

Assessing Social Affiliative Behavior: A Comparison of in Vivo and Video Tasks

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Social affiliation, or engagement in positive social interactions, is often profoundly impaired in individuals with schizophrenia. Valid measures of social affiliation are needed to understand these impairments and their symptom and functional correlates; however, such measures are limited and have not been validated. This pilot study evaluated one such measure—the video-based Social Affiliation Interaction Task (SAIT)—and a novel in vivo behavioral measure, the Affiliative Conversation Task (ACT). Twenty participants with schizophrenia or schizoaffective disorder (SZ) and 35 nonpsychiatric controls (CT) completed both tasks and measures of negative symptoms and functioning. We explored group differences in social affiliation skills; convergent validity between social affiliation skill ratings from the two tasks; and concurrent validity with social affiliation skill ratings, negative symptoms, and functioning. SZ evidenced lower affiliation skill ratings than

CT on the video SAIT, but not on the ACT, and the tasks displayed moderate convergent validity for affiliation skill ratings. Less affiliation skill in the SAIT was correlated with more negative symptoms and less functioning in the SZ group with medium effects, though the results were not significant. Findings suggest that the SAIT may be more sensitive to individual differences in skill level. Future research should continue to examine the SAIT for use in measuring affiliation skills.

Keywords: affiliation; assessment; negative symptoms; functioning

AFFILIATION IS DEFINED AS BEHAVIORAL engagement in positive social interactions with others (Kozak & Cuthbert, 2016; National Institute of Mental Health [NIMH], 2012). Affiliative social skills include verbal and nonverbal behaviors that promote positive social engagement (e.g., orientation toward the interaction partner, eye contact, positive facial displays, language reflecting interest, caring, and warmth). The drive to form positive interpersonal relationships—or the need to belong—is thought of as a fundamental human motivation (Baumeister & Leary, 1995), but profound deficits in pleasure from and desire for social contact (social anhedonia and social amotivation, respectively) are evident in

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This work was supported by the National Institutes of Health [T32MH20075 to JJB; F31MH102870 to JMM].

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schizophrenia (Blanchard, Collins, Aghevli, Leung, & Cohen, 2011; Blanchard, Mueser, & Bellack, 1998; Blanchard, Park, Catalano, Bennett, 2015; Kring, Gur, Blanchard, Horan, & Reise, 2013). NIMH's Research Domain Criteria (RDoC) initiative (Cuthbert & Insel, 2013; Kozak & Cuthbert, 2016) identified affiliation as a key construct within the social processes domain and indicated a need to develop behavioral assessments of affiliation during social interactions between individuals and strangers (NIMH, 2016). To address this need, the current pilot study evaluates the validity of two recently developed laboratory assessments of affiliation skills in a nonpsychiatric control group (CT) and a schizophrenia or schizoaffective disorder group (SZ).

In working towards the goal of understanding and enhancing affiliation skills, a key first step is the creation of appropriate measures of these skills. Schizophrenia researchers have developed several behavioral measures of other social skills; thus, we will draw from this literature in framing the current study. Structured role-play tests have been developed to assess social skills (e.g., initiating conversations with a stranger, responding to conflict, solving a problem) in people with schizophrenia (Bellack, Brown, & Thomas-Lohrman, 2006; Dickinson, Bellack, & Gold, 2007; Donahoe et al., 1990; Patterson et al., 2001; Sayers, Bellack, Wade, Bennett, & Fong, 1995). However, these tests were not designed to measure social affiliative behaviors; thus, they are limited in their usefulness in measuring affiliative behavior (Blanchard et al., 2015). For example, even when the goals of the role-play appear affiliative (e.g., getting to know a new co-worker), the interactions are nonaffiliative because the confederate is often instructed to maintain neutral affect (Patterson et al., 2001) or to allow potentially awkward delays as the confederate waits for the participant to respond (e.g., Penn, Mueser, Spaulding, Hope, & Reed, 1995). Moreover, with control participants, such role-plays do not increase positive mood (Horan & Blanchard, 2003), and an increase in positive mood would be expected from affiliative social interactions because, by definition, they involve positive emotions in both expression and experience.

