Brief Observation of Social Communication Change (BOSCC)
Project ImPACT
Brief Observation of Social Communication Change (BOSCC)
Project ImPACT

Introduction & Requirements for the BOSCC

The Brief Observation of Social Communication Change is designed to be recorded, and then later, coded for social communication acts, early language production, and autism severity. BOSCC-specific coding will also be applied to Time 1 and time 4 administrations. In addition to the audio and video recording equipment, the following materials are required.

Materials

Box 1
- 2 identical pop-up toys
- Wooden blocks in wooden box
- A set of maracas
- Elephant shaper sorter (5 shapes inside)
- 6 Tolo People (1 is the baby with the cradle)
- 2 racecars with 2 drivers
- 1 Tolo Boat
- Bubbles

Box 2
- 2 identical wind-up toys
- Nesting balls - separated
- 2 wheeled xylophones with 2 sticks
- 8-piece puzzle with large knobs
- Assortment of 8 plastic food items
- Assortment of 6 farm animals

A. Procedure Length: 12 minutes

B. Preparation
This version of the BOSCC is for minimally verbal/younger children and is conducted in two segments. The first segment consists of Box 1 followed by bubbles, totaling 7-minutes, while the second segment consists of Box 2 for 5-minutes.

The BOSCC materials are stored in two, non-transparent boxes, preferably with a top. Do NOT use transparent, plastic bins. The bubbles should not be placed in either box, but should be introduced by the examiner for the last two minutes of the first segment.

Place the toys from Box 1 on the perimeter of the circular rug. See below for a photo of the toy arrangement around the rug, which marks the physical boundaries within which we hope the child will remain. Use the same placement for the toys from Box 2.

C. Positioning of the Child and Examiner during Administration:
When administering the BOSCC the examiner should keep in mind the child’s orientation to the camera. Ideally the child should be facing or in profile to the camera, and the examiner should be mindful not to obscure the camera’s view of the child. This requires the attention of the examiner, who can periodically encourage or direct the child to move or physically adjust the child’s position when required, so that the child’s face is in view of the camera.
Brief Observation of Social Communication Change (BOSCC)  
Project ImPACT

The examiner’s position is dictated by where the child is seated. The examiner may need to adjust position frequently to remain directly across from or at 90 degrees to the child much of the time. It is acceptable to move the child or ask the child to move to a better position for optimal viewing of the child’s face. Such repositioning of the child should occur no more than 3 times to avoid being overly directive.

If a child requires that a parent is present in the room during this measure, the parent is seated comfortably in a chair in the corner of the room, away from the toys so as not to obstruct the camera view. The parent is instructed to interact minimally with the child, increasing the likelihood that the child will separate and engage with the toys and the examiner. Suggestions include asking parents to cross their legs to discourage the child from climbing into their lap, giving parents a magazine or paperwork to look at, and asking parents to avoid making comments.

D. Outline of Procedure

Activity A (Box 1 & Bubbles): 7 minutes
- Follow the child’s play with toys (~2½ minutes)
- Step back and see if the child initiates with you (~1 minute)
- Re-join play with the child, if not already (~1½ minutes)
- Clean up (~30 seconds)

Bubbles: 2½ minutes

Activity B (Box 2): 5 minutes
- Introduce own toys, play, and ideas (~2½ minutes)
- Free play, follow the child’s lead (~2½ minutes)
- Clean up (~30 seconds)

E. Procedure Details

Place Box 1 and Box 2 on the floor, easily in reach. Place the toys from Box 1 around the perimeter of the circular rug. Make sure the bubbles are easily accessible to the examiner, but out of sight for the child.

Once the recording has begun, if the parent remains in the room, give the parent the following instructions:

“We want to see how (Child’s name) plays with different sets of toys. Please try not to talk to your child and try not to respond if your child tries to interact with you. If your child hands you a toy, take it but please hand it immediately back to me.”

Then make the announcement as follows: State the Project name, ID #, name of the measure, the time period and the date. Say “Start coding here” and start the timer.

Example: “This is Project Impact, ID number 101, BOSCC, Time One, on January 15, 2015, Start Coding Here.”

1. Set the timer for 2½ minutes. For the first 2½ minutes follow the child’s lead with toys.
Brief Observation of Social Communication Change (BOSCC)
Project ImPACT

2. After 2½ minutes have passed, set the timer for 2½ additional minutes. Then, step back and see if the child initiates with you for about a minute.

During the 1-minute “step back” the examiner should not engage in play with the child until the end of the 1-minute period of time, regardless of what the child does. If the child engages with the examiner during the “step back,” the examiner may comment on the child’s play.

When you step-back be sure to lean away from the child, or maintain a very upright posture (rather than a forward leaning, interested stance). There should be a visible shift in your body language to indicate that you are no longer actively engaged in the child’s play. Likewise you should wait quietly (no talking) until the child engages you. For more information see Principles of the BOSCC below.

*If the child initiates with the parent during the “step back,” do not end your one minute of waiting for the child to initiate with you. The parent will hand the toy back to you, and you may place it on the floor. Continue to quietly observe what the child is doing while you wait.

