Validation of Facilitated Communication:A Case Study and Beyond

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This study reports the results of an attempt to validate a young adult's use of facilitated communication. The individual, Philip, had made allegations of sexual abuse against his father. These allegations were conveyed to two facilitators, one a special education teacher and the other an instructional aide. A comprehensive battery of procedures was developed and then administered to examine the likelihood that Philip could have authored the allegations. Results of the assessment failed to support Philip's possessing the necessary

communication skills to have authored the allegations. Charges against his father were subsequently dismissed.

While findings of this investigation cannot be generalized beyond Philip, the procedures and accompanying rationale may be useful to other examiners who are engaged in validation activities with facilitated communicators. Implications and proposed guidelines for testing the validation of this method of communication are presented.

acilitated communication, or FC, has been described as a method in which people with major speech difficulties type or point at letters on an alphabet board or typing device to convey their thoughts (Biklen, 1990, 1992a; Schubert, 1992). The method involves a facilitator who provides physical support that ranges from a gentle touch to the communicator's shoulder, to helping the communicator isolate an index finger in order to access a communication display. The facilitator provides backward pressure, or resistance, after each letter is selected.

In addition to physical support, the facilitator offers emotional support by verbally encouraging and maintaining high expectations of the communicator. Finally, the facilitator provides verbal support by repairing conversational breakdowns and constraining communicators' responses in ways that increase the likelihood that conversations will be successful. For example, facilitators may rely on yes/no, multiple choice, and fill-in-the-blank questions to enhance the predictability of communicators' responses (Schubert, 1992).

Since its introduction in the USA (Biklen, 1990), several investigators have reinforced Biklen's impressions that there may be many individuals who are mistakenly thought to possess minimal social, cognitive, and communication skills, who are capable of typing messages that reflect unexpectedly high levels of literacy, insight, sensitivity, and intellect (Biklen, Morton, Gold, Berrigan, & Swaminathan, 1992; Crossley, 1988, 1992b; Crossley &

Remington-Gurney, 1992; Lehr, 1992; Schubert, 1992). However, there have also been a growing number of reports that have questioned the data used to support claims of success with FC (Calculator, 1992a, 1992b) and challenged the validity of the method itself (Bligh & Kupperman, in press; Hudson, Melita, & Arnold, 1993; Intellectual Disability Review Panel (IDRP), 1989; Smith & Belcher, 1993; Szempruch & Jacobson, in press; Wheeler, Jacobson, Paglieri, & Schwartz, 1993).

Of the studies cited above, only the IDRP (1989) provided evidence supporting the validity of FC. One of three individuals passed an experimentally controlled task in which facilitators and communicators were presented questions through headphones, and responses by communicators were examined for possible facilitator influence.

Facilitator influence was suggested when communicators answered questions presented only through their facilitators' headphones, rather than responding to different questions that were posed to them.

In addition to the task in which the facilitators received questions that were different from those sent to the communicators, a message-passing task was employed. Communicators were asked to describe a gift given to them by the experimenters in the facilitator's absence. Four subjects, three of whom also participated in the experimental task involving the headphones, were able to pass this procedure.

The IDRP concluded that message passing and similar

tasks can be used to examine the validity and reliability of FC. Results of these procedures may support contentions that some individuals who use FC are capable of communicating with unexpected degrees of success. However, the panel contended that controlled tasks are necessary to examine the role of facilitators in influencing messages that might be mistakenly attributed to communicators rather than their facilitators. The panel thus distinguished between validation of communication skills and authorship.

Other results of controlled procedures have been largely negative to date. As in the IDRP (1989) study, Hudson et al. (1993) found the communicator was unable to answer questions presented through headphones unless the facilitator heard the same question and possessed the information necessary to respond for the communicator.

Bligh and Kupperman (in press) reported that a communicator was unable to respond to written questions when the facilitator viewed a different question, as was the case in previous investigations. When both the facilitator and communicator viewed the same question, the communicator was not able to respond to those for which the facilitator did not know the answer. Conversely, responses were accurate when the communicator and facilitator viewed the same question and the facilitator knew the answer. The investigators suggested that it may have been the facilitator, and not the communicator, who was actually doing the typing. They also noted that the communicator was unable to type messages when her facilitator looked at her, rather than the keyboard. This posed an additional source of concerns about the true authorship of messages previously attributed to the communicator.

Communicators have also been found unable to label referents unless their facilitators viewed the same information (Szempruch & Jacobsen, in press; Wheeler et al. 1993). When facilitators and communicators were shown different stimuli, the communicator occasionally typed out the name of the stimulus seen only by the facilitators.

