ELADEB: a recent tool in social psychiatry for self-report of current difficulties and needs for help

Bellier-Teichmann T[1], Golay P[2], Brana A[3], Hayoz C[3], Reymond C[4], Ferrari P[4], Gebel S[4], Gibellini Manetti S[4], Morandi S[4], Pomini V[1]

[1] Institute of Psychology, University of Lausanne, Switzerland
[2] Faculty of Psychology and Educational Sciences, University of Geneva, Switzerland
[3] Horizonsud Foundation, Marsens, Switzerland
[4] Social Psychiatry Section, Community Psychiatry Service, Department of Psychiatry, University Hospital Center and University of Lausanne, Prilly, Switzerland

1. Background

The assessment of patients' needs is a central part of any psychiatric, psychotherapeutic and psychosocial investigation. It helps to determine the optimal strategy of interventions, the choice and the priorities of the pursued goals. Patients suffering from chronic psychiatric disorders present various profiles of diagnoses, symptoms, cognitive dysfunctions, life skills deficits and social problems. A recent instrument called **ELADEB** (Lausanne self-rating scales for difficulties and needs) has been developed for self-rating current difficulties and needs for care. This tool allows patients, even with pronounced cognitive or verbal impairments to make adequate subjective self-reports of their present problems and requests for additional help. ELADEB is based on a Q-sort method with cards that picture eighteen life domains. Patients are invited to sort out and rank the cards representing the domains in which they perceive difficulties and needs. The eighteen items score from 0 (no problem/need) to 3 (very important problem/need). The instrument is divided in two subscales: the evaluation of difficulties and needs for care.
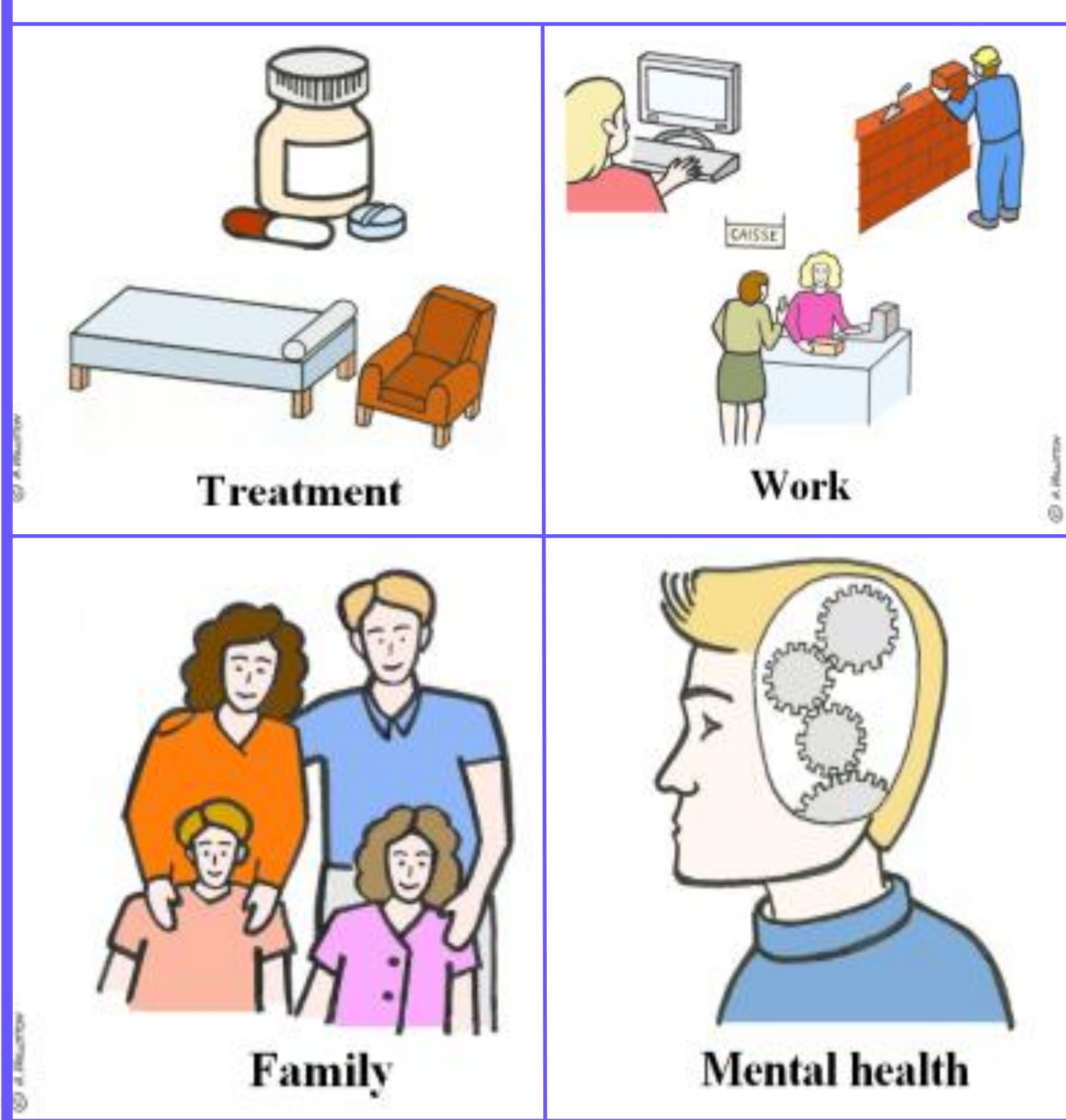
2. Tool properties

