

The construct validity of the client questionnaire of the Wisconsin Quality of Life Index – a cross-validation study

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ABSTRACT *The Wisconsin Quality of Life Index (W-QLI, Becker, Diamond and Sainfort, 1993) consists of eight scales: satisfaction with life domains, occupational activities, symptoms, physical health, social relations/support, finances, psychological wellbeing, and activities of daily living. The W-QLI has been modified to fit the characteristics of the Canadian population, the universal Canadian health system, and community and social services in Canada and the modified form was named CaW-QLI (Diaz, Mercier, Hachey, Caron, and Boyer, 1999). This study will verify the empirical basis of these theoretical dimensions by applying a cross-validation procedure on two samples, most of whose subjects have a serious mental illness. Confirmatory factor analyses and exploratory factor analyses using the principal component extraction technique with varimax rotation were applied. With the exception of the occupational activities domain, the remaining scales were correctly identified by the factor analyses on each sample. The occupational activities scale should be developed by additional items for representing this scale, which is too brief, and two other items should be revised in order to improve the quality of the instrument.*

Key words: Wisconsin Quality of Life, schizophrenia, psychometric properties, construct validity

Introduction

Following the implementation of the deinstitutionalization policy, the majority of individuals with severe mental illnesses returned to live in the community. Residential community resources such as supervised apartments, foster homes and group homes were developed to insert those with a severe mental illness into a more naturalistic environment with the intention of increasing their wellbeing and offering them a better life. Quality of life progressively became an interesting concept used to evaluate the outcomes of community mental healthcare programs. Multidimensional scales with good psychometric properties were needed to assess quality of life (QOL) in this population in terms of clinical evaluations and well as for program evaluation

and policy making (Awad, Voruganti and Heslegrave, 1997; Becker and Diamond, 1997; Katschnig, Freeman and Sartorius, 1997).

During the last two decades a number of scales have been developed to measure QOL in persons with severe mental illness (Atkinson and Zibin, 1996; Heinrichs, Hanlon and Carpenter, 1984; Lehman, 1997; Voruganti, Heslegrave and Awad, 1997). However, most scales are time consuming, require trained interviewers and/or have psychometric properties that have not been adequately evaluated. In a recent literature review of 11 instruments assessing QOL in psychiatry, Nieuwenhuizen et al. (1997) indicated that three instruments have been comprehensively evaluated for their psychometric properties:

- the QOL Scale (Heinrichs et al., 1984);
- the QOL Interview (Lehman, 1988); and
- the Lancashire QOL Profile (Oliver, 1991).

The proceedings from a 1997 workshop co-sponsored by Health Canada and the Canadian Alliance for Research on Schizophrenia (Holley, 1998) identified two measures that show promise:

- the Lancashire Quality of Life Profile; and
- the Wisconsin Quality of Life Index.

The Wisconsin Quality of Life Index (W-QLI) (Becker, Diamond and Sainfort, 1993), although a fairly new tool, does seem to be quite promising. It has incorporated most of the characteristics that should be inherent in a good QOL clinical and research tool. It is increasingly being incorporated into clinical studies (Awad et al., 1997).

The Wisconsin Quality of Life Index (W-QLI) is an instrument specifically designed to address the issue of QOL in individuals with severe mental illnesses. It is the only QOL scale currently available that solicits information about the client from three perspectives: directly from the client, from a professional care provider and from a family member.

The W-QLI is a multidimensional instrument that provides both a profile and an index. It contains 113 items spread on nine scales but only eight scales are used for calculating scores, which are measured by 47 items. The scales covered in the client's W-QLI are the following: Satisfaction with life domains, Occupational activities, Symptoms, Physical health, Social relations/support, Finances, Psychological wellbeing, and Activities of daily living. Some of these last scales include existing scales: The Satisfaction with the Life Domains Scale (Baker and Intagliata, 1982), the Bradburn's Affect Balance Scale (Bradburn, 1969), the outcome scale related to frequency and type of social contact of the International Pilot Study on Schizophrenia (Strauss and Carpenter, 1974) and the Spitzer's QL-Index and Uniscale (Spitzer, Dobson, Hall et al., 1981). These scales have been retained by the authors on the basis that they have been identified in previous studies as relevant in the measurement of quality of life (Becker et al., 1993).