To address the above limitations, Llerena, Park, Couture, and Blanchard (2012) developed the Social Affiliation Interaction Task (SAIT). In this task, participants watch a video of a warm and welcoming woman displaying positive facial expressions and describing her social relationships and activities in positive terms. At the end of the video, participants are prompted to respond with a description of their own relationships. Using the SAIT in a nonclinical

sample, Llerena et al. (2012) found that participants high in social anhedonia exhibited poorer affiliation and lower overall social skills when compared to controls. They also reported less change in positive affect, less willingness to engage with the interaction partner, and had fewer positive reactions to the interaction partner compared to controls. Examining a clinical sample, Blanchard et al. (2015) found that individuals with schizophrenia had significant behavioral affiliation skills deficits compared to controls, and within the patient group, more severe negative symptoms were related to poorer social skill. Although the two groups showed similar subjective increases in positive affect following the interaction, more severe negative symptoms of motivation and pleasure were related to less positive evaluation of the interaction partner and less positive affect following the interaction within the patient group. These results provide preliminary evidence that the SAIT is sensitive to individual differences in affiliation in both clinical and nonclinical samples.

The SAIT relies on a video interaction and does not allow for the assessment of skill in an in-person social exchange. To address this gap, we recently developed an in-person dyadic interaction task to assess affiliative behavior called the Affiliative Conversation Task (ACT). The ACT involves a face-to-face interaction in which a participant and a highly affiliative research assistant have a conversation about relationships with family and friends. Unlike other role-play tasks, including those involving unstructured conversations (e.g., the Conversation Probe; Penn et al., 1995), the ACT explicitly directs the research assistant to behave in a highly affiliative manner using positive facial displays and positive reciprocal verbal responses to naturally facilitate the conversation and encourage an affiliative reaction from participants.

In a study of individuals with schizophrenia and controls, McCarthy et al. (2017) found that, after completing the ACT, all participants reported increased affiliation and positive affect. Within the schizophrenia group, more severe motivation and pleasure negative symptoms and greater self-reported social anhedonia were related to less self-reported interpersonal closeness and less willingness to interact with the partner (McCarthy et al., 2017). Additionally, less self-reported affiliation toward the interaction partner was associated with poorer role functioning in the schizophrenia group. These findings indicate that while the ACT yields self-reported increases in affiliative feelings across clinical and nonclinical groups, less affiliative responses are related to deficits in social motivation and pleasure and to greater functional impairment within people with schizophrenia.

These initial results from the ACT are promising but do not include behavioral skills assessments during the task. Further, it is unclear how the video SAIT and the in-person ACT compare in evoking affiliative behavior. It may be that the in vivo nature of the ACT has greater ecological validity and superior sensitivity to real-world social functioning compared to the video SAIT. However, if the tasks are comparable in their sensitivity to affiliative behavior, this could provide support for using the standardized video task that does not require staffing to administer. A direct comparison of these methods addresses the call for developing behavioral assessments of affiliative dyadic interaction to study the RDoC constructs of social affiliation and social communication (NIMH, 2016).

The present study is a pilot evaluation of the SAIT and the ACT and examines how they relate to negative symptoms and functioning in individuals with schizophrenia or schizoaffective disorder and in nonpsychiatric controls. We evaluated the following hypotheses:

1. We predicted that the video SAIT and the in vivo ACT would demonstrate convergent validity in that behavioral skill ratings from one task would be correlated with behavioral skill ratings from the other.
2. We explored concurrent validity between the tasks and negative symptoms in the SZ group, predicting a negative relation between affiliation skill ratings in each task and negative symptoms, with a stronger relation between the in-person ACT and negative symptoms.
3. We explored the concurrent validity of the two tasks by assessing how affiliation skill from the video SAIT and in-person ACT were related to clinical ratings of role functioning in both groups; again, we predicted a stronger relation between the ACT and functioning.
4. We expected that the SZ group would have lower affiliation skill ratings than the CT group on both tasks given the typical skill reductions seen in the schizophrenia population.

