The Outcome of Individuals "Not at Risk of Psychosis" and the Prognostic Accuracy of the Basel Screening Instrument for Psychosis (BSIP)

Martina Papmeyer[1,2,†], Jacqueline Aston[1,†], Judith Everts-Graber[1], Ulrike Heitz[1], Erich Studerus[1], Stefan J. Borgwardt[1], Rolf-Dieter Stieglitz[1], Anita Riecher-Rössler[1,*]

[1]Psychiatric University Clinics Basel, Center for Gender Research and Early Detection, Kornhausgasse 7, 4051 Basel, Switzerland

[2]Translational Research Center, University Hospital of Psychiatry, University of Bern, Bolligenstrasse 111, 3000 Bern 60, Switzerland

† Joint first authorship

*Corresponding author:

Prof. Dr. med. Anita Riecher-Rössler

Psychiatric University Clinics Basel

Center for Gender Research and Early Detection

Kornhausgasse 7

CH-4051 Basel

Tel.: +41 61 325 8161

Fax: +41 61 325 8160

Anita.Riecher@upkbs.ch

Abstract

Aim: We aimed to determine the prognostic accuracy of the Basel Screening Instrument for Psychosis (BSIP) in terms of specificity, sensitivity, positive and negative predictive value by following up individuals that were initially not considered to be at increased risk of psychosis based on the BSIP. Moreover, clinical characteristics of these individuals were examined given the relative lack of such information in the literature.

Methods: As part of the "Früherkennung von Psychosen" (FePsy) study, 87 individuals were screened with the BSIP. Of these, 64 were classified at baseline as being in an at-risk mental state (ARMS+) for psychosis using the BSIP and followed up at regular time intervals for at least two years to determine a putative transition to psychosis. Twenty-three individuals were classified at baseline as not being in an at-risk mental state (ARMS–) using the BSIP and re-assessed after four years. Sensitivity, specificity, positive and negative predictive value of the BSIP were computed. Clinical characteristics of the ARMS– group were analysed descriptively.

Results: During the follow-up period, none of the ARMS– individuals, but 21 of ARMS+ had developed psychosis. Sensitivity of the BSIP was 1.0, specificity was 0.35. The majority of ARMS– individuals showed depressive disorders or anxiety disorders and varying levels of functioning.

Conclusions: The BSIP has good prognostic accuracy for detecting the prodromal phase of psychosis with an excellent sensitivity and a specificity similar to other risk instruments and the advantage of a relatively short duration. Depressive and anxiety symptoms commonly develop in ARMS– individuals.

Key words: prodromal, psychosis, screening instrument, sensitivity, specificity

Introduction

The prodromal period of psychosis has received major attention as it holds the potential for early intervention which is considered key to significantly improve prognosis and functional outcome.[1] One of the ultimate goals in early detection of psychosis research is to detect the prodromal stage, offer treatment and thus delay or prevent the actual onset of illness.[2] Accordingly, several clinical instruments have been developed to identify individuals suspected to be in the prodromal phase of psychosis.[3-6] These individuals are considered to be in an "at-risk mental state" (ARMS) for the disease.

The diagnostic category "attenuated psychosis syndrome" (APS) capturing prepsychotic symptoms has even been proposed for inclusion into the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).[7] However, several concerns have been raised that ultimately led to its inclusion in the research section as a condition for further study only. Among these, the validity of the ARMS concept has been questioned.[8] Given the relatively non-specific nature of early prodromal symptoms and their considerable overlap in symptomatology with depression,[9] the prospective clinical assessment of the prodromal period of psychosis is complicated by high rates of false-positives. Only about 36% of individuals meeting ARMS criteria go on to develop psychosis within three years.[10] Moreover, about one third of ARMS individuals appear to remit from their initial risk status.[11] Accordingly, concerns have been raised that the ARMS may lead to unnecessary treatment, stigma and discrimination of what might be a self-limiting phase.[12]

On the other hand, relatively little attention has been paid to the issue of false-negatives.[13] Incorrect classification of individuals as being not at increased psychosis risk may also have severe consequences for the individuals concerned, including a delay

of adequate treatment. Recently, attempts have started to follow-up these individuals in order to examine a putative onset of psychosis and thus assess the prognostic accuracy of clinical instruments.[14] Also, clinical characteristics of individuals initially classified as being not at increased risk of psychosis after a considerable follow-up period are lacking.

