Preliminary Analyses of the Social Participation Observation Tool (SPOT) For First and Second Graders

Melanie LaFavre, OTS; Kelly Wakeham, OTS; Sara Courtemanche, OTS; Poornima Kamath, MS, OT (India); Brij Maliya, MS, OTR/L;
Jennifer Iassagona, OTS; Gary Bedell PhD, OTR/L, FAOTA
Tufts University – Boston School of Occupational Therapy

Background

- Participation or " involvement in a life situation" (WHO, 2001) is an important outcome for children with and without disabilities [7]
- Environmental factors including school & physical environments, temporal organization & assistance can support or hinder participation [2,3,4]
- Hence, it is vital to assess environment together with participation [1]
- Currently very few observational tools available which combine the 2 elements [6]

SPOT

- Observation measure developed based on the terminology from the study by Pereira et al [5]
- Evaluating social participation and environmental supportiveness
- Participation rating categories: Equal (E), Equal with modifications (EM), Onlooker (O), Non-participation (N)
- Qualifiers of + and – were used for E, EM & O
- Likert enviromental scores of 1 (very limiting) to 5 (very supportive)

Research Aims

- To examine inter-rater agreement of participation & environmental scores for the SPOT
- To identify the common rationale & descriptors for each of the ratings on the participation & environmental scale
- To examine the clinical usefulness of the SPOT and identify areas for improvement.

Methods

Data Collection

- Convenience sample of 1st & 2nd grade students from one classroom
- 6 Occupational Therapy Graduate students divided into 3 pairs conducted 4 observations each, at morning meeting, meal time or outside time

Data Analysis

- Inter-rater percent agreement was evaluated using (# of matches)/(12 observations)*100
- Qualitative data were coded and analyzed for frequency; codes were grouped into themes
- Equal participation qualifiers (E+/E/E-) were analyzed to see how each rating fit into themes
- Environmental ratings were analyzed for positive and negative words/phrases
- Percentage of positive words per rating was identified
- Feedback/comments were analysed to evaluate utility and suggestions for improvement of the tool

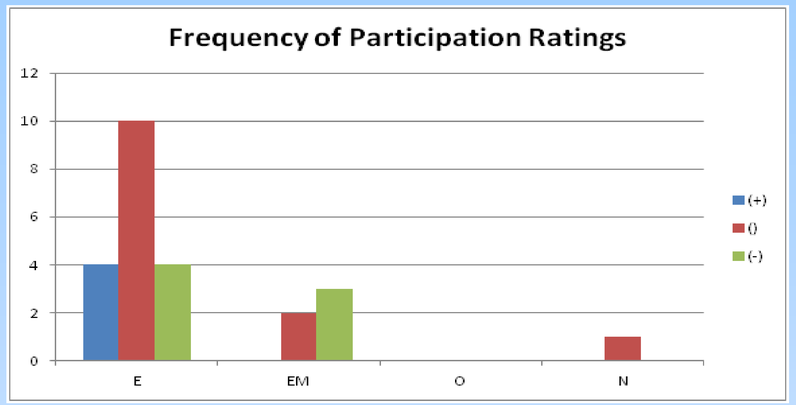
Quantitative Results

Inter-rater Percent Agreement

Participation without Qualifiers	91.67%
Participation with Qualifiers	58.33%
Environmental Scores	91.67%