Method

PARTICIPANTS

Fifty-five men were included in the study: 20 outpatients with schizophrenia or schizoaffective disorder (recruited via chart review, clinician referral, and self-referral from Baltimore, MD) and 35 nonpsychiatric participants (recruited via fliers posted at the University of Maryland Department of Psychiatry, at the Maryland Psychiatric

Research Center, and through Craigslist). Participants were involved in a parent functional magnetic resonance imaging (fMRI) study examining the effects of social support on stress reactivity, and their self-reported responses to a broader affiliative enhancement battery are presented in a separate report (McCarthy et al., 2017). All study procedures in the current report occurred prior to the fMRI paradigm.

Inclusion criteria were as follows: (1) male gender, (2) between the ages of 18–65, (3) have a schizophrenia spectrum disorder diagnosis according to the Structured Clinical Interview for DSM Disorders (SCID) IV-TR (First, Spitzer, Gibbon, & Williams, 2002) (for the psychiatric group only), (4) be literate and fluent in English, (5) have normal hearing, (6) be willing to have assessments videotaped, (7) if taking medications, have a stable regimen for at least 2 weeks (for the psychiatric group only), and (8) be right handed (for scanning purposes).

Exclusion criteria for all participants were as follows: (1) magnetic resonance imaging contraindications (e.g., magnetic resonance unsafe metal in the body), (2) claustrophobia, (3) history of neurological conditions, (4) exceed the weight limitations of the scanner, (5) back problems that would prevent the participant from lying on their back for up to 1.5 hours, and (6) history of substance abuse or dependence within the past 6 months. Additional exclusion criteria for the CT group were (1) having a known psychological condition assessed using the SCID-IV-TR diagnosis screener (e.g., depression, posttraumatic stress disorder, and clinical anxiety because individuals with other psychiatric diagnoses may also exhibit deficits in social skills [Herbert et al., 2005; Segrin, 2000]), (2) psychosis in a first- or second-degree relative (participant self-report), and (3) taking psychiatric medications (e.g., Zoloft, Ritalin).

MEASURES

Social Affiliation Interaction Task (SAIT; Blanchard et al., 2015; Llerena et al., 2012)

The SAIT was adapted from experiments on mate selection and behavior (Gangestad, Simpson, Cousins, Garver-Apgar, & Christensen, 2004; Simpson, Gangestad, & Biek, 1993; Simpson, Gangestad, Christensen, & Leck, 1999) and designed to elicit affiliative social responses through a simulated social encounter. The participant watches a video (2 minutes, 43 seconds) of an outgoing female describing her social relationships and activities. At the end of the video, the female in the video asks what the participant enjoys doing with family and friends. The participant is instructed to reply as if he is actually speaking to the person in the video.

Affiliative Conversation Task (ACT; McCarthy et al., 2017)

In this task, the participant and a research assistant have a conversation in which the goal is to get to know the other person. The research assistant (not from the SAIT) delivers a scripted introduction wherein she tells the participant that she is close with her family and friends and that she enjoys spending time with them. She then asks the participant to speak about himself. The entire conversation, including the scripted introduction, is 3.5 minutes long. The research assistant uses positive affect, body language, and self-disclosure to promote affiliation during the conversation, calling on principles of the development of trust and cooperation (Declerck, Boone, & Emonds, 2013).

