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CREATING VIDEOS TO ASSESS CHILDREN'S SIGNED LANGUAGE NARRATIVE SKILLS

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ABSTRACT

There is a need to develop valid and reliable assessment measures to monitor the progress of signed language acquisition both for research and educational purposes. One such measure is the *Assessing BSL Development Production Test* (Herman, Grove, Holmes, Morgan, Sutherland, & Woll, 2009) that assesses children's expressive BSL skills through the use of a language-free story on video. Since the elicitation task does not use language (the children in the video communicate through gestures and facial expressions only), it has good potential for use in any language. This presentation will describe the process of adapting and developing the *BSL Production Test* for use in American Sign Language (ASL). In particular, the process of creating grammatically parallel sets of language-free video stimuli will be outlined and discussed.

The creation of new, but comparable language-free stories on video was necessary to prevent children from becoming too familiar with one video over multiple viewings through repeated test administration. The process involved a thorough grammatical analysis to develop the story template; mapping out parallel narrative content, structure, and grammar for each story; producing the videos; and pilot testing the three stories with Deaf adults to ensure consistency. The presentation will elaborate on the lessons learned while creating parallel and language-free videos to effectively elicit narratives. The impact of multiple video elicitation procedures for assessing children's ASL narrative skills over time will also be discussed.

INTRODUCTION

There is a scarcity of tests to assess Deaf children's language development. A variety of tests are used to assess developmental outcomes in speech and hearing in young Deaf children; however very few commercially available assessments exist for Deaf children who are signed language users (Singleton & Supalla, 2011), and none at all for Deaf signers below the age of 3 years (Haug & Mann, 2008). According to Herman (1998), decisions about appropriate educational placements or recommended interventions for Deaf children are frequently based on assessments of spoken and written language skills, with only impressionistic assessments being made of signed language skills.

A number of assessments have been developed for different signed languages. There is currently a need for reliable and valid test instruments in different countries in order to monitor the signed language acquisition of Deaf children. Very few tests that offer strong evidence of psychometric properties are commercially available (Maller, Singleton, Supalla, & Wix, 1999). There are some logical reasons for the scarcity of signed language acquisition tests. One reason is due to the challenge of identifying developmental problems in the acquisition of minority languages, whether they are signed or spoken (Johnston 2004), and the other is a result of the small number of native signed language users. Schembri et. al. (2002) remarked that the norms for these populations do not exist because of a lack of controlled elicited data from representative samples of native users of natural signed languages. Unfortunately, the number of studies of signing Deaf children's language development is limited. In addition, Mitchell and Karchmer (2004) point out that studies of children's language development do exist; however, the number of participants is small because only a minority of deaf children can be considered native signers (i.e., they have had a normal experience of language acquisition from exposure to Deaf parents who sign). ''Of the children in educational programs for the Deaf, only five to ten percent have Deaf parents'' (Lane, Hoffmeister, & Bahan, 1996, p. 30).

Narrative/story-telling is considered by many to be a cornerstone of language development during the formative elementary school years (Cravens, 2013). For this reason eliciting narratives has been used as the basis for various development language assessments. Haynes, Purcell, and Haynes (1979) discuss the type of language sampling that is best suited for children aged 4–6 years. They compared the use of conversational vs. picture description tasks in order to investigate which type of task elicits language of greater length and complexity within this age group (Haynes et al., 1979). The results revealed that picture description tasks elicited longer utterances than conversation, but that the conversational condition elicited more complex language use than did the other conditions (Haug 2005).

It is obvious that deciding upon a certain method of assessment depends on various factors, such as the purpose of the test and the choice of structured vs. naturalistic approaches. One of the benefits of adapting an existing test as compared to developing a new test is that some of these factors regarding test design and structure have already been considered. This was the case in adapting the standardized *BSL Production Test* (Herman, Grove, Holmes, Morgan, Sutherland, & Woll, 2009) for use in ASL.

PROCEDURES

The process of adapting the *BSL PT* into ASL included the following phases:

1. Determine if the BSL video (Spider Story) could be effective in eliciting ASL narratives from Deaf adults that included common episodes and the expected use of ASL grammar structures.

