

Introduction

Emotionality has been found to influence communicative abilities in aphasia with evidence that emotional content facilitates comprehension (e.g., Reuterskiöld, 1991), repetition (Ramsberger, 1979), and reading and writing abilities (Landis, Graves, & Goodglass, 1982). Moreover, a small number of studies support the premise that emotionality positively influences discourse production in adults with aphasia (e.g., Bloom, Borod, Obler, & Gerstman, 1992; Bloom, Borod, Santschi-Haywood, Pick, & Obler, 1996). Adults with LBD were found to produce fewer content elements than adults with RBD and healthy controls in a non-emotional discourse task, while number of content elements produced by LBDs was comparable to the other groups in an emotional task (Bloom et al. 1992). This suggests that adults with LBD produce relatively more amount of information in emotional than non-emotional tasks. Moreover, coherence of emotional discourse produced by both adults with aphasia and healthy controls received higher perceptual ratings than non-emotional discourse (Bloom et al. 1996). This evidence of the facilitative effect of emotionality on discourse coherence and amount of information prompts further exploration of the influence of emotionality on additional discourse features.

However, prior to testing adults with aphasia on emotionality tasks, it is important to validate the testing stimuli with respect to emotional features (e.g., category and intensity). It is also necessary to ensure that the testing stimuli are controlled and comparable in the amount of information they elicit. The objectives of this study then are (1) to validate that the testing stimuli (15 short video-clips) represent targeted categories of emotionality and (2) to control for the amount of information elicited by each category. The final objective is (3) to select a subset of stimuli (9 out of 15) to be used in future studies.

Methods

Participants

Ten healthy Arabic-speaking adults (5 males, 5 females) ranging in age from 18 to 43 (mean = 28) participated in the study. Years of education ranged from 12 to 28 years (mean = 16). Participants had no history of psychiatric, neurological disease, or any other type of communication disorder.

Procedure

Participants viewed 15 silent video-clips ranging in duration from 30 to 45 seconds, five per emotional category: positive, negative, and neutral. The video-clips were selected from a Saudi television show that addresses social issues. They were edited to meet specific requirements (e.g., limited to one emotional category, logical sequence, duration). Participants described events depicted, and completed a brief questionnaire judging emotionality dimensions for each stimulus (e.g., valence category, rating emotional intensity, and specifying type of emotion). Discourse samples were audio-taped, transcribed verbatim, transcripts verified by a second listener, and analyzed for content units.

Analysis

Responses to questionnaire items were calculated for percent agreement, mean, SD where applicable. A minimum of 70% agreement in categorizing each video-clip was required for further analysis. Amount of information was measured by identifying and counting total number

of content units following a procedure modified from those by Menn, Ramsberger, and Helm-Estabrooks (1994), Nicholas and Brookshire (1993) and Yorkston and Beukelman (1980).

Results & Discussion

Table 1 displays results for categorization agreement among participants. Rating means and standard deviations for emotional intensity, logical sequence, and interest are also summarized. A process of elimination was followed to determine which nine clips to use in future studies. Clips receiving less than 70% agreement were eliminated. The highest agreement was noted for positives, negatives, and neutrals, respectively. One of the clips with equal percentages within a single category was candidate for elimination to achieve greatest balance across categories. Within positives, one of three clips receiving 100% was excluded (clip 9); within neutrals, one of three receiving 70% (clip 2); and within negatives, one of two receiving 80% (clip 11).

For emotional intensity rating, negatives and positives received higher ratings as anticipated, while neutrals were lower in intensity (Figure 1). An attempt was made to balance logical sequence across categories. Positives and negatives had equal mean ratings after excluding clips that met previous criteria. Neutrals received lower logical sequence mean ratings (Table 1; Figure 2). Participants gave higher interest ratings to negatives, positives, and neutrals, respectively (Table 1; Figure 3).

Content unit (CU) range and collective CUs produced by at least 70% of participants per video-clip are summarized in Table 2. CU analysis further supports excluding clips 2, 9, and 11 because they elicit least amount of units per emotional category. Of the excluded items, video-clip 11 elicited most content units and hence it can be employed in future studies as a practice item. Discourse production varied on the amount of information as an effect of emotional category with negative stimuli eliciting more CUs, followed by positive and neutral stimuli, respectively. Consequently, it is expected that discourse by adults with aphasia will contain more amount of information for negative and positive stimuli than neutral stimuli.

References

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Tables & Figures

Clip No./Theme	% Agreement Category	Emotional Intensity		Logical Sequence		Interest	
		Mean	SD	Mean	SD	Mean	SD
3- Old-fashion wedding	80% Positive	2.50	1.27	2.90	1.20	2.6	0.97
4- Girl with doves	100% Positive	3.20	1.03	3.50	0.71	3.1	0.88
5- Birth of baby	100% Positive	3.40	0.97	3	0.82	2.9	1.2
9- Father with daughter	100% Positive	3.00	1.15	3.20	0.92	2.6	1.17
Mean positives excluding 9		3.03		3.13		2.87	
2- Finding treasure	70% Neutral	1.10	0.74	2.60	1.17	2.3	1.34
6- Selling a car	70% Neutral	1.10	0.99	3.1	1.1	2	0.82
7- Airplane trip	90% Neutral	1.30	1.34	2.1	1.1	1.6	0.97
10- Boys at school	70% Neutral	1.80	1.32	2.8	0.92	2.5	0.97
Mean neutrals excluding 2		1.4		2.67		2.03	
11- Stolen car	80% Negative	3.10	1.10	3.5	0.71	2.9	0.99
13- Man taken to jail	80% Negative	2.80	1.23	2.9	0.99	2.5	1.27
14- Heart attack	90% Negative	3.20	0.92	3.2	1.32	3.2	1.03
15- Domestic violence	100% Negative	3.70	0.48	3.3	1.25	3.6	0.52
Mean negatives excluding 11		3.23		3.13		3.1	
1- Watching TV	60% Neutral			Excluded			
8- Family having lunch	50% Pos/Neu			Excluded			
12- Family moving out	40% Positive			Excluded			

Table 1. Emotionality Categorization & Ratings (n=10)

Clip No./Theme	Range of CUs	Collective	Mean after exclusion
3- Old-fashion wedding	7 - 66	27	27.7
4- Girl with doves	12 - 62	31	
5- Birth of baby	7 - 51	25	
9- Father with daughter	6-21	15	Excluded
2- Finding treasure	4-23	13	Excluded
6- Selling a car	6 - 48	27	25
7- Airplane trip	8 - 43	22	
10- Boys at school	4 - 36	26	
11- Stolen car	11-47	21	Excluded
13- Man taken to jail	8 - 39	23	28.3
14- Heart attack	9 - 64	29	
15- Domestic violence	14- 76	33	

