

Retention of idioms following one-time exposure

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Abstract

This study explored retention of idioms and novel (i.e. newly created or grammatically generated) expressions in English-speaking girls following exposure only once during a conversation. Our hypothesis was that idioms, because of their inherent holistic, nonliteral and social characteristics, are acquired differently and more rapidly than novel utterances. Two age groups of typically developing girls, 8–9 and 12–14-year-olds, were exposed to low-frequency idioms and matched novel expressions within a conversational context. Recognition and comprehension of target and nontarget idioms and novel expressions were compared following the exposure period. Ratings were obtained from participants and parents about idiom familiarity. Participants recognized significantly more target idioms than novel expressions following exposure and scored higher on comprehension of target idioms than nontarget idioms. Recognition scores did not differ significantly by age groups, but older children performed significantly better on comprehension of target idioms.

Keywords

Naturalistic exposure, retention, idioms, school-age, girls

I Introduction

Use and understanding of idioms by children, a major component of formulaic language, figure importantly in grade school language curricula and various materials are available for this purpose (e.g. O'Hallaron, 2007; Rasinski and Knoblock, 2007). Implicit use by teachers has also been documented. Research has shown that idioms and other formulaic expressions are commonly used by teachers in mainstream classes throughout the early school years and across curriculum subjects (Kerbel and Grunwell, 1997; Lazar et al., 1989). These efforts imply a certain recognition that

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formulaic expressions play a unique role in communication. Formulaic language, comprised of conversational speech formulas, idioms, proverbs, expletives, and other conventionalized phrases, differs from novel (i.e. newly created or grammatically generated) expressions in a number of important ways (Van Lancker, 1975; 1987). Many kinds of formulaic expressions are common in everyday language use, comprising about 25% of talk, and their presence in conversational speech is strongly associated with native competence (Fillmore, 1979; Kuiper, 2009; Van Lancker Sidtis and Rallon, 2002; Wray and Perkins, 2000). The fact that a large number of formulaic expressions are learned with a rich, complex constellation of social and linguistic characteristics suggests that these utterances are acquired and processed differently from novel language (Van Lancker Sidtis, 2004). The current study explored incidental learning of idioms compared with novel expressions following a single exposure during a conversational, social setting.

Few studies have focused on actual use of formulaic expressions. Notable exceptions are found in Hain (1951), documenting use of proverbs in daily social contexts in a small town, and studies of swearing (e.g. Jay, 1992). Similarly, little is known about how children acquire formulaic language. Some research using rating instruments (for a review see Nippold, 1998) or a comprehension protocol (Kempfer et al., 1999) suggests that idiom comprehension develops throughout childhood and adolescence. Few studies examining the actual process of acquiring formulaic expressions exist. One exceptional study revealed how speech formulas were transmitted to children using elicited imitation during a Halloween walk through the neighborhood (Gleason and Weintraub, 1976) as part of 'trick or treating'.

Related questions about children's comprehension of idioms and the role of exposure have yielded variable results, given the numerous approaches to these questions. Some psychological and linguistic elements that have been implicated in idiom acquisition are contextual inferencing (Gibbs, 1994), semantic knowledge (Winner and Gardner, 1993) and theory of mind (Happé, 1993; Sahlén and Reuterskiöld-Wagner, 1999). Early on, certain levels of cognitive development were seen as prerequisite to the comprehension of formulaic language (e.g. Cometa and Eson, 1978). However, although there is a well-established link between performance on cognitive tests, academic achievement and language measures, no specific prerequisite factors for idiom understanding have been convincingly determined (Nippold, 1998; Nippold et al., 2001). Support for the view that novel (newly created, grammatically generated) language and formulaic or idiomatic expressions are acquired and processed in different ways, and according to differing cerebral processes, arises from studies of persons with brain damage, showing that novel and formulaic language are selectively preserved or lost depending on the nature of neurological impairment (Bridges and Sidtis, 2010; Sidtis et al., 2009, Van Lancker Sidtis and Postman, 2006; see also Van Lancker Sidtis, 2012). Significant loss or preservation of formulaic language has been reported in association with Alzheimer's disease, Parkinson's disease, basal ganglia stroke, and left or right hemisphere damage (Van Lancker Sidtis, in press).

