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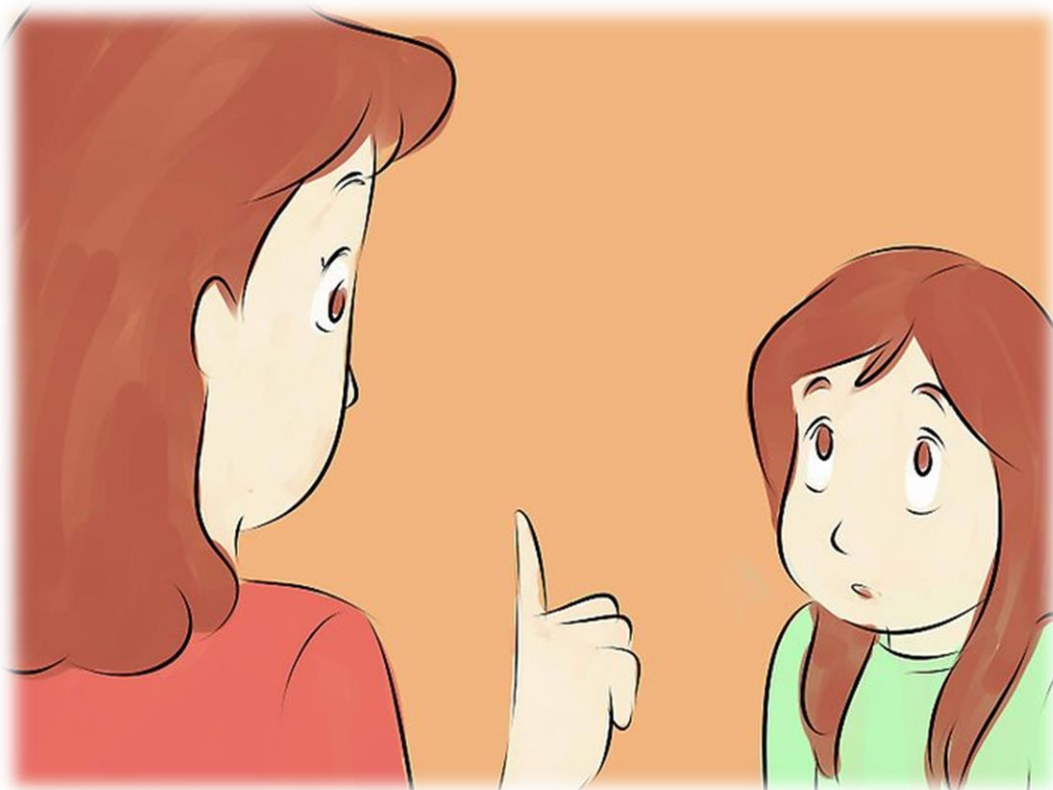
Authors

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Social influence and moment-to-moment changes in young adults' mood and psychotic symptoms

BACKGROUND

- Social situations can have a significant impact on young people's mood and mental experiences.
- More specifically, we want to know how someone's perceived social influence in social situations relates to their mood and psychotic symptoms.
- Past studies have found connections between lower perceived social status (rank, comparison, and related concepts) and psychotic symptoms^{1,2,3}, anxiety, depression⁴, and other mood related psychopathology^{5,6}.
- We use experience sampling methods to capture moment-to-moment changes in mood and psychotic symptoms in a variety of social settings.



- We predicted:
- Greater feelings of social influence will be associated with lower levels of negative affect in all diagnostic groups
 - In young adults with psychotic-spectrum disorders, more social influence will be associated with lower levels of psychotic symptoms