Each scale is scored individually. A global QOL score can then be calculated by summing the scores of each scale and dividing them by the number of

domains. The clients are also able to weigh their perception of the importance of each scale at the end of the scale. This is a unique property of the W-QLI, which produces a global score that is weighed.

Another interesting feature of this scale is that the client, professional care provider and family member versions contain a section that asks the respondent to indicate three treatment-related goals, the relative importance of each goal (on a 10-point scale), and the degree to which the respondent believes each goal has been achieved.

Some of the psychometric properties of the client's questionnaire have been assessed for the original W-QLI (Becker et al., 1993). The test-retest reliability was examined on a three-to-10-day period, with percentages of agreement varying from 0.82 to 0.87 for each domain and total score. The convergent validity for the client's questionnaire has been assessed with the Spitzer's QL-Index ($r = 0.91$) and the Spitzer's Uniscale ($r = 0.68$).

The W-QLI has been modified to fit the characteristics of the Canadian population, the universal Canadian health system, and community and social services in Canada was named CaW-QLI (Diaz, Mercier, Hachey, Caron, and Boyer, 1999). Apart from the modifications pertaining to the background information section, the questionnaire remains the same. The modifications to the original W-QLI have been done in the English and simultaneously in the French translation. In the Canadian version (CaW-QLI), test-retest (Concordance correlation coefficient-CCC) ranged from 0.36 to 0.80 among the domains, and from 0.80 (E) and 0.85 (F) between CaW-QLI global scores. Regarding convergent validity, Spearman correlation between CaW-QLI global score and Spitzer's QOL-Index were 0.72(E) and 0.58(F) (Diaz et al., 1999).

Caron, Mercier, Diaz, Martin (2002) have explored the CaW-QLI's sensitivity to sociodemographic and clinical characteristics of psychotic patients. Age had a positive effect on QOL with respect to finances and level of education had a positive effect on psychological wellbeing. Working patients scored higher on physical health, social relations/support and global QOL score. Clients living alone showed better satisfaction with daily living activities. Participants diagnosed as paranoid scored lower than patients with other types of schizophrenia with respect to symptoms, finance and the global CaW-QLI. Patients who were hospitalized at younger age tended to be less satisfied with social relations/support, physical health,

psychological wellbeing and finances. The overall results indicate that the CaW-QLI scales have differential predictive power and interesting sensitivities to both sociodemographic and clinical characteristics of severe mentally ill individuals.

Given the current popularity of the Wisconsin Quality of Life Index and its promising psychometric properties, it seems important to assess its construct validity. Until now there has not been a factor analysis performed to support the multidimensional structure of the instrument. First, the objective of this study is to verify the W-QLI's factor structure with two independent samples of people with severe mental illness, by using confirmatory and exploratory factorial analyses. Afterwards, a cross-validation procedure will also be used to verify the internal consistency related to the scales that emerged from the factorial analyses in addition to the intercorrelations between the scales.

Method

Translation

This French translation was produced by a parallel translation of two professional translators; both translations were submitted to an expert committee composed of clinicians and researchers who have retained the final version (Flaherty, 1986; Guillemain, Bombardier and Beaton, 1993).

The intention of these procedures is to produce a version that is semantically and conceptually equivalent to the original version. Both the English- and French-Canadian editions of the questionnaires were approved by the original team of authors from the University of Wisconsin-Madison.

Participants

The two samples were drawn from two studies involving clients diagnosed with several mental disorders. The sample from Douglas Hospital Research Center (DHRC) study comprised 45 women and 137 men ($N = 182$) whose average age is 41.81 years ($SD = 10.4$) with a diagnosis of schizophrenia (84%) or schizo-affective disorder (16%). All were diagnosed by certified psychiatrists (based on criteria in the Diagnosis and Statistical Manual of Mental Disorders [DSM-IV]) and had been treated through mental health services for at least 24 months prior to their participation. Participants needed to be physically healthy and able to give informed consent.