Young children learn the meanings of words without explicit teaching. Incidental learning of words, or fast mapping, has been studied both in typically developing children and in clinical populations (Gray, 2006; Oetting et al., 1995; Rice and Woodsmall, 1988). While implicit learning of lexical items has been demonstrated, a similar learning process for several words in a specific sequence is likely if the phrase is viewed as a cohesive unit with special properties. This view of idioms is held by many language scholars. Idioms have been termed 'lexical representations', 'giant lexical units', 'superlemmas' and 'formulemes' (Kuiper, 2009; Nippold, 1998; Osgood and Housain, 1974; Sprenger, 2003; Swinney and Cutler, 1979; Van Lancker Sidtis, 2008). These expressions do not burden memory in the same way as a list of unrelated words would, but rather appear to be stored and processed as a single unit or chunk. Chunking is a well-established property

of memory, in which a group of words comprising an idiom can be as efficiently recalled as a single word (Simon, 1974; Simon et al., 1989). We propose that a different or an additional language acquisition process is in play, whereby the properties of the idiom trigger an immediate acquisition of the entire formulaic expression or ‘formuleme’.

Idiomatic expressions do not always conform to regular grammatical or semantic principles; they usually utilize lexical items idiosyncratically. The inference process utilized for all language comprehension, whereby the listener undergoes a unique internal process of establishing relevance (Sahlén and Reuterskiöld-Wagner, 1999), may be heightened for idioms. The failure to find relevance in newly encountered nonliteral (idiomatic) utterances, whereby the usual lexical meanings in standard grammatical relations do not ‘make sense’, may ignite a stronger than usual inferencing process, such that minimal exposure to the formulaic expression may facilitate competence during the developmental period.

Frequency of exposure is often emphasized as important for idiom acquisition, based on reports of increased comprehension with age and a higher likelihood of children comprehending high frequency idioms than low frequency idioms (Nippold and Rudzinski, 1993). Exposure to an idiom is necessary to acquire it, and frequently occurring idioms have a better chance of being acquired. However, given the very large number of formulaic expressions that are acquired, estimated by some experts between 200,000 and 500,000 (Kuiper, 2009), it is likely that many such expressions do not repeatedly or frequently occur (see Moon, 1998). Given the length, specificity and relatively infrequent occurrence of individual idioms, we propose these might be processed differently from other aspects of language and in a way that accommodates the special properties of formulaic expressions. This allows for rapid uptake, with only single or minimal exposure, of relatively long, unique stereotyped forms including prosodic cues, complex semantic meanings carrying affective nuances, and detailed contextual dependencies. The study described here arises from the view that formulaic expressions, in this case idioms, are unique in form, meaning, and pragmatic characteristics in ways that distinguish them in the social linguistic context, implicating specialized acquisition processes.

We designed an experiment to explore incidental learning of idioms. The study was guided by the following questions:

1. Do children recognize more exposed target idioms than matched novel expressions after a one-time exposure in a naturalistic situation?
2. Do children comprehend the meanings of low-frequency target idioms after a one-time exposure in a naturalistic situation better than nonexposed, nontarget low-frequency idioms?
3. Is there a difference in the ability to recognize and comprehend idioms after a brief exposure between girls aged 8–9 and 12–14?

II Methods

To simulate the naturalistic conditions of exposure to an idiom, we prepared craft materials for a session in which two children and two adults could become engaged in projects while talking together. We utilized low-frequency idioms obtained from published ratings (Nippold and Rudzinski, 1993). Performance measures compared children’s recognition and comprehension of idiom sentences and novel sentences in the exposure phase with control stimuli not used in the exposure phase. A survey of previous exposure in the home to the idioms used in the procedure was also obtained from participants and their parents.

We hypothesized that the forms and meanings of idioms – used naturalistically only once in a clarifying context – would be recognized and/or comprehended more accurately than matched novel expressions and than idioms not used in the social context. In addition, we chose two distinct age groups to investigate the notion that maturational rates differ between the two types of language.

1 Participants

Six English-speaking girls aged 8–9 years (younger group) and six girls aged 12–14 years (older group) were recruited from a public school in Manhattan, USA. All participants were monolingual and without a history of language disorders or hearing impairment. All girls passed a pure-tone audiometric screening at 25 dB bilaterally for 500 Hz–4000 Hz, as well as a brief language screening (Recalling Sentences subtest, CELF-3; Semel et al., 1995). All scored within age-appropriate ranges on these pre-tests.