In summarizing the results of controlled studies, there is evidence to indicate that facilitators may inadvertently influence messages typed through this method. Findings that communicators are often unable to respond accurately unless their facilitators have access to the information being requested raises questions as to the communicators' role in this method.

Duchan (1993) conceptualized FC as a collaborative act, likening it to other forms of verbal communication in which partners influence one another's messages based on context, prior experiences, knowledge of their listener, and so forth. However, in the case of FC, occasions may arise in which delineating the source of messages becomes critical. The case study that follows represents such a situation.

This investigation was carried out to determine a young adult's ability to use facilitated communication. A protocol was developed to validate facilitators' claims that the individual, Philip, was able to converse using this method. Procedures in the resulting battery also permitted examinations of authorship. Unlike previous experimental investigations that relied on a single procedure to explore these

issues, the present investigation employed a variety of tasks that used different input and output modalities. In addition, the battery solicited input from Philip and his facilitators about the content of tasks and modifications they wished to implement. Finally, Philip's responses were scored for both accuracy and content. By examining responses qualitatively, the investigators were able to offer hypotheses as to the role of the facilitator during this method of communication.

Background Information

This investigation was initiated at the request of the New Hampshire Division of Child and Youth Services in conjunction with a charge of sexual abuse against the father of Philip, a 17-year-old teenager. The first author was asked to assist in ascertaining whether Philip was actually communicating through this method. Information was also sought regarding whether Philip possessed sufficient skills with this method to have independently authored the allegations against his father. These allegations were conveyed on separate occasions to two facilitators (a special education teacher and an instructional aide) at his local high school, where Philip was fully included in regular education. Philip's father had been removed from his home and forbidden contact with his son during the 6 months preceding this investigation.

Case History

As indicated above, Philip attended his local high school, where he participated in regular education classes. His class schedule was similar to that of other typical students, and teachers' expectations of him were comparable to those of classmates. Current criteria for evaluating his performance stipulated, "student is on same grading system as other students, with option of pass/fail if needed."

Philip's teachers reported that he was passing all classes and successfully completing his written assignments and class exams. The latter included essays, multiple choice, and other formats. Philip participated in these various activities with the support of a facilitator, with all responses generated using FC.

According to teachers and other school personnel, Philip was facilitated effectively at the wrist with each of three facilitators. A nonelectronic letter board was affixed to his desk, table, and other places in which communication needs arose. His teachers reported that Philip was "flourishing" in school.

A review of Philip's file revealed that at the age of 3 he was considered to have an attention disorder, abnormal interpersonal relationships, markedly delayed language, and difficulties with sensory processing. A diagnosis of autism with mental retardation was considered but not applied until Philip was 6 years of age, at which time he was coded educationally as other health impaired, or autistic.

Testing at 12 years of age revealed an IQ of 35 on an adapted form of the Leiter, placing Philip in the borderline moderate to severe range of mental retardation. A Peabody

Picture Vocabulary Test was also administered at that time. Philip achieved a receptive language age equivalent of 4 years 3 months.

His most recent speech-language testing was conducted when he was 15 years of age. Philip achieved an age equivalent of 3;5 on the Peabody Picture Vocabulary Test. Results of the Token Test for Children indicated that Philip was able to respond to commands involving one critical element, in one-step directions. Beyond this level of complexity, Philip purportedly became confused.

Expressively, Philip was found to communicate primarily by use of natural gestures, vocalizations, and physically pulling and leading his listeners in preferred directions. He occasionally used one- and two-word utterances, although most of his speech was described as echolalic at that time. Finally, a communication board containing a combination of photographs, pictures, and some sight words had been introduced with little success. Formal testing at 15 years of age revealed an age equivalent of 5 years 2 months on the Expressive One Word Picture Vocabulary Test.

Philip participated in a modified regular classroom at age 15, with an emphasis on vocational skills. The speech-language pathologist's recommendations to pursue aided communication, along with speech and some signing, were followed until Philip's alleged abilities to use facilitated communication were identified by his special education teacher one year later.

As indicated earlier, he was having a very successful school year until the point that two facilitators reported Philip's allegations of sexual abuse. At the time of the present investigation, Philip's teachers indicated that FC was still his primary means of communication. While he had some speech, much of his verbal behavior consisted of echolalia and "talking in incoherent syllables."

Procedures

It is important to point out that at the time of this investigation, the authors had no knowledge of prior test results. It was explained to Philip and his facilitators that the examiners did not want to be biased in one direction or the other by prior results.