ELADEB was tested on 94 psychiatric outpatients in a protocol where test-retest reliability and correlations with other instruments measuring quality of life, social functioning and depression were assessed.

Self-report of difficulties is positively correlated with depression and negatively with quality of life and social functioning. Test-retest reliability at one week is satisfactory. ELADEB has good psychometric properties.

Classical exploratory and confirmatory factorial analysis were tested on ELADEB but did not give any satisfactory results.

Examples of items

Treatment

Work

Family

Mental health

3. Hypothesis

We will try to determine the factorial structure of ELADEB on a larger sample with a new factorial method.

We hypothesized that difficulties and needs for care would demonstrate both unicity and diversity. We predicted that difficulties and needs could be explained by both a general and several more specific factors.

Traditional rotations (e.g. promax, varimax) often can not recover such structures because they can not handle well items that may load on two factors (one general and one specific factor).

To deal with this goal we will use a bi-geomin rotation. (Jennrich & Benler, 2011, 2012).
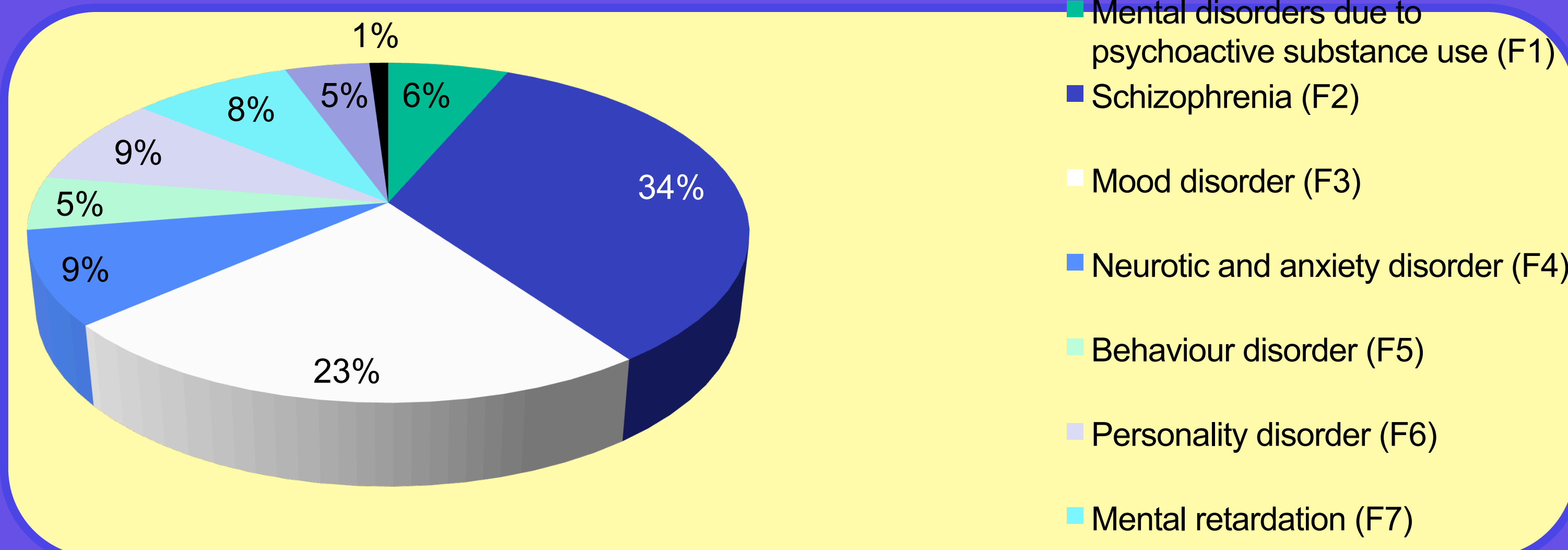
4. Sample

This project is a multicentric study. ELADEB was administered in routine clinical assessments to patients from three different mental health centers. The mean age of our total sample is 40 years (sd 5.6) and is composed by 51.6% of males.