Clients from the Fernand Seguin Research Center (FSRC) study were 140 women and 63 men participating in intensive community treatments in Montreal. These 203 persons suffered from a severe mental illness. Their average age was 51.65 years ($SD = 14.59$). As for the distribution of psychiatric diagnoses, 98 (48.3%) suffered from schizophrenia or other psychotic disorders, 63 (31%) from a mood disorder, and 42 (20.7%) had other diagnoses (mainly personality disorders or an anxiety disorder). All were diagnosed by certified psychiatrists (based on criteria in the Diagnosis and Statistical Manual of Mental Disorders [DSM-IV]).

Data collection

In both samples, clinicians were approached to identify and recruit participants who met the study's inclusion criteria. Participants read and signed comprehensive consent forms to carry out the interview.

The DHRC study

Participants were recruited with the purpose of validating the CaW-QLI in two Canadian centres, Halifax (Nova Scotia), and Montreal (Quebec), from outpatient services – rehabilitation programs, socioprofessional services – or residential community resources. All were living in the community. Although the CaW-QLI was designed as a self-administered instrument, the data collection was conducted by trained interviewers with bachelor degrees in social science, who provided patients with assistance if needed. This is due to the fact that the scale consists of a large number of items and requires a relatively long period of concentration. On the other hand, for the sake of the diversity of subscales (dichotomic versus Likert scale) most of the patients needed some supervision in order to complete the questionnaire. The average administration time of the client's CaW-QOL was 25 minutes.

The FSRC study

The CaW-QOL was part of a battery of questionnaires that the client was asked to answer with the intention of repeating the assessment one year later in order to evaluate change in clients' quality of life as an outcome measure for evaluating the intensive community treatments program. The case manager (psychologist, social worker, human relations agent and nurses), who had previously trained in using this instrument, completed the CaW-QOL with his/her client.

Data analyses

Confirmatory factor analyses were carried on six scales with continuous variables, as the confirmatory factor analysis method requires a substantial number of cases when dichotomic scales are included in the model (Bentler, 1995). The six subscales are the following:

- satisfaction level with different life domains;
- occupational activities;
- symptoms;
- physical health;
- social relations/support; and
- finances.

From a confirmatory mode, it was possible to explore new empirical paths – in other words to go from hypothetico-deductive mode to a heuristic mode (Bacher, 1987). In this latter step, the instrument's theoretical elements are taken into account. It thus becomes probable that a new, more parsimonious model emerges from the results of the first confirmatory factor analyses. The initial model can be re-tested on a second sample to see if it fits as well as the new model that emerged from the previous analysis. This procedure allows the analysis of these models and cross-validation with an independent sample. According to this procedure, the model that best fits the two samples will be considered the most valid and will be retained for the later studies.

Exploratory factor analyses using the principal component extraction technique with varimax rotation was applied for the two other dichotomic scales:

- psychological wellbeing, and
- activities of daily living.

Thereafter, the internal consistency of each scale was assessed using Cronbach's alpha. Finally, Pearson correlations were used between all domains and between domains and the total score. The W-QLI is based on the theory that QOL is a complex multidimensional construct. This implies that each domain measures a distinct aspect of QOL; which, at the same time, is related to the same underlying construct. If the domains are distinct from one another, the correlation between domains should be lower than the one between each domain and the global score. On the other hand, if these dimensions pertain to the same underlying concept, one

would expect significant correlations between each scale and the global score.

In order to cross-validate our findings, all analyses carried out with the first sample DHRC were replicated with the FSRC sample, confirmatory factor analyses, exploratory factor analyses, and the calculation of Cronbach's alpha for each of the scales as well as Pearson correlations between the scales.

Results

Initially, a confirmatory factor analysis was carried out on the six following scales for the DHRC sample: Satisfaction with life domains, Occupational activities, Symptoms, Physical health, Social relations/support, and Finances (Table 1). This first confirmatory analysis did not yield a satisfactory model adjustment. In fact, the three adjustment indexes, CFI, CFI robust and IFI were below the threshold of 0.90 (Bentler, 1995). These results can be explained by the non-significant variance of the occupational activities scale due to the fact that the saturation of the three items of that scale is quite low, <0.32. Two other items, one from the Symptoms scale and another from the Social relations/support scale, made the adjustment problematic.

