

Social Media Usage and Symptomatology in Patients with First Episode Psychosis

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Introduction

- Schizophrenia is a severe, complex psychiatric disorder affecting approximately 1% of the population
- Symptoms are characterized by positive symptoms (false beliefs, hearing voices) and negative symptoms (unclear or confused thinking, reduced social engagement and emotional expression, lack of motivation)
- The first episode of psychosis (FEP) manifests in late adolescence or early adulthood, disrupting development and leading to psychosocial dysfunction (Schrank et al., 2010)
- Early intervention (EI) services have been shown to be effective to treat schizophrenia and attenuate its social comorbidities (Perkins et. al., 2005)
- EI services focus on aggressive identification and treatment of the illness as early as possible in the disease course
- EI engagement is important for FEP patients, but difficult to achieve
- Novel interventions utilizing social media platforms and related technologies show modest improvements to patient adherence and treatment engagement (Haker et al., 2006)
- Literature shows similar social media usage between the general population and patients with schizophrenia, with slightly less usage among the latter population (Mittal et al., 2007)
- Social media use and symptomatology was reviewed in this study because more negative symptoms typically cause social isolation
- Whether this isolating tendency carries over into social media usage has received little research
- FEP patients social media usage may vary by symptoms, which should be considered when implementing treatments that utilize it

Methods

Design

Data for this project was extracted from a larger dataset of an ongoing longitudinal study of patients in the Prevention and Recovery Center for Early Psychosis (PARC), an Eskenazi Health Midtown Community Health Center clinic specializing in the study and treatment of FEP patients.

Baseline data for 25 subjects was included in this analyses (Table 1). A demographics questionnaire was administered to determine the subject's age, years of education, parental socio-economical status (SES), and social media usage. Positive and Negative Syndrome Scale (PANSS) was used to assess symptoms of schizophrenia. The Mini International Neuropsychiatric Interview (M.I.N.I.) was used to detect presence of social anxiety.

Data Analysis

Using SPSS software, a Spearman Correlation was used to examine the association of the social media use with clinical factors, including:

- Age
- Sex
- Race
- Parental socioeconomic status
- Positive, Negative, and Total symptoms
- Presence or absence of social anxiety

Table 1. Demographic Characteristics

Sex (M/F)	19 (76%)/ 6 (24%)
Race (C/AA/other)	10 (40%)/ 14 (56%)/ 1 (4%)
Parental SES (avg.)	3.61
Social Anxiety (No/Yes)	21 (84%)/ 4 (16%)

Results

Table 2. Correlations between average hours spent on social media per week and variables of interest

	Time spent on social media
PANSS Total	r = 0.30
PANSS Positive	r = 0.22
PANSS Negative	r = -0.01
Social Anxiety	r = 0.04
Parental SES	r = 0.30
Gender	r = 0.40
Race	r = 0.13