3. After a minute, rejoin the child in play. After the timer beeps, clean up the toys, this should take approximately 30 seconds.

4. Now, set the timer for 2½ minutes for the bubble activity. During this activity the examiner engages in play with the child during a bubble activity. This should be a naturalistic interaction between the examiner and the child. At some point during the 2½ minute activity, set the bubbles on the ground to create a communicative temptation and follow the following prompting hierarchy. The examiner should wait about 7 seconds after each prompt before presenting the next one. Only present the prompting hierarchy one time during the bubble activity.

Present the temptation, wait and look expectantly.
2. Say “Want bubbles?” and simultaneously extend an open hand on the ground, at least 12 inches from the bubbles.
4. Say “Want bubbles?” and simultaneously move the open hand to within 3 inches of the object.

If at any point during the communicative temptation portion of the bubble activity the child makes a communicative attempt, the examiner should respond naturally. If the child does not respond to the prompting hierarchy after step 4, the examiner should blow the bubbles and continue to play.

5. The timer will beep after 2½ minutes. Put the bubbles away, and arrange the materials from Box 2 around the carpet.
Brief Observation of Social Communication Change (BOSCC)
Project ImPACT

6. Once the final box of toys is arranged on the carpet, set the timer for 2½ minutes. For approximately 2½ minutes introduce toys using your own play ideas. If the child joins you in play, you can imitate them briefly, but then introduce a new play idea or a new toy.

7. After 2½ minutes have passed, set the timer for 2½ minutes and follow the child’s lead in play. After your timer beeps, clean up the toys, this should take approximately 30 seconds.

Say “Stop Coding here.”

D. Principles of the BOSCC

Principles of Behavior when Following the Child’s Lead:
1) **Allow the child to select** toys, waiting an average of 10 seconds for the child to make a choice.
2) **Follow the child’s attentional lead**, paying attention to what the child’s attention is focused on.
3) **Join in and play, maintaining the child’s demonstrated level of play**.

4) **Respond** to the child’s communication rapidly and consistently.

The three ifs:
1) **If the child’s attention wanes** and if he appears to become bored, demonstrate the toy or offer a new choice.
2) **If the child’s play becomes perseverative, repetitive, and/or ritualistic**, try to interrupt the behavior and gently redirect the child.
3) **If the child throws toys** retrieve the item twice. On the third throw, leave the toy where it lands or retrieve it and put it away.

Principles of Examiner Talk when Following the Child’s Lead:
1) **Topic** of examiner talk should be about what the child is paying attention to.
2) **Sentence length** of examiner talk should be no more than 3 words more than the child’s typical utterance length.
3) **Presentation** of examiner talk should use a lilting intonation and stress key words.
4) **Pace** of examiner talk should create generous opportunities for the child to send a message or take a turn. There should be about 4 to 6 comments or questions per minute (both about the child’s focus of attention; i.e., topic concluding).
5) **Prompts should be avoided.** The examiner’s behavior and the examiner’s talking should allow the child to communicate. The examiner is not prompting the child to communicate, rather the examiner is responding to the child’s communication. For example, the examiner should refrain from asking the child to make choices, “Do you want the car or the block?, or prompt the child in any way “What do you want?”, holding a toy out of reach.
6) **Re-directives** that move the child’s attention to a toy not already being attended to, even in a polite question or suggestion form, should be avoided unless required as a strategy to respond to perseverative behaviors which are not communicatively productive.
**Brief Observation of Social Communication Change (BOSCC)**

**Project ImPACT**

7) **Occasional directives** for child action can be used when the child is unengaged for more than 10 seconds or unproductively engaged. For example, “Let’s play with this.”

8) **Affect** of the examiner should be consistently positive throughout the 15 minute session.

**Principles of Examiner Talk and Behavior when NOT following the Child’s Lead (Step-Back): During Activity A**

1) **During the 1-minute step back,** quietly observe what the child is doing while you wait. There is no need to redirect the child’s perseverative play during this part of the procedure.

2) **Body posture should be upright or leaning back away from the child,** so that there’s a clear shift in your body posture in relation to the child during the step back.

3) **If the child’s initiates,** the examiner should comment on the child’s play and then resume the step-back posture and wait until the end of the 1-minute step-back to re-engage in play.

4) **After a minute of waiting,** the examiner rejoins the child in play.

**Principles of Examiner Talk and Behavior when NOT following the Child’s Lead: During Activity B**

1) **Introduce developmentally appropriate play.** The examiner plays at the child’s level of development.
   - Introduce play using your own toys, and using your own ideas. The examiner can play with the same toy set the child is playing with, but should try to get the child interested in something the examiner has introduced.

2) **The examiner can prompt the child to look at what you’re doing in play.** It is ok to say “look,” or “you do it,” when introducing new ideas into play.

3) **If the child starts to imitate the examiner,** the examiner can remain engaged with the child and continue with the play interaction naturally. After a few seconds, you should go back to introducing your own toys, using your own ideas.
Brief Observation of Social Communication Change (BOSCC)

Example of toy arrangement – Box 1:

Example of toy arrangement – Box 2:
Other toys that may be more difficult to see clearly in the picture: