A DEVELOPMENTAL STUDY OF L1 IDIOM COMPREHENSION IN FARSI LANGUAGE

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Abstract

This quantitative study investigated the comprehension of Farsi idioms with a developmental view and explored at what age, these idiomatic expressions are acquired. We also examined different categories of idiomatic expressions, embracing biological and cultural idioms to see whether they are acquired differently. To this end, three target age groups, including 6-year-olds (n=20), 10-year-olds (n=20), and adults (n=20) were selected. To collect data, 40 most frequent Farsi idioms were selected as the material of the study and the participants were asked to orally provide a free explanation of the meaning of these idioms in their own words. To analyze data, descriptive statistics, one-way ANOVA and paired samples t-test were calculated. The findings indicated that around age 6 is almost the beginning of the idiom acquisition process and around age 10 children's idiomatic comprehension starts approximating that of adults. It was also found that primarily, children exhibit knowledge of transparent biological idioms rather than idiosyncratic cultural idioms. The conclusions and implications of the study are discussed.

Keywords: L1, idiom comprehension, idiomatic expressions, biological idioms, cultural idioms

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1. INTRODUCTION

Idiomatic expressions, which comprise a considerable proportion of everyday language, are one of the principal categories of figurative language that due to their ambiguous linguistic structure might challenge children's acquisition process. These expressions are utilized to convey the thoughts, emotions, and opinions that might be ineffable or less successfully expressed using literal expressions (Bischofshausen, Makoid, & Cole, 1989; Gibbs & Colston, 2012). Figurative language competence shows superior level of language processing due to applying the simultaneous processes of language, pragmatics, cognition, and world knowledge (Levorato & Cacciari, 1992). A common aspect of the idiomatic expressions is that their reference is indirect and their interpretation is non-compositional and non-literal, hence, they are the concise examples of speech with a depth of meaning. Comprehending the emergence of idioms and their acquisition process can elucidate the issues of non-literal meaning, human cognition, and conceptual structures.

It is believed that the development of children's ability in comprehending and producing idiomatic expressions relies on the development of the same linguistic abilities on which language in general is based (Levorato, 1993). In language development, the ability to interpret idiomatic language develops gradually during the life-span and it is claimed that adults excel on idiom knowledge in comparison to both younger and older children (Nippold, 2006). It is also declared that the ability to interpret idiomatic language associates with age and years of schooling, and other linguistic aspects, such as meta-linguistic awareness and inference from context play an important role in this regard (Benneli et al., 2006; Holsinger, 2013; Rapp & Wild, 2011). Findings of the studies about the age of idioms acquisition are partly controversial which might be due to discrepancies in methodology and theoretical background of these studies (Pouscoulous, 2011). Abkarian et al. (1992) claim that idioms are not interpreted before age 6, and around this age the idioms comprehension takes off. Moreover, Cain, Towse and Knight (2009) suggest that figurative knowledge develops between ages 7 and 11. Presenting evidence from a considerable cross-sectional research, Kempler et al. (1999) propose that age 10 is when children's idioms competence consolidates and approximates adult-like competence.

Developmental studies can lead us to a thorough evaluation of the nature of idiomatic expressions. These studies can illuminate how children become aware that the law of literalness can be violated and the meaning of expressions can be extended for figurative purposes (Levorato & Cacciari, *1992).* Reviewing the literature in idiom acquisition field demonstrates that in most of the studies, the attention has been given to the adult idiomatic comprehension and only to English language as well as few other languages. Due to the scarcity of research in the early acquisition of idioms in Farsi language, it is the aim of the present study to concentrate on the comprehension of Farsi idioms with a developmental view and explore at what age, these idiomatic expressions are acquired and consolidated. Hence, concerning the findings of the previous studies (Abkarian, Jones & West, 1992; Kempler, Van

Lancker, Marchman & Bates, 1999), three target age groups, including 6-year-olds, 10-year-olds, and adults were selected in this study. We also examined the comprehension of the different categories of idiomatic expressions in each age group and whether they are acquired differently. Therefore, the following research questions are addressed in the current study:

1) Does age 10 represent a turning point in idiom acquisition process, and age 6 the initial stage of this process?
2) Is there any significant difference between the comprehension of the various idiomatic categories in each age group?
3) In which idiomatic category do children exhibit knowledge primarily?

