Title: Development of a satisfaction scale for young people attending youth mental health services

Dr Magenta B Simmons*, Research Fellow, headspace Centre for Excellence in Youth Mental Health, Orygen Youth Health Research Centre, Centre for Youth Mental Health, The University of Melbourne

Dr Alexandra G Parker, Senior Research Fellow, headspace Centre for Excellence in Youth Mental Health, Centre for Youth Mental Health, Orygen Youth Health Research Centre, The University of Melbourne

Dr Sarah E Hetrick, Senior Research Fellow, headspace Centre for Excellence in Youth Mental Health, Orygen Youth Health Research Centre, Centre for Youth Mental Health, The University of Melbourne

Mr Nic Telford, Evaluation Manager, headspace National Youth Mental Health Foundation.

Mr Alan Bailey, Research Assistant, headspace Centre for Excellence in Youth Mental Health, Centre for Youth Mental Health, Orygen Youth Health Research Centre, The University of Melbourne

Prof Debra Rickwood, Head of Research and Quality Improvement, headspace National Youth Mental Health Foundation, Professor of Psychology, The University of Canberra

*Corresponding author:

Dr Magenta Simmons, Orygen Youth Health Research Centre, Locked Bag 10, Parkville, Victoria, Australia, 3052. Phone: +61 3 9027 0100. Fax: +61 3 9027 0199. Email: msimmons@unimelb.edu.au.
Abstract

Aims
To develop a comprehensive measurement tool for assessing client satisfaction at a youth mental health service.

Methods
We developed a scale based on existing scale items and by generating new items, before undertaking revisions and item reduction in consultation with an expert panel comprised of researchers, clinicians and consumer representatives. This draft scale was then pilot tested in seven enhanced primary care youth mental health services across Australia.

Results
A total of 215 respondents completed the scale. Cronbach’s Alpha (α=0.953) demonstrated excellent internal consistency and exploratory factor analysis suggested that the scale measures a global construct of satisfaction.

Conclusions
Through a rigorous and participatory process involving key experts, service providers and service users, this study has resulted in the development of a scale that can appropriately measure the level of user satisfaction with youth friendly early intervention services.
**Introduction**

Providing timely care to young people with mental disorders is crucial to minimise the negative impact on their social, occupational and psychological functioning (1), yet professional help seeking by young people is low (2, 3). Having negative attitudes and beliefs about mental health services has been identified as a key barrier to seeking help (4). These may stem from past negative experiences, including feeling that a service has not helped a young person or taken their problems seriously (5).

Given that negative experiences can influence future help seeking, it is essential that services provide a positive experience for clients and address the barriers that are specific to young people (6). The World Health Organisation (WHO) has developed a framework for ‘youth friendly’ services, and describes five key attributes: that they are accessible, acceptable, equitable, appropriate and effective (7). Many services set out to ensure a youth friendly approach, however, it is important to evaluate if they are achieving this. A key part of such evaluation is measuring young peoples’ satisfaction with the service.

Satisfaction is a broad umbrella term for a range of factors relating to care, and may include satisfaction with: the physical/environmental aspects of the service (e.g. location, waiting room, consultation rooms); staff (e.g. administrative and clinical); the care received (e.g. treatment options available, results of treatment); and other aspects of care, such as how involved the client was in their own care. Ensuring that satisfaction scales cover the relevant areas for youth mental health (YMH) is essential if we are to effectively measure the areas that will potentially influence client engagement and future help seeking behaviours.

A recent review detailed both qualitative and quantitative studies of client satisfaction in YMH, highlighting a lack of focus on client satisfaction as opposed to parental or caregiver satisfaction (8). The review demonstrated differences between caregiver and client satisfaction, stressing the importance of focussing on client satisfaction, and nominated four scales that were most well developed to measure this (9-12). Three key domains were described, including environment and
organization of services, adolescent-caregiver relationship, and treatment outcome (8). Guided by this, and by the WHO framework (13), a measure of satisfaction that covered all relevant domains was sought, but we were unable to find an existing scale.