Commonly used clinical instruments to identify ARMS individuals include the Comprehensive Assessment of At Risk Mental States (CAARMS),[3] the Structured Interview for Prodromal Syndromes (SIPS),[4] the Schizophrenia Proneness Instrument (SPI-A)[5] and the Basel Screening Instrument for Psychosis (BSIP).[6] This study focusses on the BSIP which has been shown to have a predictive validity comparable to other established clinical instruments,[15] with 32% of ARMS individuals developing psychosis within a follow-up period of up to five years.[6] Moreover, a very good inter-rater reliability has been demonstrated (Kappa .87).[6] However, the sensitivity and specificity of the BSIP have not been determined as yet since only ARMS individuals had initially been followed up.

Therefore, we invited individuals not meeting ARMS criteria according to the BSIP to a follow-up appointment and assessed whether psychosis had occurred. Moreover, we examined their clinical and functional outcome in terms of general wellbeing, psychopharmacological or psychotherapeutic treatments, psychopathological symptoms, mental disorders, capacity to work and global functioning. Based on our previous investigations,[6] we hypothesized that the BSIP identifies with high sensitivity and moderate specificity individuals at increased risk of psychosis. Accordingly, we expected that none of the individuals not meeting ARMS criteria during the initial screening had subsequently developed psychosis. Second, we hypothesized that these

individuals fulfil criteria for various mental disorders and present with varying degrees of functional outcome as typically observed in mixed patient samples.

Methods

Setting and Recruitment

Participants were initially recruited between 01/03/2000 and 28/02/2007 as part of the prospective "***F***rüh***e***rkennung von ***Psy***chosen" (***FePsy***; English: Early detection of psychosis) study. A detailed description of the study design can be found elsewhere.[16, 17] In brief, individuals suspected to be in their early (prodromal) phase of psychosis were referred to our specialised early detection clinic at the Psychiatric University Outpatient Department of the Psychiatric University Clinics Basel, Switzerland. This study was approved by the Ethics Committee Basel (EKBB) and conforms to the provisions of the Declaration of Helsinki. For the telephone interview, consent was obtained orally. In all individuals attending an outpatient appointment, written informed consent was obtained.

Initial Screening with the Basel Screening Instrument for Psychosis

Individuals were screened with the BSIP which has been designed to identify individuals presenting with putative prodromal symptoms or full-blown (first-episode) psychosis.[6, 18] It consists of seven sections that capture prodromal symptoms as specified in the revised third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R),[19] other early psychosis symptoms as derived from the literature, and current or previous (pre)psychotic symptoms as defined by Yung and colleagues.[20] Moreover, known risk factors such as young age, social decline, familial aggregation of

psychotic disorders, previous psychiatric history and referral because of suspected psychosis are taken into account (Table 1). The interview duration of the BSIP varies between 45-60 minutes.

[Insert Table 1]

Individuals were classified as being in an ARMS if they met one of the following inclusion criteria: (a) attenuated or brief limited psychotic symptoms according to the criteria by Yung et al.;[20] (b) familial aggregation of psychotic disorders in combination with at least two further risk factors according to screening instrument in line with the criteria by Yung et al.;[20] (c) a minimal amount and combination of certain risk factors according to screening instrument (for details, see [16]). Individuals meeting criteria (a) or (b) are considered at particular "high risk" because they show more psychosis-related symptoms or risk factors, whilst individuals meeting criteria (c) are considered at "low risk" as their symptoms are rather nonspecific.

On the basis of the BSIP, individuals were classified as either being in an ARMS (ARMS+ group), having an established (first-episode) psychosis, or being not at increased risk of psychosis (ARMS– group). ARMS+ and first-episode psychosis (FEP) individuals were invited to take part in the FePsy study, provided that they did not meet any exclusion criteria described previously.[6] For this study, ARMS– subjects were re-contacted approximately four years after their initial appointment at our clinic and invited to take part in a follow-up assessment.

Follow-up and Transition to Psychosis

ARMS+ individuals were re-assessed at regular time intervals for at least two years to examine whether transition to psychosis had occurred. ARMS– individuals were interviewed by telephone and subsequently invited to a face-to-face clinical interview at our clinic. Transition to psychosis was examined based on the Brief Psychiatric Rating Scale (BPRS)[21] items "suspiciousness", "unusual thought content", "hallucinations" and "conceptual disorganization", using the criteria of Yung et al.[20]

Follow-up Telephone Interview of Individuals Not at Risk of Psychosis

During the telephone interview, general wellbeing, capacity to work and psychopharmacological or psychotherapeutic treatments received since the initial screening were assessed. Transition to psychosis was examined based on the BPRS as described above. These items have shown good inter-rater reliability during a telephone interview before.[22]

