

Research Article

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The Role of Context in Understanding Colloquial Arabic Idiomatic Expressions by Jordanian Children

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Abstract: The present study examines the role of context in understanding colloquial Arabic idiomatic expressions by Jordanian good and poor comprehenders in two age groups: 10- and 12-year-olds. Children read short stories comprising Arabic expressions that could be interpreted as idiomatic or not; depending on the context in which they are presented. Familiar and unfamiliar idiomatic expressions were used in this study. The effect of four variables: age, reading comprehension level, meaning condition as well as familiarity with the idiomatic expressions on children's understanding of idiomatic expressions was examined. Three variables were found to have a main effect on the number of correct answers given by children, these are: meaning condition, reading comprehension level, and familiarity of the idiom. Children gave more correct answers in the transparent meaning condition. More correct answers were given for familiar idiomatic expressions. Also, good comprehenders gave more correct answers than their poor counterparts. On the basis of age, the differences between the groups were not significant.

Keywords: idiomatic expressions, context, good and poor comprehenders, meaning condition, familiarity

1 Introduction

The idiomatic expression is defined by Cooper (1999, p. 233) as “an expression whose meaning cannot always be readily derived from the individual meaning of its constituent elements.” They are relatively fixed structures. Some of these idioms are syntactically rigid; i.e. they lose their meaning when they are formed in a different way as in the passive, whereas others are less rigid and allow some change in their structure or a substitution of their lexical items (Cooper, 1999).

Idiomatic expressions in Arabic were investigated by many Arab writers and researchers. Many of these idiomatic expressions are classified into two different patterns. For example, an idiomatic expression may be in the form of a full sentence where the meaning of its strings is different from the result of their combination such as *the blood reached his head* (i.e. he became angry). Other Arabic idioms could be in the form of one word like *قطاعة* qata'ah (A cutter: someone who is very intelligent). Thus, semantic and syntactic characteristics of Arabic idiomatic expressions are similar to those of English idioms (Awwad, 1990).

Researchers have long focused on how idioms are understood and processed by adults as well as by children. They argued that, since understanding idiomatic expressions causes a problem for adults, the degree of difficulty for children will be much more. Levorato and Cacciari (1992, p. 416) explained that this difficulty refers to the little linguistic experience that children have compared to adults. They argued that the figurative

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competence needs a set of abilities such as understanding “the dominant, peripheral and additional meanings of a word, its position in a given semantic domain as well as its paradigmatic and Syntagmatic relations.” Moreover, among these abilities, when given in a context, children must be able to use contextual information, establish and integrate the lexical and semantic information to extract the suitable meaning of a figurative expression” (Levorato and Cacciari (1992, p. 416)).

Studies on understanding and producing idiomatic expressions identified three factors that help in understanding idioms. Some of these studies focused on the semantic analyzability of the constituents of the idiom (e.g. Cain et al., 2009; Gibbs, 1987; Levorato & Cacciari, 1999, among others). Levorato and Cacciari (1992) identified another factor that could help in understanding idioms. They showed that the familiarity of the idiomatic expression can influence the ease with which an idiom is understood. Thus, people can understand some idiomatic expressions easily because they are familiar with them since they have an exposure to them before. The role of familiarity was emphasized by Nippold and Taylor (2002). They argued that exposure plays a significant role in the comprehension of idiomatic expressions. Thus, the more exposed to an idiomatic expression, the more able she/he to extract its figurative meaning. This hypothesis is known as Acquisition via Exposure Hypothesis. They also explained that idioms undergo extensive periods of acquisition through adolescence and beyond. This suggests that adults will not face problems in understanding idiomatic expressions, whereas children, as not exposed to most of the idiomatic expressions in their language, will face difficulties in understanding them especially when facing them without context.

According to Levorato and Cacciari (1992), whenever a child is exposed to an idiomatic expression that s/he is unfamiliar with in a context, s/he can use the information in the text to derive the suitable meaning of the idiom. Thus, even unfamiliar idiomatic expressions can be understood if they are introduced in an informative and supporting context. This is called the Global Elaboration Model (GEM) proposed by Levorato and Cacciari (1995). It states that a well-formed context can enable the reader to appreciate that the transparent meaning of an idiom is inappropriate, and further provides the necessary semantic information to derive the appropriate opaque meaning.

There is a strong tie between understanding Arabic idioms and realizing the Arab culture and customs, Alghazo et al. (2022) stated that that idioms in JA convey a hidden meaning that couldn't be understood without understanding and realizing the linguistic and non-linguistic context.

2 Literature Review

The relationship between age and figurative comprehension of idiomatic expressions was intensively investigated by researchers. Most of these studies showed that children's ability in comprehending idiomatic expressions arose between 7- and 12-years-olds (Cain et al., 2009; Levorato & Cacciari, 1992, etc.). Levorato and Cacciari (1995) argued that older children were more able to understand idiomatic expressions than their younger counterparts. They explained that the reason that underlies the better performance of the older children is their advanced linguistic abilities. Thus, the older children were more able to integrate the different types of information in the text to derive the appropriate meaning of the idiomatic expression. Another reason for their performance is that they have had more exposure to these expressions, and therefore, the expressions were more lexicalized and were more understood by them.

This result was also revealed by Oakhill et al. (2016) who were interested in the impact of age on the understanding of idiomatic expressions. They concluded that younger children were less able to choose the appropriate interpretation of the idiomatic expression.

The role of context was another factor that has been examined by a wide range of studies on figurative language. Within these studies, the reading comprehension level of the participants was taken into consideration since good comprehenders are thought to be more able to use context to derive the suitable opaque meaning of idiomatic expressions than their poor counterparts.