In the present study, 60 Farsi-speaking individuals were asked to orally provide a free explanation of the meaning of 40 most frequent Farsi idiomatic expressions in their own words and in order to analyze the collected data, descriptive statistics, one-way ANOVA and paired samples t-test were calculated.

Review of the literature

Idioms, as a category of figurative language, are a substantial type of ambiguous linguistic structures which children are exposed to during the language development process. The structure of idioms has been portrayed as gestalt form in psycholinguistics (Bar-Hillel, 1955; Faser, 1970; Lampert & Lampert, 2010). Idioms include a sequence of morphemes and semantic markers to represent the meaning and specification of a main grammatical type (Katz & Postal, 1963). Reviewing numerous definitions of idioms provided by different scholars, Liu (2008) concludes that there are agreements among the various scholars that idioms often have non-literal or semi-literal meaning and the interpretation of their components cannot completely lead to deriving their precise meanings, they usually have rigid structures, and they are multiword expressions.

Idioms often have a literal meaning that is different from its figurative meaning, and this fact of having two meanings reinforces the children's tendency not to go beyond the processing of the literal meaning. As Levorato (1993) explains, the literal strategy, including the application of only lexical and morphosyntactic competence to the interpretation of the literal meaning, is "not only the preferred strategy and the one that is adopted first, but, especially in very young children, is the only strategy available" (p.105). Various factors may lead to the variation in the complexity of idioms' comprehension. Linguistic and cognitive factors are two main aspects in this regard. The latter concerns the semantic content of idiom, so that, idiomatic expressions representing concrete actions are probably less complicated to understand, at least for children, than idioms representing feelings or mental states. The linguistic factor may contain the morphosyntactic or semantic features such as semantic transparency, syntactic frozenness, etc. (Levorato, 1993).

Nunberg, Sag and Wasow (1994) distinguish between idiomatically combining expressions (ICEs) and idiomatic phrases (IPs). The former includes idioms which their

meanings can be distributed among their components, despite their conventionality. The latter comprise idioms that besides their conventionality do not distribute their meanings among their parts and should be interpreted globally. According to Nunberg et al., (1994), idioms may differ respecting the semantic features embracing compositionality, conventionality, and transparency. Compositionality concerns the degree to which the whole meaning, once known, can be scrutinized in terms of the contributions of the idiom's components. Conventionality represents the degree to which the meanings of the idiomatic expressions are not anticipated based on knowledge of the word pieces in isolation, and knowledge of the conventions of a specific language setting. Ultimately, transparency indicates the degree to which the original motivation of these expressions is instantly comprehensible (Titone & Connine, 1999). In other words, transparency represents the degree of agreement between the literal and non-literal meanings of an idiomatic expression (Cain et al., 2005). According to these semantic distinctions and other things being equal, IPs have essentially a lower compositionality, a higher conventionality, and a lower transparency in comparison to ICEs.

Three characteristics of figurative language, including idioms, play a central role in its acquisition. These three characteristics are the gap between the speaker's words and his/her communicative goals, conventionality which means departing from the original and literal meaning and acquiring new meaning through strongly held conventions, and more dependence on the context than literal language (Levorato, 1993). The comprehension of figurative language is a demanding issue (Gibbs, 1987, 1991), since children have trouble understanding 1) that there might be a difference between what is said and what is meant, 2) that the conventional meaning may be different from the literal one, and 3) that it is essential to utilize all the available contextual information, including the linguistic context, nonlinguistic context, and the relevant world knowledge, to understand the precise meaning of an expression (Levorato, 1993).

It is believed that idioms differ substantially in their ease of comprehension, possibly due to the frequency of occurrence in children's natural settings (Nippold & Tarrant Martin, 1989). Further, it is claimed that among adults the familiarity of idioms may affect how idioms are processed and the non-literal meaning may be more difficult to retrieve for less familiar idiomatic expressions (Schweigert, 1986; Titone & Libben, 2014). Idiom familiarity is identified as ''how frequently an idiom occurs in the language'' (Nippold & Taylor, 1995, p. 427). It has been also declared that more familiar idioms are easier to interpret than less familiar ones for children (Nippold & Taylor, 2002). In effect, children acquire the meaning of idiomatic expressions when they see them in written and spoken contexts (Nippold & Taylor, 2002). In other words, as they gain more language experience, more expressions turn out to be familiar and therefore easier to interpret. Exposure to input has been also found to be an important factor in the process of acquisition according to usage-based theory of language acquisition which can be summarized in the two maxims including meaning is use and structure emerges from use (Tomasello, 2003). It is obvious that mere

exposure to idiomatic expressions is inadequate to justify developmental improvements. In addition, idiomatic expressions that are encountered in supportive narrative contexts are simpler to interpret than those encountered in isolation (Ackerman, 1982; Cacciari & Levorato, 1989; Fanari, 2010). When idioms are represented in context, the essential semantic information, that can be used to extract the proper meaning of the expression, is provided and the interpretation of figurative language might be facilitated. This issue might be more crucial for less frequent idioms and specifically for unfamiliar and less transparent idioms that might not be fully understood by means of semantic analysis of the phrases (Cain et al., 2005).