Follow-up Face-to-Face Clinical Interview of Individuals Not at Risk of Psychosis

In those individuals who agreed to face-to-face assessments, the BPRS was administered to assess overall symptoms and transition to psychosis. Current diagnoses were assessed using the Structured Clinical Interview for Axis-I Disorders[23] and Axis-II Disorders (SCID).[24] Overall level of functioning was examined using the Global Assessment of Functioning (GAF).[24]

Subjectively experienced (pre)psychotic symptoms were assessed with self-rating questionnaires. The Paranoid Scale of the Paranoid-Depression Scale (PDS)[25] was used

to examine suspiciousness and loss of contact with reality. A global paranoid score was calculated, ranging from 0 to 48. Scores greater than 5 were considered an indicator for a potential loss of contact with reality.[25]

The Symptom Checklist (SCL-90-R)[26] was administered to assesses subjective impairment caused by “paranoid ideation” and “psychoticism”. Average "paranoid ideation" and "psychoticism" scores were determined, ranging between 0 and 4. Scores exceeding 1.89 and 1.48, respectively, were considered indicators of full-blown psychosis since they were one standard deviation above the average score typically found in non-psychotic psychiatric patients.[25]

Finally, positive and negative symptom dimensions as of the Community Assessment of Psychic Experiences (CAPE)[27] were assessed, with total scores ranging from 2 to 8. For the positive dimension, a score exceeding 5.0 was considered an indicator of psychotic symptom intensity as it has been shown to separate psychosis patients well from non-psychotic individuals.[28]

Statistical Analysis

All statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS), version 14.0 or the R environment for statistical computing (http://www.r-project.org). To rule out systematic differences between subjects who did or did not participate in the follow-up assessment, drop-out reasons were documented and age, sex and BPRS symptom dimension scores[29] were compared between the groups using t-tests and χ^2 tests, respectively.

Absolute and relative frequencies were calculated for categorical variables, mean values were computed for ordinal-scaled variables. To assess the accuracy of the telephone interview, findings from the telephone interview were compared with those from the face-to-face interview which was considered the gold standard. Sensitivity, specificity, positive and negative predictive value and positive and negative likelihood ratio of the telephone interview were computed. Finally, to assess the prognostic accuracy of the BSIP, specificity, sensitivity, positive predictive value and negative predictive value were calculated. Details regarding the calculation and interpretation of these six statistical parameters can be found in Figure 1.

[Figure 1]

Results

Sample Characteristics

Among the 263 individuals screened with the BSIP, 39 individuals were classified as ARMS–, 117 as ARMS+ and 107 as FEP (Figure 2). Of the ARMS– individuals, five (13%) were not contactable and eleven (28%) refused a telephone interview. Accordingly, 23 (59%) telephone interviews were conducted. Nine individuals (39%) interviewed refused a subsequent outpatient appointment, mainly because of “lack of time”. In total, 14 subjects (36%) attended a face-to-face interview.

[Figure 2]

Among the 117 ARMS+ individuals, 71 (61%) agreed to take part in the study. Of these, 7 individuals (10%) dropped out of the study before a follow-up duration of two years and were thus excluded. Accordingly, 64 ARMS+ individuals (55%) were included in the analyses.

There were no significant differences with regard to age, sex or BPRS symptom dimension scores between participants and refusers (Table 2). Also, the proportion of ARMS– and ARMS+ individuals followed up did not significantly differ between the groups ($p \leq 0.976$).

[Table 2]

Telephone Interview

When asked about their emotional wellbeing, 26% (n = 6) of ARMS– individuals felt worse, 35% (n = 8) felt better and 39% (n = 9) reported no change in wellbeing since the initial assessment. With regard to their capacity to work, 44% (n = 10) reported no change, 17% (n = 4) stated that their situation had improved, and 39% (n = 9) indicated that it had deteriorated (newly unemployed or receiving disability pension). In total, 65% (n = 15) had received pharmacotherapy and/or psychotherapy since initial assessment. In detail (multiple answers possible), 57% (n = 13) had received antidepressants, 22% (n = 5) tranquilisers, 13% (n = 3) antipsychotics, and 9% (n = 2) were unsure about their medication type. All individuals with a history of antipsychotic medication had received this form of pharmacotherapy for reasons other than psychosis.

When examining psychotic symptoms using the BPRS, one individual was suspected to have developed psychosis.