Cain et al. (2005) found that skilled comprehenders were more able to explain the meaning of both familiar (English) and unfamiliar (novel/translations of European) idioms when presented in context. They

also revealed that both familiar and unfamiliar idioms were better understood when presented in informative contexts than when presented in isolation. Also, Oakhill et al. (2016) supported these results and emphasized the role of context in comprehending idiomatic expressions mainly by good comprehenders.

Most of the studies that tended to emphasize the role of context in understanding figurative language in general, and idiomatic expressions in particular, used novel idioms that are not found in the participants' native language. Thus, they control the familiarity condition by including idioms that the participants have never been exposed to and they are not familiar with. An example of these studies is the one conducted by Oakhill et al. (2016). Within this study, the researchers included idioms that were translated from Italy. Doing so, the results of the study could be interpreted by the GEM but not by the Acquisition via Exposure hypothesis. The researchers reported that the results of their study cannot be explained by familiarity since if exposure played a significant role in the comprehension process for the idioms in this study, the interaction between familiarity and meaning condition should have resulted in more correct answers for English idioms in context but this was not the pattern found.

The suitable meaning of an idiomatic expression for the context where it is presented can be in two types: the transparent meaning and the opaque meaning. The difficulty appears most with deriving the opaque meaning. With the transparent meaning, the difficulty decreases. This is because the meaning of an expression is immediately derived from the meaning of its constituents. This was found in most of the studies that examined the performance of children in a context that needs the transparent meaning of the idiomatic expression compared to those where the transparent meaning is not suitable for the whole meaning of the context. Again, Oakhill et al. (2016) found that good and poor comprehenders in all age groups in their study scored more in the transparent meaning condition and spent more time reading the stories where opaque meaning is needed.

While the role of context in understanding idiomatic expressions by school children has been widely investigated in English-speaking children, it has not been examined in Jordanian children. Therefore, this study aims to contribute to the relevant literature on how different variables affect Jordanian school children's understanding of Arabic idiomatic expressions in context. In particular, this study seeks to test the predictions made by the researcher based on the findings of previous studies. First, it is predicted that the number of correct answers will be given more in the transparent meaning condition than in the opaque meaning condition. In line with what has been found in previous studies, it is assumed that good comprehenders will give a higher number of correct answers than their poor counterparts, especially in the opaque meaning condition of unfamiliar idiomatic expressions. On the basis of familiarity, children will give more correct answers for familiar rather than unfamiliar idiomatic expressions. Finally, it is predicted that older children will outperform younger ones.

3 Methodology

3.1 Participants

This study aims to investigate the role of context in understanding idiomatic expressions by school children. To do so, 50 fourth graders (10-year-olds) and 53 sixth graders (12-year-olds) who are students at a public school in Al-Bouaida, a rural area in the north of Jordan, were chosen for the purpose of this study. The purpose of choosing this group age is based on the justification of Conner et al. (2011, p. 9) who stated that:

This difference in their stage of acquiring the idioms, entails somewhat different processes in producing them. For younger participants the process of idiom acquisition reported for older childhood and adolescence (e.g., Chan & Marinellie, 2008; Nippold & Rudzinski, 1993) appears to develop further, well into young adulthood, as the correlation between increased accuracy and age seen in our younger-adult group suggests.

In other words, there is a strong tie between age and the production of idioms. All the students have been set for AL-ARABIYYA-TEST which is a fully computer-based Arabic language proficiency test in order to make sure that all participants fall within the same level. The Arabic level of the participants is A2. The comprehension skills of the two age groups were examined using items chosen from PIRLS test (Progress International Reading Literacy Study). PIRLS is an international study of reading comprehension achievement. It is designed to measure children's reading literacy achievement. Even though this test was designed for fourth graders, countries have the option of administering PIRLS on literacy to fifth and sixth-grade students. Three passages and their items (multiple-choice and open-ended questions) from PIRLS test were given to each child.

The scores of students were transformed into percentages. Students who got 80% and above were chosen as good comprehenders and those who got 60% and below were chosen as poor comprehenders. The resulting experimental sample comprised 20 good and 20 poor 10-year-old comprehenders as well as 20 good and 20 poor 12-year-old comprehenders.

3.2 Material

Since this study investigates the role of context in understanding idiomatic expressions, familiar expressions (i.e. idioms that are adherent to Jordanian Arabic) as well as unfamiliar expressions (i.e. idioms that are adherent to other Arabic colloquial varieties) were collected. Thirty Arabic idiomatic expressions were collected from Jordanian, Egyptian, Saudi, Iraqi, and Yemini Facebook groups as well as internet websites. To ensure that children at the target ages were familiar with the idioms presented, 30 school teachers who taught children of the related ages were recruited from the same school to participate in a rating-scale questionnaire in which they were presented with a list of the 30 collected idiomatic expressions. Teachers were asked to rate these expressions on a 5-point scale to indicate if children in the target age groups are familiar with these idiomatic expressions or not by coming across these expressions either in their conversations with their teachers, television programmes, or on social media sites. They were asked to give a score of 5 if they think that an idiom is familiar to students and a score of 1 if they think that it is unfamiliar. 10 idiomatic expressions which were mostly rated as highly familiar or familiar as well as 10 idioms which were mostly rated as highly unfamiliar or unfamiliar were chosen for the purpose of the study. Table 1 shows the frequencies and percentages of the most-familiar and the least-familiar idiomatic expressions that will be used in the study based on the rating made by teachers.