The development of children's ability to produce and comprehend idioms relies on the development of the same linguistic skills which are necessary to acquire figurative language as well as language in general (Levorato, 1993). It has been argued that, prior to the acquisition of idiomatic meanings, literal meanings are acquired first in language development (Chafe, 1970). Chafe (1970) proclaims that a basic symbolization system is operating, i.e. primarily a one-to-one relationship between semantic and phonetic representation develops. He maintains that, at the upper levels of language development, the one-to-one relationship cannot be sustained due to the increasing size of the semantic elements and the finite constraints imposed by the phonetic system. Hence, the mechanism of duality grows and leads to further isolating semantic units from phonetic units. In effect, the mechanism of duality allows the independent development of concepts and symbols and permits the possibility to attribute more than one meaning to a single phonetic sequence (Chafe, 1970).

Therefore, the process of comprehending figurative meanings of idioms has a prolonged period of development. Understanding idiomatic expressions has been reported in children under 10 years of age (Caillies & Le Sourn-Bissaoui, 2008; Gibbs, 1991; Levorato & Cacciari, 1992). However, imperfect comprehension of these expressions is still evident in older children and adolescents (Nippold & Rudzinski, 1993; Nippold & Taylor, 2002). Levorato and Cacciari (1995) suggest that the development of the skills and abilities involved in the acquisition of figurative language, including idioms, occurs between ages 7 and 11. Some scholars (Nippold, 2006; Nippold & Duthie, 2003) believe that understanding idioms develops gradually and it is not fundamentally different from other lexical development; however, others (e.g. Kempler et al., 1999) assume that idioms comprehension is a nonlinear process which is very similar to the vocabulary burst between ages 2 and 3 (Marchman & Bates, 1994; Bates & Goodman, 1997). Kempler et al. (1999) believe that regarding idioms, the developmental process takes almost 4 times longer and its peak is around age 11, with a much later onset.

It has been proved that children’s acquisition of idioms is beyond a simple and passive process of learning conventional expressions. In contrast, it is a progression concerning complex linguistic and cognitive abilities (Levorato, 1993). With regard to idiomatic expressions, the skills of a truly competent speaker comprise 1) the ability to separate the component parts of idioms and to make semantic inferences about

them; 2) the ability to understand idioms even when their lexical or/and syntactic components have been substituted or varied; and 3) the ability to create new idioms through applying syntactic and lexical variations on present idioms (Levorato, 1993).

2. METHOD

Participants

The participants of this study were 60 Farsi-speaking individuals, including 6-year-olds (n=20, 12 females and 8 males), 10-year-olds (n=20, 9 females and 11 males), and adults (n=20, 10 females and 10 males). The younger children were almost illiterate as they were in their first year of semi-formal education. The older children were students who had finished the third grade of elementary school and entered the fourth grade. Three criteria were considered while selecting subjects: 1) Absence of any significant language disabilities, 2) being a native speaker of Farsi, and 3) having parents with native competence in Farsi. The participants were selected from Tehran, Iran, on a voluntary basis.