In developing a validation protocol, the authors began by compiling a set of guidelines to follow in selecting and implementing procedures. These guidelines, shown in Table 1, were intended to reflect FC proponents' general concerns with the process of assessing, and perhaps questioning, individuals' use of FC. Many were designed to mitigate purported communicator and facilitator anxiety (Biklen, 1990, 1992a, 1992b, 1992c; Calculator & Singer, 1992; Crossley, 1992a; Schubert, 1992). The examiners predicted that by prestating and adhering to these guidelines, results would be accepted more readily by Philip's facilitators and other proponents of the method.

Assessment Battery and Results

The battery of tests used with Philip consisted of a variety of procedures. As can be seen, these represent a combination of formal and informal, standardized and

TABLE 1. Some general guidelines in testing for validation of facilitated communication.

- Communicators and facilitators must understand the purpose of the assessment. Get assent/consent from communicators and facilitators before proceeding.
- Throughout testing, the examiner should convey attitudes of respect and expectation of the communicator.
- 3. Provide opportunities for communicators and facilitators to give input in designing and implementing the assessment battery. Continue to solicit feedback as testing proceeds. For example, ask them why a particular task is or is not posing difficulty. The examiner should make it clear that he/she is seeking optimal performance by the communicator.
- Permit facilitators and communicators to decide when to terminate a particular procedure. Do not continue a task without permission from communicators and facilitators.
- 5. Think of the tests themselves as nothing more than contextual variables, to be modified and manipulated. While such modifications preclude normative comparisons, we are more interested in how communicators' performances vary under different circumstances.
- 6. Move smoothly from task to task, varying task demands.
- Rely on a battery of procedures that require different types of sensory input and motor output. Identify procedures that optimize, and those that limit communicators' performance.
- 8. Review classwork and assignments the communicator has purportedly completed, with facilitation, at school. This content may provide clues for how to test. Assignments may have required communicators to fill in the blanks, match, answer questions about material that was presented visually and/or auditorally, and so forth.
- Conduct all testing in a familiar setting such as school or home.
- 10. Facilitators should be familiar and, in the case of investigations of sexual abuse and other sensitive matters, the same individuals with whom controversial messages arose. Similarly, the typing device should be the same one with which allegations or other messages were conveyed.
- 11. Encourage facilitators to continue providing emotional support and high expectations throughout testing, irrespective of results. Examiners should model such feedback in their own interactions with the communicator.
- 12. Select procedures that can be replicated at school and at home by others, particularly teachers, parents, and so forth. Consider levels of expertise and resources available.

nonstandardized procedures that sampled communication across different input and output modalities. The battery was designed to sample a broader range of skills than those included in the investigations reviewed earlier, many of which employed a single task to examine validity of the method. Guidelines presented in Table 1 were incorporated into each of the following steps of the battery.

- 1. Greetings and introductions. Examiners, facilitators, and Philip all told a bit about themselves and disclosed their reasons for participating in the validation session. In Philip's case, we discussed why validation was important relative to the allegations he had made about his father.
- 2. Explain the purpose of the visit. We reviewed the results of previous attempts to validate FC use by other communicators, and the contradictory results to date. We discussed why validation is important and pointed out that other communicators' messages have been questioned by

people who feel that it is the facilitators who may be doing some or all of the typing. A primary purpose of this visit was to give Philip and his facilitators the opportunity to demonstrate his ability to use FC, and to author messages free from facilitator influence. We could not and would not draw any conclusions about his allegations of sexual abuse. Our assessment could only determine whether or not Philip possessed communication skills that would have enabled him to convey these allegations through FC.

3. Assent-consent/dissent from Philip and facilitators. We explained that Philip and his facilitators could terminate testing at any time, request breaks from testing, ask questions, and express concerns. We solicited input from Philip about whether he felt validation of FC was important at this time, and whether he was willing to participate in the procedure. He responded, "IT IMPRTNT PEOPLE KNOW ME SMART" (It is important that people know that I am smart).

Here we were confronted with a situation in which Philip conveyed consent/dissent through the very method that was under investigation, FC. There was no way to determine at that time who was responding, Philip and/or his facilitator. The examiners monitored Philip's behavior throughout the assessment for signs of frustration and discomfort and were prepared to terminate testing at any point, irrespective of messages allegedly typed by Philip.

4. Give communicator maximal input in designing test environment. We asked Philip if there were things about the testing situation that he wanted to change, in order to feel more comfortable. The following dialogue ensued.

Examiner: "Is it okay if Ms. Smith is here?" [The special

education coordinator had asked to be present

as an observer.]

Philip: NO ME NOT COMFORTABLE

Examiner: "How would you feel more comfortable?"

ME NOT SURE Philip:

Examiner: "Would you feel better if she was gone?" Philip:

"ME LIKE THAT [Ms. Smith is asked to

leave].