A second confirmatory factor analysis was carried out after withdrawing the three items from the occupational activities scales and by removing the item 'have you felt like harming others?' from the symptoms scale and the item 'during the last four weeks, have you been having good relationships with others and receiving support from family and friends?' from the social relations/support scale. The five scales model (Figure 1) is composed of Satisfaction with life domains (10 items), Symptoms (four items), Physical health (three items), Social relations/support (five items) and Finances (three items), and presents significant coefficients which vary from 0.89 to 0.94 for the CFI, CFI robust and IFI indexes (Mueller, 1996; Joreskog and Sörbom, 1993). The respective values for RMSEA (0.06) and Chi-square/dl (1.28) are lower than 0.08 and five (Byrne, 1989; Hofmann, 1995). The items of each scale are presented in Table 2.

A factor analysis using the principal component extraction technique with varimax rotation was applied for the two dichotomic scales: psychological wellbeing (Bradburn Balance Affect Scale) and activities of daily living. Three factors were identified explaining 41,48% of the variance. The first two factors include the positive and the negative dimensions of the Bradburn

Table 1. Confirmatory factorial analysis results of the QoL (DHRC sample, N = 182)

Models	Adjustment Fit Index				
	Satorra chi square/df	CFI	CFI Robust	IFI	RMSEA
Six dimensions (30)	521.3/391 = 1.33	0.85	0.91	0.86	0.06
Five dimensions (25)	338.1/265 = 1.28	0.89	0.94	0.90	0.06

CFI = Comparative Fit Index; CFI Robust = Comparative Fit Index Robust; IFI = Bollen Fit Index; RMSEA = Root Mean Square Error of Approximation.

Balance Affect Scale. The third factor regroups all items of activities-of-daily-living scale. All the items are significantly related to their factor; the factor loadings are significant (Table 3).

Reliability analyses were conducted on the eight conceptual dimensions, and Cronbach alpha's varied from 0.50 to 0.86 for the five scales (Figure 1) and varied from 0.59 to 0.66 for the three scales presented in Table 3. Given that two of the eight conceptual dimensions are represented by only three items, the alpha coefficients 0.50 for finances and 0.61 for physical health are considered to be satisfactory (Gulliksen, 1950; Martinez Arias, 1995).

As expected, each scale demonstrated a significant correlation with the global score (Table 4). For seven of the eight domains, these correlations were over 0.45. The lowest correlation was with activities of daily living ($r = 0.17$, $p < 0.01$) and the highest was with satisfaction with life domains ($r = 0.73$, $p < 0.001$). The correlations between the domains were lower, ranging between 0.13 (NS) and 0.62 ($p < 0.01$); they were all significant, with some exceptions with two scales: activities of daily living and symptoms. Activities of daily living was only significantly related to physical health and Positive Bradburn and symptoms were not correlated significantly with finances, activities of daily living and Positive Bradburn.

Cross-validation

As was described in the data analyses section, the two confirmatory factorial analyses carried out on the first sample were replicated with the second sample. As was the case for the first sample, the first model did not fit the data of the second sample; the fit indexes were not satisfactory (Table 5). As was found with the first sample, the items from the occupational activities scale did not significantly load on that factor. A similar

result was found for the two other items that were identified with the first sample, one on the symptoms and another on the social relations/support scales. We were successful at obtaining satisfactory results by adjusting the second model using the same five scales (25 items) with the following minor modifications. By adding three correlations between the item measurement error, specifically between the items from the satisfaction with life domains (r_{e2e1} , r_{e4e3} , related to items 2 and 1, and 4 and 3) social relations/support (r_{e19e18} related to items 19 and 18 – see Table 2) using Hull et al.'s (1991) recommendation, we obtained adjustment indicators above 0.90 for the CFI, CFI robust and IFI, a chi-square/dl below 5, and a satisfactory RMSEA equal to 0.05 (Table 5).

With respect to the results of the exploratory factor analysis, we obtained the same factorial solution as was obtained with the first sample. However one item from the Positive Bradburn scale 'That things went your way' loads weakly not only on the Positive Bradburn scale, and equally on the negative.