Table 2. CU range & collective units

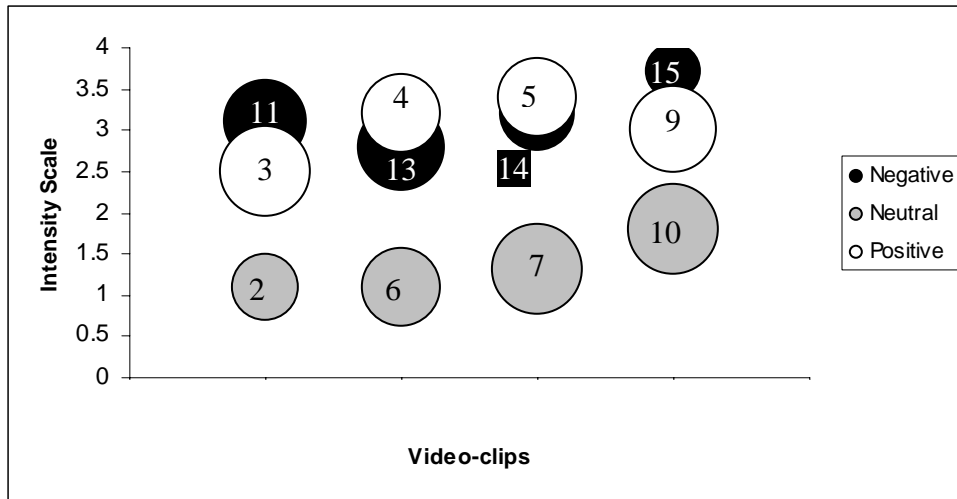


Figure 1. Mean emotional intensity ratings (size of bubble represents SD)

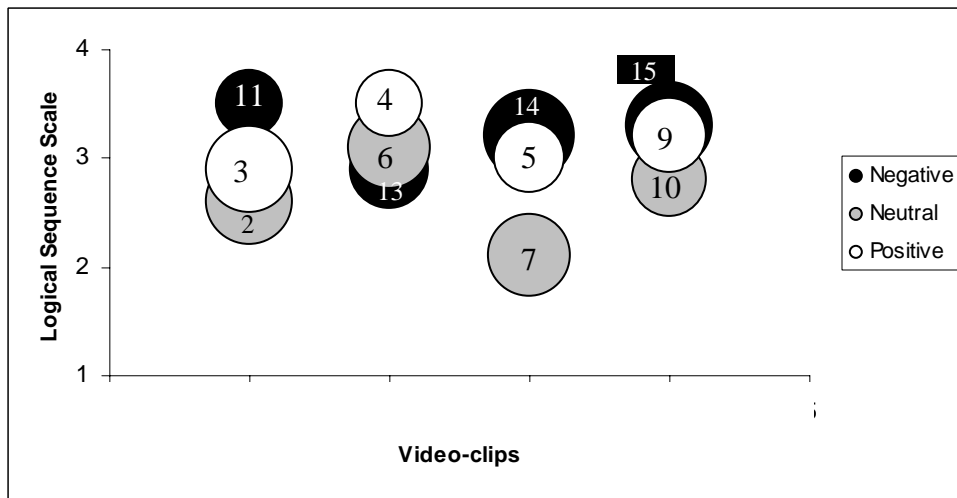


Figure 2. Mean logical sequence ratings (size of bubble represents SD)

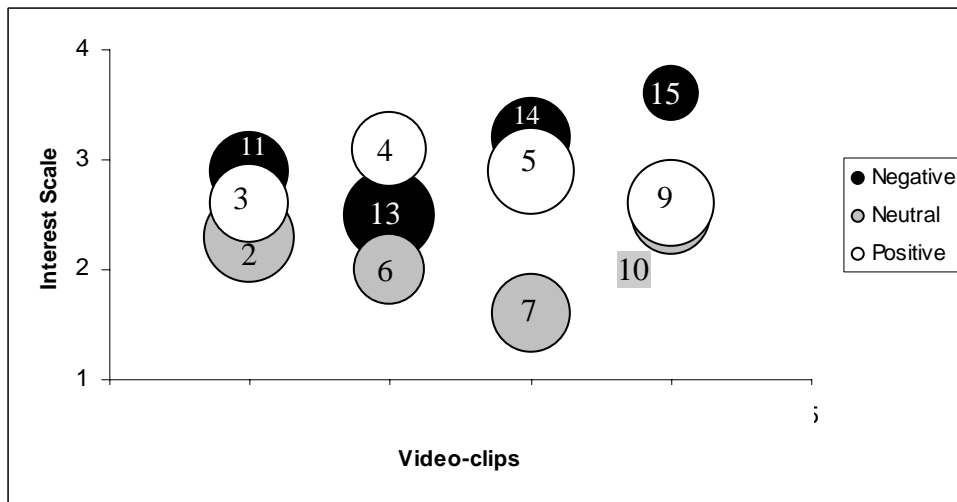


Figure 3. Mean interest ratings (size of bubble represents SD)