As in the preceding case, we could not determine who was asking Ms. Smith to leave, Philip and/or his facilitator. However, we operated under the assumption that all messages were originating with Philip unless otherwise indicated.

5. Provide a brief overview of the day. It was explained that a battery of procedures would be used to examine Philip's communication skills with and without facilitation. Philip might find some tasks to be very easy, whereas others might be more difficult. Philip was encouraged to do his best.

The examiners stated that they were more interested in identifying communication strengths than deficits. Different tests would be used to examine different aspects of communication. Some tasks would examine performance when his facilitator was not provided with the same information that was provided to him. This would prevent the facilitator from accidentally answering questions intended for Philip. It was also explained that on different

occasions, the facilitator might be asked to leave the room, or be blocked in some way from sharing information presented to Philip. Blocking might be visual (e.g., presenting information to Philip as the facilitator looks away) or auditory (e.g., presenting white noise through headphones to prevent facilitators from hearing information intended for Philip). Equipment was reviewed with Philip and the facilitators at this time.

6. Examiners explain their role to Philip. It was explained, once again, that the primary purpose of this assessment was to validate Philip's use of FC. The examiners indicated that they were operating under the assumption that Philip was a competent communicator and that this would be borne out through his responses to the various phases of the assessment battery. The examiners discussed the contradictory nature of the assessment process in that they were expected to maintain high expectations of Philip, as proponents of the method advocate, while systematically examining the appropriateness of these same expectations.

7. Opportunity for Philip and his facilitators to ask questions.

Examiner: "Do you have any concerns before we get

started?"

Philip: ME LIKE YOUR THINKING. ME NOT NERVOUS. ME LIKE YOUR IDEAS.

At this stage, testing commenced.

8. Peabody Picture Vocabulary Test (PPVT-R) (Dunn & Dunn, 1981.). We explained the purpose of this test as a general measure of receptive vocabulary. We determined that the facilitator had not seen the test being administered, nor had she reviewed the test protocol previously. This information was obtained by interviewing the facilitators. We then pointed out that items may be very easy in the beginning and then grow increasingly difficult. This served to orient Philip and his facilitator to the task. We asked that he not be offended by this procedure. The method (Calculator & Singer, 1992) of masking the facilitator with white noise was demonstrated. The PPVT-R sample items were administered without masking. The examiner presented each stimulus as the facilitator looked down. Following each stimulus, Philip indicated his response using FC. Earplugs and headphones were placed on the facilitator. A series of spondees (e.g., baseball, hotdog, and so forth) were administered to the facilitator to determine the level of masking, with white noise, at which intelligibility was 0%. The sample items were readministered with the headphones and earplugs in place. Again, no masking was introduced. The first three test items were administered without masking, and subsequent items were administered with masking as a control. Masking was introduced before presenting each stimulus. The white noise also cued the facilitator to look down, holding her head in a position roughly parallel to the table surface. It had been determined that she was unable to see the examiner's lips from this position. Each time the white noise was turned off, or she was tapped on the shoulder by the examiner, the facilitator took Philip's hand and facilitated his response.

Testing continued until either a ceiling was reached or the communicator displayed sufficient skills to warrant termination of testing.

Philip's responses were 100% correct when his facilitator was able to hear the stimulus. Philip continued to pass items consistently at the 10- to 11-year level once masking was introduced to his facilitator. Performance became sporadic as the 13-year level was reached and exceeded. At that point we decided to suspend testing rather than obtain a ceiling.

Philip's performance with facilitation and controls far exceeded previous results on the PPVT. He had scored age equivalents of 4;3 and 3;5 at 12 and 15 years of age, respectively. These earlier administrations of the test were carried out in standardized fashion, without facilitation.

9. Expressive One Word Picture Vocabulary Test–Revised (EOWPVT-R) (Gardner, 1990). We explained that this test is a broad measure of expressive vocabulary and assured that Philip was comfortable with the testing format and understood the purposes of this test.

Examiner: "Do you understand what we are looking at

here?"

Philip: ME THINK VALDUT (validity) WILL BE

PROVEN.

Examiner: "Do you understand what we mean by expres-

sive vocabulary?"

Philip: ME NKNT (not) SURE [examiner then

explains].

Once again, the examiners acknowledged that since the purpose of this protocol was to validate Philip's use of FC, responses such as those offered here could not be assumed to have been his. However, consistent with the protocol, we operated from an assumption that Philip could shape the protocol if given the opportunity to do so.

