

# Dimensional approach in DSM-5 replace the subtyping of schizophrenia?

## Factor analysis the severity of core symptoms in early psychosis :

### A 1-year longitudinal follow-up prospective cohort study

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## BACKGROUND

- Schizophrenia subtypes were discarded with the release of DSM-5 because of the lack of their clinical significance.
- Correspondingly, DSM-5 presented a Clinician-Rated Dimensions of Psychosis Symptom Severity, which consists of 8 items.
- The purpose of this study is to investigate the structure categorizing the items of dimensional assessment through factor analysis in patients with early psychosis and we tried to see if the categorized structure is useful for predicting the longitudinal clinical course.

## METHODS

### METHOD

- Factor analysis was conducted on the 8 items of Clinician-Rated Dimensions of Psychosis Symptom Severity in DSM-5
- We grouped the patients according to the factors listed in the factor structure and compared the data of baseline and 1-year longitudinal data
- Follow-up assessments are conducted at 2, 6, 9, and 12 months

### SUBJECTS

497 subjects enrolled in Korean Early Psychosis cohort Study (KEPS)

- Of 506 patients, 9 patients excluded due to their final diagnosis or loss of evaluation.

390 subjects for baseline data

- Patients who cannot be grouped were excluded.
- Of 497 patients, 107 patients were excluded.

195 subjects for longitudinal data for 1-year

- 83 patients did not reach the evaluation point.
- 112 patients were dropped out.

### STATISTICAL ANALYSIS

: t-test, Chi-square test, Fisher's exact test, Repeated measurement analysis

## RESULTS

### ❖ Classification of patients according to the factor structure derived from factor analysis

: Two factors were identified which were labeled as 'psychotic' and 'deficit' domain.

-**Psychotic domain** : delusions, hallucinations, disorganization, abnormal psychomotor behavior

-**Deficit domain** : negative symptoms and impaired cognition

Grouping the patients according to the structure. → "Psychotic dominant" & "Deficit dominant"

### ❖ Baseline characteristics and clinical variables

: Deficit dominant group had longer DUP, younger in age at onset, higher rate of comorbidity and higher non-urban residential rate.

### ❖ Longitudinal course

- ✓ The baseline severity represented by PANSS total score and CGI-S was higher in psychotic dominant group.
- ✓ There was no difference in severity from two months later. However, the difference of PANSS negative scale was significantly higher in deficit dominant group persistently.
- ✓ Along this, CGI-S was reversed and difference of PANSS total score showed a trend at 12 months.

Table 1. Baseline sociodemographic characteristics

	Psychotic dominant (n=169)	Deficit dominant (n=221)	$\chi^2$ or t	p
Gender (Male : Female), n	62:107	102:119	3.523	0.061
Age (years), mean(±SD)	29.8(±9.5)	28.0(±8.7)	2.012	0.045*
Age at onset (years), mean(±SD)	28.5(±9.5)	25.6(±8.8)	3.102	0.002*
Education, n (elementary: high school: college, graduate)	2:77:90	1:97:123	0.826	0.662
Residential area, n (urban: non-urban)	153:16	177:44	8.021	0.005*
Family history of psychiatric illness (presence: absence), n	26:141	33:188	0.030	0.863
Comorbid mental illness, n (presence: absence)	17:150	43:175	6.549	0.010*
Comorbid physical illness, n (presence: absence)	18:149	17:200	0.988	0.320
Familial support, mean(±SD) (5-point Likert scale)	2.6(±1.1)	2.7(±1.1)	-0.216	0.829
Duration of untreated psychosis (DUP, month), mean(±SD)	10.9(±22.2)	18.0(±36.8)	-2.289	0.023*

\*Statistically significant (p<0.05)