To address this gap in the literature, we used the results of the review to inform the development of a comprehensive measurement scale of satisfaction with YMH services. This involved two phases: 1. Developing a pilot tool with input from YMH clinicians and researchers; and 2. Pilot testing the tool with young service users.

**Methods**

**Setting**

At the time of this study, headspace National Youth Mental Health Foundation had 45 centres across Australia providing health and mental health care to young people aged 12-25 years. Centres are staffed by a range of professionals (e.g. allied health professionals, general practitioners) and designed to be non-stigmatising and accessible to young people in terms of location and service delivery (14). All centres have been developed according to the WHO framework for youth friendly services (described above) and an evaluation of centres in 2008-9 (15) demonstrated that this has largely been achieved.

**Phase 1: Development of the pilot tool**

**Procedure**

**Initial selection of items**

A master list of relevant scale items was compiled based on the scales identified in the abovementioned review. As we were seeking items that were not specific to one type of treatment approach, items that were too specific to a particular treatment or health professional were amended or excluded. A total of 36 items were included in this first list. Items were amended so that responses conformed to a 5-point Likert scale where a score of 1 represented ‘strongly agree’ and 5 ‘strongly disagree’. A further reduction of items was undertaken by consensus between three authors
(MS, AP and NT), whereby items were deleted if they appeared more than once. After this process, 30 items remained.

Experts panel process

We undertook a consultation process with an expert panel comprised of key clinical staff members, researchers with specialised knowledge in YMH (including one with a background in scale development) and youth reference group members. A voting process akin to the Delphi method was employed to rank the items for inclusion. Experts were asked to review the included items and comment on their relevance and wording, and to suggest any new items.

Results

This process resulted in a further 21 items being removed, and 7 new items added, so the draft measure had 16 items (see Table 1). We also included qualitative items relating to general feedback about satisfaction (e.g. ‘What was good about headspace?’) and a specific item related to the measure itself (‘Are there are any other questions about your experiences with headspace that we should have asked you on this form but didn’t?’).

Phase 2: Pilot testing and item reduction

Procedure

We undertook pilot testing to determine the psychometric properties of the draft scale. Research ethics approval was obtained (QA2012048).

We purposively selected seven headspace centres based on pre-defined characteristics that we determined would support generalizability to other headspace centres, ensuring: a range of locations (e.g. urban, semi-rural); a range of centre sizes (e.g. average number of clients seen per year); and inclusion of both established and newer centres. This pilot test involved the client satisfaction scale being offered to all the centres’ clients over a three month period. Participation was voluntary and no identifying information was obtained from participants. The scale was administered using a paper-based version of the scale. Feedback was also
obtained from local centre staff regarding issues related to the scale’s implementation. A reliability analysis was undertaken to consider the psychometric properties of the scale. Item reduction was then undertaken using factor analysis to identify variability across items.

Results
A total of 215 clients completed the satisfaction scale from seven *headspace* centres across Australia (Coffs Harbour, NSW, n=52; Frankston, VIC, n=14; Gold Coast, QLD, n=18; Launceston, TAS, n=30; Maitland, NSW, n=47; Sunshine, VIC, n=23; and Warwick, QLD, n=31) between November 2011 and January 2012.

Descriptive statistics revealed that items were skewed towards more positive responses (see Table 2). Cronbach’s Alpha was used to assess internal consistency, and the results demonstrated excellent internal consistency (α=0.953). Following this, we undertook exploratory factor analysis to determine if there might be more than one factor identified by the measure (e.g. satisfaction with environment vs. staff). The scree plot demonstrated only one factor, and communalities were all above 0.5. Therefore, the factor analysis revealed that the scale appears to measure a single global construct of satisfaction.

Final version of the scale
The final version of the scale includes 16 items covering 4 domains: 1) satisfaction with centre; 2) satisfaction with staff; 3) satisfaction with help provided; and 4) general satisfaction and feedback (see Table 1). All components from the WHO framework for youth friendly services were covered, with the exception of equitability as all respondents had been able to access services.