We determined the facilitator's familiarity with this test and pointed out that the nature of the test was to offer increasingly difficult items. It was explained that the facilitator would be asked to look away when items were presented, to prevent him from accidentally answering for Philip. As each picture was placed face-down on the table, the facilitator would encourage Philip to spell the name of the picture he had seen, using FC. If Philip was unable to label a picture, the facilitator was asked to encourage him to describe what he had seen. The facilitator would then interpret Philip's response. It was the facilitator's interpretation that was then used as a basis for evaluating whether or not responses were correct. Sample items were then administered. Philip and the facilitator were able to view each picture. Philip unexpectedly responded to items verbally. For this reason, the masking condition described in the PPVT-R protocol was re-instituted here.

Despite the fact that he was able to verbally identify several pictures, Philip was unable to label these, or any other pictures, through FC when his facilitator did not see the pictures or hear his responses. All of Philip's facilitated responses were either unintelligible to the facilitator, or inaccurate. As indicated earlier, a prior administration of the EOWPVT-R in which Philip responded independently

through verbalization and signs had resulted in an age equivalent of 5;2.

10. Conversation. As with every procedure used in the battery, the examiners explained how this task would be administered, and then solicited Philip's and his facilitators' agreement to participate. The examiner engaged Philip in a conversation, while the facilitator assisted by facilitating Philip's responses. During the conversation, white noise was introduced intermittently through the facilitator's headphones. As in the previous tasks, this cued the facilitator to look down until the noise abated, at which point he was expected to facilitate a response from Philip. The headphones were worn by the facilitator in both conditions, but the white noise was only administered in the control condition.

Philip's responses in the two conditions, with and without controls, were compared with respect to accuracy and contingency on the examiner's preceding messages. Testing began with no controls, and resulted in the following messages.

Examiner: "Do you have any brothers or sisters?"

Philip: ME HAVE ONE SISTER Examiner: "What is her name?" Philip: JUNNEFER (Jennifer).

The dialogue continued, with controls introduced intermittently to the facilitator. Results in the two conditions, *with and without controls*, follow.

With Controls

Examiner: "How old is Jennifer?"

Philip: QPANPQP [perseverating on letters]

BAD FATHER

Examiner: "What do you want to talk about?"

Philip: ME LIKE DD (Don) ANT (and) ANN. (Names

of the two facilitators).

Examiner: "Do you want Ann here?"
Philip: NEED HELOEP (help).
Examiner: "What is your father's name?"
Philip: THEY ARE MY SUPPORT

Without Controls

Examiner: "Who did you work with that first helped you

with this problem with your father?"

Philip: ANN RPEACH FIRST. Examiner: "Who helped you next?"

Philip: DON WAS SECOND. JUDY HIRED [Exam-

iner later found out that a paraprofessional named Judy had recently begun facilitating

with Philip].

With Controls

Examiner: "Who is Judy?"

Philip: TOM [his father]IS A MOLESTER.

Examiner: "Is Tom your father?"

Philip: DAD [this was the only instance in which

Philip responded contingently and on topic in

the CONTROL condition].

Examiner: "How does Tom make you feel?"

Philip: DON SU. DON SUPPORTS ME.

Examiner: "What about Ann?"

Philip: ASK ME SOMETHING ELSE

Examiner: "Where were you the first time Tom molested

ou?'

Philip: GLAD TO BE ALIFFE (alive).

Examiner: "Would you rather talk about this or get off the

subject?"

Philip: FEEL DARK INSIDE.

Without Controls

Examiner: "Would you like to stop or continue?"
Philip: LEAVE A MOMENT TO URINATE
Examiner: "Do you want to do some more this after-

noon?"

Philip: YES

These results indicated that Philip's ability to engage in conversation, and provide contingent responses, depended heavily on his facilitators' hearing the same questions asked of him. His only accurate response in the control condition was DAD. Otherwise, messages conveyed under these conditions were unrelated to the examiner's questions. Conversely, when the controls were removed, Philip's responses and initiations were accurate and topic contingent.

11. Clinical Evaluation of Language Fundamentals-Revised (CELF-R) Subtest XI - Listening to Paragraphs (Semel, Wigg, & Secord, 1987). It was explained that this test would examine Philip's use of FC to answer questions about two short stories. Philip's responses would be compared in conditions with and without controls provided to his facilitator. Controls consisted of administering white noise and asking the facilitator to look away, as in the PPVT-R protocol. White noise was only administered during the reading of the paragraph.

The facilitator was interviewed to determine that she had not seen this test being administered, nor had she reviewed the test protocol previously. All of the paragraphs that were selected were recommended, in the CELF-R protocol, for students in the 5- to 7-year age range. It was assumed that these stimuli would require skills well within Philip's capability, given his teachers' reports concerning his academic abilities were valid.