Materials

The materials of this study contain 40 Farsi idiomatic expressions which are the most frequent ones in the daily conversations. The references for the most commonly used idioms in Farsi language were not available for the researchers. Therefore, initially Farsi dictionaries and other references were searched and 116 idiomatic expressions were selected. In order to discover the most familiar and frequent idioms in modern Farsi, this number of idioms were further reduced to 40 idioms with the overall familiarity value of .957 in a pilot study, which was carried out with 87 native Farsi speaking adults. Inspired by the typology adopted in Penttilä, Nenonen, and Niemi (1998, cited in Vulchanova et al., 2011), these idioms were classified into two major categories, including biological (18 items) and cultural idioms (22 items), based on the judgments of the three native Farsi-speaking expert linguists (89% inter-rater agreement). Penttilä et al. (1998, cited in Vulchanova et al., 2011) were influenced by Searle's (1983) notion of deep background, referring to the biological nature of human, and local background, referring to the local cultural issues, while clarifying the foundation of language in human experience. Based on this classification, biological idioms are those expressions originated in human (bodily) experience and relationship with the environment, while cultural idioms are those expressions originated in local cultural practices and might vary from one culture to another (Vulchanova et al., 2011). For example, *feel it in one's bones* is a biological idiom while *a red herring* is a cultural one, as it is related to cultures surviving on fishing (Vulchanova et al., 2011). In general, biological idioms are more transparent, and cultural idioms tend to be more idiosyncratic and less transparent. Table one depicts a sample of Farsi biological and cultural idioms used in the current study.

Table 1: A sample of Farsi biological and cultural idioms.

	Farsi idioms	Transliteration	Literal meaning	Non-literal meaning
Biological idioms	پوست کسی را کندن	Puste kasi ra kandan	Cutting out someone's skin	Severely punishing someone
	دهان کسی بوی شیر دادن	Dahane kasi buye shir dadan	Someone's mouth smelling like milk	To be inexperienced
	تو(ی) دل کسی را خالی کردن	Tu (ye) dele kasi ra khali kardan	Emptying the inside of someone's heart	Frightening someone
Cultural idioms	لنگر انداختن	Langar andakhtan	Dropping anchor	Staying somewhere for a long time
	غاز چراندن	Ghaz charandan	Grazing goose	To be idle and jobless
	آتش سوزاندن	Atash suzandan	Burning fire	Causing disturbance

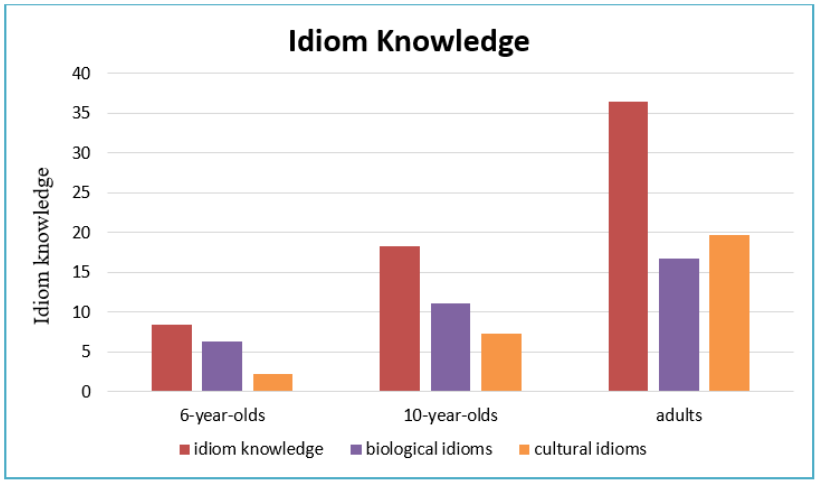
Data collection

In this study, 60 native Farsi speaking individuals in three age groups were asked to orally provide a free explanation of the meaning of the idioms in their own words. According to Nippold and Taylor (2002), explanation tasks can afford us insight into children's thinking processes. The participants were not informed about the purpose of the study and in this regard, to refuse utilizing the term 'idioms', the researchers referred to them as 'expressions'. They were allowed enough time to finish their explanation in a silent setting. The answers for each idiom were scored through using the procedure in which a score of 1 was dedicated to correct responses, 0.5 to semi-correct answers where the subjects avoided providing literal meanings but simultaneously gave a rather inexact idiomatic explanation, and 0 to incorrect ones.

3. RESULTS

Initially, the descriptive statistics (Table 2) were calculated and it was revealed that 6-year-old children's overall idiomatic knowledge rate was 21.17% (biological idioms: 15.62%, cultural idioms: 5.55%), 10-year-old children's rate was 45.8% (biological idioms: 27.62%, cultural idioms: 18.17%), and adults had an overall success rate of 91.05% (biological idioms: 41.75%, cultural idioms: 49.30%), which is a very high score. The findings with regard to two idiomatic categories were different for each age group. Both younger children (M = 6.25, SD = 3.03) and older children (M = 11.05, SD = 3.47) showed better comprehension of biological idioms, while adults' comprehension of biological idioms (M = 16.70, SD = 1.26) was lower, in comparison to cultural idioms. The descriptive statistics (Table 2) for the cultural idiomatic comprehension in each age group are as follows: younger children (M = 2.22, SD = 1.33), older children (M = 7.27, SD = 3.12), adults (M = 19.72, SD = 2.08). Figure 1 demonstrates idiom knowledge of three age groups.