Discussion
Ensuring young people are satisfied with mental health services is an important part of service provision and evaluation. To date, there has not been a comprehensive measure to assess all aspects of satisfaction relevant to early intervention services for young people. The current scale demonstrated excellent internal consistency and
the factor analysis suggests it measures a global construct of satisfaction. Limitations of the current study include the fact that most respondents in the pilot test were very satisfied with their care and this is reflected in the skewness of the items. As participation was voluntary, it is possible that those who were dissatisfied may have been less likely to participate. Further, it is possible that clients who attended the service only once (perhaps because they were dissatisfied with the service) may have been less likely to complete the survey.

This new scale will now be used in the systematic evaluation of headspace centres nationally and will provide key data about the accessibility, appropriateness and acceptability of these services. The model for collection of evaluation data is designed to be youth-friendly and maximise response rates by using iPads in waiting rooms. Alongside client satisfaction, key variables such as reason for attendance, demographics, diagnoses, functioning, pathway to headspace (e.g. history of help seeking, waiting time to be seen by headspace), psychological distress, general well being and service information (e.g. main service provided and length of service) will be measured.

In doing so, we will be able to address any areas that demonstrate lower or poor satisfaction (including consideration of aspects of the WHO framework discussed above) as well as tailor the improvement of service provision to clients more likely to report lower levels of satisfaction. The routine assessment of client satisfaction is an integral component of any youth participation model. Due consideration of identified barriers to ensuring meaningful youth participation (e.g. (16)) will be given in order to ensure successful implementation of the results of the client satisfaction measure. Overall, these combined efforts will work to maximise the engagement of young people in early intervention services.
References

Acknowledgements

The authors are grateful for the contribution of the clinician and consumer experts who participated in the consensus process, along with the clients and headspace staff members who were involved in the pilot testing.
<table>
<thead>
<tr>
<th>Scale item</th>
<th>Domain</th>
<th>WHO framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt comfortable at headspace</td>
<td>Satisfaction with headspace</td>
<td>Equitability and acceptability</td>
</tr>
<tr>
<td>The waiting rooms and appointment rooms were welcoming</td>
<td>Satisfaction with headspace</td>
<td>Acceptability</td>
</tr>
<tr>
<td>I was given enough information about headspace (i.e. information about what headspace could and couldn’t do)</td>
<td>Satisfaction with headspace</td>
<td>Accessibility</td>
</tr>
<tr>
<td>I could attend appointment times that suited me (i.e. didn’t interfere with study or work)</td>
<td>Satisfaction with headspace</td>
<td>Accessibility</td>
</tr>
<tr>
<td>I felt that headspace staff listened to me</td>
<td>Satisfaction with headspace</td>
<td>Acceptability</td>
</tr>
<tr>
<td>I felt that headspace staff involved me in making decisions about what would happen next</td>
<td>Satisfaction with headspace</td>
<td>Acceptability and appropriateness</td>
</tr>
<tr>
<td>I felt that my thoughts and feelings were taken seriously</td>
<td>Satisfaction with headspace</td>
<td>Acceptability</td>
</tr>
<tr>
<td>I felt that I was able to raise any concerns that I had</td>
<td>Satisfaction with headspace</td>
<td>Acceptability</td>
</tr>
<tr>
<td>I was satisfied with the amount of time available for me (e.g. appointment times)</td>
<td>Satisfaction with headspace</td>
<td>Acceptability</td>
</tr>
<tr>
<td>I got help for the things I wanted to get help with</td>
<td>Satisfaction with the help</td>
<td>Appropriateness</td>
</tr>
<tr>
<td>I feel that my mental health improved because of my contact with headspace</td>
<td>Satisfaction with the help</td>
<td>Effectiveness</td>
</tr>
<tr>
<td>I feel that other aspects of my life improved because of my contact with headspace</td>
<td>Satisfaction with the help</td>
<td>Effectiveness</td>
</tr>
<tr>
<td>I feel that I can deal more effectively with my problems because of attending headspace</td>
<td>Satisfaction with the help</td>
<td>Effectiveness</td>
</tr>
<tr>
<td>I feel that I know more about mental health problems in</td>
<td>Satisfaction with the help</td>
<td>Effectiveness</td>
</tr>
</tbody>
</table>
general because of attending **headspace**