2. Create additional versions of the test (parallel video stories) so that children do not become familiar with the Spider Story through repeated testing.
3. Conduct pilot testing (with both adults and children) with the various versions of the test to ensure they are parallel and that scores between versions can be compared.
4. Collect normative data on a representative sample of Deaf children across Canada and the US.

A brief description of Phase 1 will be provided, however, the main focus of this presentation is to describe Phase 2 of the project. Phase 3 is currently in progress and Phase 4 has not yet been completed.

Phase 2 of the project was to create additional versions of the test, or parallel video-based stories that would elicit comparable narratives. Prior to developing parallel stories, the first requirement was to execute some revisions of the Spider Story. As stated earlier, this involved consideration of the characters in terms of gender, age and roles to ensure respect and diversity. The environmental setting (furniture, décor, etc.) was also modified to have more neutral colours (such as no flowery tablecloth) to limit distractions and focus on clean visuals for the purpose of eliciting target grammar structures. The video production format can also make a difference if the approach leads to good technical quality, engaging storytelling by taking advantage of the inherent strengths of the camera (namely closeness), showing rather than telling, and shooting additional views to edit later. The need for additional videos is to create three different elicitation scenarios. The objectives for creating three scenarios were to; (1) maintain the same grammar elicitation, (2) allow for re-testing longitudinally, (3) account for developmental challenges, (4) create American versions, and (5) simplify to focus on grammatical elicitation.

FINDINGS

Creating new stories with parallel structure/grammar and matching the content required planning. An in-depth investigation of specific linguistic structures and production measures was needed to create stories with matching content. We used the basic narrative structure of the Spider Story and aligned the two new stories, “Home Alone” and “Tiffany’s Breakfast” to this format. All three stories have a similar plot. The same narrative structures are included, for example, an initiating event, complicating actions, climax, and resolution. The settings vary in the three stories, but they all occur in one room and have only two characters. There are also parallels between the objects and actions (verbs) in each of the stories.

ASL Grammar Alignment:

Creating parallel stories with one common theme and at the same time preserving the overall grammar template was exciting but was also challenging. It required a change of mindset and divergent thinking. It was important to be

aware of many structures and concepts at once, and think about different ways to connect or rearrange them. In addition, the stories needed to be enjoyable and engaging for children so they would remember them and be interested in retelling them. The framework was established by having two characters – a protagonist and an antagonist; introducing conflicts in the life of the characters; and finding a way for the characters to respond to these conflicts. This is what gave the stories meaning. Opportunities to elicit the same kinds of grammatical structures in each story had to be integrated within this framework. The result is that the three stories align across each of the five grammatical categories (spatial verbs, agreement verbs, aspect, manner, and role shift).

Video Production:

The production of the videos involved finding a suitable location, auditioning actors, assembling a film crew, pre-production planning, filming, and editing. These procedures were all managed by the production team, which consisted of two university researchers (one from the University of Manitoba, and one from Gallaudet University) and the research assistant (UM graduate student completing courses at Gallaudet University). Each of these aspects of the process will be discussed.

Location: The opportunity to use a recently renovated house (for future student housing) on the campus of Gallaudet University to conduct the filming became available. This was an ideal location because it was furnished, neutral décor, not cluttered, but looked like a natural home. It was also in an accessible location for the production team and for recruiting Deaf child actors.

Actors: It was determined that the children participating in the story should be native ASL users, and would be recruited from the surrounding schools for the deaf – those being the Maryland School for the Deaf and Kendall Demonstration Elementary School. The filming was conducted on a Saturday so it would not conflict with a school day for student actors. Young actors auditioned at their schools and six were selected to participate in the test videos.

Film Crew: The film crew included a videographer, a videographer assistant, and a make-up artist. The crew members were all Deaf people and local to Gallaudet University. They were experienced working on productions involving ASL or visual communication, so were very aware of the importance of clear visuals throughout the filming process. The production team also participated in assisting the filming crew throughout the filming day.

Pre-production planning: The production team discussed all the project details and made decisions collaboratively. This included determining what equipment and props were needed, setting up schedules and organizing all the necessary details. Details ranged from scheduling actors, setting time slots for each video, providing food and snacks, preparing for taping delays, describing the taping process, determining the budget, and creating a detailed plan of action for

production.