Face-to-Face Clinical Interview

Among the 14 ARMS– individuals who attended the face-to-face interview, none had transitioned to psychosis according to BPRS criteria. The mean BPRS total score was 32 (SD 7), corresponding to an overall psychopathological symptom severity of "mildly ill".[30] The average level of functioning as assessed with the GAF was 69 (SD 13), representing mild symptoms or some difficulty in social or occupational functioning. Clinical diagnoses of ARMS– individuals at follow-up are provided in Table 3. In brief (multiple diagnoses possible), the majority of individuals fulfilled criteria for a depressive (93%, n = 13) or anxiety disorder (28%, n = 4). The one individual suspected to suffer from psychosis on the basis of the telephone interview was diagnosed with borderline personality disorder instead.

[Table 3]

Details on self-rated psychotic symptoms are provided in Table 4. Only the participant suspected to suffer from psychosis on the basis of the telephone interview scored high on all self-rated psychotic symptom dimensions, including "paranoid ideation" and "psychoticism" using the SCL-90-R, the paranoid scale of the PDS, and positive symptoms as measured with the CAPE. For negative symptoms as assessed with the CAPE, she and one other individual (16%) scored above the proposed cut-off value.

However, as described above, a diagnosis of psychosis was not confirmed during the clinical face-to-face interview.

[Table 4]

Transition to Psychosis in At-Risk Mental State Individuals

The course of mental health in ARMS+ individuals has previously been described in detail by our research group.[17, 31] In short, 21 of the 64 ARMS+ subjects developed psychosis during the follow-up period (median time until psychosis onset in ARMS+ individuals: nine months).

The Accuracy of the Telephone Interview

According to the telephone interview, one ARMS– individual was suspected to have developed psychosis. The subsequent face-to-face clinical interview showed that none of the ARMS– individuals had actually developed psychosis. Thus, the specificity of the telephone interview was 0.93 (95% CI 0.66, 0.99), the negative predictive value was 1.00 (95% CI 0.75, 1.00). The sensitivity and positive predictive value could not be determined since there were no true positives.

The Prognostic Accuracy of the BSIP

Given the high accuracy of the telephone interview, findings from it regarding transition to psychosis were incorporated into the following analyses if a face-to-face interview

had not been feasible. Based on the follow-up assessments of ARMS– and ARMS+ participants, the following psychometric properties for the BSIP emerged: The sensitivity was 1.00 (95% CI 0.77, 1.00), meaning that all individuals who developed psychoses had been correctly identified as ARMS+ individuals at baseline. Specificity was 0.35 (95% CI 0.24, 0.48), indicating that the BSIP identifies in 35% of the cases correctly who remains unaffected by psychoses. The positive predictive value was 0.33 (95% CI 0.22, 0.46). That is, 33% ARMS+ individuals had a transition to psychosis during follow-up. The negative predictive value was 1.00 (95% CI 0.79, 1.00). That is, 100% of ARMS– individuals remained non-psychotic within a four-year follow-up period. The positive likelihood ratio was 1.54 (95% CI 1.19, 1.83), indicating that individuals identified as being in an ARMS according to the BSIP have a significantly increased probability of psychosis onset as compared to their pretest probability. The negative likelihood ratio was 0 (95% CI 0), showing that individuals identified as not being in an ARMS according to the BSIP have a largely decreased probability of psychosis as compared to their pretest probability. . In fact, their probability of developing psychosis is estimated to be zero.

Discussion

In a four-year follow-up of individuals initially classified as not at risk of psychosis according to the BSIP, none were found to have developed psychosis. The sensitivity (1.00) of the BSIP was excellent, indicating that all individuals who transitioned to psychosis were correctly classified as ARMS+. The specificity (0.35) was substantially lower since only about one third of ARMS+ subjects transitioned to psychosis during the follow-up period.

Our finding of an excellent sensitivity of the BSIP is in line with a recent meta-analysis that reported similar sensitivity estimates of 0.96 for both the SIPS and CAARMS across samples, with no influence of follow-up duration.[14] Similarly, Schultze-Lutter et al.[32] documented a sensitivity of 0.93 when employing both the SIPS and the "cognitive disturbances" (COGDIS) symptom criteria of the SPI-A in a four-year follow-up study.