3.3 Procedure

Each child was presented with 10 familiar as well as 10 unfamiliar idioms. For each idiomatic expression, the child was presented with two types of stories: a story where the transparent meaning is needed and another one where the opaque meaning is suitable. Thus, each child was presented with 40 stories in total across two sessions where the child is presented with 20 stories in each. In the first session, children were presented with 20 stories comprising familiar and unfamiliar expressions where transparent meaning is required. The total score for each will be 10. Within the second session, they were presented with the other 20 stories of both types of idioms where the opaque meaning is appropriate. Again, the total score for each will be 10.

The test is a picture-matching task where three pictures were provided with each story: (1) a picture representing the transparent meaning of the expression, (2) a picture representing the opaque meaning of the idiom, and (3) a picture representing the emotional state of a character in the story or representing the general idea of the story. Children were asked to read each story and then to match the idiomatic expression that is presented in bold with the picture that matches the meaning of the expression based on the context of the story (a sample of the picture-matching task is attached to Appendix).

Table 1: The frequencies and percentages of teachers' rating of familiarity of idioms

Familiar			Unfamiliar		
Idiom	#	%	Idiom	#	%
من عرق جبينه min'araq jbinuh (By the sweat of his brow)	27	90	انزل من على ودي (get off my ears)	30	100
قتل حاله qatal haluh (Killed himself)	26	87	ادعك الفانوس (Wipe the lantern)	30	100
فرجيني عرض كتافك farjini 'ard kta:fak (Glad to see the back of you)	25	83	انزل من على المسرح يا نجم (get off the stage)	30	100
راسك يابس rasak yabis (Hard-head)	25	83	اتوبيس راجع بظهره (A taxi coming back)	30	100
قطاعة qata'ah (A cutter)	25	83	قرط الحبل (Chopped the rope)	30	100
عد للعشرة 'id la'ashra (Count to ten)	25	83	يحتفلوا عليه (Celebrate him)	30	100
وصل الدم لراسه sisl id-dam la-rasuh (The blood reached his head)	25	80	انزع هنا (be planted here)	24	80
نافش ريشه nafish rishuh (Fans his/her feathers)	24	77	غسل مخك (Washed out his/her brain)	22	73
صاروخ saru:kh (A rocket)	23	73	حبالها طويلة (Its ropes are long)	22	73
فرط معلاقه farat mi'laquh (His/her liver exploded)	22	73	املا التناك (Fill up the tank)	22	73

For each child, the sum of correct answers in each condition was calculated; four-way ANOVA and paired comparisons were carried out to investigate the effect of the four variables: age, reading comprehension skills, meaning condition, and familiarity of the idiomatic expression on the number of correct answers given by each child.

The 4-way ANOVA analysis included the measure of variation between groups (DF), the Mean Sum between the groups (MS), the variation within the samples (F value), the significance level (Sig.) as well as the effect of the independent variable on independent ones (Partial Eta squared).

4 Results

4.1 ANOVA Analysis of the Results

For each child, the sum of the correct answers in each condition (Familiar and unfamiliar idiomatic expressions in the transparent and opaque meaning condition) was calculated. A four-way ANOVA was carried out on the number of correct answers between subject variables: age (10- and 12-year olds) and level of comprehension (good vs poor) as well as within subjects' variables: familiarity (familiar vs unfamiliar) and meaning condition (opaque vs transparent).

Table 2: The four-way ANOVA analysis of the participants' correct answers in all conditions

Variable	Type IV sum of squares	DF	MS	F Value	Sig.	Partial Eta squared
Meaning condition	354.903	1	354.903	212.857	0.000	0.403
Age	8.778	1	8.778	5.265	0.022	0.016
Familiarity	93.528	1	93.528	56.095	0.000	0.151
Level of comprehension	139.128	1	139.128	83.444	0.000	0.209
Total	20731.000	320				
Corrected Total	1121.547	319				

As Table 2 shows, there was a main effect of meaning condition (opaque vs transparent) on the correct answers by the participants, $F = 212$, $P > 0.01$. There was also a main effect of the participants' level of comprehension on their performance, $F = 83$, $P < 0.01$. The third variable that had a main effect on the participants' performance was familiarity, $F = 93$, $P < 0.01$. All these variables reached the significance level of difference and had a main effect on the correct answers made by the students. The least effect was of the age variable, $F = 5$, $P > 0.01$.

Table 3 presents the estimated marginal means for each condition to show where the correct answers were given more by the participants.

As shown in Table 3, for the meaning condition, the correct answers were given more frequently in the transparent meaning condition than in the opaque meaning condition ($M_s = 8.881$ and 6.775 , respectively). For the variable that has the second main effect on the children's performance, it is obvious that the good comprehenders gave more correct answers than the poor comprehenders ($M_s = 8.369$ and 7.169 , respectively). Moreover, the correct answers were given more for the familiar idiomatic expressions than for the unfamiliar ones ($M_s = 8.369$ and 7.288 , respectively); 10- and 12-year-old children gave correct answers with similar means ($M_s = 7.663$ and 7.994 , respectively).

Besides carrying out a 4-way ANOVA, paired comparisons were carried out using Paired samples t -test to identify the sources of overall significant differences revealed by ANOVA. In doing so, statistical differences within groups and between groups can be investigated.

