Hacettepe University Graduate School of Social Sciences

Department of Linguistics

EARLY ACQUISITION OF FIGURATIVE COMPETENCE: COMPREHENSION OF IDIOMATIC EXPRESIONS IN TURKISH BETWEEN SEVEN AND ELEVEN YEARS OF AGE

Abdurrahman KARA

A PhD Dissertation

Ankara, 2015

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KABUL VE ONAY

Abdurrahman Kara tarafından hazırlanan "Early Acquisition of Figurative Competence: Comprehension of Idiomatic Expressions in Turkish Between Seven and Eleven Years of Age" başlıklı bu çalışma, 09/01/2015 tarihinde yapılan savunma sınavı sonucunda başarılı bulunarak jürimiz tarafından doktora tezi olarak kabul edilmiştir.

Prof. Dr. Yeşim AKSAN (Başkan)

Prof. Dr. Nalan BÜYÜKKANTARCIOĞLU (Danışman)

Prof. Dr. Işıl ÖZYILDIRIM

Prof. Dr. Leyla UZUN

Yrd. Doç. Dr. Elif ARICA-AKKÖK

Yukarıdaki imzaların adı geçen öğretim üyelerine ait olduğunu onaylarım.

Prof. Dr. Yusuf ÇELİK

Enstitü Müdürü

BİLDİRİM

Hazırladığım tezin tamamen kendi çalışmam olduğunu ve her alıntıya kaynak gösterdiğimi taahhüt eder, tezimin kağıt ve elektronik kopyalarının Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanmasına izin verdiğimi onaylarım:

☐ Tezimin tamamı her yerden erişime açılabilir.

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☒ Tezimin 1 yıl süreyle erişime açılmasını istemiyorum. Bu sürenin sonunda uzatma için başvuruda bulunmadığım takdirde, tezimin tamamı her yerden erişime açılabilir.

09.01.2015

A. Kara

Abdurrahman KARA

ACKNOWLEDGEMENTS

Humbly, writing this dissertation made me realize that I found myself in the middle of the CAREER IS A JOURNEY metaphor and that there is a lot to do in the bumpy roads of the life-long learning. Foremost, I would like to express my sincere gratitude to my advisor Prof. Dr. Nalan Büyükkantarcıoğlu for the continuous support of my research, for her patience, expert guidance, immense knowledge and motherly advice. It was a great pleasure working with her.

I would also like to thank the members of my thesis committee: Prof. Dr. Işıl Özyıldırım, Prof. Dr. Yeşim Aksan, Prof. Dr. Leyla Uzun, and Ass. Prof. Dr. Elif Arıca-Akkök for their encouragement, constructive comments and patience. Also, I am greatly indebted to Prof. Dr. Cristina Cacciari who mentored me about the theoretical background and the design of the study.

My sincere thanks also goes to Prof. Dr. Güray König and Asc. Prof. Dr. Doğan Bulut who introduced me to the Linguistics Department.

The corridor talks were much fun with the fellow friends in the linguistics department and I feel grateful to Nalan Ertan for being a great sister in the process.

Last but not least, I would like to thank my dear family: my parents Fikret Kara and Azime Kara for being a great and respectable parents, my wife Bircan for her patience and support, and the other members of the family, Fatma, Hilal, Erkut and Faruk-Nilgün Aka for their patience and supporting me spiritually throughout my life.

ÖZET

KARA, Abdurrahman. Erken Dönem İmgesel Yeti Edinimi: Türkçe Deyimsel İfadelerin Yedi ve Onbir Yaş Arasında Anlaşılma Süreçleri, Doktora Tezi, Ankara, 2015.

İmgesel bir dil türü olan deyimsel ifadeler iletişimin büyük bir kısmında yer almaktadır. Kendine has yapısal, anlamsal ve söylem özellikleri ve kısıtlamalar göz önünde bulundurulduğunda, deyimsel ifadeler sözlüksel dilden belirgin bir şekilde ayrılır. Söylenen ve kastedilen arasındaki fark, kavramsal derinlik ve anlamsal karmaşıklık gibi deyimlerin belirgin özellikleri son zamanlarda araştırmacıların ilgisini çekmeyi başarmıştır. Geleneksel olarak deyimler çoklu kelimelerden oluşan, belirli bir derecede donukluk ya da esnek yapı özelliği gösteren, anlamsal altyapı olarak ayrıştırılamayan ve en önemlisi, sadece bir dil meselesi olarak görülmüştür. Fakat bilişsel dilbilim bakış açısına göre deyimler kavramsal sistemin ürünüdür ve birçok deyim kavramsal olarak güdülenmiştir ve bu süreç kavramsal sistemde bilgi alanları arasında bir etkileşim gerektirmektedir.

Gelişimsel bir çerçevede deyimsel ifadelerin edinimini inceleyen çalışmalar bu edinim sürecinin ömür boyu sürdüğünü, çocukluğun ilk dönemlerinde başladığını, daha sonra resmi eğitim ortamlarında geliştiğini ve ilginç bir şekilde tam imgesel yetinin bütünüyle edinilemediğini göstermiştir. Bu tür çalışmalar anlamsal çözümlenebilirlik, bilinirlik düzeyi, bağlamsal bilgi ve genel okuma-anlama becerisi gibi etkenlerin deyimleri edinim sürecinde doğrudan etkisinin olduğunu göstermiştir.