The specificity of the BSIP is similar to that of the combined SIPS and COGDIS criteria of the SPI-A (0.28)[32] and the SIPS (0.39), but slightly lower than that of the CAARMS (0.56).[14] As opposed to the CAARMS however, the BSIP additionally classifies individuals as ARMS+ who present with relatively unspecific symptoms and risk factors. This fact may account for the observed higher sensitivity but lower specificity of the BSIP as compared to the ultra-high risk criteria. Indeed, if those subjects who only had low risk according to the BSIP had been classified as ARMS– (analyses not shown), the sensitivity of the BSIP would have declined to 0.95 as there would have been one false-negative but the specificity would have improved to 0.45. So with the extra category of "low risk", the BSIP ensures not to overlook any individual at risk at the cost of identifying slightly more false positives.

When examining the utility of a specialised telephone interview in assessing psychosis onset in ARMS– individuals, a very high validity emerged. The telephone interview yielded only one false-positive psychosis classification. Accordingly, it appears to be a less resource-demanding and highly valid alternative to face-to-face clinical interviews. We recommend to conduct telephone interviews with ARMS– subjects routinely and to only invite those individuals with suspected onset of psychosis to a face-to-face interview.

Our follow-up assessment also provides new insights into the clinical characteristics and functional outcome of ARMS– individuals who had been referred to us with suspected emerging psychosis. Most ARMS– individuals were diagnosed with major depressive and/or anxiety disorders at follow-up. This is well in line with the fact that we, as well as other early detection services, found ARMS– individuals to commonly present with mood and anxiety disorders at initial contact.[33, 34] A recent meta-analysis has shown that diagnoses of depressive or anxiety disorders are made in about 41% and 15% of ARMS+ individuals at baseline, respectively. As in ARMS+ samples, the spectrum and severity of psychopathological symptoms in ARMS– cohorts share strong commonalities with other mental disorders[35] and the general level of functioning varies considerably between subjects.

A particular quality of this study is the assessment of transition to psychosis in ARMS– and ARMS+ individuals after a relatively long follow-up duration of at least two and four years, respectively. Moreover, we provide detailed clinical characteristics of ARMS– participants at follow-up and fill this gap in the literature. Some limitations need to be addressed. First, the sample size of ARMS– individuals was relatively small. With only 23 of 39 (59%) ARMS-follow-up interviews that could be conducted, it remains unknown whether some individuals who did not take part in the follow-up had developed psychosis.

In conclusion, the BSIP is a valid instrument for early detection of at-risk states for psychosis, with an excellent sensitivity and a specificity that is similar to other risk assessment instruments. Its advantage if the comparably shorter interview duration. Future research should aim at following up individuals seen at early detection services and classified as “not at risk” in order to further improve the specificity of risk

assessment instruments. Moreover, the specificity can likely be enhanced by combining ARMS criteria with additional risk factors and biomarkers from other domains such as neuropsychology[17], neuroimaging[36] or neurophysiology[37] into prediction models.

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Tables

Table 1. Domains of the Basel Screening Instrument for Psychosis (BSIP)[6]

(1) Psychopathology - Prodromal symptoms according to DSM-III (first occurrence within last 5 years and persisting up to now) - Other prodromal signs as derived from literature (first occurrence within last 2 years and persisting up to now) - Psychotic symptoms (attenuated or brief)
(2) Social decline Marked deterioration of performance with severe consequences for work, education or relationships (occurence during last 5 years and persisting up to now)
(3) Drug abuse Regularly within the last 2 years
(4) Previous psychiatric history Previous psychiatric disorders and treatments
(5) Genetic risk Schizophrenia/psychoses in the family
(6) At-risk age
(7) Patient referral because of suspected psychosis

Table 2. Sociodemographic and clinical characteristics at baseline

	At-Risk Mental State				Not At-Risk Mental State			
	All (n=117*)	Followed-up (n=64)	Not followed-up (n=53)	p-value	All (n=39*)	Followed-up (n=23)	Not followed-up (n=16)	p-value
Age	26.3 (7.9)	26.2 (8.4)	26.4 (7.4)	0.843	31.5 (8.8)	31.6 (8.6)	31.5 (9.4)	0.909
Gender:				1.000				0.692
Women	49 (42%)	27 (42%)	22 (42%)		18 (46%)	10 (43%)	8 (50%)	
Men	68 (58%)	37 (58%)	31 (59%)		21 (54%)	13 (57%)	8 (50%)	
BPRS*:								
Depression/Anxiety	8.65 (3.51)	8.43 (3.66)	9.00 (3.29)	0.410	11.3 (5.01)	12.2 (5.92)	10.2 (3.41)	0.224
Psychosis/Thought Dist.	7.12 (3.07)	6.70 (2.75)	7.76 (3.45)	0.103	5.76 (2.91)	5.26 (1.91)	6.40 (3.81)	0.304
Negative Symptoms	5.78 (2.99)	6.03 (3.14)	5.39 (2.72)	0.272	5.57 (2.72)	6.05 (2.91)	4.97 (2.41)	0.243
Activation	5.90 (2.63)	5.70 (2.52)	6.22 (2.81)	0.338	6.12 (2.51)	6.47 (2.22)	5.67 (2.85)	0.375