4.2 Paired Comparisons of the Meaning Condition

Paired comparisons were first carried out to examine the significant differences that resulted from the effect of the meaning condition. As the results of the ANOVA showed, the meaning condition variable was the most

Table 3: The estimated marginal means of the four variables

Variable	Mean	Std. error	95% Confidence interval	
			Lower bound	Upper bound
Meaning condition				
Opaque	6.775	0.102	6.574	6.976
Transparent	8.881	0.102	8.680	9.082
Age				
10 years old	7.663	0.102	7.462	7.863
12 years old	7.994	0.102	7.793	8.195
Familiarity				
Familiar	8.369	0.102	8.168	8.570
Unfamiliar	7.288	0.102	7.087	7.488
Level of comprehension				
Good	8.488	0.102	8.287	8.688
Poor	7.169	0.102	6.968	7.370

Table 4: The results of 10-year-old poor comprehenders in the two meaning conditions

Meaning condition	Group	M	SD	F	P-value
Transparent	Familiar	9.25	0.64	1.65	0.12
	Unfamiliar	8.75	1.07		
Opaque	Familiar	7.150	1.954	6.325	0.000
	Unfamiliar	4.100	0.912		

Table 5: The results of 10-year-old good comprehenders in the two meaning conditions

Meaning condition	Familiarity	M	SD	F	P-value
Transparent	Familiar	9.15	0.81	1.21	0.24
	Unfamiliar	8.65	1.42		
Opaque	Familiar	7.500	1.100	2.186	0.035
	Unfamiliar	6.750	1.070		

affecting variable on the performance of children. Table 4 presents the statistical analysis of the correct answers given by poor comprehenders who are 10-year-olds in the transparent and opaque meaning conditions for familiar and unfamiliar expressions.

As Table 4 shows, poor comprehenders gave more correct answers in the transparent meaning condition for both familiar and unfamiliar idiomatic expressions with Ms = 9.25 and 8.75 of correct answers in the transparent meaning condition and 7.150 and 4.100 of the correct answers in the opaque meaning condition.

For the performance of good comprehenders in the same age group, the results are presented in Table 5.

The statistical analysis of the results of good comprehenders exhibits a similar behavior to that of poor comprehenders. Good comprehenders gave more correct answers in the transparent meaning condition. This is shown by the means of correct answers they gave in the two conditions. The means of correct answers given in the transparent meaning condition for familiar and unfamiliar expressions were 9.15 and 8.65, respectively. For the means of correct answers given in the opaque meaning condition for familiar and unfamiliar idioms, they are 7.500 and 6.750, respectively.

For the other age group, i.e. 12-year-olds, the results of poor comprehenders are given within Table 6.

As with the previous age group, poor comprehenders show better performance in the transparent meaning than in the opaque meaning condition for both familiar and unfamiliar expressions. This is shown by the means of correct answers in the transparent meaning condition (Ms = 8.75 and 8.10, respectively) compared to those in the opaque meaning condition (Ms = 7.45 and 4.40, respectively).

Table 7 introduces the statistical analysis of the results of older good comprehenders to examine if they exhibit the same performance.

Even though they are not significant, differences between the means of correct answers given in the transparent and opaque meaning conditions are present. Older good comprehenders gave a little bit more correct answers in the transparent meaning condition than in the opaque meaning condition.

Table 6: The results of 12-year-old poor comprehenders in the two meaning conditions

Meaning condition	Group	Ms	SD	F	P-value
Transparent	Familiar	8.75	0.97	2.10	0.05
	Unfamiliar	8.10	1.07		
Opaque	Familiar	7.45	1.15	9.68	0.00
	Unfamiliar	4.40	0.82		

Table 7: The results of 12-year-old good comprehenders in the two conditions

Meaning condition	Group	Ms	SD	F	P-value
Transparent	Familiar	9.650	0.489	3.454	0.003
	Unfamiliar	8.750	0.967		
Opaque	Familiar	8.65	0.93	1.51	0.14
	Unfamiliar	8.20	0.95		

4.3 Paired Comparisons of Good and Poor Comprehenders

Paired comparisons were also carried out to examine the groups' differences in the transparent and opaque meaning conditions for familiar and unfamiliar idiomatic expressions. In doing so, the effect of children's reading comprehension skills can be examined. Table 8 shows the results of four-grade good and poor comprehenders (10-year-olds) in the transparent meaning of familiar and unfamiliar idiomatic expressions.

As Table 8 shows, the mean of the correct answers provided by poor and good comprehenders in the transparent meaning condition for familiar and unfamiliar conditions were similar. Thus, there was no significant difference between the two groups in their performance in the transparent meaning condition for both types of idiomatic expressions, $P > 0.05$.

Table 9 presents the statistical analysis of the results of good and poor comprehenders of this age group in the opaque meaning condition for familiar and unfamiliar idiomatic expressions.

As it is obvious from the table, there were no significant differences between good and poor comprehenders in their performance in the opaque meaning condition for familiar idiomatic expressions, $P > 0.05$. On the other hand, there was a significant difference between the two groups in the correct answers they gave for the unfamiliar ones, $P < 0.05$.

It is concluded that there were no significant differences between the two sub-groups in the transparent and opaque meaning conditions for familiar and unfamiliar idiomatic expressions, except for the opaque meaning condition of the unfamiliar ones where good comprehenders outperformed their poor counterparts. This can be a first indicator of children's better performance in the familiar expressions, and children gave more correct answers for familiar than unfamiliar ones especially when they have an opaque meaning.

