



# Analysis of Psychosis-Risk Screener and Interview Response Mismatch

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## INTRODUCTION

- Psychosis is defined by symptoms such as delusions, hallucinations, and disorganized thinking, speech, or behavior
- Psychosis-risk screeners and interviews assess risk symptoms to identify individuals who may develop psychosis
- Previous research suggests that participant responses on self-report screeners correlate highly, but not perfectly, with clinician-administered interview<sup>1</sup>
- It is important that screeners are as effective as possible to facilitate early intervention, which is associated with better treatment response
- Although screeners are useful and valid tools for assessing psychosis-risk, studies show that they can be hampered by false-positive responses
- 'Mismatches,' when an individual's response on a questionnaire differs from clinical interview, could provide important clues towards understanding false-positive responses
- Psychosis-risk symptoms occur in the general population, but are reported at a higher frequency in younger ages, making age a potentially relevant contributor to mismatch<sup>2</sup>
- This study examined mismatches in three overlapping questions between the commonly used screener (PRIME Screen) and the gold standard clinician administered risk interview (Structured Interview for Psychosis Risk Syndromes, "SIPS")
- In an attempt to identify potential mechanisms for mismatches, we examined the role of age in predicting mismatches for these three questions

## PARTICIPANTS

- 117 adolescents and young adults receiving mental health treatment
- Recruited from local outpatient clinics, a local university, and a school mental health program
- Ages 12-23 years (mean=15.95, SD=2.89)

**Table 1. Participant Demographics**

Diagnostic Groups		Mean Age (SD)
No-risk	65 (55.6%)	16.40 (3.08)
At-risk	40 (34.2%)	15.50 (2.48)
Psychosis	10 (8.5%)	15.31 (2.84)
Not reported	2 (1.7%)	14.00 (1.41)
Gender		
Female	72 (61.5%)	
Male	45 (38.5%)	
Race		
Black/African American	50 (42.7%)	
White	43 (36.8%)	
Multi-racial	17 (14.5%)	
Other	3 (2.6%)	
Not reported	4 (3.4%)	
Total Household Income		
<\$20,000	31 (26.5%)	
\$20,000-\$39,000	26 (22.2%)	
\$40,000-\$59,000	13 (11.1%)	
\$60,000-\$79,000	9 (7.7%)	
\$80,000-\$99,000	8 (6.8%)	
≥\$100,000	18 (15.4%)	
Not reported	12 (10.3%)	

Note: The three diagnostic groups did not significantly differ on any demographic variables

## RESULTS

**Table 2. Participant Response and Percent Mismatch**

Q9		PRIME Screen		
		I think I might feel like my mind is "playing tricks" on me		
SIPS		Yes	No	% Mismatch
Do you ever feel that your mind is playing tricks on you?	Yes	26	17	40%
	No	16	54	23%
% Mismatch		38%	24%	

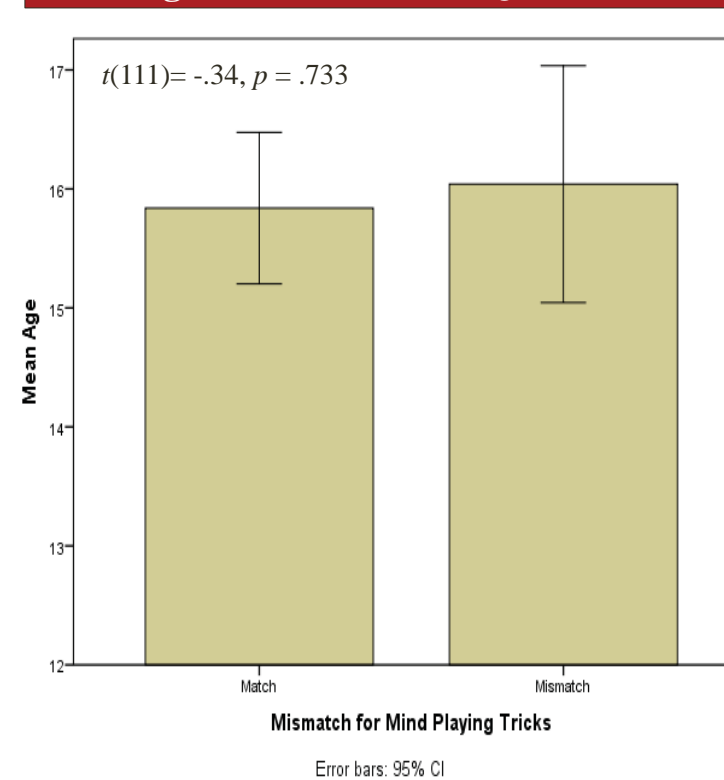
**Table 3. Participant Response and Percent Mismatch**

Q10		PRIME Screen		
		I have had the experience of hearing faint or clear sounds of people or a person mumbling or talking when there is no one near me		
SIPS		Yes	No	% Mismatch
Do you ever hear a voice that other's don't seem to or can't hear?	Yes	29	8	22%
	No	14	67	17%
% Mismatch		33%	11%	