Mental health centers

1. Programme of case management for hospitalised patients (Social psychiatry section) : N = 104
2. Evaluation and treatment rehabilitative program for day and outpatient care (Social psychiatry section) : N= 215
3. Supervised workshops and housing (Horizonsud Foundation) : N = 152

Total: N= 471

Diagnosis (ICD 10)

- Mental disorders due to psychoactive substance use (F1)
- Schizophrenia (F2)
- Mood disorder (F3)
- Neurotic and anxiety disorder (F4)
- Behaviour disorder (F5)
- Personality disorder (F6)
- Mental retardation (F7)

5. Results

The bi-geomin rotation yield a general factor that is orthogonal to all factors and a number of specific factors that may correlate with each other. The two subscales were analyzed separately. When the items were treated as continuous, interpretability and paralell analysis suggested a solution with 3 factors for both difficulties and need subscale. When the items were treated as categorical ordinal (see below) the three factors structure also proved to be the best solution. Goodness of fit indexes (RMSEA & SRMR) indicated good fit to the data (Hu & Bentler, 1999).

Factor 1: difficulties. This is a general factor of difficulties. Each item (except money) correlates significatively on this general factor.

Factor 2: administrative tasks. The items finances, administrative tasks and housework load on this factor.

Factor 3: social anxiety. The items transport, public places, family (negative loading) and self-care load on this factor.

RMSEA: 0.053
SRMR: 0.040

Difficulties

BI-GEOMIN ROTATED LOADINGS (* significant at 5% level)			
ITEMS	FACTOR 1	FACTOR 2	FACTOR 3
ACCOMODATION	**0.318***	0.064	-0.106
FINANCES	0.161	**0.442***	-0.097
WORK	**0.401***	0.147	-0.011
FREE TIME	**0.451***	0.071	0.045
ADMINISTRATIVE TASKS	**0.295***	**0.587***	0.019
HOUSEWORK	**0.414***	**0.203***	0.175
TRANSPORT	**0.317***	0.013	**0.494***
PUBLIC PLACES	**0.433***	-0.065	**0.392***
FRIENDSHIP	**0.490***	-0.117	-0.023
FAMILY	**0.546***	-0.087	**-0.302***
CHILDREN	**0.356***	-0.009	-0.196
LOVE STORIES	**0.451***	0.076	-0.165
FOOD	**0.368***	0.013	0.178
SELF-CARE	**0.245***	-0.008	**0.266***
PHYSICAL HEALTH	**0.325***	0.053	0.053
MENTAL HEALTH	**0.598***	0.020	-0.038
ADDICTION	**0.292***	-0.021	-0.004
TREATMENT	**0.395***	0.070	-0.023

Factor 1: needs for care. This is a general factor of needs for care. Each item correlates significatively on this general factor.

Factor 2: administrative tasks. The items accomodation, finances, work and administrative tasks load on this factor.

Factor 3: social anxiety & physical health. The items transport, public places, children (negative loading), food, self-care and physicial health load on this factor.

RMSEA: 0.050
SRMR: 0.037

Needs for care

BI-GEOMIN ROTATED LOADINGS (* significant at 5% level)			
ITEMS	FACTOR 1	FACTOR 2	FACTOR 3
ACCOMODATION	**0.295***	**0.280***	-0.013
FINANCES	**0.212***	**0.440***	-0.026
WORK	**0.313***	**0.241***	-0.078
FREE TIME	**0.529***	0.095	0.189
ADMINISTRATIVE TASKS	**0.300***	**0.420***	0.046
HOUSEWORK	**0.369***	0.009	0.201
TRANSPORT	**0.208***	0.008	**0.270***
PUBLIC PLACES	**0.471***	-0.139	**0.333***
FRIENDSHIP	**0.495***	-0.159	-0.049
FAMILY	**0.606***	-0.010	-0.281
CHILDREN	**0.473***	0.081	**-0.265***
LOVE STORIES	**0.570***	-0.155	-0.168
FOOD	**0.391***	0.055	**0.400***
SELF-CARE	**0.196***	-0.044	**0.243***
PHYSICAL HEALTH	**0.391***	0.203	**0.193***
MENTAL HEALTH	**0.613***	0.162	0.004
ADDICTION	**0.199***	0.097	0.002
TREATMENT	**0.483***	0.058	0.008

6. Discussion & Conclusion

These new results helped us to identify a structure of ELADEB with 3 factors. We obtained one general factor of difficulties and one general factor of needs for care. The second factor represents difficulties and needs in administrative tasks. The third factor represents difficulties related to social anxiety as well as needs related to social anxiety and physical health. This third factor of needs is not clear. The structure may be influenced by some items which are not frequently checked off by the patients and create artifacts. Furthermore, complementary analysis centered on the patients' diagnosis will help us to define whether individuals with a particular psychopathology have specific difficulties and needs for care.