For the other age group, i.e. 12-year-olds, the correct answers given by good and poor comprehenders in the two meaning conditions for both types of expressions were statistically analyzed. Table 10 shows the

Table 8: The results of 10-year-olds in the transparent meaning condition

Familiarity	Group	Ms	SD	F	P-value
Familiar	Good	9.15	0.81	0.433	0.668
	Poor	9.25	0.64		
Unfamiliar	Good	8.650	1.424	0.251	0.803
	Poor	8.750	1.070		

Table 9: The results of 10-year-olds in the opaque meaning condition

Familiarity	Group	Ms	SD	F	P-value
Familiar	Good	7.50	1.10	0.70	0.49
	Poor	7.15	1.95		
Unfamiliar	Good	6.75	1.07	8.43	0.00
	Poor	4.10	0.91		

Table 10: The results of 12-year-olds in the transparent meaning condition

Familiarity	Group	Ms	SD	F	P-value
Familiar	Good	9.650	0.489	3.715	0.001
	Poor	8.750	0.967		
Unfamiliar	Good	8.750	0.967	2.015	0.051
	Poor	8.100	1.071		

statistical analysis of both groups in the transparent meaning condition for familiar and unfamiliar idiomatic expressions.

Table 10 indicates that good comprehenders outperformed the poor ones in the literal meaning condition of familiar idiomatic expressions. This was indicated by the significant difference between the two groups at the significance level of 0.05. For the unfamiliar ones, there was no significant difference between the two groups.

In the opaque meaning condition, the results of 12-year-old good and poor comprehenders are summarized in Table 11.

As it appears from the results in Table 11, good comprehenders outperform poor comprehenders in the opaque meaning condition. The statistical analysis shows a significant difference between good and poor comprehenders at the significance level of 0.05.

The two sub-groups within this age group showed different results in the transparent and opaque meaning conditions of familiar and unfamiliar idiomatic expressions. In the two meaning conditions, good comprehenders outperformed their poor counterparts.

To conclude, good and poor comprehenders showed different results in the transparent and opaque meaning conditions for familiar and unfamiliar expressions. Mostly, good comprehenders in the two age groups gave more correct answers than their poor counterparts. This can be an indicator of the main effect that the level of comprehension variable has on the correct answers given by the participants.

4.4 Paired Comparisons of Familiar and Unfamiliar Expressions

To show the effect of familiarity on the children's performance, the differences between the groups in the correct answers they gave for familiar and unfamiliar idiomatic expressions were tested using paired comparisons in each condition. The analysis begins with discussing the results of the 10-year-olds. Table 12 presents the statistical analysis of the results of good and poor comprehenders' transparent interpretation of familiar and unfamiliar expressions.

The data presented in the table above show no statistical differences between the performance of the two groups for the familiar and unfamiliar expressions. The difference between the two groups is not significant, $P > 0.05$. Table 13 presents the results of both groups in the opaque meaning condition.

It is obvious from the statistical analysis presented in the table above that there is a significant difference between the groups' performance in the opaque meaning condition for familiar and unfamiliar idiomatic expressions. Both groups gave more correct answers for the familiar idiomatic expressions. There is a

Table 11: The results of 12-year-olds in the opaque meaning condition

Familiarity	Group	Ms	SD	F	P-value
Familiar	Good	8.65	0.93	3.63	0.00
	Poor	7.45	1.15		
Unfamiliar	Good	8.20	0.95	13.52	0.00
	Poor	4.40	0.95		

Table 12: The results of 10-year-olds in the transparent meaning condition for familiar/unfamiliar

Group	Familiarity	Ms	SD	F	P-value
Good	Familiar	9.15	0.81	1.21	0.24
	Unfamiliar	8.65	1.42		
Poor	Familiar	9.25	0.64	1.65	0.12
	Unfamiliar	8.75	1.07		

Table 13: The results of 10-year-olds in the opaque meaning condition for familiar/unfamiliar

Group	Familiarity	Ms	SD	F	P-value
Good	Familiar	7.500	1.100	2.186	0.035
	Unfamiliar	6.750	1.070		
Poor	Familiar	7.150	1.954	6.325	0.000
	Unfamiliar	4.100	0.912		

significant difference between them in the familiarity condition at the significance level $P < 0.05$ with a preference for the familiar ones where more correct answers were given.

For the 12-year-olds' sub-groups, the statistical analysis of their results for familiar and unfamiliar idioms is presented in Table 14. Within this table, a comparison between the performances of the two groups for familiar and unfamiliar idiomatic expressions is carried out in the transparent meaning condition.

Table 14 shows that familiarity affected the performance of the two groups in the opaque meaning condition. Here, correct answers were given more for the familiar idiomatic expressions. The performance of good comprehenders in the familiar condition was better than their performance in the unfamiliar ($M_s = 9.650$ and 8.750 , respectively). Thus, the difference between the correct answers for the familiar and unfamiliar ones was significant, $P < 0.05$.

The difference between the poor comprehenders' performance in the familiar condition was also better than their performance in the unfamiliar one ($M_s = 8.75$ and 8.10 , respectively). The difference in their performance in both was significant, $P < 0.05$.

Table 15 presents the results of these groups for the familiar and unfamiliar idiomatic expressions when they have an opaque meaning.

For good comprehenders, there was no significant difference between the means of the correct answers they gave in the familiar and unfamiliar idiomatic expressions ($M_s = 8.65$ and 8.20 , respectively). The difference did not reach the significance level, $P > 0.05$. For poor comprehenders, the opposite was found. Familiarity affected the performance of this group. The means of the correct answers given by this group were 7.45 and 4.40 , respectively. This means that poor comprehenders gave more correct answers for the familiar than the unfamiliar ones. The difference in their performance was significant, $P < 0.05$.

The results here indicate that familiarity affected the children's performance. They produced more correct answers for the familiar than the unfamiliar idiomatic expressions, except for the good comprehenders in the opaque meaning condition where their results for the familiar and unfamiliar were similar.