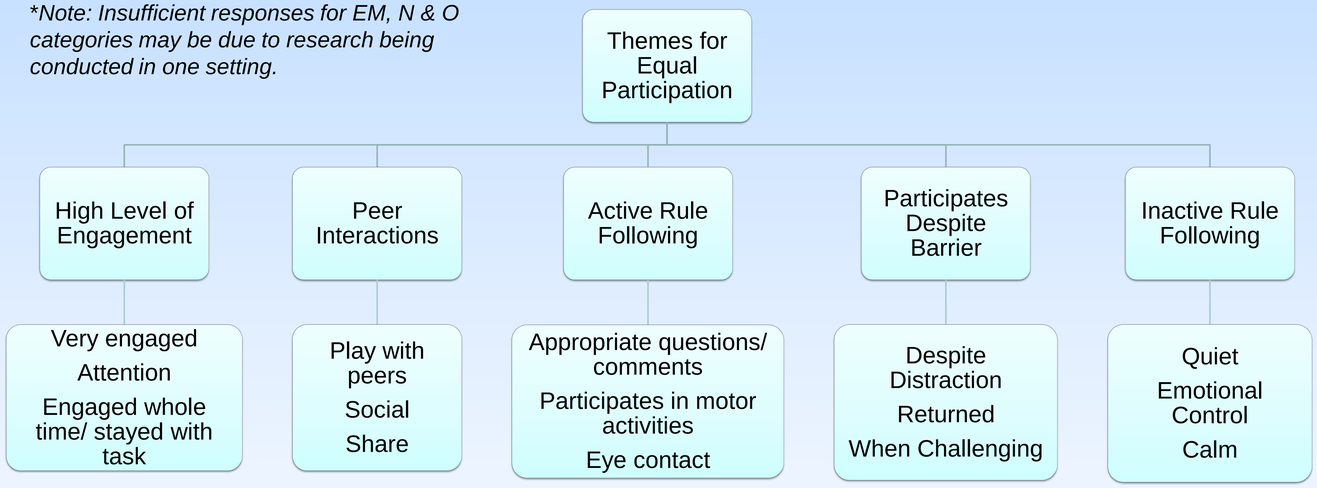
Frequency of Environmental Scores

Score	Frequency
5	8.33%
4	54.17%
3	37.5%

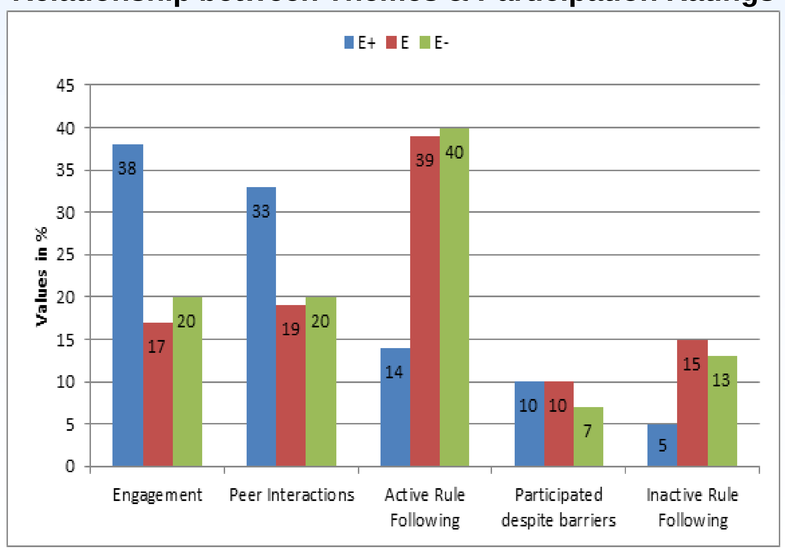


Qualitative Results

**Note: Insufficient responses for EM, N & O categories may be due to research being conducted in one setting.*



Relationship between Themes & Participation Ratings



Analysis of Participation Rating

- E+ rating is more highly associated with "high level of engagement" and "peer interactions."
- E and E- are more highly associated with "active rule following."
- E and E- rationale also include disqualifier themes for why an E+ was not given or why an E – was given

Analysis of Environmental Rating

Percentage of Positive words/phrases:

5: 75%
4: 66%
3: 57%

As ratings decreased, the percentage of positive words/phrases used in rationale also decreased

Practical Utility

- Rationale for ratings provides self check for raters; makes tool user friendly
- Observer's reaction column on SPOT keeps the rater objective
- Use of observable behaviors column on SPOT helps to arrive at an overall participation score
- Barriers/supports helped with developing rationale for environmental ratings
- Environmental rating helped to apply qualifiers to the participation rating

Suggestions for Improvement

- Clear explanation about use of qualifiers may increase inter-rater agreement
- Consultation with classroom teacher to understand expectations of the activity and to clarify questions, may improve accuracy of rating
- Future research could include a larger sample and a variety of settings which may increase range of responses
- Future research could also evaluate sensitivity of tool over time and discriminative validity

Conclusion

- The high inter-rater percent agreement without qualifiers suggests that categories are clear
- By definition, the group determines what E participation is; this could explain the high frequency of E ratings
- High frequency of 4 ratings may be due to same classroom being used for all observations.
- The findings from qualitative analysis suggest that there are differences among the three ratings within the E category
- Further definition and distinction between ratings will also aid in use of the tool for evaluating student goals & outcomes
- Preliminary observations show that the tool has promise for future use, but still needs development

References

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