

Preliminary Analysis of the Social Participation Observation Tool (SPOT) for Kindergartners



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Background and Purpose

- Participation promotes health & wellbeing¹
- Participation is essential to learning & is correlated with higher academic achievement²
- Participation may predict social adjustment in later life³
- Currently, there is a need for more comprehensive participation assessment tools, that can be used across populations⁴
- This study was designed to examine the utility of the Social Participation Observation Tool (SPOT) by observing kindergartner's school participation. The SPOT is a newly developing tool that guides observation of participation & environmental supports and barriers.

Specifically, the aims of this study were:

- To examine inter-rater reliability of the SPOT
- To examine rater rationale of environment ratings
- To examine rater rationale of participation ratings

Methods

Data Collection:

- 3 pairs of researchers observed children in kindergarten at the Eliot-Pearson School in Medford, MA during the morning arrival routine, morning meeting, outdoor play, or lunch
- Each pair observed a single child for the duration of an entire activity using the SPOT and gave a participation rating based on descriptions from Periera et al.⁵ E= participation equal to peers; EM= equal participation with modifications; O=onlooker; Qualifiers were used to indicate more (+) or less (-) participation. Environment was rated on a 5-point scale (1= very limiting to 5 =very supportive)
- Rationale for ratings given were recorded
- Each pair completed 3 separate observations, for a total of 24 observations

Data Analysis:

- *Inter-rater percent agreement* (#agrees/total # pair observations x 100) of environmental and participation ratings
- *Content analysis & descriptive statistics:*
- Environmental rating rationale categorized by physical environment, peers, teacher, activity/schedule
- Computed number of environmental supports and barriers reported
- Participation rating rationale coded by key words & phrases reflecting quantity & quality of participation.
- Computed percent of participation ratings given

Results

Inter-Rater Percent Agreement:

- 91.67% for participation ratings without qualifiers (+, -); 50% with qualifiers
- 50% for environment ratings