When internal consistency was examined with this second sample for the eight scales, coefficients comparable to those obtained with the first sample were found varying from 0.63 to 0.82 (Figure 1). They varied from 0.63 to 0.71 for the three scales presented in Table 3. As can be seen in Table 4, the scales were found to be intercorrelated, with coefficient ranging from 0.20 to 0.83 ($p < 0.01$); only the activities of daily living scale presented weak correlation coefficients, which vary from 0.01 (NS) to 0.27 ($p < 0.01$).

Discussion

The confirmatory factor analysis with two independent samples confirmed the construct validity of five of the six scales with continuous variables: satisfaction with life domains, occupational activities,

Table 2. Items of confirmatory factorial analysis for the CaW-QLI questionnaire*Satisfaction with domains of life*

1. How satisfied or dissatisfied are you with the way you spend your time?
2. How satisfied or dissatisfied are you when you are alone?
3. How satisfied or dissatisfied are you with your housing?
4. How satisfied or dissatisfied are you with your neighbourhood as a place to live in?
5. How satisfied or dissatisfied are you with the food you eat?
6. How satisfied or dissatisfied are you with the clothing you wear?
7. How satisfied or dissatisfied are you with the mental health services you use?
8. How satisfied or dissatisfied are you with your access to transportation?
9. How satisfied or dissatisfied are you with your sex life?
10. How satisfied or dissatisfied are you with your personal safety?

Symptoms/attitudes

11. During the last four weeks, have you: 1) generally felt calm and positive in outlook or 2) been having some periods of anxiety or depression or 3) generally been confused, frightened, anxious or depressed?
12. There are many aspects of emotional distress including feeling of depression, anxiety, hearing voices, etc. In the last four weeks, how much distress have these symptoms caused you.
13. In the last four weeks, how much have these symptoms interfered with your daily life?
14. In the last four weeks, have you felt like killing yourself?

Physical health

15. In the last four weeks, you would best describe your physical health as: (poor to excellent)?
16. During the last four weeks, you have: 1) been feeling well or great most of the time or 2) been lacking energy or not feeling well more than just occasionally or 3) been feeling ill or poorly most of the time?
17. How do you feel about your physical health?

Social relations/support

18. How satisfied or dissatisfied are you with the number of friends you have?
19. How satisfied or dissatisfied are you with how you get along with your friends?
20. How satisfied or dissatisfied are you with your relationship with your family?
21. If you live with others, how satisfied or dissatisfied are you with the people you live with?
22. How satisfied or dissatisfied are you with how you get along with other people?

