

## Appendix A: idioms used in experiments 1 and 2.

Words omitted in experiment 2 appear in boldface. The citation form in Hebrew is third person singular past; gloss and translations match this; the idioms, of course, are not limited to the past tense. The bracketed literal paraphrases are given in English (for convenience), but they were determined based on the corresponding original Hebrew.

### Decomposable full idioms

Idiom	Median Frequency
<b>(AddWord)</b>	
(1) [sam] [‘et kol ha- <b>beycim</b> ] [be-sal exad] put ACC all the-eggs in-basket one ‘[put] [all the eggs] [in one basket]’ ‘[invested] [all the efforts/resources] [in one goal/plan]’	3
(2) [hosif] [šemen] [la- <b>medura</b> ] added oil to.the-fire [added] [oil] [to the fire] ‘[added] [an intensifying factor] [to a difficult situation]’	4
<b>(AddWord)</b>	
(3) [harag] [štey <b>ciporim</b> ] [be-maka axat] killed two birds in-strike one [killed] [two birds] [with one strike] ‘[achieved] [two goals] [by doing one thing]’	4
(4) [zara] [ <b>melax</b> ] [‘al ha-pca’im] sprinkled salt on the-wounds ‘[sprinkled] [salt] [on the wounds]’ ‘[added] [pain/insult] [to an existing hurt/pain]’	5

**(AddWord)**

- (5) [ra'a] ['et ha-'or] [be-kce ha-**minhara**] 5  
saw ACC the-light at-end the-tunnel  
[saw] [the light] [at the end of the tunnel]  
'[discerned] [a solution] [for a difficult situation]'

**Decomposable open-slot idioms**

**(AddWord)**

- (6) [hidlik] [le-X] [nura '**aduma**] 4  
lit to-X bulb red  
[lit] [to X]<sub>1</sub> [a red-bulb]<sub>2</sub>  
'[raised] [a suspicion]<sub>2</sub> [in X's mind]<sub>1</sub>'
- (7) [hixnis] ['et X] [la-**tmuna**] 3  
put.in ACC X to.the-picture  
'[put] [X]<sub>1</sub> [in the picture]<sub>2</sub>'  
'[shared] [a plan/relevant information]<sub>2</sub> [with X]<sub>1</sub>'
- (8) [hipil] ['al X] [ **tik**] 4  
dropped on X file/bag  
[dropped] [on X]<sub>1</sub> [a file/bag]<sub>2</sub>'  
'[imposed] [a difficult/annoying task]<sub>2</sub> [on X]<sub>1</sub>'
- (9) [taman] [le-X] [**pax**] 4  
buried/concealed to-X bin  
[buried/concealed] [for X]<sub>1</sub> [a bin]<sub>2</sub>  
'[plotted] [a harmful event/situation]<sub>2</sub> [for X]<sub>1</sub>'

- (10) [šalaf] [‘et X] [me-ha-šarvul] 3  
 pulled.out ACC X from-the-sleeve  
 [pulled] [X] [out of the sleeve]  
 ‘[provided] [X] [without preparation]’

### Nondecomposable full idioms

#### (AddWord)

- (11) [hixnis] [roš bari] [le-mita **xola**] 4  
 put.in head healthy in-bed sick  
 [put] [a healthy head] [in a sick bed]  
 got involved<sup>1</sup> [in a difficult/problematic situation]
- (12) [sam] [‘et ha-klafim] [‘al ha-šulxan] 4  
 put ACC the-cards on the-table  
 [put] [the cards] [on the table]  
 ‘[revealed] [his/her intentions]’
- (13) [hixzik] [‘et ha-roš] [me‘al ha-mayim] 3  
 held ACC the-head above the-water  
 [held] [the head] [above water]  
 ‘[survived]’
- (14) [taman] [‘et ha-roš] [ba-xol] 3  
 buried/concealed ACC the-head in.the-sand  
 [buried/concealed] [the head] [in the sand]  
 ‘[ignored] [obvious signs of difficulty]’

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<sup>1</sup> In Hebrew *got involved* is expressed here by a single verb *histabex*.

