and background references to the DTSQc

- Bradley C (1999) The Diabetes Treatment Satisfaction Questionnaire (DTSQ): change version for use alongside status version provides appropriate solution where ceiling effects occur. *Diabetes Care*, **22**, 3, 530-2.
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¹ **Example for a crossover design:**

For the past N* weeks you have used either X** or Y**. Today we would like to know how your experience of this treatment for HIV (including medication and diet) has changed from your experience of the previous treatment, which you used in the N weeks before you changed to the treatment you are using now. Please answer...etc.

Where:

*N = the number of weeks/months in each treatment period

**X and Y = the two treatments being compared

HIV Treatment Satisfaction Questionnaire (HIVTSQs)

The following questions are concerned with your medical treatment for HIV and your experience over the past few weeks. Please answer each question by circling a number on each of the scales.

1. How satisfied are you with your current treatment?
very satisfied 6 5 4 3 2 1 0 very dissatisfied
2. How well controlled do you feel your HIV has been recently?
very well controlled 6 5 4 3 2 1 0 very poorly controlled
3. How satisfied are you with any side effects of your present treatment?
very satisfied 6 5 4 3 2 1 0 very dissatisfied
4. How satisfied are you with the demands made by your current treatment?
very satisfied 6 5 4 3 2 1 0 very dissatisfied
5. How convenient have you been finding your treatment to be recently?
very convenient 6 5 4 3 2 1 0 very inconvenient
6. How flexible have you been finding your treatment to be recently?
very flexible 6 5 4 3 2 1 0 very inflexible
7. How satisfied are you with your understanding of your HIV?
very satisfied 6 5 4 3 2 1 0 very dissatisfied
8. How satisfied are you with the extent to which the treatment fits in with your lifestyle?
very satisfied 6 5 4 3 2 1 0 very dissatisfied
9. Would you recommend your present treatment to someone else with HIV?
yes, I would definitely recommend the treatment 6 5 4 3 2 1 0 no, I would definitely not recommend the treatment
10. How satisfied would you be to continue with your present form of treatment?
very satisfied 6 5 4 3 2 1 0 very dissatisfied

**Please make sure that you have circled one number on each of the scales.
Thank you for taking the time to complete this questionnaire.**