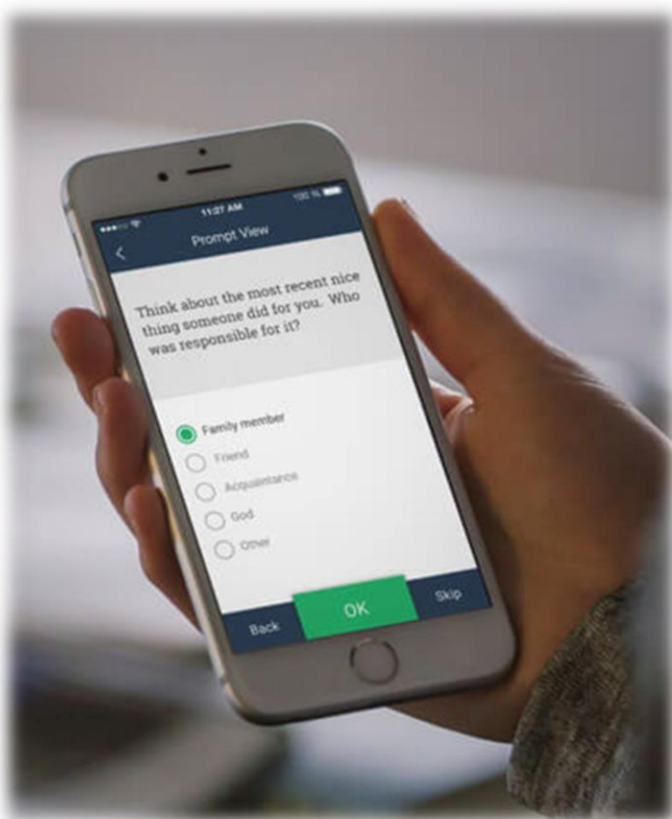
METHODS

Participants

To date, 21 individuals ages 15-25 completed the phone surveys at the time of this analysis. Two participants did not receive survey questions regarding social influence, so 19 young adults are included in analyses. 4 met criteria for clinical high-risk (CHR) for psychosis on the Structured Interview of Psychosis-Risk Syndromes⁷, 6 met criteria for a psychotic disorder (PSY) on the Structured Clinical Interview for DSM-5⁸, and 9 were non-psychotic comparisons (NC) with no current or past mental illness. (Table 1)

Methods

- Participants complete daily surveys via a mobile phone app 6 times per day for 3 weeks
- Young adults are asked about their mood, mental experiences, and present-moment social contexts.
- Assessing social context: participants received questions about who they are with and how they feel about that social context
- Social influence: participants are asked to what degree they feel able to influence the people they are surrounded by in a given moment, as well as how much they feel able to be influenced by those people.
- We created a composite variable (social influence) by reverse scoring how much an individual felt *able to be influenced*, and averaging this with how much they felt *able to influence others*, assuming that these items would be inversely related.



	NC (n=9)	CHR (n=4)	PSY (n=6)
Age (m, SD)	19.6, 2.8	21.3, 1.5	19.33, 1.6
Average survey completion rate (%)	80%	82%	71%
% of time spent with others	53%	35%	31%
Gender % (n)			
Male	56 (5)	50 (2)	50 (3)
Female	44 (4)	25 (1)	50 (3)
Nonbinary	0 (0)	25 (1)	0 (0)
Race % (n)			
White	67 (6)	75 (3)	67 (4)
Black	0 (0)	25 (1)	17 (1)
Asian	33 (3)	0 (0)	0 (0)
Interracial	0 (0)	0 (0)	17 (1)

TABLE 1. Participant characteristics

Data Analysis

Due to the small sample size, we calculated Pearson's r in order to analyze the relationship between influence and symptoms.

RESULTS

Initial findings:

- We found weak negative correlations between composite social influence and negative affect (NA) ($r = -0.22$, $p < 0.001$) and psychotic symptoms ($r = -.11$, $p = 0.003$) in the full sample, which led us to consider breaking social influence down into its component parts ("feeling able to influence" and "feeling influenced by others")
- "Feeling able to influence" and "feeling influenced by others" were positively correlated ($r = .62$, $p < 0.001$) – NOT inversely related
- No meaningful correlations were found between feeling able to influence or feeling influenced by others and psychotic and mood symptoms in the full sample, so we then broke out the correlations by group to learn how the relationships may differ between clinical and non-clinical populations

Correlations by group (reflected in Figure 1):

Non-psychotic Comparisons (NC)

- Weak positive correlations were found between both directions of influence and **psychotic** and **mood** symptoms, with the exception of *feeling able to influence others* and **NA**, which had no correlation.

Clinical High Risk (CHR)

- Negative correlations were found between both directions of influence and **psychotic symptoms**
- A weak positive correlation was found between *feeling able to influence others* and **NA** but no significant correlation between *feeling influenced by others* and **NA**.

Psychosis Group (PSY)

- Positive correlations were found between both directions of influence and **psychotic** and **mood** symptoms, with stronger correlations between *feeling influenced by others* and both types of symptoms.