2 Stimuli

Twelve idioms to be targeted in a naturalistic context and 12 additional idioms (foils) were selected from the numerical idiom familiarity rating (Nippold and Rudzinski, 1993). In that study idioms were rated in terms of familiarity by adolescents (11, 14 and 17 years old). We selected idioms rated as 3 or higher, i.e. (heard a few times, once or never) on a scale of 1–5, where 1 is ‘heard or read it many times before’ and 5 is ‘never heard or read it before’ (e.g. *paper over the cracks*, 4.25). All idioms included in the current study were drawn from this list. Half of the idioms were used in the exposure phase (target idioms). The other half (foils or nonexposed idioms) were randomized with the target idioms for recognition and comprehension testing. A *t*-test revealed that there was no statistical difference between the numerical rating of the idioms children were exposed to and the idioms only used as foils (exposed mean: 3.85, SD.52; nonexposed mean: 3.6, SD.36; $t = 1.26, p = 0.234$).

Twelve novel expression targets were selected to be included in the exposure phase. Novel phrases were selected to be a natural part of the conversation, which thus centered around the same topics. In addition, 12 novel expressions (matched to the novel targets and idiom targets) not included in the exposure were selected as foils for presentation in the tests of recognition and comprehension. All stimuli, target and nontarget idioms and novel sentences, were matched in terms of number of syllables. Examples of stimuli are given in Table 1.

3 Procedure

The female participants arrived two at a time in the test room. The craft activities, pasting cut-outs from magazines and making bracelets from beads, constituted the apparent purpose of the session. The two adults explained the activities. All four participants made fashion posters by cutting out pictures and created jewelry while conversing. The facilitator, a native speaker of American English, held the prepared list (kept out of sight of the children) of two sets of phrases, target idioms and target novel sentences. When appropriate, the facilitator produced each of the target idioms and novel expressions as a natural part of the conversation. The idioms and novel expressions were distributed continuously through the approximately one hour-long session. Sessions were audio recorded; see Appendix 1.

Table 1. Examples of idioms and novel expressions (those used in exposure phase are shown in bold).

Exposed idioms:	Exposed novel expressions:
Cross swords with someone (3.10)	Give one a new ball.
Go through the mill (3.60)	Shop at different stores.
Jump through a hoop (3.30)	In a new school.
Paper over the cracks (4.25)	Listen to one's parents.
Pull in one's belt (3.55)	Try to be good.
Remain in the saddle (3.40)	Offer one a notebook.
Nonexposed idioms:	Nonexposed novel expressions:
Give someone enough rope (3.25)	Look at me funny
Haul over the coals (3.45)	Cover up the mistakes
Hoe one's own row (4.35)	Call out one's name
Lay at one's door (3.75)	Tie up the ends
Lead with one's chin (4.15)	Lay out the stuff
Make the fur fly (3.60)	Work on a project

Note: For idioms numerical rating of familiarity 1–5 is given, with higher numbers being less familiar.

4 Measures

Performance measures of acquisition of idioms versus novel expressions focused on recognition of the form of the expressions and comprehension of the meanings. Both probes were administered as written protocols. The form-recognition task included the 12 idiom targets and 12 novel targets from the exposure phase, randomized with the 12 idiomatic foils and 12 novel foils, which did not appear in the exposure phase, for a total of 48. For each expression, the child circled a *yes* or a *no* response to the following questions: 'Did you hear this during the session today?' and 'Have you heard this before?' The task was thoroughly explained to each child before she started to fill out the form to ensure clarity regarding the meaning of the questions, and that 'heard before' clearly meant 'heard before the exposure phase'.

The meaning-comprehension test utilized an adaptation of the NEFIPPS (Northridge Evaluation of Formulas, Idioms and Proverbs in Social Situations; Hall, 1996). Brief verbal descriptions of social settings were provided, and the participant was asked to choose the appropriate formulaic expressions from an array of four choices in a written multiple-choice format. For this study, NEFIPPS was adapted to provide test items pertinent to the 12 idiom targets and 12 idiom foils; see Appendix 2. Reading support was offered in case the experimenter sensed any difficulties with decoding of the written material.

One parent of each participant completed a rating of the frequency of use of the target formulaic expressions in their home by completing a two-page idiom use survey of 24 different idioms (12 target idioms used in the exposure phase and 12 nontarget idioms used as foils). The parent survey consisted of a rating scale of 0–3, where 0 meant the idiom was not used at all, and 3 if the idiom was used 5 times or more.

