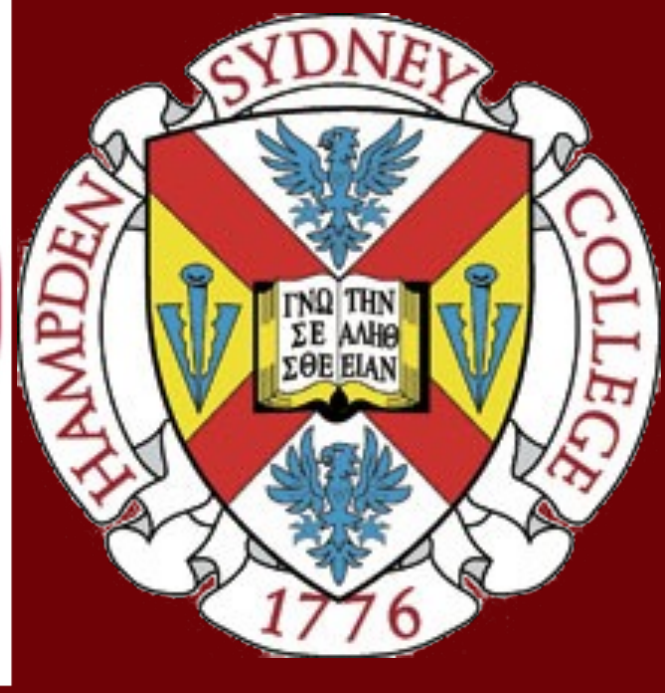


Assessing New Creativity Measures: Exploring Early Childhood Creativity Across Contexts



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Background

- Creativity is predictive of **academic success** (Gajda et al, 2017) and **physical and psychological well-being** (Richards, 2010)
- Imagination is often used in collaboration with creativity in idea generation (Tsai, 2012) and therefore, is used to measure convergent validity.
- Current creativity tasks designed for older children may not be appropriate for preschool-aged children with less developed metacognitive skills.
- Divergent thinking tasks have been questioned for validity for young children (Silvia et al., 2008; Mottweiler & Taylor, 2014). Some young children who score high on a divergent thinking task never perform in a creative manner (Runco, 2012).
- Instead, parent and teacher reports can reduce participant burden and help researchers get data faster (5-minute survey vs. 20-min. session with preschooler).
- Moreover, creativity should be assessed through different contexts to get a holistic idea of the child's abilities.
- There is **no known parent report measure of creativity** for early childhood. Thus, this is a context of childhood creativity missing from the literature.

Aims & Hypotheses

The aim of the current study is to create and assess two new informant reports of creativity.

Hypotheses:

1. Parent creativity scores will correlate with child creativity measures and convergent measures.
2. Teacher creativity scores will correlate with child creativity measures and convergent measures.
3. Parent and teacher measures of creativity and convergent measures will correlate with each other.

Method

Participants:

- Ninety-seven preschool children ($M = 4.30$ years $SD = 0.65$; 43% female) were recruited from the Tuscaloosa, AL and Hampden Sydney, VA areas. Children's race/ethnicity were 86.7% White, 5.3% Black, 1.3% Asian, and 6.7% other.
- Children completed a divergent thinking task and their parents and teachers completed new informant creativity reports and an imagination report (TIQ or PIQ).

New Measures

Creative Preferences Scale (CCPS)

- Parents and teachers were asked about the child's preferences between a creative and non-creative task. "Does your child prefer to..."

 1. *Draw or paint your own picture* or copy one from a book?
 2. *Make up a story* or read a story you already know?
 3. Do a dance that you already know or *make up your own dance*?
 4. *Build your own creation out of blocks or Legos* or follow directions to build something that already exists?
 5. Play a game that already has directions or *make up a game*?
 6. *Sing a song you made up* or sing a song you already know?

*Teachers' and Parents' Rating Scale for Creativity (*TRSC/PRSC; *Garcia et al., 2012)

0 (Never)- 4 (Always) scale

1. Writes and tells stories, solutions and ideas stemming from a great imagination.
2. During circle time, the child has unique but on topic contributions
Altered in PRSC: He/she has unique but on topic contributions to conversations.
3. He/she knows how to end stories and narrations with originality and making sense.
4. Child solves problems in an unusual yet successful way
5. In his/her drawings and artwork, he/she shows an uncommon originality.
6. Shows a preference for the activities that require him/her to investigate, experiment and discover information.
7. Shows a lot of curiosity about knowing new things and frequently asks this type of questions: why don't we do it now? I have an idea, etc.
8. Can have unexpected opinions
9. It is possible to note in him/her a clear tendency toward intellectual playfulness, and he/she fantasizes, imagines and manipulates ideas in a spontaneous way.
10. He/she shows a subtle sense of humor and sees situations as humorous that would not seem so to others.
11. He/she seems comfortable in free or not very structured class activities in which the little initiative of the students determines the plan to follow.
Altered in PRSC: He/she seems comfortable in free or not very structured activities in which the little initiative of the students determines the plan to follow.

Results

	DT-BOX	T-CCPS	TIQ	TRSC	P-CCPS	PIQ
T-CCPS	0.065					
TIQ	0.090	0.204				
TRSC	0.057	0.153	0.387**			
P-CCPS	0.346	-0.067	0.204	0.170		
PIQ	0.070	0.453*	0.431**	0.470**	0.175	
PRSC	-0.180	0.111	-0.200	-0.052	-0.424**	0.219

- Warmer colors indicate stronger correlations (* $p < .05$, ** $p < .01$)
- Paired samples t-test revealed that teachers consistently rate creativity higher, and parents consistently rate imagination higher for the same child

Discussion

- Results demonstrated that parent and teacher reports of creativity correlated with informant reports of related constructs, such as imagination, suggesting construct validity.
- Parent and teacher reports did not correlate with each other, nor with child-direct measures.
 - This mirrors discrepancies between reporters as found in other studies in this age range (e.g., social skills: Heyman et al., 2016; emotion regulation: Mitchison et al., 2022). This also speaks to the impact of context on the expression of creativity, and the importance of multiple informants for creativity measurement in young children.
- Additionally, the difference in parent and teacher scores may suggest that unstructured contexts, such as home environments, may evoke processes involved in creativity, such as imagination, related to the generative process. Whereas school environments may provide opportunities for children to demonstrate creative products that involve both generative and evaluative processes due to this context involving more structured activities.
- Findings have implications for measure development aimed to utilize data from multiple informants and demonstrates that more research is needed to develop measures of childhood creativity across contexts.