Figure 1: Rationale for Environmental Ratings

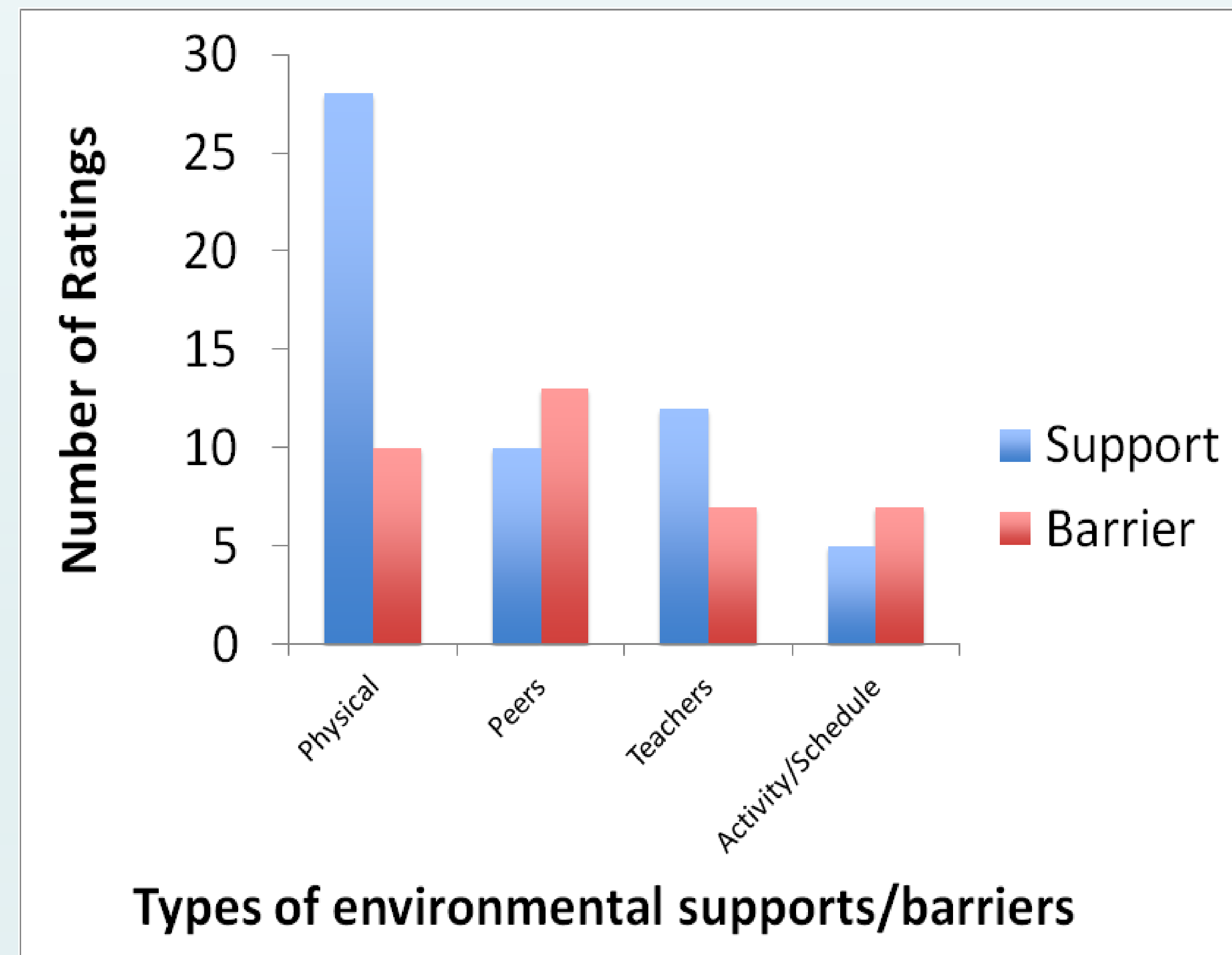


Table 1: Environmental Rating Categories: Definitions and Examples

Type of Environmental Support/Barrier	Definition	Examples of Support (+)	Examples of Barrier (-)
Physical	Natural and built nonhuman environment and the objects in them	“It was supportive because the circle area was small and confined. It was clear of clutter.”	“It was limiting because the door was open so she had the chance to leave the room.”
Peers	Interactions with same age classmates	“Another student helped him by showing him what to do.”	“He was distracted by the other classmate who was following him.”
Teacher	Interactions with the teacher	“The teacher gave clear directions to follow and talks to her one-on-one a few times.”	“It was also limiting when the teacher did not engage with the student in conversation.”
Activity/Schedule	Tasks or sequence of tasks child was engaged in	“It is supporting because there was a structured game that she could easily join.”	“The staggered arrival of children and the multiple activities occurring were distracting to children and could limit participation.”

Table 2: Rationale for Participation Ratings

Rating	Percent of Observations	Common Theme
E+	12.5%	Children described as having leadership qualities (proactively engaged) and participating throughout the entire activity.
E	46%	Children interacted/talked with classmates and/or teachers. They appeared to be listening and enjoying themselves.
E-	12.5%	Children described as participating in the activity and with others but were distracted by themselves or by other factors.
EM	4%	Child participated in activity, had limited verbal interactions, and <i>self-modified</i> *
EM-	4%	Child participated, barely spoke, and <i>self modified</i> *
O	4%	Child appeared to be engaged, but did not actively participate.

* Child seemed to have difficulty doing the activity and briefly removed herself from it

Discussion

- Inter-rater agreement for participation ratings without qualifiers was very good, but poor for participation with qualifiers & for environment. These results might be due to 1) Environment ratings not being as well defined as participation ratings leading observers to focus on different aspects of the environment, & 2) Participation with qualifiers had more ratings thus greater opportunities for disagreement
- Raters most often rated physical environment as supports possibly due to physical environment being easier to observe. The number of supports and barriers seemed to affect environment ratings (e.g. ratings of 5 had the most support & the least barriers).
- Within participation score rationales, observers consistently focused on leadership qualities, interacting with peers and teachers, & participating throughout the entire activity, which is consistent with previous literature⁶⁻⁸

Limitations: Small sample from one laboratory-demonstration school limited generalizability; Only 6 raters in this pilot study so inter-rater agreement needs further assessment. Environment and participation ratings were clustered (narrow range) possibly due to the unique classroom setting and small sample size. Research in more diverse classrooms is needed with varying populations (e.g. , children with disabilities)

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