| I was generally satisfied with **headspace** | General satisfaction and feedback | All |
| If a friend needed this sort of help, I would suggest **headspace** | General satisfaction and feedback | Appropriateness |
Table 2. Descriptive statistics of responses to scale items

<table>
<thead>
<tr>
<th>Scale item</th>
<th>Mean (SD)</th>
<th>Skewness (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt comfortable at headspace</td>
<td>1.50 (0.76)</td>
<td>2.06 (0.17)</td>
</tr>
<tr>
<td>The waiting rooms and appointment rooms were welcoming</td>
<td>1.49 (0.65)</td>
<td>1.61 (0.17)</td>
</tr>
<tr>
<td>I was given enough information about headspace (i.e. information about what headspace could and couldn’t do)</td>
<td>1.61 (0.75)</td>
<td>1.55 (0.17)</td>
</tr>
<tr>
<td>I could attend appointment times that suited me (i.e. didn’t interfere with study or work)</td>
<td>1.49 (0.75)</td>
<td>1.90 (0.17)</td>
</tr>
<tr>
<td>I felt that headspace staff listened to me</td>
<td>1.32 (0.61)</td>
<td>2.53 (0.17)</td>
</tr>
<tr>
<td>I felt that headspace staff involved me in making decisions about what would happen next</td>
<td>1.39 (0.66)</td>
<td>2.46 (0.17)</td>
</tr>
<tr>
<td>I felt that my thoughts and feelings were taken seriously</td>
<td>1.33 (0.64)</td>
<td>2.40 (0.17)</td>
</tr>
<tr>
<td>I felt that I was able to raise any concerns that I had</td>
<td>1.39 (0.64)</td>
<td>2.05 (0.17)</td>
</tr>
<tr>
<td>I was satisfied with the amount of time available for me (e.g. appointment times)</td>
<td>1.41 (0.69)</td>
<td>2.48 (0.17)</td>
</tr>
<tr>
<td>I got help for the things I wanted to get help with</td>
<td>1.52 (0.70)</td>
<td>1.78 (0.17)</td>
</tr>
<tr>
<td>I feel that my mental health improved because of my contact with headspace</td>
<td>1.76 (0.86)</td>
<td>1.12 (0.17)</td>
</tr>
<tr>
<td>I feel that other aspects of my life improved because of my contact with headspace</td>
<td>1.82 (0.85)</td>
<td>0.76 (0.17)</td>
</tr>
<tr>
<td>I feel that I can deal more effectively with my problems because of attending headspace</td>
<td>1.78 (0.85)</td>
<td>1.00 (0.17)</td>
</tr>
<tr>
<td>I feel that I know more about mental health problems in general because of attending headspace</td>
<td>1.77 (0.89)</td>
<td>1.36 (0.17)</td>
</tr>
<tr>
<td>I was generally satisfied with headspace</td>
<td>1.38 (0.62)</td>
<td>2.44 (0.17)</td>
</tr>
<tr>
<td>If a friend needed this sort of help, I would suggest headspace</td>
<td>1.40 (0.69)</td>
<td>2.31 (0.17)</td>
</tr>
</tbody>
</table>

\(^1\)5-point Likert scale where 1=strongly agree and 5=strongly disagree.
Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Simmons, MB; Parker, AG; Hetrick, SE; Telford, N; Bailey, A; Rickwood, D

Title:
Development of a satisfaction scale for young people attending youth mental health services

Date:
2014-11-01

Citation:

Persistent Link:
http://hdl.handle.net/11343/59216

File Description:
Submitted version