Figure 1. Idiom knowledge of three age groups.



With regard to biological idioms, the findings indicated that idiomatic comprehension improves gradually between age 6 and adulthood (Figure 2). In contrast, cultural idiomatic knowledge improves very smoothly between ages 6 and 10, and rapidly between age 10 and adulthood (Figure 2). Finally, the overall idiomatic knowledge of the individuals improves smoothly between ages 6 and 10, and then increases rapidly until adulthood (Figure 2). Table 2 summarizes the descriptive statistics of the three age groups in the idiom classifications.

Figure 2. Idiom knowledge in categories

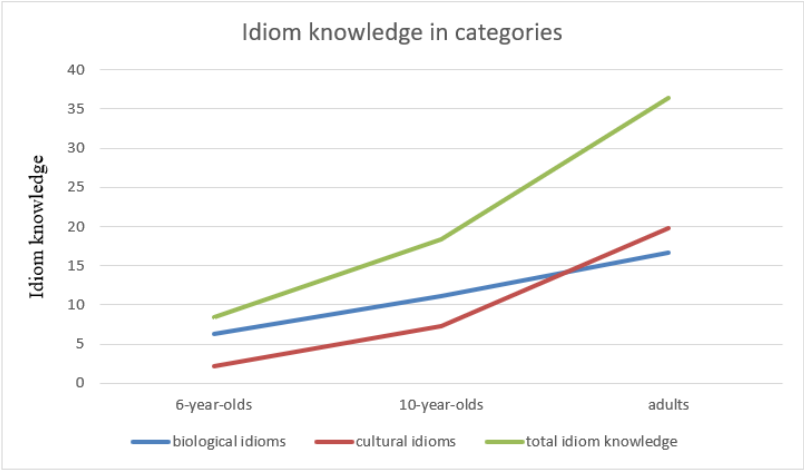


Table 2. Descriptive statistics of the three age groups in the idiom classifications

		Biological idioms (18 items)	Cultural idioms (22 items)	Overall (40 items)
6-year-olds (n=20)	Mean	6.25	2.22	8.47
	SD	3.03	1.33	3.83
10-year-olds (n=20)	Mean	11.05	7.27	18.32
	SD	3.47	3.12	6.35
Adults (n=20)	Mean	16.70	19.72	36.42
	SD	1.26	2.08	2.97

Further, the results of one-way ANOVA indicated that there was a statistically significant difference between groups with regard to their overall idiomatic knowledge F (2,57) = 188.72, $p < .05$. The results of the Tukey post hoc test (Table 3) showed that 1) the 6-year-olds' idiomatic knowledge was significantly lower than both older children and adults', 2) the 10-year-olds' idiomatic knowledge was significantly higher than 6-year-olds' and lower than adults', 3) the adults' idiomatic knowledge was significantly higher than both younger and older children's at p <. 05. Comparing the mean differences between groups (Table 3) indicates significantly greater difference between younger children and adults, than the difference between 10-year-olds and adults with regard to their overall idiomatic knowledge. It was also revealed that the mean difference between younger children and older children is lower than the mean difference between younger children and adults (Table 3). As a consequence, this can be claimed that, around age 10, children's comprehension starts approximating that of adults and around age 6 is almost the beginning of the idiom acquisition process.

As mentioned previously, a group of answers were semi-correct ones where participants avoided providing literal meanings but simultaneously gave a rather inexact idiomatic explanation. Among the responses which were not correct, the rate of semi-correct answers provided by participants was as follows: younger children: 4.4%, older children: 10.2%, and adults: 27.5%. These responses were attempts to give non-literal but somewhat inaccurate explanations and indicated that even when participants didn't know the precise meaning of some idioms they were generally aware of the nature of these idiomatic expressions. As the findings showed, in comparison to younger children, older children were more aware of the nature of idiomatic expressions even when they didn't know their exact meanings.

Table 3: Tukey HSD. Dependent variable: idiom knowledge.