Table 14: The results of 12-year-olds in the transparent meaning condition of familiar/unfamiliar

Group	Familiarity	Ms	SD	F	P-value
Good	Familiar	9.650	0.489	3.454	0.003
	Unfamiliar	8.750	0.967		
Poor	Familiar	8.75	0.97	2.10	0.05
	Unfamiliar	8.10	1.07		

Table 15: The results of 12-year-olds in the opaque meaning condition of familiar/unfamiliar

Group	Familiarity	Ms	SD	F	P-value
Good	Familiar	8.65	0.93	1.51	0.14
	Unfamiliar	8.20	0.95		
Poor	Familiar	7.45	1.15	9.68	0.00
	Unfamiliar	4.40	0.82		

Table 16: The results of good comprehenders in the transparent meaning condition

Familiarity	Age	Ms	SD	F	P-value
Familiar	10-year-olds	9.150	0.813	2.357	0.024
	12-year-olds	9.650	0.489		
Unfamiliar	10-year-olds	8.650	1.424	0.260	0.796
	12-year-olds	8.750	0.967		

To conclude, poor and good comprehenders within both age groups mostly tended to give more correct answers for familiar rather than unfamiliar idiomatic expressions.

4.5 Paired Comparisons of Age Groups

For the age variable, paired comparisons were carried out in order to examine if there are any differences as a result of the differences in age between the groups. The comparisons were carried between the groups in the opaque and transparent meaning conditions for familiar and unfamiliar idiomatic expressions. Table 16 includes the results of good comprehenders in the two age groups in the transparent meaning condition for familiar and unfamiliar idiomatic expressions.

The difference between the two age groups appears in the significant difference between the good comprehenders in their performance in the transparent meaning of the familiar idiomatic expressions, $P > 0.05$. For unfamiliar ones, the results of the good comprehenders in the two age groups were not significant, $P < 0.05$.

For any possible differences in the good comprehenders' performance in the two age groups in the opaque meaning condition, Table 17 includes the statistical analysis.

Within the two age groups, good comprehenders differed significantly in their performance in the opaque meaning condition for familiar and unfamiliar expressions. The performance of the older good comprehenders was better than younger good comprehenders for the familiar expressions ($M_s = 8.65$ and 7.50 , respectively) as well as for the unfamiliar expressions ($M_s = 8.20$ and 6.75 , respectively). The differences between the two age groups here were significant, $P < 0.05$.

Comparisons between the poor comprehenders within the two age groups were also carried out. Table 18 presents the results of the older and younger poor comprehenders in the transparent meaning condition for familiar and unfamiliar idiomatic expressions.

Table 17: The results of good comprehenders in the opaque meaning condition

Familiarity	Age	Ms	SD	F	P-value
Familiar	10-year-olds	7.50	1.10	3.57	0.00
	12-year-olds	8.65	0.93		
Unfamiliar	10-year-olds	6.75	1.07	4.53	0.00
	12-year-olds	8.20	0.95		

Table 18: The results of poor comprehenders in the transparent meaning condition

Familiarity	Age	Ms	SD	F	P-value
Familiar	10-year-olds	9.50	0.639	1.930	0.061
	12-year-olds	8.750	0.967		
Unfamiliar	10-year-olds	8.750	1.070	1.920	0.062
	12-year-olds	8.100	1.071		

Table 18 shows that there are no significant differences between the results of poor comprehenders within the two age groups. Older children did not outperform the younger ones. For the familiar idiomatic expressions, the older children and their younger counterparts showed similar means of the correct answers they gave ($M_s = 8.750$ and 9.50 , respectively). Also, for the unfamiliar idiomatic expressions, both gave similar means (8.100 and 8.750 , respectively). There were no significant differences between the two age groups, $P > 0.05$.

The results of poor comprehenders within the two age groups in the opaque meaning condition are presented in Table 19.

It is obvious from the statistical analysis of the results of poor comprehenders within the two age groups that there are no significant differences between both. Age did not seem to have an effect on the results of the two groups. Again, older children did not outperform younger ones. This is shown by the similar means of the correct answers they gave for the familiar expressions ($M_s = 7.45$ and 7.15 for older and younger, respectively). The difference in their performances did not reach the significance level, $P > 0.05$. The same behavior of the two age groups can be observed in the unfamiliar idiomatic expressions. Older and younger poor children were not different in the means of the given correct answers ($M_s = 4.40$ and 4.10 , respectively). Thus, the differences in their performance did not reach the significance level, $P > 0.05$.

As a conclusion, the performance of the two age groups, except for the good comprehenders in the opaque meaning condition, was similar. This means that age did not have a main effect on the correct answers given by poor and good comprehenders. The only case where age seemed to have an effect was for the good comprehenders in the opaque meaning condition. Older good comprehenders outperformed the younger good comprehenders in the opaque meaning condition.

5 Discussion of Results

As mentioned earlier, ANOVA and paired comparisons were used to analyze the results of good and poor comprehenders within two age groups in their interpretation of familiar and unfamiliar idiomatic expressions introduced in two types of contexts requiring the transparent or the opaque meaning of the idiomatic expression. These types of statistical analysis were carried out in order to prove the hypotheses set up by the researcher.