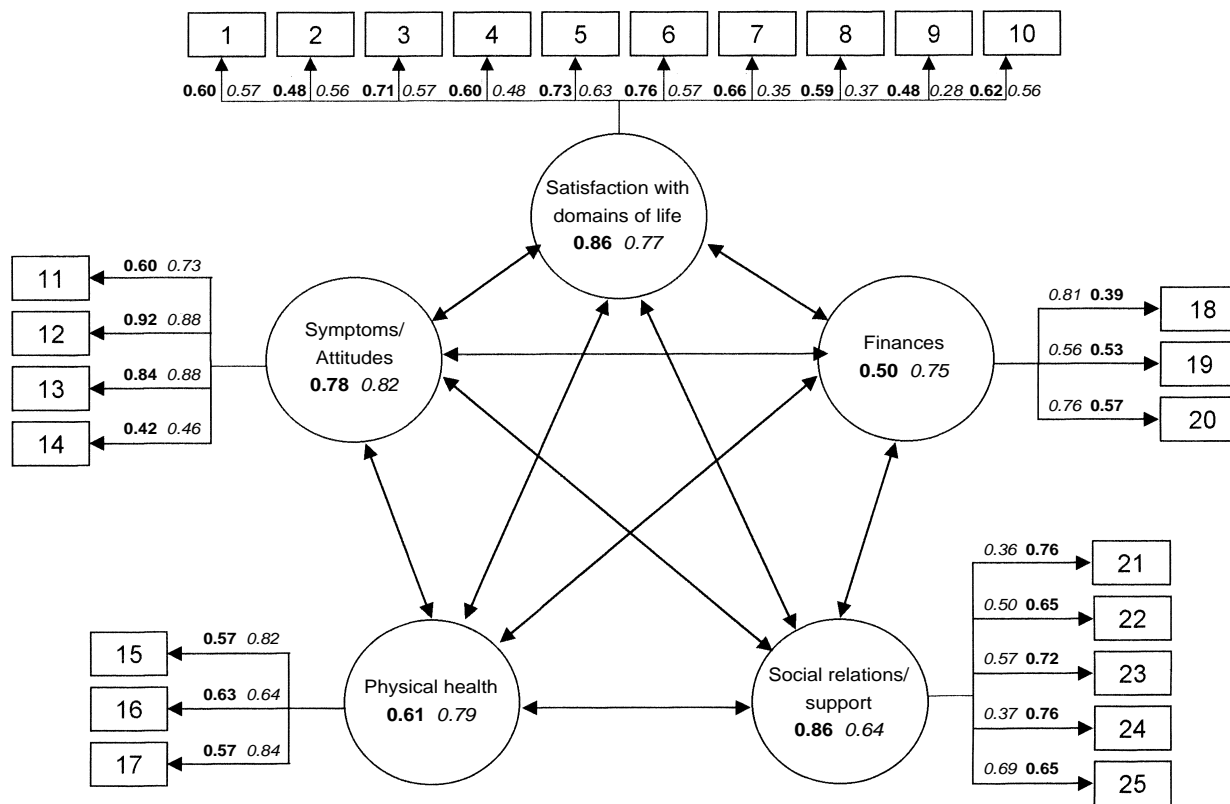
Finances

23. How do you feel about the amount of money you have?
24. How satisfied are you about the amount of control you have over your money?
25. How often does lack of money keep you from doing what you want to do?

symptoms, physical health, social relations/support and finances. The occupational activities scale failed to be confirmed in both analyses. This domain did not reach an acceptable level of internal consistency because of a scoring problem; the scale seems to overrate satisfaction with occupational activities. The scoring procedure requires further review because the two-factor analysis confirms the fact that there is a problem with this scale.

Moreover, for an improved adjustment for both samples, two items that appeared problematic were

removed, one in the symptoms scale and another in the social relation/support. The 'Have you felt like harming others?' item that appears in the symptoms scale had a rating problem that resulted in an underestimation of the symptom. In reviewing the scoring procedures of the original authors, we discovered that some items in the symptoms scale were over-rated. For instance, a score of 0 on this item corresponds to 'feeling like harming other frequently'. Therefore, in the above mentioned example, even if a score of 0 is theoretically neutral, it reflects something negative. The item



Cronbach's alpha given inside the circles, and factor loading indicated beside each item number

Figure 1. Confirmatory factorial analysis for the CaW-QLI questionnaire (DHRC sample in bold (N = 182) and FSRC sample in italic (N = 203))

‘During the last four weeks, have you been having good relationships with others and receiving support from family and friends?’ created a problem because there are two different questions in the same item. For example, it is possible that someone could report having had positive relationships during the last month but not having received the support he had expected. Consequently, this item could lead to confusion. We believe there should be two separate questions to cover the topics being addressed by the item.

With the two other scales with dichotomic variables, the factor analysis with the first sample correctly identified the items pertaining to each scale. The positive and negative items of the Bradburn Affect Balance Scale were respectively regrouped on two distinct factors and all the items of the activities of daily living were aggregated on another factor. In the cross-validation process with the second sample we found the

same three factors but one item of the Positive Bradburn scale did not load significantly on any factors.

In addition, the lowest correlation between domains and the highest between domains and the total score of CaW-QLI for both sample, support the multidimensional construct of the instrument. The strong correlations between domains and the global score confirm that each of the domains is related to a general concept of quality of life. The weaker correlations between domains also confirm the multidimensionality of the instrument, in addition to the fact that each of these dimensions represents a distinct life domain.