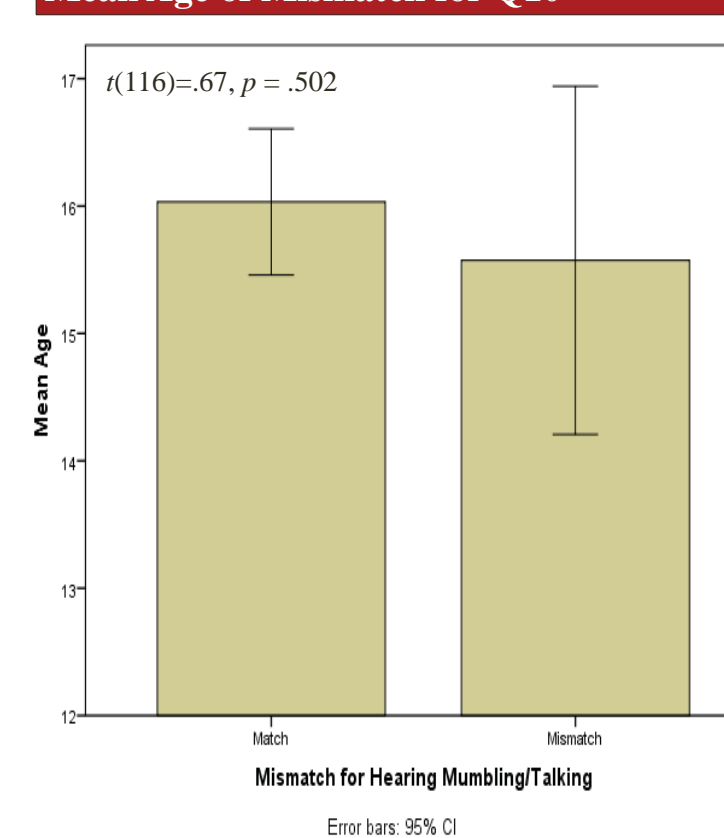
**Table 4. Participant Response and Percent Mismatch**

Q11		PRIME Screen		
		I think that I may hear my own thoughts being said out loud		
SIPS		Yes	No	% Mismatch
Do you ever hear your own thoughts as if they are being spoken outside your head?	Yes	16	9	36%
	No	20	74	21%
% Mismatch		56%	11%	

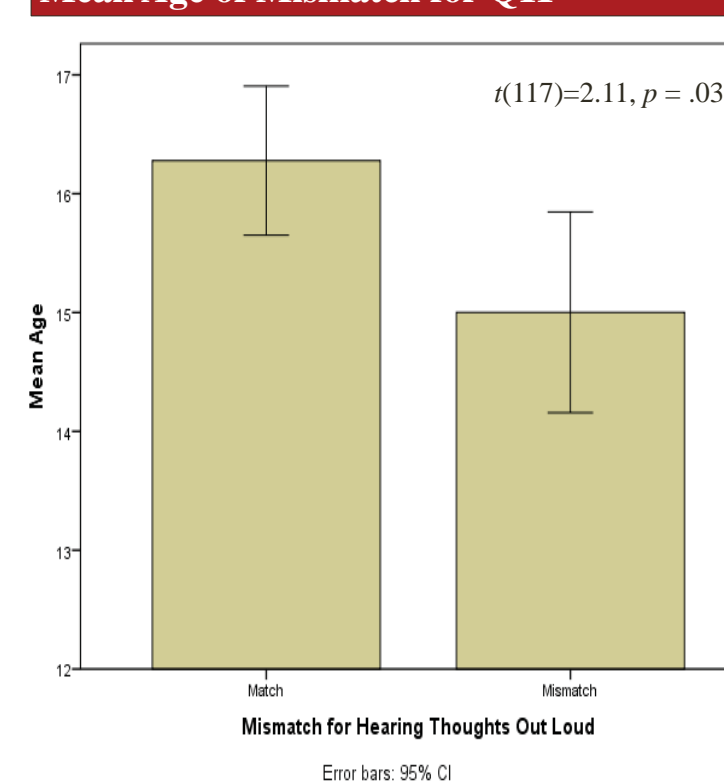
**Figure 1. Mean Age of Mismatch for Q9**



**Figure 2. Mean Age of Mismatch for Q10**



**Figure 3. Mean Age of Mismatch for Q11**



## METHODS

- Participants were interviewed and screened via:
    - Structured Interview for Psychosis Risk Syndromes (SIPS)<sup>3</sup>
    - PRIME Screen<sup>4</sup>
  - We examined similar items across the PRIME Screen and the SIPS interview and then compared whether participants were more likely to report mismatched or conflicting information based on age
- Analysis*
- 2 x 2 tables illustrate match between interview and screener
  - T-tests were calculated to assess whether age varied significantly by match status

## DISCUSSION

- Overall mismatch response frequencies for all three items ranged from 18.6-29.2%
- Younger aged participants were more likely to inconsistently report experiences of "hearing their own thoughts being spoken out loud" (Q11;  $t(117)=2.11, p=.037$ )
- Possible reasons for mismatches:
  - Participants might misunderstand questions on the screener that are clarified when asked by the interviewer
  - This may reflect a developmental-based process for item 11, as those who matched tended to be older than those who did not
  - Not addressed in the current study, participants might feel more comfortable acknowledging potentially stigmatizing symptoms on the screener than in the interview, or vice-versa
- The main limitation for this study was the small sample size
- Further investigation of the mechanisms that lead to discrepancies between screener and interview measures will be important for improving such measures with the purpose of promoting early intervention efforts
- Future studies could:
  - Review additional screeners beyond the Prime Screen
  - Qualitatively interview participants about mismatches to gain better insight into reasons for discrepant responses
  - Review additional variables for relation to mismatch such as gender and no-risk versus at-risk for psychosis

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