†Statistical analysis: t-test, chi-square test

Fig. 1. The longitudinal changes of clinical variables

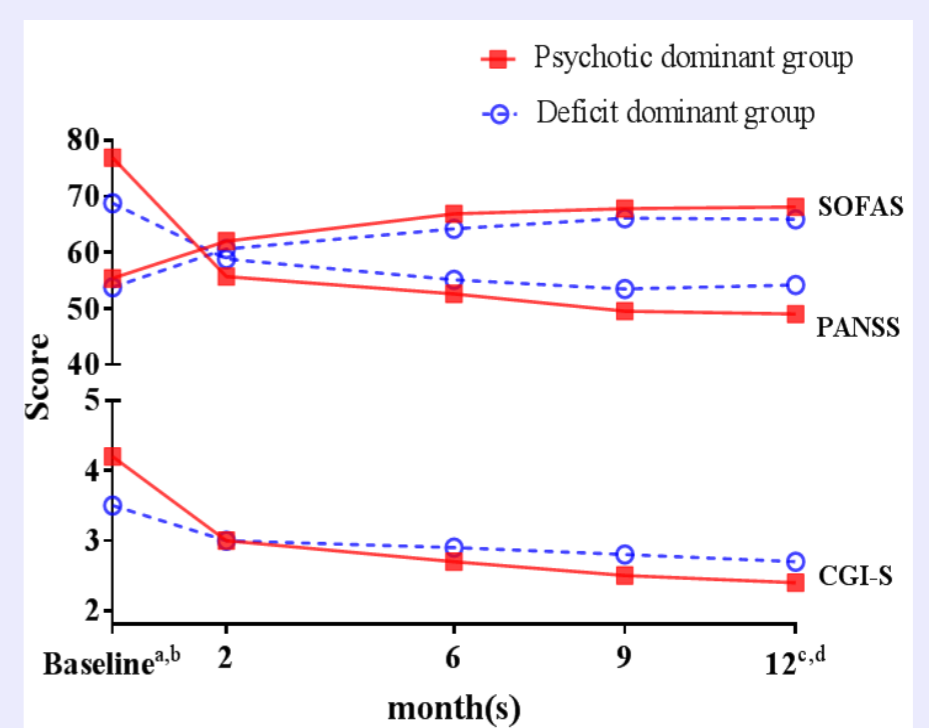
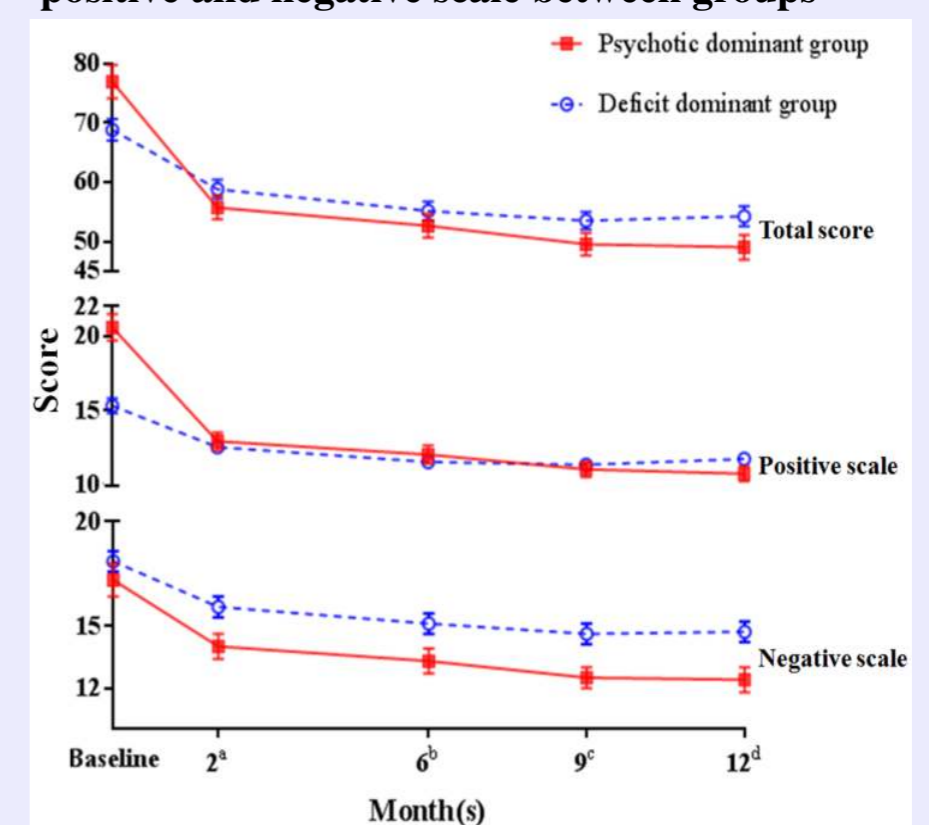


Fig. 2. The comparison of longitudinal courses of PANSS positive and negative scale between groups



## CONCLUSION

- ❖ A factor structure in patients with early psychosis can be created using the Clinician-Rated Dimensions of Psychosis Symptom Severity in DSM-5.
  - ❖ Grasping the dominance according to the structure can also be helpful in predicting the longitudinal clinical course of the patients.
- \*\*Negative symptoms and impaired cognition are worth noting.