For age, means and standard deviations are provided. For gender, absolute and relative frequencies are provided. BPRS, Brief Psychiatric Rating Scale.[21]

* For BPRS symptom dimensions, there are 13 missing cases in the At-Risk Mental State group and 3 missing cases in the Not At-Risk Mental State group.

Table 3. DSM-IV diagnoses of individuals not at risk of psychosis after four-year follow-up

DSM-IV Code	Diagnosis	%	(n)
MOOD DISORDERS		**93**	**(13)**
296.26	Major depressive disorder, single episode, in full remission	21	(3)
296.31	Major depressive disorder, recurrent, mild	7	(1)
296.32	Major depressive disorder, recurrent, moderate	7	(1)
296.34	Major depressive disorder, recurrent, severe, with psychotic features	7	(1)
296.35	Major depressive disorder, recurrent, in partial remission	14	(2)
296.36	Major depressive disorder, recurrent, in full remission	21	(3)
300.04	Dysthymic disorder	7	(1)
311	Depressive disorder, not otherwise specified	7	(1)
ANXIETY DISORDERS		**28**	**(4)**
300.22	Agoraphobia, without panic disorder, mild, in partial remission	7	(1)
300.23	Social phobia, in partial remission	7	(1)
300.29	Specific phobia, moderate	7	(1)
300.7	Body dismorphic disorder	7	(1)
EATING DISORDERS		**7**	**(1)**
307.1	Anorexia nervosa, in full remission	7	(1)
ADJUSTMENT DISORDERS		**7**	**(1)**
309.4	Adjustment disorder with mixed disturbance of emotions and conduct, in full remission	7	(1)
SUBSTANCE RELATED DISORDERS		**7**	**(1)**
304.10	Benzodiazepine dependence, in full remission	7	(1)
PERSONALITY DISORDERS		**7**	**(1)**
301.83	Borderline personality disorder	7	(1)

DSM-IV, Diagnostic and Statistical Manual of Mental Disorders, fourth edition, based on the Structured Clinical Interview for Axis-I Disorders (SCID).[23] Multiple diagnoses are possible.

Table 4. Symptomatology and global level of functioning of individuals not at risk of psychosis after four-year follow-up

Individual	SCL-90-R		PDS	CAPE		GAF	BPRS
	Paranoid ideation	Psychoticism	Paranoid Scale	Positive symptoms	Negative symptoms		Total Score
1	-	-	2	-	-	55	41
2	0.33	0.20	**6**	2.30	3.79	70	28
3	0.00	0.00	0	2.20	5.00	90	27
4	1.00	0.40	1	3.07	5.33	65	28
5	0.00	0.30	0	2.30	3.21	50	41
6	**3.00**	**3.33**	**19**	**6.16**	**7.62**	55	43
7	0.17	0.00	0	2.26	2.64	70	25
8	-	-	-	-	-	85	24
9	0.67	0.50	2	-	-	60	35
10	0.50	0.00	3	3.35	4.36	65	38
11	0.00	0.00	0	2.05	2.36	85	-
12	0.83	0.40	1	2.75	4.31	65	31
13	0.33	0.30	0	2.30	3.36	90	26
14	1.17	1.00	3	2.60	**7.00**	65	34
Mean (SD)	0.67 (0.83)	0.54 (0.93)	2.85 (5.16)	2.85 (1.17)	4.45 (1.69)	69.28 (13.28)	32.38 (6.69)

Bold indicates scores above cut-off value; SD, standard deviation.

BPRS, Brief Psychotic Rating Scale;[21] CAPE, Community Assessment of Psychic Experiences;[27] GAF, Global Assessment of Functioning;[24] PDS, Paranoid-Depression Scale;[25] SCL-90-R, 90-item Symptom Checklist – revised.[26]

Figure Legends

Figure 1. Measures of prognostic accuracy.

Figure 2. Study sample at initial screening and follow-up. BSIP, Basel Screening Instrument for Psychosis.[6]