III Results

Comparisons between recognition of target idioms and target novel expressions, and comprehension of target idioms and nonexposed idioms in all participants were computed using paired sample

t-tests. Our first question addressed recognition performance for idiom targets as compared with novel expressions targets. Our measure was a binary forced-choice task, and we therefore corrected for number of responses at chance level (Postman, 1950). For all participants, there was a significant difference in the number of recognized target idioms compared with the number of recognized target novel expressions presented in the exposure setting ($t(11) = 4.8, p = 0.001$; see Table 2). We found a significant difference between performance on comprehension of target idioms presented in the exposure phase versus comprehension of nonexposed idioms ($t(11) = 3.546, p = 0.005$; Table 2).

Target novel expressions were rated as 'heard before' to a significantly higher degree than target idioms ($t(11) = -10.164, p < 0.001$), indicating a higher frequency of exposure of target novel expressions than target idioms. There was no difference between target idioms and nonexposed idioms on the ratings of 'heard before' ($t(11) = 1.106, p = 0.293$; Table 2), indicating that idioms used in the exposure phase and idioms used only as foils in the performance test were equally infrequent.

Lastly, we looked at effects of age on idiom recognition and comprehension. We used the unpaired, exact Wilcoxon–Mann–Whitney test to account for the small sample sizes in each group. No Bonferroni correction was used, since this procedure is overly conservative according to Perneger (1998). The older girls did not recognize significantly more target idioms than the younger girls ($Z = -0.993, p = 0.394$). There was also no significant difference on recognition of target novel expressions between the age groups ($Z = -0.833, p = 0.405$; see Table 3).

The older group obtained a significantly higher number of correct responses on comprehension of the target idioms as compared to the younger participants ($Z = -2.185, p = 0.024$). There was no significant difference between the groups in comprehension of nonexposed idioms ($Z = -1.774, p = 0.093$; Table 3). There were no significant differences between the age groups in identifying whether they had heard any of the expressions before the exposure phase (target idioms heard before: $Z = -1.82, p = 0.106$; target novel expressions heard before: $Z = -1.245, p = 0.026$; nonexposed idioms heard before: $Z = -1.234, p = 0.271$; Table 3).

Finally, we did not find any significant correlation (Pearson r) between recognition of idioms and idioms rated as 'heard before' ($r = .44, p = 0.15$), but there was a significant correlation between comprehension of idioms and idioms rated as 'heard before' ($r = .61, p = 0.033$). Parent rating of use of idioms in the home did not correlate with any measure.

Table 2. Mean and standard deviation (SD) for comprehension and recognition of idioms and novel expressions, and heard before (HBF) items for all children ($n = 12$).

	Mean	SD	<i>p</i> -value
Target idiom recognition	6.8	2.8	
Target novel expressions recognition	3.1	3.4	0.001*
Target idiom comprehension	8.3	3.7	
Nonexposed idiom comprehension	6.3	8.2	0.005*
Target idioms HBF	2.5	2.6	
Target novel expressions HBF	9.3	2.0	<0.001*
Target idioms HBF	2.5	2.6	
Nonexposed idioms HBF	2.0	1.9	0.293

Notes: *p*-values for *t*-test comparisons between stimuli; * $p < .005$.

Table 3. Mean and standard deviation (SD) for older versus younger girls for comprehension and recognition of idioms and novel expressions, and heard before (HBF) items.

Variables	Older group (n = 6)		Younger group (n = 6)		p-value
	Mean	SD	Mean	SD	
Target idiom recognition	7.7	2.3	6.0	3.1	.394
Target novel expressions recognition	4.0	3.3	2.2	3.5	.426
Target idiom comprehension	10.5	1.8	6.2	3.9	.024*
Nonexposed idiom comprehension	8.5	4.0	4.2	3.5	.093
Target idioms HBF	3.8	3.0	1.2	1.5	.106
Target novel expressions HBF	9.8	1.9	8.8	2.1	.260
Nonexposed idioms HBF	2.7	2.1	1.3	1.6	.271

Notes: p-values for Wilcoxon–Mann–Whitney comparisons between age groups; *p < .05.

IV Discussion

We explored the possibility that the forms, meanings, and contextual relations of idioms are stored more effectively in memory than novel expressions following a one-time exposure in a naturalistic context. This indeed seems to be the case, since the scores on both the recognition task and the comprehension task were significantly higher for idioms presented in the exposure phase compared with novel expressions and with nonexposed idioms. The older girls outperformed the younger girls on recognition and comprehension of exposed target idioms, although the difference in recognition did not reach statistical significance. The total number of participants included in the study was small, so the lack of age effect may be attributable to a lack of statistical power. This is in line with published results on age effects in the development of formulaic language and incidental learning of words (Kempler et al., 1999). There was no significant difference between age groups on recognition of novel expressions or comprehension of nonexposed idioms. This result suggests that a one-time exposure in a naturalistic context is sufficient for children to acquire and comprehend idiomatic meanings, and that this task-related effect increases with age.