Philip answered questions accurately when his facilitator heard the passage. Responses were either unintelligible to the facilitator, or appropriate but inaccurate, when the facilitator did not hear the paragraph read to Philip. To illustrate, one paragraph was about a girl named Lisa who received a gold ring from her grandmother for her birthday. Lisa's name was engraved on the ring. This same paragraph was read to Philip with and then without controls. Results follow, depicting the correct answer (in parentheses), Philip's response with controls (Upper case print) and without controls (Upper case, italicized print). The two responses in the condition without controls were accurate. Not one of the three responses in the condition with controls was intelligible to the facilitator.

Examiner: "What did Lisa get for her birthday?" (A gold

ring).

Philip: MNNG (with controls)

RING (without controls)

Examiner: "Who gave the ring to Lisa?" (Her grand-

mother)

Philip: GIRKDM (with controls)

GRANDMOTHER (without controls)

Examiner: "What was on the ring?" (Lisa's name). Philip: KEBLSMEMRNSMTM (with controls)

(Not tested without controls)

12. Generals subtest of the Test of Language Development—Intermediate (TOLD-2) (Hammill & Newcomer, 1988). It was explained that this test would require Philip to group words into superordinate categories. The facilitator indicated that she had not seen this test being administered, nor had she reviewed the test protocol previously. Again, the examiners apologized in advance for administering items that Philip might find overly simple. White noise and looking away were employed to prevent the facilitator from responding for Philip. These controls were removed, and the facilitator was cued to facilitate a response, after administering each stimulus to Philip.

Philip responded accurately and/or contingently, despite misspellings, when his facilitator heard the stimuli. However, responses were unintelligible to the facilitator when controls were applied. Following are the instructions, correct responses (in parentheses after the examiner's instructions), Philip's responses (upper case print), and the facilitator's interpretations of these responses (lower case italicized print). We begin with two sets of responses elicited without controls.

Examiner: "I'm going to say three words that are all alike

in some way. I want you to tell me how they are all alike. For example, 'Monday, Tuesday, and Wednesday.' How are these alike? What is similar about them?" (days of the week).

Philip: GO TO AL SKOOL (all days he goes to

school).

While this response was not correct according to the test protocol, it suggested the possibility that Philip understood the task and was able to frame a novel response with FC when his facilitator heard the stimulus. This same pattern was observed on the next item, where he responded accurately and with a novel spelling.

Examiner: "Let's try another one. 'Red, Brown, Green'.

How are they alike?"

Philip: LOLK KOLOURYRS. KOLOURS (like

colors)

Upon introducing *controls*, Philip's typing was no longer intelligible to his facilitator, as the following two examples illustrate.

Examiner: "Okay, let's try another one. 'Venus, Mars,

Pluto."

Philip: MRKEU U TO P JOPBS [unintelligible to

facilitator]

Examiner: "How about these. 'Igloo, teepee, palace.""
Philip: IPKIPOP [unintelligible to facilitator]

Philip was then asked to comment on this task and to offer ways of modifying the procedure to enhance his success. The following conversation ensued, *without controls*.

Examiner: "Are there other things you want to talk about?

Are there other ways you can let us know

how much you know?"

Philip: KAN LET M WREAD DAMN THING (Can

you let me read the damn thing?).

Testing resumed, but items were presented to Philip to read, rather than orally. The facilitator was asked to look away as the stimuli from the Generals subtest were readministered visually. Philip's responses remained unintelligible to his facilitator.

13. Message passing. It was explained to Philip that these tasks would require him to type out responses to the same question asked by his two facilitators, only one of whom would be present to hear the correct answer to the question. The purpose of this task was to examine Philip's ability to convey novel information to his facilitators. As in all preceding tasks, Philip indicated through FC that he felt this task would be fair and interesting, and was willing to participate. The results demonstrated that Philip's messages were either incorrect and/or unintelligible to the naive facilitator, yet accurate with the facilitator who had access to the same information provided to Philip. Facilitator's interpretations of Philip's responses appear in parentheses in lower case italics.

Examiner: "Okay Philip. We all know you are so darn

smart, but for some reason you're having lots of trouble with these tests. Let's try something different. Let's see how you spell when Don and Ann don't know what it is you are talking about versus when they do. I'm going to ask Ann to leave the room. Her job, when she returns to the room, is going to be to find out what Randy (second author) had for lunch.

[Ann leaves room].

Examiner: "Philip, Randy had a bacon, lettuce and tomato

sandwich for lunch today. Or a BLT. Don is going to ask you what Randy had. Just spell it

out."

Don: "What did Randy have for lunch?" (without

controls)

Philip: BLT

Examiner: "Great. Now you need to tell the same thing to

Ann."

[Ann is invited back into the room. Less than 2 minutes have passed since Philip spelled out

BLT for Don].

