

Affective features and gender in Psychosis: Duration of illness makes a difference

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Background

Gender differences in schizophrenia are generally accepted: Men show earlier age of onset, more negative symptoms, less affective symptoms, and worse prognosis¹. Also, some studies showed more prominent gender differences in later than earlier disease stages².

Aim

1. To test gender differences in clinical presentation and functioning in our sample.
2. To test whether duration of illness moderates these differences.

Methods

Gender differences in 262, inpatients and outpatients, affected by schizophrenia (n=225) and schizoaffective disorder (n=37) were compared. Symptoms were evaluated through Positive and Negative Syndrome Scale (PANSS) and its five Lindenmayer factors; functioning was measured by Global Functioning Assessment (GAF). Premorbid Intelligence Quotient (IQ) was estimated by verbal subscale of WAIS.

Univariate analysis is made by t-student test, and non parametrical test (U Mann-Whitney) when necessary. A moderation analysis with simple slopes and Johnson-Neyman Technique methods is undertaken using PROCESS application³.

Results

- Female patients showed **later age of onset and higher Positive and Affective factors score**. No statistically significant differences were found in GAF, IQ, total PANSS, and Negative, Disorganized, and Excitement factors (Table 1).
- A moderating effect of duration of illness in affective symptoms was present, with statistical significance in patients with more than 17,7 years of evolution: **more chronic females showed more affective symptoms** (Predicting Model of Affective Factor: Duration x Gender: $B=0,1$ (0,04); $p=0,015$). (Fig.1 and 2).
- This interaction, in turn, was not moderated by diagnosis (third order interaction is not significant when added to the model, Duration x Diagnosis x Gender). (Fig. 3)
- Duration had no moderation effect on gender differences in other Lindenmayer's factors, neither in total PANSS, IQ and GAF (table 1).

Figure 1: Regression model: Duration and Gender interaction

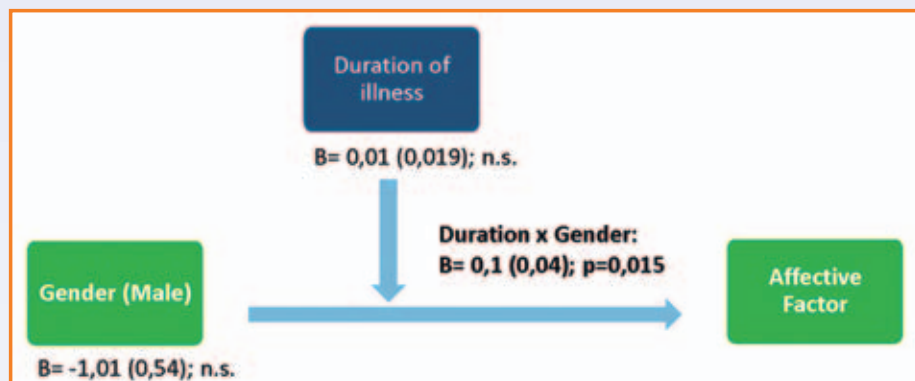


Figure 2. Plot of Regression shown in Figure 1

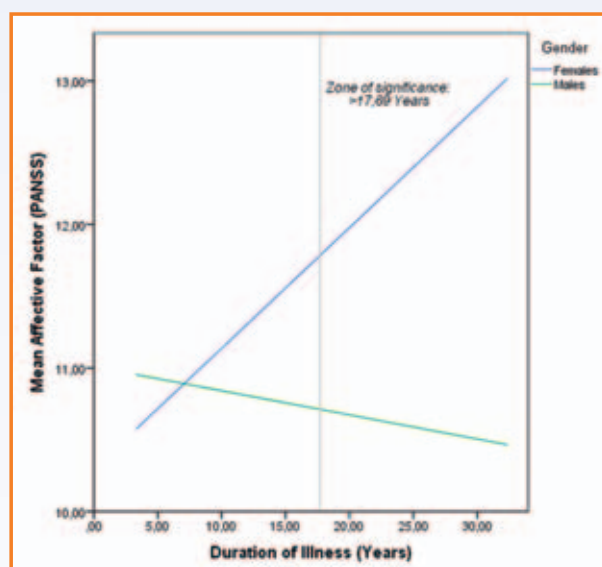


Figure 3: Diagnosis interaction model

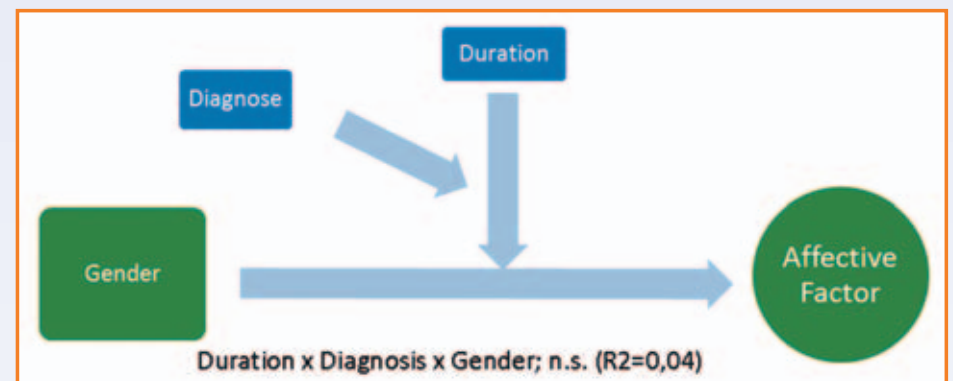


TABLE 1: Clinical Variables, Bivariated and Regression analysis

Tested Variable	Females N=82 (31,3%) Mean (DS)	Males N=180 (68,7%) Mean (DS)	Sign. ¹	Time x Gender Interaction ³
Age of Onset	24,13 (7,80)	20,99 (5,24)	P< 0,001 ²	
PANSS	81,22 (22,40)	76,8 (22,36)	n.s.	n.s.
Positive Factor	21,43 (7,62)	18,80 (7,20)	P< 0,01	n.s.
Negative Factor	19,38 (9,71)	20,49 (9,23)	n.s.	n.s.
Cognitive Factor	17,37 (6,89)	16,83 (6,94)	n.s.	n.s.
Affective Factor	11,80 (4,30)	10,73 (3,78)	P< 0,05	Sig.
Excitement Factor	9,91 (4,36)	9,63 (4,49)	n.s.	n.s.
GAF	50,76 (15,90)	48,49 (15,77)	n.s.	n.s.
IQ	92,04 (12,58)	95,69 (15,68)	n.s. ²	n.s.

1. T Student test.

2. U Mann-Whitney test (non normal distribution).

3. Lineal Regression with gender and duration interaction as predictor (as shown in fig. 2).

Conclusions

- Our data support the common finding of earlier age of onset in males.
- There are gender differences in positive and affective symptoms.
- Time of evolution had a moderating effect on gender differences in affective symptoms.

References

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