To control the familiarity variable we selected only idioms previously rated as low frequency in published studies. Following the procedure, we asked our participants (and their parents) whether they had heard the idioms, the foils and the novel expressions previously. There was no correlation between the number of idioms rated as heard before and the correct responses in the recognition task, but a moderate correlation between the number of idioms rated as heard before and the correct responses in the comprehension task. This shows that children better understand idioms that they have been exposed to more than once. Children stated that they had heard a significantly higher number of exposed novel expressions before the exposure task than idioms. The novel expressions did not contain any low-frequency vocabulary items, and the topics discussed represented common conversational topics. It is thus not surprising that children endorsed familiarity with novel expressions. The exposed target idioms, however, were low-frequency idioms, which we did not expect children to be familiar with. In addition, children recognized significantly more exposed target idioms than exposed novel expressions in the recognition task, in spite of having stated that they had heard more of the novel expressions at an earlier point in time. Thus, frequency of exposure does not seem to on its own explain the seemingly quick acquisition of idioms spoken in supporting context.

1 *Properties of idioms: Unitary form and complex meaning*

Models of child language acquisition provide support for the notion of acquisition of unitary structures. Locke (1997, citing Nelson, 1981; Plunkett, 1993) notes that infants produce utterances that are not segmented and analysed, preserving their length, stress pattern, and intonation contour. Utterances may contain articles and pronouns that develop only later. These child utterances can be considered formulaic in that they are holistic phrases, which do not utilize grammatical structure. For some children, nearly 50% of their productions consist of these kinds of frozen phrases (Locke, 1993, 1995). Other scientists examining child language have described two interactive processes underlying acquisition: holistic and analytic, bringing in again a viable chunking process alongside an unfolding of analytic grammatical rules for the language (Kempler, et al., 1999; Peters, 1983), a process that also appears in diachronic language change (Bybee and Torres Cacoullous, 2009) and second language acquisition (Weinert, 1995).

The view of the formulaic expression as a unitary unit has been challenged by claims of decompositionality, phrasal flexibility, and related notions of opaque versus transparent lexical meanings in idioms (Gibbs, et al., 1989; Nippold, 1998; Nippold and Duthie, 2003). Contemporary debates have not achieved agreement on these topics (Cacciari and Tabossi, 1988; Wray, 2008). It is our view that formulaic expressions are stored and processed as unitary entities or *formulemes*, and these can also be modified (Van Lancker Sidtis, 2008; 2012), subject only to a recoverability condition (see Kuiper, 2009).

2 *Different acquisition processes*

The results from the current study support the notion that different acquisition processes – one for formulaic language and one for novel language – operate in parallel during child language development. One process allows for the rule-governed combination of lexical items for the creation of novel utterances, while the other modulates use of unitary expressions (Kempler et al., 1999; Locke, 1997).

3 *Rapid acquisition of idiomatic expressions*

There are several known kinds of rapid stimulus acquisition. One-trial learning, a well-researched special case in classic learning theory, occurs as an immediate result of ‘strong contingency’ reinforcement (Lattal, 1995). Brain biochemistry and brain localization for a related learning condition, imprinting, have been extensively investigated (Horn, 1985). A similar process of instantaneous memory acquisition occurs as flash bulb memories, involving rich contextual detail (Gold, 1992; Kreiman and Sidtis, 2011). We speculate that, like other rapid learning processes, an innate ability to quickly acquire salient utterances favors formulaic expressions, which are spoken with a signature combination of contextual, connotational and auditory cues. Furthermore, negative or positive valuations and connotations are generally present in formulaic expressions. *He’s at the end of his rope* inherently carries affective innuendos compared to an utterance such as *He’s in the middle of the sidewalk*, which does not. Note that the idiom carries emotional/attitudinal connotations without the presence of explicitly emotional words. Most idioms thus contain more or less strong attitudinal nuances as part of their meaning. Novel sentences contain these only when the speaker selects lexical items for the purpose, as in *He’s sobbing in the middle of the sidewalk*. Affective properties – such as those inherent in formulaic expressions – are likely to engage limbic structures that are involved in emotional experiencing as well as memory.

Thus, acquiring a new formulaic expression may occur very rapidly in a normal process that gives a neurological 'print now' command (Livingston, 1967).