(I) Age group	(J) Age group	Mean difference (I-J)	Std. Error	Sig.
6-year-olds	10-year-olds	-9.8500*	1.4594	.000
	adults	-27.9500*	1.4594	.000
10-year-olds	6-year-olds	9.8500*	1.4594	.000
	adults	-18.1000*	1.4594	.000
Adults	6-year-olds	27.9500*	1.4594	.000
	10-year-olds	18.1000*	1.4594	.000

* The mean difference is significant at the 0.05 level.

In order to explore whether there is any significant difference between biological idiomatic knowledge and cultural idiomatic knowledge for each age group, paired samples t-test was calculated. For the group of younger children, a paired-samples t-test indicated that the scores were significantly higher for the biological idioms (M = 6.25, SD = 3.03) than for the cultural idioms (M = 2.22, SD = 1.33), t (19) = 6.68, p < .05. Similarly, the results for the older children showed significantly higher score of the biological idioms (M =11.05, SD =3.47) than that of the cultural idioms (M =7.27, SD = 3.12), t (19) = 9.18, p < .05. In contrast to both the children groups, adults indicated significantly higher score of cultural idiomatic knowledge (M = 19.72, SD = 2.08) than that of biological idiomatic knowledge (M = 16.70, SD = 1.26), t (19) = 7.86, p < .05.

Investigating whether children primarily exhibit knowledge in the field of biological idioms, rather than in the cultural idioms area, one-way ANOVA was run for each category between different age groups. The findings showed that there was a statistically significant difference between groups with regard to both their biological F (2, 57) = 71.80, p < .05, and cultural idiomatic knowledge F (2, 57) = 306.52, p < .05. Comparing the mean difference between older children and adults (mean difference = 5.65) with the mean difference between older children and younger children (mean difference = 4.80) regarding their biological idiomatic knowledge, the results of the Bonferroni post hoc test (Tables 4 & 5) revealed a minor change, however, respecting the cultural idiomatic knowledge the change was considerable (the mean difference between older children and adults = 12.45; the mean difference between older children and younger children = 5.05). This means that, primarily, children exhibit knowledge of transparent biological idioms rather than idiosyncratic cultural idioms.

Table 4: Bonferroni. Dependent variable: biological idiomatic knowledge.

(I) Age group	(J) Age group	Mean difference (I-J)	Std. Error	Sig.
6-year-olds	10-year-olds	-10.4500*	.8730	.000
	adults	-4.8000*	.8730	.000
10-year-olds	6-year-olds	10.4500*	.8730	.000
	adults	4.8000*	.8730	.000
Adults	6-year-olds	-5.6500*	.8730	.000
	10-year-olds	5.6500*	.8730	.000

* The mean difference is significant at the 0.05 level.

Table 5. Bonferroni. Dependent variable: cultural idiomatic knowledge.

(I) Age group	(J) Age group	Mean difference (I-J)	Std. Error	Sig.
6-year-olds	10-year-olds	-17.5000*	.7275	.000
	adults	-5.0500*	.7275	.000
10-year-olds	6-year-olds	17.5000*	.7275	.000
	adults	5.0500*	.7275	.000
Adults	6-year-olds	-12.4500*	.7275	.000
	10-year-olds	12.4500*	.7275	.000

* The mean difference is significant at the 0.05 level.

More evidence of the differences in degree of familiarity between the two types of idioms emerges in the range of accuracy on each category. While the maximum score of 6-year-olds for biological idioms was 12 out of 18 possible, which means that the children who did best knew more than half of the biological idioms, for cultural idioms, the maximum was 5 out of 22 possible. Moreover, the maximum scores of 10-year-olds in biological category and cultural category were 16 (out of 18 possible) and 13.5 (out of 22 possible), respectively. This means that even younger children

scoring the highest had less cultural idiomatic knowledge than the other category. Also, the performance of the older children with the highest scores regarding the biological idioms was very high and so close to the total score; however, their score respecting the cultural idioms was almost half of the total score. Hence, it seems that children primarily exhibit knowledge in the field of biological idioms, with greater gaps in the cultural idioms.