The first hypothesis was successfully met; children in this study gave more correct answers in the transparent meaning condition than in the opaque meaning condition. This was also revealed by the

Table 19: The results of poor comprehenders in the opaque meaning condition

Familiarity	Age	Ms	SD	F	P-value
Familiar	10-year-olds	7.15	1.95	0.59	0.56
	12-year-olds	7.45	1.15		
Unfamiliar	10-year-olds	4.10	0.91	1.09	0.28
	12-year-olds	4.40	0.82		

ANOVA analysis which showed that the meaning condition has a main effect on the correct answers given by good and poor comprehenders in the two age groups. Paired comparisons revealed this finding and showed that even if the idiomatic expression is familiar, children sometimes tended to interpret it literally. Not only poor comprehenders, good comprehenders also tended to give more correct answers in the transparent meaning condition. The reason behind this finding is that the transparent meaning of an expression does not need any processing mechanisms or inferential skills as is the case with opaque meaning. When the expression is idiomatic, children need to use the different semantic components in the context in order to derive a suitable meaning. This finding goes in line with other studies that emphasized the ease of interpreting the idiomatic expression when the transparent meaning is needed. Oakhill et al. (2016) found that children almost interpreted idiomatic expressions when transparent is suitable for the context easily and thus they gave more correct answers in the literal meaning condition than in the figurative one even when the idiom is a novel one.

The second hypothesis was also proved by the statistical analysis of the correct answers given by good and poor comprehenders in the two age groups: good comprehenders gave more correct answers than poor comprehenders. This tendency was apparent in the opaque meaning condition of unfamiliar idiomatic expressions where good comprehenders outperformed their poor counterparts. Since children have no exposure to new unfamiliar expressions, poor comprehenders were not able to identify that a literal interpretation is not correct, and even if they recognized this, they were not able to connect the different sources of semantic information available in the context to come up with the suitable opaque meaning. However, good comprehenders were able to use the context to derive a suitable meaning even when the expression was unfamiliar. Thus, this finding emphasizes the role of context in interpreting idiomatic expressions.

This result can be explained on the basis of the GEM proposed by Levorato and Cacciari (1995, 1999) which emphasizes the role of context in identifying that a transparent meaning of an idiomatic expression is not appropriate and use the semantic components of this context to infer the opaque meaning. The reason behind using this model to explain this finding is that the opaque meaning of unfamiliar expressions was understood as well as the opaque meaning of familiar ones by good comprehenders.

This finding shows the same tendency of poor and good comprehenders in previous studies which investigated the role of context in the interpretation of idioms (e.g. Ackerman, 1982; Levorato & Cacciari, 1999; Oakhill et al., 2016, among others). These studies showed the importance of context in understanding idioms by comparing the results of skilled and less-skilled comprehenders (Nesi et al., 2006). In these studies, as the case in this study, skilled comprehenders outperformed their less-skilled counterparts in interpreting idiomatic expressions when they are presented in context.

Familiarity was also found to have a main effect on the correct answers given by good and poor comprehenders. Thus, the third hypothesis proposed by the researcher was also proven by the statistical analysis of the children's results: more correct answers were provided for familiar rather than unfamiliar idiomatic expressions. Children within the two age groups gave more correct answers for familiar than unfamiliar expressions. Even in the opaque meaning condition, poor comprehenders were able to give correct answers for the familiar expressions just as their good comprehenders counterparts. For unfamiliar idiomatic expressions, their performance was not as their performance for familiar ones.

This finding can be explained on the basis of the Acquisition via Exposure Hypothesis proposed by Nippold and Martin (1989) since poor children were able to interpret the opaque meaning of familiar idiomatic expressions because of their knowledge of these expressions and not as a result of their reading comprehension skills.

This finding was also revealed by other studies that emphasized the role of familiarity in interpreting idiomatic expressions (Laval, 2003; Levorato & Cacciari, 1992; Nippold & Rudzinski, 1993, among others). Children in the study conducted by Oakhill et al. (2016) showed a different tendency. Within this study, children did not give more correct answers for English idioms in the opaque meaning condition, and hence their findings cannot be explained by familiarity.

The fourth hypothesis was not successfully met by the results of children since age did not have a main effect as other variables on the performance of children in this study. Older children did not give more correct answers than younger children. The only effect of age appears with older good children who outperformed

younger good children in the opaque meaning condition of unfamiliar idiomatic expressions. This variable did not exhibit the same degree of effect that was found in previous studies (Cain et al., 2005; Levorato et al., 2004; Oakhill et al., 2016). These studies found that older children outperformed younger children in their interpretation of idiomatic expressions.

One reason behind the difference in the effect of age in this study and the previous studies is that the age groups in this study are older than those in the previous ones or that the difference in age between the groups of this study is not significant. Most of these studies examined the interpretation of idiomatic expressions in children with the age of 7-year-olds to 12-year-olds and this allowed them to identify age differences (Cain et al., 2005). Another reason behind the little effect of age in this study could be interpreted on the basis of differences in comprehension skills between old and young children. Levorato and Cacciari (1995) explained that younger children did not make use of context to derive the opaque meaning of idiomatic expressions as did older children because their comprehension skills are not as those of older children. Thus, the differences between the age groups in previous studies relate to the advanced reading comprehension skills and not to age in particular.

In conclusion, some of the results revealed in this study go in line with other previous studies and contradict the results of others. The only difference between this study and other previous studies is that age which has a main effect in other studies on children's performance was not found to have a main effect in this study. Meaning condition, reading comprehension skills of children, and the familiarity of the idiomatic expressions seemed to have main effects on children's performance. Also, the differences in the results of good and poor comprehenders emphasize the role of context in interpreting idiomatic expressions.