Examiner: "Ann, you need to find out from Philip what

Randy had for lunch."

Ann: "Philip, tell me what Randy had for lunch."

(with controls)

Philip: ULUPOPTPDO (unintelligible)

[Don was then asked to leave the room in order

to do a second message-passing task].

Examiner: "When Don comes back in to the room, you

need to tell him where I went to school. The answer is 'Wisconsin.' First, let's practice with Ann. Ann, ask Philip where I went to school."

Ann: "Where did Steve go to school?" (without

controls)

Philip: GO WISCONSIN (go Wisconsin)

Examiner: "Great. Now you just have to give the same

information to Don. Let's invite him back in."

[Don returns to room]

Examiner: "Can you find out from Philip where I went to

school?"

Don: "Where did Steve go to school?" (with con-

trols)

Philip: BRANDEIS (Brandeis)

MAS MA (*Massachusetts*) [Note: the facilitator later informed the examiners that he attended the University of Massachusetts.]

Discussion

The purpose of this investigation was to provide information to the Division of Child and Youth Services (DCYS) about Philip's abilities to communicate using facilitated communication. Through FC, Philip had alleged to the two facilitators who participated in this study that his father had sexually molested him on numerous occasions. A physical examination of Philip that was conducted before the present investigation had failed to corroborate these allegations. Similarly, interviews of Philip's mother and family members provided no suggestions that any such events had occurred.

Before turning to the results of this study, one point must be emphasized. This study could not shed light on the veracity of the allegations themselves (that is, whether or not Philip had indeed been molested by his father) any more than would have been possible had the allegations been made orally. The procedures used in this study were designed to examine Philip's communication skills free of facilitator influence.

In conducting these procedures, the examiners acknowledged the possibility that by instituting different types of controls, the 'natural' process of facilitation was altered. However, given the nature of the case, there did not appear to be a viable alternative to the use of these controls. The assessment process was constructed with several safeguards in place (see Table 1) to address concerns about the validity of the battery in assessing the validity of Philip's use of FC.

With the exception of the PPVT-R, there was no substantial evidence in the controlled conditions that Philip was able to communicate with FC independently of facilitator influence. Similarly, there was no evidence of his ability to author messages that were intelligible to his facilitators unless they heard the questions that were addressed to Philip.

The PPVT-R probed Philip's receptive vocabulary and

did not require him to spell messages. Instead, it required him to point to one of four pictures named by the examiner. Philip consistently passed items up to the 11-year level, with facilitation. His performance far exceeded results obtained without facilitation, where his highest previous score was commensurate with an age equivalent of 4;3. These findings are consistent with a previous report in which four out of five subjects' scores on the PPVT-R were significantly improved with FC (Calculator & Singer, 1992).

The PPVT-R results indicated that Philip's receptive language is far greater than previous administrations of this test had suggested. However, his proficiency on this test did not carry over to tests of expressive communication that relied on facilitators interpreting spelled messages under controlled circumstances. As we examine results on the remainder of the battery, however, we find a puzzling picture that appears resistant to resolution.

Beginning with the EOWPVT-R, Philip was unable to use FC to identify any pictures presented to him, not even those he successfully labeled verbally. Results on this task were significantly below previous findings that established an age equivalent of 5;2 on this task. The higher score was achieved when Philip responded to items independently, through speech and signs, rather than through facilitated communication.

This outcome suggests that FC may limit Philip's expressive output, rather than embellishing it to the extent that would have been necessary for him to have authored the various allegations against his father. This represents an alternate form of facilitator influence in which requiring Philip to use FC may actually prevent him from expressing thoughts through other modes instead.

The conversation task provided further evidence of facilitator influence. Philip's responses were both consistent and accurate when the facilitator heard his conversation with the examiner. However, with the exception of one response, "DAD," the introduction of controls led invariably to Philip changing every topic introduced by the examiner. Responses included accusations that his father was a molester and requests for help. It is important to note that none of these off-topic responses arose when the facilitator heard the examiner's input.

It was also noted that accurate responses in the condition *without controls* contained misspellings (JUNNEFER/Jennifer) and syntactic errors (ME/I). Such errors have been proposed by others (Crossley, 1992; Schubert, 1992) as qualitative support for the validity of FC. These investigators have argued that if facilitators were authoring messages, such errors should not occur. Returning to the Conversation task, however, we see that such errors occurred when the facilitator was unaware of messages to which Philip was reacting, such as DD/Don; ANT/Ann; HELOEP/Help; ALIFFE/Alive. However, every one of these messages actually constituted inaccurate, noncontingent responses.