Behavioral coding procedure. Social skills, including affiliation skills, were coded from the responding phase of the SAIT and the full ACT. To avoid rater and task contamination, two undergraduate raters blind to group status, symptom ratings, and functioning coded each task (four raters in total). The raters used a social skills rating manual and additional task-specific rating forms (adapted from the Maryland Assessment of Social Competence; Bellack, Sayers, Mueser, & Bennett, 1994; Sayers et al., 1995) to code gold-standard training videos chosen from recordings of participants in the current sample. After training, each rater coded half of the videos from each task, and interrater agreement for social skill was assessed using intra-class correlation (ICC) across participants for each of the social skills within each task using the gold-standard codes as reference. Raters received weekly coding supervision to prevent coder drift. They coded social skill components across four domains using a 5-point Likert scale ranging from 1 (*Very poor*) to 5 (*Very good*): (1) Verbal/Conversational domain includes ratings of clarity, spontaneous conversation, positive valence, negative valence, and word count; (2) Nonverbal domain gaze/eye contact, fluency, meshing, and nonverbal bodily expression; (3) Affiliation—that is, the participant's engagement coded as an aggregate across verbal and nonverbal behaviors (e.g., vocal affective expression, warmth); and (4) Overall Social Skill, a general measure of ability to interact in a meaningful way across verbal and nonverbal domains. Both tasks were coded for the same behaviors except Meshing was not coded for the SAIT. The current study only examined the Affiliation domain.

In a past study using the SAIT with undergraduates (Llerena et al., 2012), interrater reliability was

measured using ICCs for each social skill domain; ICCs ranged from 0.87 to 0.93. Internal reliability, assessed with Cronbach's alpha, for the four social skills domains was 0.92, indicating good internal consistency (Llerena et al., 2012). ICCs were calculated for the current study.

Currently, the ACT has no published psychometric properties as it was specifically developed for this study. Previous research using unstructured role-plays found ICCs between 0.72 and 0.95 (Penn et al., 1995). ICCs were calculated for the current study.

Symptoms and functioning. The Clinical Assessment Interview for Negative Symptoms (CAINS; Blanchard et al., 2017; Kring et al., 2013) is a 13-item clinician-rated interview that assesses negative symptoms across two subscales, motivation and pleasure (MAP; 9 items) and expression (EXP; 4 items). The MAP measures desire for close relationships, frequency of pleasurable social, work/school, and recreational activities in the past week and expected frequency of these activities in the upcoming week. The EXP measures facial and vocal expression, expressive gestures, and quantity of speech. All items are rated on a scale from 0 (*No impairment*) to 4 (*Severe deficit*).

The Role Functioning Scale (RFS; Goodman, Sewell, Cooley, & Leavitt, 1993) is a 4-item clinician-rated interview that assesses functioning in work/school, independent living, close relationships, and community activities. Items are rated on a scale from 1 (*minimal functioning*) to 7 (*optimal functioning*).

PROCEDURE

Data were collected over the course of two visits. During Visit 1, participants provided informed consent and completed a battery of scales and tasks including the CAINS, RFS, and video SAIT. During Visit 2, participants completed scales and tasks assessing social functioning, including the in-person ACT. All assessors and experimenters were blind to group status, symptom ratings, and role functioning.

DATA ANALYSIS PLAN

Interrater reliability was assessed via ICCs. To assess convergent validity, we calculated Pearson correlations between behavioral affiliation ratings from the video SAIT and the in-person ACT within each group. To measure concurrent validity, we used Pearson correlations to examine the relation between negative symptoms and role functioning and affiliation skills in the SZ group. In the nonclinical CT group, concurrent validity was examined between affiliation skills and role functioning only, given that negative symptoms are very low in the CT group (see

Table 2). Finally, to examine group differences in affiliation skills, we used *t*-tests to compare scores between groups on each task.

Results

Demographic characteristics of participants are provided in Table 1. Groups were significantly different on education (the CT group had nearly two more years of high school education) and living circumstances (the CT group lived unsupervised). Behavioral ratings and clinical symptom ratings are provided in Table 2, and relevant correlations are in Table 3. Kurtosis and skewness were within bounds (+2) for all variables of interest except for the CAINS MAP. For this variable, nonparametric analyses were performed (i.e., Spearman’s rho), and results did not differ from parametric analyses. For simplicity of reporting, only parametric analyses are reported.

RELIABILITY

We examined interrater agreement for behavioral skills ratings with ICCs using a two-way mixed model. ICCs between each of the two raters per task and the gold standard rater were 0.92 and 0.89 for the SAIT and 0.95 and 0.89 for the ACT. These values indicate high interrater agreement between the task raters and the gold-standard rater for the affiliation variables.

Table 1
Demographic Variables

	SZ (N = 20)	CT (N = 35)	<i>t</i> or <i>X</i> ² (<i>df</i>)
Sex: Male (N)	20	35	
Age (M, SD)	48.70 (11.22)	44.74 (13.22)	
Education (M, SD)	10.75 (1.80)	12.65 (2.41)	3.07 (53)*
Race (N)			
Black or African-American	19	32	
White	1	1	
Asian	0	1	
Multiple Backgrounds	0	1	
Marital Status (N)			
Married	0	2	
Divorced/Separated	3	7	
Never Married	17	26	
Employment Status			
Employed	2	10	
Unemployed	18	25	
Living Circumstances			
Unsupervised	14	34	8.91 (2)*
Supervised (e.g., half-way home)	3	1	
Supervised (e.g., board and care)	3	0	

Table 2
Means and Standard Deviations by Group

	M (SD)	
	SZ	CT
SAIT	2.05 (1.03)	3.2 (1.06)
ACT	3.84 (1.07)	4.23 (0.73)
RFS: Global	18.5 (5.25)	26.92 (1.81)
CAINS: MAP	15.8 (9.99)	4.89 (4.81)
CAINS: EXP	4.9 (3.99)	0.08 (0.5)

Note. SZ = Schizophrenia; CT = Non-psychiatric Controls; SAIT = Social Affiliation Interaction Task; ACT = Affiliative Conversation Task; RFS = Role Functioning Scale; CAINS = Clinical Assessment Interview for Negative Symptoms; MAP = Motivation and Pleasure Scale; EXP = Expression Scale.

CONVERGENT VALIDITY

To examine convergent validity, the relation between behavioral ratings from the two tasks was explored. The SAIT and ACT affiliation ratings were not significantly correlated in the CT group (*r* = 0.30, *p* = 0.12) or in the SZ group (*r* = 0.36, *p* = 0.14), though in both groups effect sizes are of a moderate magnitude (Cohen, 1988). We performed a post hoc exploratory analysis (Bonferroni correction for familywise error remains alpha = 0.05). This analysis was done across both groups given that we are interested in how the measured skill constructs in each task are related, regardless of diagnosis. Collapsing across groups, the SAIT and ACT were significantly correlated (*r* = 0.40, *p* = 0.01).

CONCURRENT VALIDITY

We correlated affiliation skill ratings from the two tasks with negative symptoms and role functioning (see Table 3). In the SZ group, lower affiliation skill ratings were associated with more negative symptoms and more impaired role functioning with medium effects for the SAIT and small effects for the ACT, but the correlations did not reach significance. The correlation between the SAIT and CAINS MAP was

Table 3
Pearson Correlations for Concurrent Validity

	Correlations in SZ			Correlations in CT		
	CAINS: MAP	CAINS: EXP	RFS: Global	CAINS: MAP	CAINS: EXP	RFS: Global
SAIT	-0.45 ⁺	-0.32	0.35	-	-	0.14
ACT	-0.12	-0.23	0.18	-	-	0.21

Note. SZ = Schizophrenia; CT = Non-psychiatric Controls; SAIT = Social Affiliation Interaction Task; ACT = Affiliative Conversation Task; RFS = Role Functioning Scale; CAINS = Clinical Assessment Interview for Negative Symptoms; MAP = Motivation and Pleasure Scale; EXP = Expression Scale.