*All correlations were non-significant at a p value > 0.10

Results

Figure 1: Association of Social Media Usage and PANSS Total Score

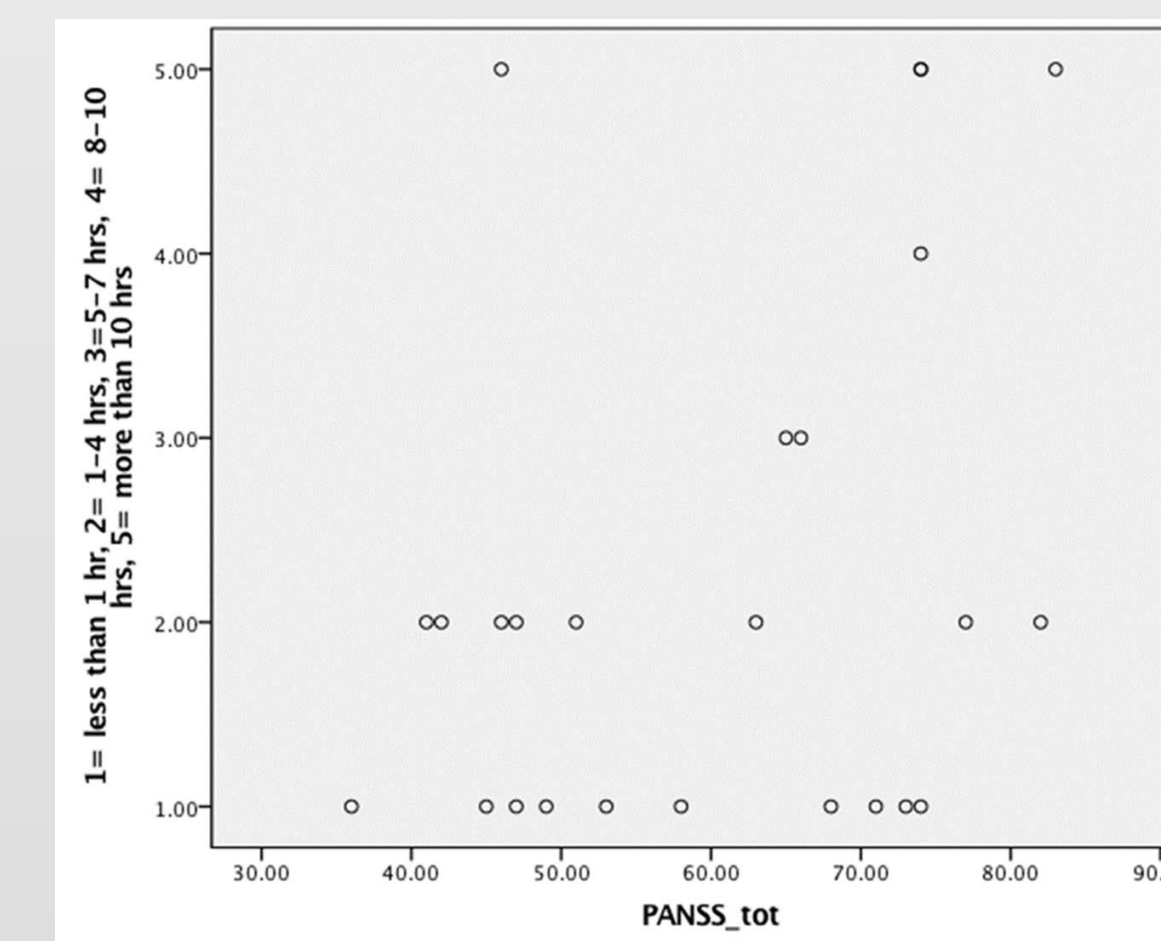


Figure 2: Association of Social Media Usage and PANSS Positive Score

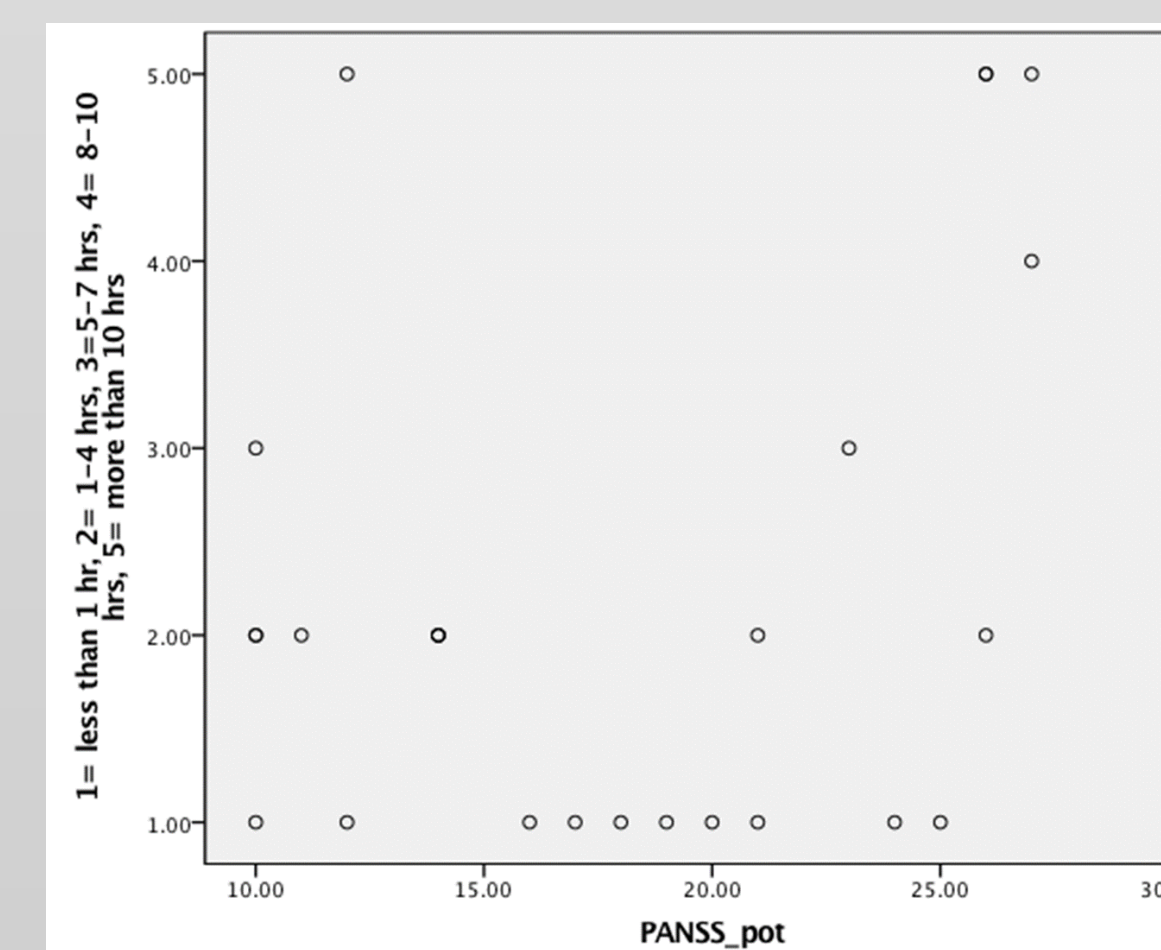
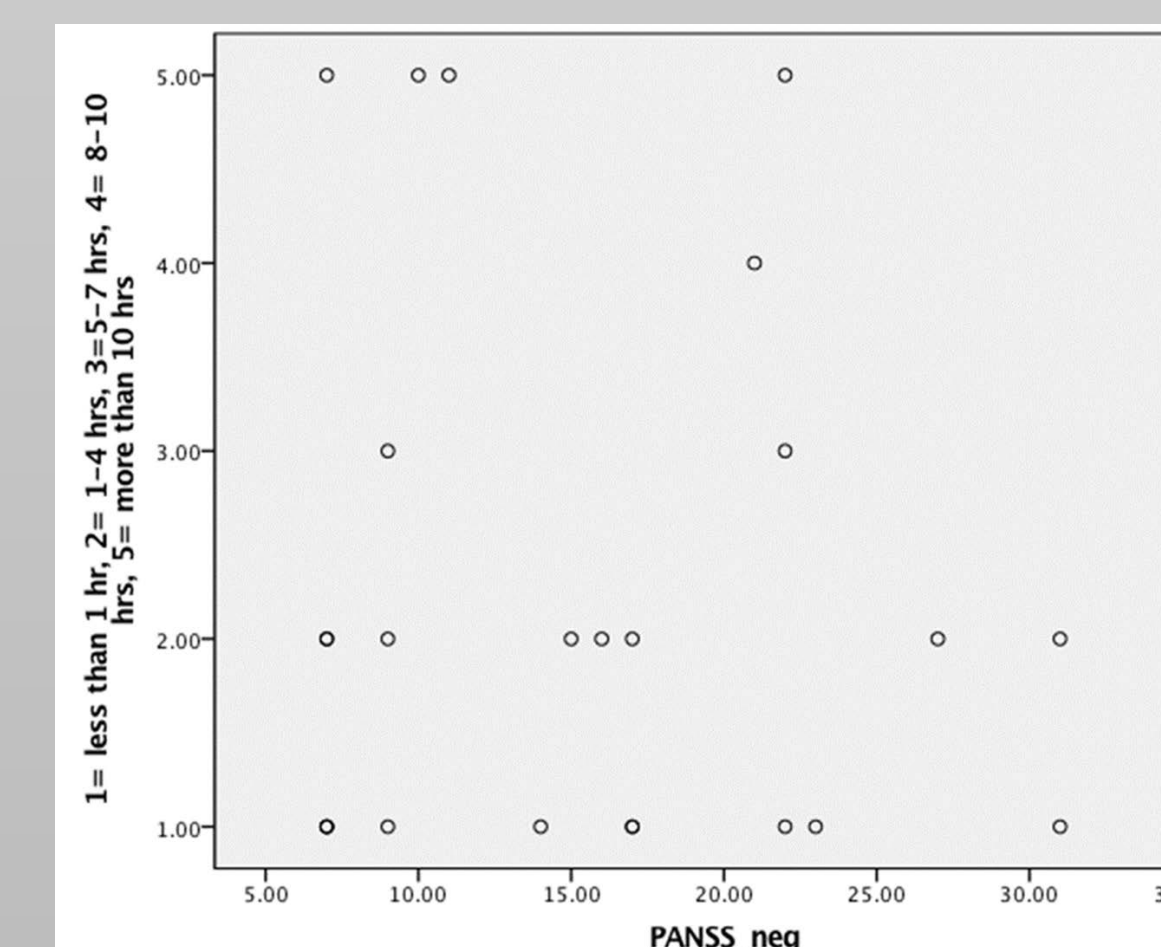


Figure 3: Association of Social Media Usage and PANSS Negative Score



Conclusions

- This FEP patient population has lower than national average social media use which should be considered when implementing new treatment routes
- Extraneous factors, including SES and social anxiety, had no significant effect on social media usage
- Further studies, should include larger sample size and more specific questions

Discussion

Considerations

- FEP patient populations have lower social media usage (1-4hrs/wk) compared to overall national averages (12hrs/wk) (Mittal et al., 2007)
- Important to consider when implementing technologically related solutions to treatment engagement and adherence
- It may not be effective for this population

Extraneous Variables

- No difference in usage among SES levels
 - Perhaps because many were in the same, lower SES levels
- No significant correlation found between social anxiety and social media usage

Limitations

- Small, uniform sample
- Social media usage measured in blocks of time (e.g. 1-4 hrs/wk vs. 3 hrs/wk)
 - Unable to determine more specific amount of usage
- Small percentage showing social anxiety
 - Larger sample required to make an accurate conclusion about its influence

For future research

- Compare to control matched for age/SES
- Assess access to social media technology (e.g. computers, smartphones, etc.)
- Examine social media platforms used
- Assess technological literacy of patients

References

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Acknowledgements

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