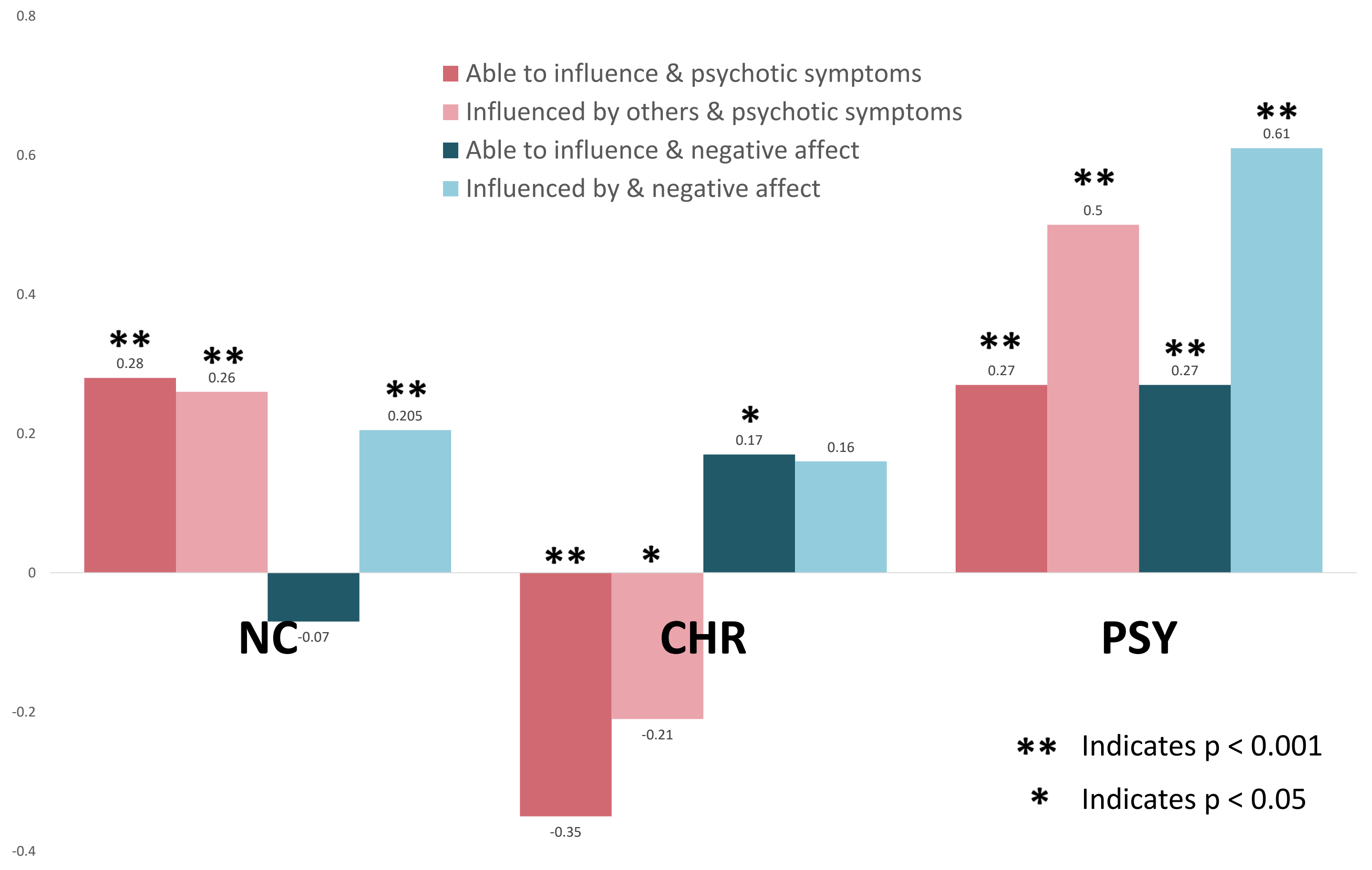


FIGURE 1. Pearson's r correlations between young adults' perceived influence, psychotic symptoms, and negative affect

CONCLUSIONS

- These findings do not align with our hypotheses, but do suggest that **the relationship between influence and symptoms differs between groups (NC, CHR, and PSY)**
- It is notable that **"feeling able to influence" and "feeling influenced by others" correlated with psychotic symptoms in the same direction, and correlated with negative affect in the same direction, within each group, but not across groups.**
- Further exploring the relationship between influence and symptoms in young adults with psychotic disorders:
 - Higher levels of feeling influenced by others AND higher levels of feeling able to influence others were associated with increased symptoms** (both negative affect and psychotic symptoms) in the PSY group, indicating that in the sample of individuals with psychotic disorders, regardless of whether a person feels like the influencer or influencee, experiencing social influences in either direction is associated with distress.
 - However, there were **stronger associations between feeling influenced by others and symptoms** in the PSY group, which is more aligned with what we expected (that feeling influenced by others would be associated with more distress than being able to influence others).
 - Largest correlations were found in PSY group, demonstrating that social influence seems to be relevant to the well-being and mental health experiences of individuals with psychotic disorders.** This could suggest an area for clinical intervention, and a potential topic to target in CBT therapies with this population.
 - For a better understanding of the clinical implications of these results, it would be important to 1) see if the relationships hold in a larger sample and 2) tease apart whether the amplified relationship between influence and symptoms is more a product of the real vulnerability caused by the systematic marginalization of people with mental health disorders or more a product of the potential connectedness between interpersonal influence and potential delusion thought content (e.g. mind-control, thought insertion, etc.) that would be disproportionately present in the PSY group.

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