- (15) [dafak] ['et ha-roš] [ba-**kir**] 4  
 banged ACC the-head in-the-wall  
 [banged] [the head] [against the wall]  
 [continued] [trying to fight for a hopeless cause/goal]

**Nondecomposable open-slot idioms**

- (16) [hifna] [le-X] ['et ha-gav/'**oref**] 4  
 turned to-X ACC the-back/nape  
 [turned] [to X] [the back/nape]]  
 '[refused] [to help X]'

**(AddWord)**

- (17) [sovev] ['et X] ['al ha-'**ecba** ha-ktana] 4  
 turned ACC X on the-finger the-little  
 [turned] [X] [around the little finger]  
 '[manipulated] [X]'

- (18) [hoci] ['et X] [me-ha-**kelim**] 5  
 took.out ACC X from-the-tools  
 [took] [X] [out of the tools]'  
 '[annoyed/angered] [X]'

**(AddWord)**

- (19) [hixnis] ['et X] [la-**kis** ha-katan] 4  
 put.in ACC X to.the-pocket the-little  
 [put] [X] [in the little pocket]  
 '[outperformed] [X]'

## (AddWord)

- (20) [he'ela] [le-X] ['et laxac ha-**dam**] 3  
elevated to-X ACC pressure the-blood  
[elevated] [to X] [the blood pressure]  
'[annoyed/angered] [X]'

## Appendix B: Error analysis, experiment 2.

We divided errors into the 7 sub-categories listed in Table 5. Figures 11-13 show the distribution of correct responses and error types within each age group.

**Table 5:** Error categories.

Classification of errors, experiment 2 Error type	Definition	Example
<b>1. literal</b>	the contextually established literal correlate of the target word	The story concerns classes and 'classes' is used instead of 'eggs' in: <i>sam 'et kol ha-beycim be-sal exad</i> put ACC all the-eggs in-basket one 'invested all the efforts/resources in one goal/plan' (idiom 1, Appendix A)
<b>2. inappropriate literal</b>	an error triggered by a detail in the story/illustration	The story concerns books, and 'book' is used instead of 'back'/'nape' in: <i>hifna le-X 'et ha-gav/'oref</i> turned to-X ACC the-back/nape 'refused to help X' (idiom 16, Appendix A)
<b>3. guess</b>	an incorrect guess triggered by the lexical items in idiom <sup>2</sup>	The verb <i>kill</i> triggers the use of 'flies' and 'roaches' instead of 'birds' in: <i>harag štey ciporim be-maka axat</i> killed two birds in-strike one 'achieved two goals by doing one thing' (idiom 3, Appendix A)

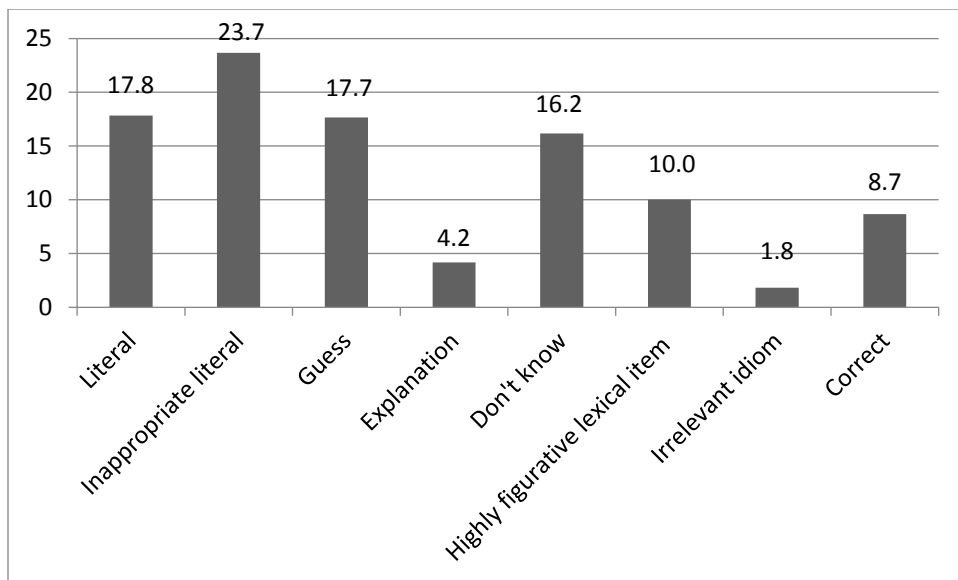
<sup>2</sup> We analyzed errors conservatively, thus considering all non-target completions that could be triggered by a lexical item in the idiom uniformly as guesses, even when it was possible that the child knew the idiom, but retrieved a semantically or phonetically close lexical item (e.g., *zvuv* 'fly' instead of *cipor* 'bird').