Overall, our results are consistent with the theoretical construct of the W-QLI. Most of the theoretical dimensions of W-QLI were identified correctly by the first analyses and a process of cross-validation has confirmed our first empirical findings. The W-QLI

Table 3. Outcomes of factor analysis by principal components — DHRC sample (in bold) and FSRC sample (in italic)

Items	Factors					
	Negative Bradburn		Positive Bradburn		AVQ	
Depressed or very unhappy	0.77	<i>0.65</i>				
Bored	0.67	<i>0.68</i>				
So restless that you couldn't sit long in chair	0.62	<i>0.41</i>				
Upset because someone criticized you	0.60	<i>0.62</i>				
Very lonely or remote from other people	0.54	<i>0.60</i>				
Particularly excited or interested in something			0.73	<i>0.74</i>		
Proud because someone complimented you on something you had done			0.70	<i>0.72</i>		
Pleased about having accomplished something			0.58	<i>0.59</i>		
On top of the world			0.56	<i>0.51</i>		
That things went your way			0.50	—		
Go shopping					0.76	<i>0.63</i>
Prepare a meal					0.64	<i>0.74</i>
Do the laundry					0.63	<i>0.80</i>
Go for a ride in a bus or car					0.48	<i>0.29</i>
Clean the room/apartment/home					0.45	<i>0.76</i>
Go to a restaurant or coffee shop					0.37	<i>0.43</i>
Eigen value	2.93	<i>1.36</i>	1.96	<i>2.13</i>	1.74	<i>3.35</i>
Variance	18.31	<i>9.08</i>	12.27	<i>14.16</i>	10.90	<i>22.32</i>

Factors loading < 0.30 are not indicated

was designed to measure QOL with severe mental illness, even if the samples were not randomly selected, the number of participants and the severity and diversity of their diagnosis give confidence as regarding them as representative of patients with severe mental illness. Considering that the two samples differ with respect to many variables such as age, gender and distribution of diagnosis, the results of the cross-validation procedure might provide evidence that the instrument is robust across different populations.

However, the scoring procedure of the occupational activities scale has to be reviewed and two items mentioned above should be modified; new reliability and confirmatory analysis should be done after these minor changes. Considering that the W-QLI has been comprehensively evaluated on the grounds of its psychometric properties (reliability and construct validity) and that its dimensions have predictive power and clinical utility (Caron et al. 2002) it appears quite promising for clinical assessment.

Further studies are needed to assess the sensitivity of the CaW-QLI to detect differences following the implementation of a treatment, an intervention or a significant life event. This would allow for the effects of psychosocial and/or pharmacological treatments to be assessed which are useful in both the area of research and clinical settings.

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Table 4. Correlations between scales

Domains	(SLD)	(SYM)	(PH)	(SR)	(FIN)	(PWB-)	(PWB+)	(ADL)	(TOT)
Satisfaction with life domains (SLD)									
Symptoms (SYM)	0.17*	0.43**	0.43**	0.48**	0.43**	0.40**	0.39**	0.11	0.83**
Physical health (PH)	0.27**	0.44**	0.57**	0.35**	0.20**	0.61**	0.34**	0.21**	0.74**
Social relationships (SR)	0.42**	0.34**	0.24**	0.22**	0.21**	0.39**	0.22**	0.13	0.65**
Finances (FIN)	0.31**	0.13	0.27**	0.41**	0.33**	0.27**	0.29**	0.01	0.63**
Negative psychological wellbeing (PWB -)	0.23**	0.62**	0.43**	0.32**	0.26**	0.23**	0.22**	0.02	0.55**
Positive psychological wellbeing (PWB+)	0.15*	0.13	0.20**	0.30**	0.28**	0.26**	0.33**	0.09	0.66**
Activities of daily living (ADL)	0.03	0.13	0.16*	0.03	0.09	0.10	0.16*	0.27**	0.55**
Total W-QLI (TOT)	0.73**	0.58**	0.57**	0.71**	0.57**	0.61**	0.47**	0.17*	0.22**

DHRC sample in below diagonal (N = 182) and FSRC sample in italic above the diagonal (N = 203)

* p < 0.05

** p < 0.01

Table 5. Confirmatory factorial analysis results of the QoL (FSRC sample, N = 203)

Models	Adjustment Fit Index				
	Satorra chi square/df	CFI	CFI Robust	IFI	RMSEA
Six dimensions (30)	657.2/391 = 1.68	0.81	0.83	0.81	0.07
Five dimensions (25)	355.0/262 = 1.35	0.92	0.93	0.92	0.05

CFI = Comparative Fit Index; CFI Robust = Comparative Fit Index Robust; IFI = Bollen Fit Index; RMSEA = root mean square error of approximation.

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