4. DISCUSSION

Body The aim of the current study was to examine whether age 6 is the initial stage of idiom acquisition process and if age 10 represents a turning point in this process. We also explored the knowledge of biological and cultural idioms in each age group to see whether they are acquired differently. The findings revealed that there is a significantly greater difference between younger children and adults, compared to the difference between 10-year-olds and adults with regard to their overall idiomatic knowledge. This means that around age 10 children's idiomatic comprehension consolidates and starts approximating that of adults and around age 6 is almost the beginning of the idiom acquisition process. In contrast to lexicon and grammar, which are developed at the early stages of language acquisition, the idiomatic expressions take longer to develop. We found that, a literalization strategy seems to be operating between ages 6-10, and an idiomatization strategy predominates after the age of 10 and into adulthood. The transition from using literal meaning to using idiomatic meaning coincides nearly with the ages during which the syntagmatic to paradigmatic shift appears (Entwisle, 1966). At about this stage of language development the child acquires the ability to appreciate double meaning in conversational language such as riddles, jokes, and so on (Prinz, 1983). Therefore, the reason for group differences regarding their idiomatic comprehension could be due to the differences in pragmatic skills, involving how to use language in communication. Basic pragmatic skills appear at quite an early age, but are improved and enhanced throughout preadolescence and adolescence (Cekaite, 2012). Further, it has been asserted that children with pragmatic deficits have difficulties with nonliteral language (Cain et al., 2005).

In our study, younger children provided more literal meanings of the idiomatic expressions. In other words, they used literal strategy, including the application of only lexical and morphosyntactic competence to interpret the literal meaning (Levorato, 1993). According to Levorato (1993), literal strategy is not only the preferred strategy and adopted first, but also, particularly in very young children, is the only available strategy. Our findings support the previous claim by Prinz (1983) that the literal meaning of idiomatic expressions is acquired initially by children before the age of 6 and the acquisition of idiomatic meaning occurs at a significantly later age. He asserts that although at age 6-7 the comprehension of some idioms appears in the children, for most of the children the comprehension of idioms grows rapidly after the age of 9 (Prinz, 1983).

It has been found that more familiar idioms, which are also more frequent, are easier to understand than less familiar ones for children, adolescents, and adults (Levorato & Cacciari, 1992; Nippold & Rudzinski, 1993; Nippold & Taylor, 2002; Nippold et al., 2001; Schweigert, 1986; Titone & Libben, 2014). According to the language experience hypothesis of idiom acquisition, children acquire the meanings of idioms when they encounter them in written and spoken contexts (Nippold & Taylor, 2002). In other words, as children gain more language experience; more idiomatic expressions turn out to be familiar and therefore, easier to interpret. Furthermore, it has been affirmed that the ability to interpret idioms is associated with reading comprehension level (Cain et al., 2005; Oakhill et al., 2016), which supports Levorato and Cacciaris's (1995, 1999) hypothesis that superior idiom understanding is associated with language processing ability. It is clear that 10-year-olds, as school children who are able to read and write, are exposed to idiomatic expressions more than preschoolers, thus, they outperformed 6-year-olds. It should be considered that mere exposure to idiomatic expressions is not adequate to explicate developmental improvements.

One of the reasons for the outperformance of both 10-year-olds and adults in comparison to younger children can be due to the ability of semantic analysis, which has been found to play a crucial role in idiom comprehension in line with Nippold's metasemantic hypothesis (Cain et al., 2009; Nippold, 1998; Nippold & Taylor, 1995). According to Cain et al. (2009), both adults and older children are able to analyze the component words in an idiomatic expression (specifically transparent one) to comprehend its meaning, though the performance of children is not in line with the level of adults. They found little evidence of successful semantic analysis among 7- to 8-year olds (Cain et al., 2009). Levorato and Cacciari (1999) also affirm that semantic analysis becomes increasingly significant at the later stages of figurative competence development.

Our finding is in line with the study of Abkarian et al. (1992) who assert that idioms acquisition does not occur earlier than around age 5-6. It also aligns with the study of Vulchanova et al. (2011) who state that age 10 is a turning point in the acquisition of idioms and children's idiomatic knowledge starts approximating adult patterns at this age. They also emphasize that age 6 is the initial stage of idioms acquisition (Vulchanova et al., 2011).