<b>4. highly figurative lexical item</b>	a lexical item with a high figurative capacity, which is common in idioms	The item ‘head’ <sup>3</sup> is used instead of ‘salt’ in: <i>zara melax ‘al ha-pca’im</i> sprinkled salt on the-wounds ‘added pain/insult to an existing hurt/pain’ (idiom 4, Appendix A)
<b>5. irrelevant idiom</b>	a lexical item from an irrelevant idiom that the child was familiar with (not a word common in idioms)	The item ‘jar’ <sup>4</sup> is used instead of ‘sand’ in: <i>taman ‘et ha-roš ba-xol</i> buried/concealed ACC the-head in.the-sand ‘ignored obvious signs of difficulty’ (idiom 14, Appendix A)
<b>6. explanation</b>	an explanation of the meaning of the idiom in the context	‘she wanted the girl to win so she decided they should compete in swimming instead of running’ is used instead of ‘bin’ in: <i>taman le-X pax</i> buried/concealed to-X bin ‘plotted a harmful event/situation for X’ (idiom 9 in Appendix A)
<b>7. don’t know</b>		

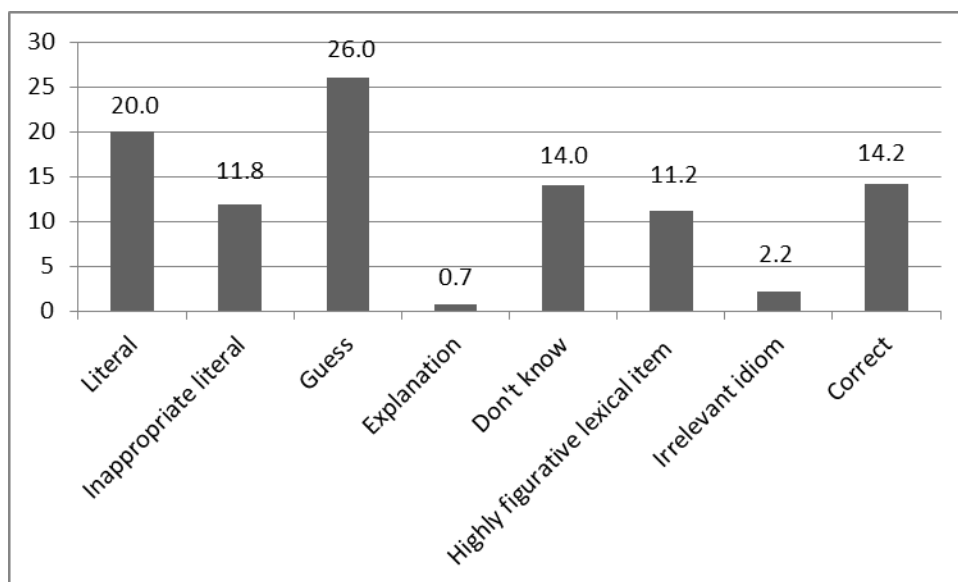
<sup>3</sup> The word ‘head’ appears in 4 idioms in our stimuli, idioms 11, 13, 14, 15.

<sup>4</sup> The idiom with ‘jar’ is given in (i).

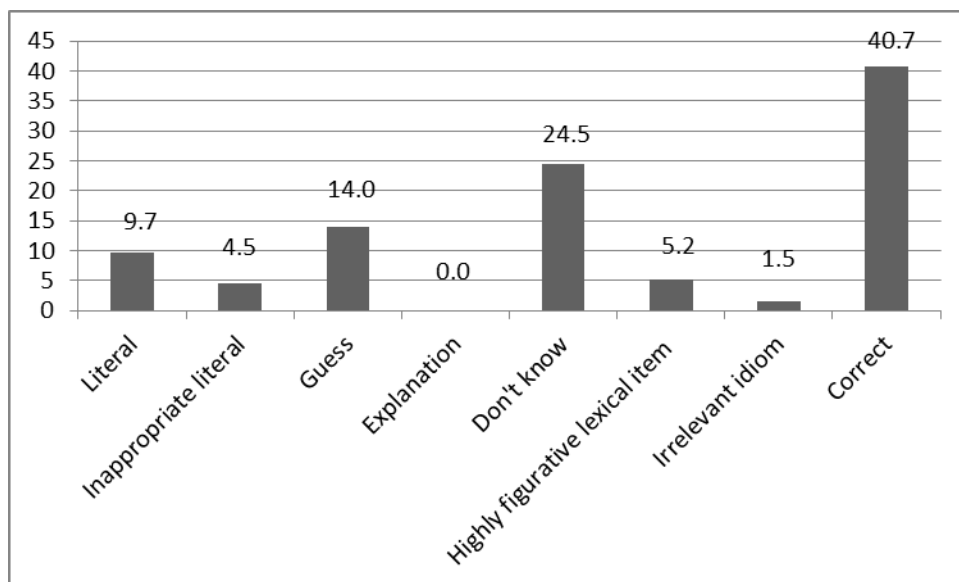
(i) ‘al tistakel ba-kankan ‘ela be-ma še-yeš bo  
don’t look in.the-jar but at-what that-there-is in-it  
‘Don’t look at the jar but at what’s inside it.’ (‘don’t judge a book by its cover.’)



**Figure 11:** Percentage of answers by types, first grade.



**Figure 12:** Percentage of answers by types, second grade.



**Figure 13:** Percentage of answers by types, third grade.