6 Conclusion

The aim of the present study was to examine the role of context in interpreting familiar and unfamiliar idiomatic expressions. The role of context was investigated by examining the performance of good and poor comprehenders and how they can use the semantic components provided by the context where the idiomatic expression is presented in order to help them deriving the intended meaning, i.e. transparent or opaque. To do so, eighty school children were recruited from a public school in Al-Bouaida, a rural area north of Jordan. These children were divided into two age groups: 40 10-year-olds who are fourth graders and 40 12-year-olds who are sixth graders. Each group was then divided into two sub-groups based on children's level of comprehension. Thus, each group was divided into 20 good and 20 poor comprehenders.

Ten familiar and 10 unfamiliar idiomatic expressions were put in two types of stories. Thus, each child is presented with 20 stories where the transparent meaning is appropriate and 20 stories where the opaque meaning is needed. The effects of four variables on the number of correct answers given by children are age, meaning condition, familiarity, and level of comprehension.

The statistical analysis showed that three variables have main effects on children's understanding of idiomatic expressions, these are: meaning condition, level of comprehension, and familiarity. This finding lends support to those of Laval (2003), Levorato and Cacciari (1999), and Nippold and Martin (1989). Age was the only variable that was found not to have a main effect on children's performance. This finding contradicts what has been found in previous studies such as Oakhill et al. (2016). The findings of the study can be summarized below:

- (1) The meaning condition has a main effect on the number of correct answers given by children. Good and poor comprehenders in the two age groups gave more correct answers in the transparent meaning condition. This refers to the ease of understanding the literal meaning of an expression. For instance, when children were presented with a story where the transparent meaning of the idiomatic expression '*id la'ashra* (count to ten) is needed, they were able to choose the picture that represents the transparent meaning of the expression more often than when its opaque meaning is needed.
- (2) Children's level of comprehension also affected their performance. Good comprehenders gave more correct answers, especially in the opaque meaning condition of unfamiliar idioms, than their poor

counterparts. Good comprehenders could make use of the context and its semantic components to appreciate that the transparent meaning of an idiom is not appropriate and to derive the appropriate meaning. Poor comprehenders, on the other hand, failed to appreciate that a transparent meaning of an idiom does not fit with the context, and even if they appreciate this, their low level of reading comprehension skills does not enable them to derive the appropriate meaning.

- (3) Familiarity seemed to have an impact on children's interpretation of idiomatic expressions. Children gave more correct answers in the opaque meaning condition for familiar idiomatic expressions than for unfamiliar ones. Even poor comprehenders in the two age groups were able to appreciate that the literal meaning of an idiom is not appropriate, and they were able to choose the correct interpretation of familiar idioms. This cannot be considered a result of their comprehension skills since they must give the same number of correct answers for unfamiliar ones. The reason behind their good performance here is a result of their good knowledge of these idiomatic expressions as they had good exposure to them.
- (4) Age was not found to have a main effect on children's performance in this study. Older children did not outperform their younger counterparts. The only case where age seemed to affect children's performance is with older good comprehenders in the opaque meaning condition of unfamiliar idiomatic expressions. Here, age had an interaction with the level of comprehension skills.
- (5) The reason behind the little effect of age on children's performance in this study could be a result of the little age difference between the two age groups. Thus, both age groups have a similar degree of exposure to the targeted idiomatic expressions which resulted in their similar numbers of correct answers in the opaque meaning condition of familiar idioms. Another reason for this limit in the effect of age could be explained on the basis of differences in comprehension skills. Thus, if older children outperform younger ones, this may not be a result of the difference in age between them but a difference in the comprehension skills that are improved as children get older since they get more experienced with language interpretation and language use. What proves this explanation is the results of older and younger poor comprehenders. Older poor children did not outperform their younger counterparts. If age matters, the opposite should be the case. The comprehension skills of older poor comprehenders did not improve as they got older and hence their performances were similar.
- (6) The performance of good and poor comprehenders shows the role of context in the interpretation of idiomatic expressions even when they are unfamiliar.

The present study investigated the use of context in interpreting familiar and unfamiliar idiomatic expressions in two age groups: 10- and 12-year-olds. In this regard, it would be interesting for future research to investigate this in younger age groups. For instance, future research could examine more potential differences in the transparent and opaque meaning conditions for familiar and unfamiliar expressions by groups that differ significantly in age. This would be the case since comprehending idiomatic expressions arises between 7- and 12-year-olds (Cain et al., 2009; Levorato & Cacciari, 1992). Younger age groups could also be taken into consideration, for example, it is possible for future studies to examine if 5-year-old children have the ability to interpret familiar idiomatic expressions when they are presented in short pictured stories.

Further studies can also examine the effect of other variables such as gender on interpreting idiomatic expressions. This could be the case since previous linguistic and neurological studies showed linguistic differences between males and females and emphasized the linguistic superiority of females to males (Burman et al., 2008). It is also recommended that comparative studies with other Arabic countries could be conducted.

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Appendix

	1. يعمل أحمد في شركة للمنتجات الغذائية وقد كان دائماً ما يتأخر في القدوم الى عمله. قام مديره في العمل بتحذيره من التأخر وبدأ بتطبيق بعض العقوبات عليه مثل خصم جزء من الراتب وغير ذلك. بالرغم من تطبيق العقوبات عليه وتحذيره لأكثر من مرة، الا أن أحمد كان غير مبالي لدرجة كبيرة. في يوم من الأيام قام المدير باستدعاء أحمد الى مكتبه وقال له: "لقد نفذ صبري منك، اذهب الى المدير المالي وخذ كامل مستحقاتك" ثم قال له بلهجته العامية "وفرّجيني عرض كتافك". صل الصورة المناسبة للكلمات المخطوطة تحتها.
	
	