⁺ *p* = 0.054

likely trending towards significance ($p = 0.054$). All other p -values, including for correlations in the CT group between affiliation skills and functioning, were greater than 0.14.

GROUP DIFFERENCES IN AFFILIATION

Behavioral ratings and clinical symptom ratings are provided in Table 2. Group differences in behavioral ratings of affiliation were assessed with independent samples t -tests. There was a significant group difference in SAIT affiliation skill ratings ($t(1, 44) = 3.84, p < .001$, Cohen's $d = 1.21$) with CT evidencing higher ratings than SZ. However, groups did not differ in ACT skill ratings, $t(1, 52) = 1.57, p = .12$, Cohen's $d = 0.43$.

Discussion

In the current study, we examined the convergent validity, concurrent validity, and group differences of two recently developed affiliation probes, the video SAIT (Llerena et al., 2012) and the in-person ACT (McCarthy et al., 2017). This preliminary study measured behavioral affiliation in individuals with and without schizophrenia and schizoaffective disorder to address the call by the RDoC initiative to create behavioral assessments of social affiliation (NIMH, 2016).

CONVERGENT VALIDITY BETWEEN TASKS

The video SAIT and the in-person ACT were correlated with one another with medium effect sizes; however, these correlations were not significant. A post hoc exploratory analysis combining the groups did reveal a significant correlation between the tasks. We combined groups for this analysis because we believe that, if these tasks measure the same constructs, they should be correlated regardless of the diagnostic profile of the sample. The two tasks only share approximately 16% variance given the moderate effect sizes. These tasks have unique demands and may differ in the type of affiliative behavior that they generate from participants, as discussed below. Thus, these differences may yield a limited amount of common variance in skill ratings. These results indicate that the tasks measure similar constructs, though all findings must be replicated in a larger sample.

RELATION BETWEEN AFFILIATION SKILL AND NEGATIVE SYMPTOMS

Within the SZ group, less affiliation skill from both the video and in-person tasks was associated with more severe negative symptoms. However, despite having medium effect sizes in the SZ group, these correlations were not significant. We believe that, with a larger sample, these medium correlation

coefficients would be significant. The directionality of our results is consistent with prior reports of an association between more severe negative symptoms and impaired affiliation skills (Blanchard et al., 2015), poorer social skills (Bellack, Morrison, Wixted, & Mueser, 1990; Blanchard et al., 2015; Couture, Granholm, & Fish, 2011; Mueser, Bellack, Morrison, & Wixted, 1990b), and less social closeness and willingness to interact with a partner (McCarthy et al., 2017). Future research should evaluate these hypotheses using a larger sample.

RELATION BETWEEN AFFILIATION SKILL AND ROLE FUNCTIONING

Greater clinician-rated role functioning in the community was related to higher behavioral ratings of affiliation in the SZ group with a medium effect size, though this result did not reach significance. These effects were small and nonsignificant in the CT group. Previous research shows that better social skills are related to better community functioning (Brekke, Kay, Lee, & Green, 2005; Couture et al., 2011; Dickinson et al., 2007; Ho et al., 1998; Hunter & Barry, 2012; Mueser et al., 1990b). Therefore, the relation between affiliative social skills and role functioning (e.g., functioning in close relationships) should be examined in larger samples of individuals with psychosis, and researchers should investigate the potential differential sensitivity between the video SAIT and in-person ACT as they relate to role functioning.

GROUP DIFFERENCES IN BEHAVIORAL RATINGS OF AFFILIATION

Compared to the CT group, the SZ group had lower affiliation skill ratings on the video SAIT. However, groups did not differ in affiliation skill from the in-person ACT. The format of the SAIT may result in behavior that is more representative of individual differences in affiliation, while the ACT's provision of cues and affiliative prompts may create an interaction that is less representative of such differences. In the SAIT, the participant watches the affiliation video and, when it is turned off, the participant responds as though he were having an interaction with the person in the video. This format requires participants to respond to the video without any ongoing cues to prompt their responses. In contrast, the ACT is live and involves partners who are trained to be affiliative throughout the conversation (e.g., positive facial expressions and tone, displays of interest in getting to know the participant). Thus, the constant and dynamic affiliative behavior from the ACT partner—behavior that is atypical in daily life—may increase the

likelihood that participants will reciprocate this behavior.