Inferencing in language comprehension is a complex process that is performed using contextual and linguistic cues and involves assessment of relevance (Sperber and Wilson, 1986) to the social and linguistic context. Idioms and other formulaic expressions inherently have a special relationship to linguistic and social context (Norbury, 2004). Since the meaning of an idiom as a holistic unit is more strongly linked to the nonlinguistic context than to the meaning of the individual linguistic components, one might speculate that the inference process, well described for acquisition of lexical items, may play an enhanced role for successful processing of these structures.

New theories of speech perception lend support to the view of rapid learning of formulaic expressions. Recent studies indicate considerable memorial retention of phonetic detail on first hearing of utterances (Goldinger, 1996; Gurevich et al., 2010). These discoveries lay a foundation for the possibility that formemes are stored as units in their canonical, stereotyped forms, which includes phonetic, prosodic, lexical, and structural detail. Furthermore, it is well known that prosodic features facilitate word learning in children (Echols, 1993; Jusczyk et al., 1993). Prosodic differences mark utterances as either literal or idiomatic in American English (Van Lancker et al., 1981). It is likely that a unique intonation configuration in many idioms serves as a cue for recognition (Van Lancker Sidtis, 2003).

4 Implications for practice

In summary, we propose that a rapid learning function of the form and meaning of idiomatic expressions is in place during childhood. This study is the first to show that children store the forms and meanings of idioms from a single exposure in a naturalistic context better than novel expressions. Textbooks and children's literature contain a high number of idioms (Nippold, 1991), making recognition and comprehension of these an important pre-requisite for reading comprehension. The implications of this study for the classroom indicate that teachers will do well to introduce children to proper usage of idioms in naturalistic contexts. It remains to be seen whether providing illustrative short stories (such as in Scaper, 2002) is as effective for idiom acquisition as naturalistic, participative contexts for the children. Explicit discussions about the meaning of idiomatic and other formulaic expressions may appropriately follow these activities, utilizing children's books highlighting the form and use of such expressions (e.g. O'Hallaron, 2007; Parish, 1977; Rasinski and Knoblock, 2007).

There is evidence that some child language disorders can be better understood when careful examination of competence in formulaic in contrast to grammatical speech is considered. For example, language disorders in children on the autistic spectrum, in some cases, can be characterized as enhancement of processes underlying acquisition of formulaic expressions alongside paucity of grammatical processes (Dobbinson et al., 2003). Some of these children acquire jingles and nursery rhymes and other routinized expressions but are severely impoverished in grammatical speech. As a common presentation in Gilles de la Tourette's syndrome, vocalizations comprising expletives, the most classic of formulaic expressions (Van Lancker and Cummings, 1999), appear at times in the course of the disease. A better understanding of brain-behavior relationships underlying formulaic and novel language production will continue to enlighten evaluation and treatment of communication disorders in children.

In this study the number of participants and the set of idioms employed were necessarily restricted. Replication with more participants and larger sets of idioms is desirable. Other measures might be pursued, using this design that highlights the naturalistic context, such as retention of

constituent words of exposed idioms in comparison with lexical constituents of novel expressions. Direct comparison with new idiom recognition and comprehension using traditional pedagogical methods may be attempted. There is much to be learned about the processes of acquiring formulaic language in children, an aspect of linguistic competence that is crucial for social success.

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Appendix 1 Excerpts from experimental session transcripts

Notes: (A) Annette*, (N) Nicole*, (C) Carolyn, (B) Belinda (pseudonyms) ; * child participants. Target idioms and expressions are in bold.

- N: Let's cut this thing out, her tattoo.
A: He face looks pretty.
N: That's Beyoncé.
B: Yeah, that's Beyoncé. Do you know who she is?
A: Beyoncé.
B: Ok, **I don't want to make you guys jump through the hoops**, but I want to get this whole page filled.
B: Ok?
C: Alright!
A: Alright! You're making us a task. We'll do that task!
A: And cut her feet out
B: Ok, so.
N: Ok I need glue.
C: Glue ok. Sooo ...
B: **I'm gonna put you through the mill**. I want you to find a red head.
A: A red head?
B: Mhmm, we have blond, brown hair and we need a red head.
A: And I love black, I mean brown hair.
C: I think it's going to be hard.
B: I think it's going to be hard too.
A: Not for me.

Appendix 2 An example of an item used for comprehension testing (adapted from the NEFIPSS)

1. Mary is angry and wants Bob to leave her house immediately. She might say ...
 - a. Stay awhile.
 - b. Pet the toad.
 - c. Hit the road.
 - d. Mind the store.