Filming Day: The crew and the production team arrived at the filming location early to set up equipment, organize the props, and arrange the waiting area for actors and their parents. Before the scheduled filming work was to begin, the crew arranged to meet with the team to run through the day's shoot. The production began at 8:00 a.m., and the filming was completed by 9:00 p.m. Actors came to the set knowing the character that they would play in the video. The production team met with each actor to discuss their character and how they should act. The production team reminded them that the shooting is not a rehearsal and that they may need to do the same things over again several times. A brief meeting took place with the actors before each scene, as sometimes the producers would change directions for the scene. The actors followed what was expected. When the shooting began the whole building went into "lock-down" - no one moved, spoke, or signed while shooting and all communication devices were turned off. The parents stayed in a waiting area on the main floor and were not allowed to be with their children during the filming. This was done to keep the children focused and to not add more pressure to their performance.

The film crew shot the same scene repeatedly until the director/producers were satisfied. For all types of productions, the average filming day lasts approximately twelve hours, often longer. The time required for the first group of actors that came for the morning shoot was longer, as the film crew was just getting familiar with the video stories and learning which kinds of shots (close-up, wide-angle, etc.) were needed. Throughout the day the filming was often a long and tedious process as many details needed to be sorted out, including removing wrinkles or stains from clothing, finding the right color for each child's shirt, re-arranging furniture in the rooms, and preparing the food props. The actors became very tired and sometimes needed encouragement to continue. The actors enjoyed acting and they were able to take all the criticism and suggestions well. The filming day ran far behind schedule and by noon the production team had to contact families to postpone the starting time for the final video shoot. Cramming all three videos into one filming day was hectic, but it would have been difficult to assemble the whole team again on another day.

The production team's main goal was to focus on the facial expressions for the purpose of eliciting children to retell the story. For example, you might see a close-up of a character's face as he/she delivers a particular action, then a close-up of the other character's reaction at the same time, then a wide shot including both characters to see how their body language plays out the scene. The production team wanted specific facial expressions solely for the purpose of creating the story. Facial expression is not the only part that conveys meaning, but it is the most important part. The other aspects to consider are body movement, posture, gesture, eye contact, and use of space. Body movement is the way you move and carry yourself. It communicates a wealth of information to the world. Posture can have different meanings, for example, sitting slumped on

the chair shows that the character is upset. Gesture is when you use your body and hands, for example, shaking your head for “no”, or holding out your hand to “demand”. These actions are important for expressing meaning. Eye contact plays a key role for Deaf people in communication. It is an especially important type of nonverbal communication. The way you look at someone can communicate many things, including interest, affection, hostility, or attraction. Eye contact is also important in maintaining the flow of conversation and for gauging the other person’s response. The use of physical space can communicate different nonverbal messages, including signals of affection, aggression or dominance. The actors effectively used facial expression, movement, posture, gestures, and eye contact to produce successful outcomes that satisfied the production team.

Postproduction/editing: The initial editing was completed by the videographer who selected the scenes and put them in the appropriate order. The production team examined the drafts of the videos to validate that all the shots capitalized on conveying the story. Each film shot was checked to match with the content and the grammatical features expected in the retelling. The videos were reviewed, analyzed and evaluated after they were edited. The production team then met with the videographer to revise and restructure the video to create the final cut. The editing production was finalized for each of the three videos.

CONCLUSION

Future research will involve pilot testing the three videos with Deaf adults to determine if they elicit comparable narratives. It will also be necessary to pilot test the videos with children who are native ASL users (have Deaf parents). The purpose for limiting the pilot sample in this way is to ensure that the test reflects the appropriate developmental sequence of ASL acquisition based on fully accessible exposure to the language (Enns & Herman, 2011). After pilot testing, the results will be reviewed for each of the three scenarios and modifications will be made where needed. Eventually, normative testing will be completed with a broader sample of deaf children.

What has been particularly motivating for us throughout this process is knowing that developing this test will open opportunities for teachers in schools to learn more about language development, and that our work may facilitate test development for other under-documented signed languages. This is exciting and rewarding. Although some modifications and improvement will still be necessary, we are moving closer to teachers being able to have a good and reliable method to monitor children’s language progress in ASL.

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