Future studies might provide the SAIT stimulus throughout the participant's response to control for the effect of stimulus duration across tasks. The ACT could also be modified to represent more typical positive interactions, and therefore evoke a broader range of scores, while still maintaining its high degree of affiliation (e.g., only discussing topics that the participant brings up, allowing natural lulls in conversation). Additionally, future studies with larger samples should reexamine group differences in the ACT given (a) the large literature supporting social skills differences between SZ and CT groups and (b) the medium effect size for the ACT group difference.

LIMITATIONS AND FUTURE DIRECTIONS

This study has several limitations. The sample size is small and may have limited our ability to detect smaller effects. Most participants (95%) were African-American, and all were male. Future research should examine the utility of these measures in female participants and those from other racial and ethnic backgrounds to increase generalizability of findings. The patient sample included participants with only two diagnoses (schizophrenia and schizoaffective disorder). To be more aligned with the RDoC initiative (Cuthbert & Insel, 2013; Kozak & Cuthbert, 2016), we plan to investigate these questions in a transdiagnostic sample. While the CT group was similar to other nonclinical groups recruited from the same area (e.g., Blanchard et al., 2015) and was well matched to the patient group in this study, it is not representative of the general population in unemployment rates and living circumstances.

All affiliative partners and the woman in the video SAIT were Caucasian. It is possible that the difference in race between participants and staff could affect the degree of affiliative behavior. Studies of behavioral affiliation in people with schizophrenia have not explored race as a contributing factor; future research should assess the effects of race on affiliative behaviors given that race has been shown to influence social interactions (e.g., Davies, Tropp, Aron, Pettigrew, & Wright, 2011; Shelton, 2003). Similarly, while all participants were male, all social partners in the affiliations tasks were female. Prior research on gender in social skill in serious mental illness has found that men are less skilled than women (e.g., Mueser, Bellack, Morrison, & Wade, 1990a); however, we are not aware of research that has examined how gender of research confederates may influence performance on affiliation skill measures. Future studies will need to determine if our findings replicate across genders.

Finally, the in-person ACT was designed to examine the development of affiliative bonds and included an interaction partner who was highly encouraging and affiliative. The current findings may not generalize to other in-person social interaction tasks that use different partner behaviors (e.g., role-plays that focus on social skill assessment rather than building and assessing social affiliation).

CONCLUSIONS

We found that the SAIT, a brief video assessment of social affiliation, is capable of eliciting behavioral affiliation skills ratings that differ between clinical and non-clinical groups. Though the SAIT and in-person ACT have moderate convergent validity, the ACT did not significantly detect group differences in affiliation skill. Future research should continue to investigate these measures and their relation to both negative symptoms and clinician-rated role functioning. While preliminary, these findings represent an important first step in the development of standardized measures of social affiliative behaviors and suggest that the SAIT may be more promising than the ACT as a measure of affiliation skill in disorders with psychosis. Additional work with larger and more racially and clinically diverse samples will more fully determine the validity and utility of the SAIT. Should the SAIT be found to be a valid assessment of affiliation skill, it would represent an advantage over resource-intensive in-person assessments and be a practical measure to assess RDoC constructs focusing on affiliation (NIMH, 2016).

Conflict of Interest Statement

The authors have no actual or potential conflict of interest including any financial, personal, or other relationships with other people or organizations within three (3) years of beginning the work submitted that could inappropriately influence (bias) this work.

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RECEIVED: August 3, 2017

ACCEPTED: March 16, 2018

AVAILABLE ONLINE: 19 March 2018