Similarly, the above investigators have also cited communicators' uses of idiosyncratic phrases as support for the validity of FC. Returning to the conversation subtest, Philip used the expression, "FEEL DARK IN-

SIDE." It could be argued that it would be unlikely for a facilitator to use such an expression. However, this response occurred as an off-topic response to a question.

In the condition without controls, a second idiosyncratic phrase arose, "LEAVE A MOMENT TO URINATE," in response to the examiner's asking Philip whether or not he wanted to continue with the testing. Again, this utterance would be highly unlikely to arise in the verbal repertoire of most speaking adults, including facilitators. However, its occurrence in the condition without controls may suggest that facilitators not only author messages for Philip unwittingly, but may do so with forms and content that would be identified or associated with Philip. This could also explain Philip's, or the facilitators', spelling and grammatical errors. This is purely speculative, but is certainly precedented in conversations between adults and young children, where the former employ a discourse style that results in telegraphic, highly redundant language, or "motherese/baby talk."

At first glance, the Listening to Paragraphs task provided further evidence that Philip could not respond correctly unless his facilitators shared information presented to him. Analyzing these results more closely, however, we are puzzled with one response, GIRKDM/GRANDMOTHER. While this response was unintelligible to the facilitator, who lacked a context, having not heard the story, one can only speculate as to what might have occurred had the facilitator heard the story and been in a position to question Philip about this response. Would she have eventually guessed "grandmother"?

Conversely, GRANDMOTHER was typed without hesitation moments later when the facilitator heard the passage read to Philip a second time. The immediate conclusion might be that this represented facilitator influence. How else could Philip suddenly generate this noun? However, the possibility that GRANDMOTHER resulted from the joint efforts of Philip and his facilitator also cannot be ruled out. Such an explanation is highly consistent with Duchan's (1993) description of FC as a collaborative effort involving the facilitator and the communicator.

The Generals task provided further examples of misspellings (SKOOL/school; KOLOURYRS. KOLOURS/colors) in the situation without controls. However, it is difficult to identify any rationale for Philip's response that the words "Venus," "Mars," and "Pluto" are alike in that they are: MRKEU U TO P JOPBS. While the correct response would have been the superordinate label "planets," there is evidence here that Philip may instead be naming additional planets. Could MRKEU (Mercury?), U (Uranus?), TO P (Pluto?), JOPBS (Jupiter?) constitute valid responses that in the absence of a context were rendered unintelligible to the facilitator? Alternatively, could the facilitator be the actual source of this response, once again responding unconsciously for Philip in a way that suggests he lacks the ability to group nouns into superordinate categories?

The message-passing task, during which Philip was asked what the second author had for lunch, proceeded similarly. Philip's response, ULUPOPTPDO, was unintel-

ligible to Ann. However to the first author, it represented a possible attempt to spell the words "lettuce" and "tomato." It should be pointed out that the second author saw nothing relevant in this response. This raises the possibility that facilitators may occasionally be creating meaning from otherwise random letter selections provided by communicators. Alternatively, we may be seeing situations in which communicators select letters, intentionally or randomly, and then their facilitators unconsciously take over the letter selection process to create meaningful messages. The second author described this phenomenon as "a letter in search of a word."

Epilogue

Based in part on the findings of this investigation, charges against Philip's father were dismissed. The family is now part of a class action suit seeking damages for what they feel they have wrongfully endured over the past year. Philip continues to be fully included at his high school. His educational team has begun discussing changes in his educational program, including a greater emphasis on vocational training. In addition, the team has begun to explore other means of augmentative and alternative communication. While facilitated communication has been terminated at school, staff and family are attempting to maintain high expectations and personal/physical contact with Philip. In addition, they are considering placing increased emphasis on literacy training, targeting reading and writing/typing independently.

As a case study, results of this investigation cannot be generalized beyond Philip. However, several concepts introduced in this paper may be helpful in subsequent attempts to validate individuals' uses of facilitated communication:

- 1. The efficacy of facilitated communication may best be assessed on a case-by-case basis; it may be advisable to avoid sweeping statements to the effect that this method benefits all or none.
- 2. Special care may be necessary in creating testing environments that validly sample the process of facilitated communication without inadvertently altering that process and thus invalidating the assessment procedure itself. Some of these considerations were summarized in Table 1.
- 3. Where the use of facilitated communication can become a central issue in matters of great social-emotional significance, such as allegations of abuse against a parent, the need for ongoing validation of this method is highly warranted. Such testing should occur when the method is first introduced and continue as new communication partners become involved. This assessment should be considered integral to the method, rather than a course of action that is only considered when problems arise.
- 4. FC validation may teach us more about ourselves and our interactions with others than unraveling mysteries surrounding the method itself.

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