Respecting the two categories of idioms, including biological and cultural idioms, our results indicated that both older and younger children's scores of the biological idiomatic comprehension were significantly higher than that of the cultural one. In addition, it was found that primarily, children exhibited knowledge of transparent biological idioms rather than idiosyncratic cultural idioms. The fact that children met less challenge while interpreting biological idioms is straightforward, as these idioms build on analogies involving body parts, and they are originated in human (bodily) experiences and relationship with the environment. Many of these idioms are common among various cultures and languages (Vulchanova et al., 2011). Furthermore, according to Cain et al. (2009), semantic analysis skill, as an important factor in

idioms acquisition, can support processing of transparent idioms, including biological ones, more efficiently. On the other hand, cultural idioms are expressions which might vary substantially not only across various cultures and languages, but also across various registers within a society. In the current study, it was illuminated that biological idiomatic knowledge improved gradually between age 6 and adulthood, while cultural idiomatic knowledge improved very smoothly between ages 6 and 10, and rapidly between age 10 and adulthood. In summary, based on the above-mentioned statements, biological idioms were easier for both 6-year-olds and 10-year-olds and they emerged initially in the child idiomatic acquisition process rather than cultural ones. Our finding further confirms the results of the previous studies which clarify that biological idioms are processed more readily despite their idiomatic nature (Chahboun et al., 2016; Vulchanova et al., 2011), and acquired primarily, in comparison to cultural idioms (Vulchanova et al., 2011). In contrast to both groups of children, adults showed significantly higher score of cultural idiomatic knowledge. It seems that they took biological idiomatic expressions for granted and were more concentrated on the cultural ones. This finding is not in line with the study of Vulchanova et al. (2011) who state that adults demonstrate better knowledge of biological idioms than cultural ones. This controversy in the results could possibly be related to the different cultural contexts of the studies. Interpersonal communications among Iranian people have been traditionally established based on close ties deeply rooted in Iran's rich culture intertwined with its long and rich history. Cultural richness and wide historical experiences of Farsi speaking people are reflected in the vast topic range and huge number of Farsi figurative expressions, many of which are used in people's everyday conversations (Mirhosseini, 2017). The outperformance of adults with respect to cultural idioms might be related to this social and cultural context.

In comparison to other idioms categorizations, the typology employed in the present study provides a direct connection between language structure and cognitive foundation of idioms understanding, thus, it can clarify the varying degrees of difficulty in the process of idioms comprehension (Vulchanova et al., 2011). The finding that the acquisition of biological idioms initiates earlier compared to cultural ones, concur with embodiment theories whereby development is dependent on the relationship of an individual and his/her body with the environment (Vulchanova et al., 2011). Through this relationship, the development process might proceed and the source of underlying knowledge to acquire biologically-based linguistic expressions can be provided, therefore the early onset of acquiring such expressions is ensured. However, the acquisition of the cultural expressions is more dependent on the gradual exposure to linguistic input.

5. CONCLUSION

The current research examined comprehension of Farsi idioms with a developmental view and scrutinized at what age, these idiomatic expressions are acquired. The

different categories of idiomatic expressions, including biological and cultural idioms, were also explored to see whether they are acquired differently or not. The findings indicated that around age 6 is almost the beginning of idiom acquisition process and around age 10 children's idiomatic comprehension starts approximating that of adults. It was also found that primarily, children exhibit knowledge of transparent biological idioms rather than idiosyncratic cultural idioms.

Our study may have substantial implications for curriculum designers, teachers, and educators. Considering the findings of this study about the age of acquiring idiomatic language and different rate of learning various types of idioms can influence the quality of teaching idioms in Farsi classes in elementary schools. They might also guide material development specialists in order to produce and collect proper idiomatic linguistic input for children regarding their age and abilities. Teaching idiomatic expressions can be more effective if teachers and curriculum designers consider children's age of idioms acquisition and their different rate of learning respecting various categories of idiomatic expressions. Starting the process of teaching idiomatic expressions with biological idioms in lower grades of elementary school and concentrating on cultural idioms in upper grades may facilitate children's acquisition of idiomatic language.

The present study has some limitations which should be acknowledged. It is important to consider that explanation tasks are commonly more demanding than multiple-choice tasks due to the requisite metalinguistic abilities to perform them (Cacciari & Levorato, 1998). However, as suggested by Nippold and Taylor (2002), explanation tasks can afford us insight into children's thinking processes, and the differences that emerge through performing an explanation task might not be apparent through performing a forced-choice task (Abrahamsen & Burke-Williams, 2004). Due to these reasons, we decided to carry out explanation tasks in our study to obtain more comprehensive and detailed data about idioms acquisition process. However, accumulating further converging evidence through other sources such as multiple-choice tasks could have refined our understanding of idioms comprehension development. In addition to exploring the developmental stages of idiomatic language with comprehension data, which was done in the current study, further research should be conducted to examine the production process of idiomatic language by children. Further studies are also essential to scrutinize the underlying language skills that might influence developmental gains in idiom competence.

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