Türkçe bağlamında deyimleri anlama üzerine yapılan çalışmalar kısa kesitler halindedir ve genellikle deyim edinim sürecinin geç dönemlerini incelemiştir ve hemfikir olarak resmi eğitim ortamlarında öğrencilere deyimleri sunmanın ideal yaşı olarak 11 yaşı işaret etmiştir. Türkçe bağlamında erken yaşları kapsayan deyim edinim süreçleri üzerine yapılan çalışmaların eksikliği göz önünde bulundurularak, mevcut çalışma, Bütüncül Ayrıntılama Modeli (Levorato and Cacciari 1992, 1995) eşliğinde, deyimsel ifadelerin anlaşılması sürecinde 7, 9 ve 11 yaş gruplarındaki ilkokul öğrencilerinin bilişsel hazırbulunuşluk düzeylerini saptamayı ve gelişimsel yaş eğilimlerini betimlemeyi amaçlamıştır. Yaş,

bilinirlik düzeyi, bağlamsal bilgi, anlamsal çözümlenebilirlik, ve kavramsal yapılanma gibi etkenlerin deyimleri anlama sürecindeki etkisi incelenmiştir.

Sonuçlar yaş etkeninin etkinliğini göstermiştir: bir tarafta sözlüksel eğilimi temsil eden 7 yaş grubu ve diğer tarafta 9 ve 11 yaş grubu arasında net bir gelişimsel ve niteliksel fark gözlenmiştir ve 9 yaş grubu imgesel eğilim noktasında önemli bir geçiş noktası olarak ön plana çıkmıştır. Bilinirlik düzeyi, edinim sürecine asgari düzeyde katkıda bulunmuştur. Anlamsal çözümlenebilirlik etkisi özellikle yaşça büyük çocukların, deyimlerin bileşenlerinin anlamlarının bir araya gelerek bütüncül imgesel anlamı oluşturabildiğinin farkında olduğunu göstermiştir. Bağlamsal bilgi deyimleri anlama sürecinde en önemli etken olarak ön plana çıkmıştır. Bağlamsal bilgi bütün yaş gruplarında çocukların sözlüksel yorumlamayı belirli ölçülerde reddetmesine yardımcı olmuştur. Son olarak, bütün yaş gruplarında üretilen yanlış imgesel cevaplar şematik bilginin varlığını psikolojik olarak göstermiştir.

Erken yaş gruplarında gözlemlenen bu gelişimsel özellikler önemli sonuçlar doğurmuştur ve bu bulgular Türkçe ders materyallerinin hazırlanmasında ve Türkçe ders müfredatında deyimsel dil özelliklerinin ayarlanmasında kullanışlı bir rehber olabilir. Deyimlerin sıklık listeleri ve bu listelerde yer alan ayrıntılı bilinirlik düzeyleri, anlambilimsel derecelendirme ve kavramsal altyapı gelecek araştırmalar için bir ölçüt oluşturması beklenmektedir.

Anahtar kelimeler: deyim edinimi, ayrıştırılabilirlik, bilinirlik düzeyi, bağlamsal destek, kavramsal eğretileme ve düzdeğişmece, Bütüncül Ayrıntılama Modeli, imgesel yeti

ABSTRACT

Kara, Abdurrahman. Early Acquisition of Figurative Competence: Comprehension of Idiomatic Expressions in Turkish Between Seven and Eleven Years of Age, A PhD Dissertation, Ankara, 2015.

As one type of figurative language, idiomatic expressions are found in a majority of human communication. With their structural, semantic and discourse features and constraints, idiomatic expressions differ substantially from literal language. The characteristic say-mean distinction, the conceptual complexity and the semantic quality inherent in idioms have attracted the attention of many scholars in recent years. Traditionally, idioms were treated as multi-word expressions, exhibiting a certain degree of frozenness or flexibility, as nondecomposable in their semantic make-up, and most importantly, they were regarded as a matter of language only. However, the cognitive-linguistic view of idioms regarded them as products of our conceptual system and that many idioms are conceptually motivated, which entails an interplay between domains of knowledge in the human conceptual system.

Studies investigating the acquisition of idiomatic expressions in a developmental framework revealed that the acquisition process is indeed a life-long process which apparently starts in early childhood; subsequently improved by formal educational settings through school years, and interestingly it is a process in which the full, perfect figurative competence is never expected to be realized. Those studies indicated that semantic compositionality, familiarity, context and the general reading-comprehension skills have direct influence on the developmental acquisition of idiomatic expressions.

Research on idiom comprehension in the Turkish context seems to be fragmented and they mainly focused on the later stages of idiom acquisition, and unanimously arguing that age 11 is cognitively the ideal stage to present them idiomatic expressions in formal educational settings. Regarding the lack of comprehensive studies in the early acquisition of idiomatic expressions in the Turkish language, the current research aimed to investigate the

developmental age trends and the cognitive readiness levels of primary school children aged 7, 9 and 11 in the comprehension process of idiomatic expressions in line with the Global Elaboration Model (Levorato and Cacciari 1992, 1995). The roles of age, familiarity, contextual information, compositionality and conceptual structuring on the comprehension of idiomatic expressions were analyzed.

The results confirmed the main effect of age: There was a clear developmental and qualitative gap between the 7-year-old-group on the one side of the continuum representing the literal tendency, and the 9 and 11-year-old groups on the other side, in which the 9-year-old group marked a great transitional quality towards figurative tendency. The familiarity effect was observed to partially contribute to the acquisition process. The compositionality effect indicated that the older children have an awareness of the fact that the meanings of the individual parts of idiomatic expressions come together to contribute to the overall figurative meaning. Contextual backup has qualified to be the most important variable in the comprehension of idiomatic expressions. Among all age groups, contextual information helped children reject the literal interpretation of an idiom with varying degrees. Finally, the psychological reality of the schematic information was detected in the wrong figurative answers given by all age groups.

The developmental trends of these early age groups have significant implications, which can be a useful guide both for the adjustments on idiomatic language in the Turkish curriculum and the preparation of educational materials in Turkish. The idiomatic frequency lists, with fine details of consecutive familiarity levels, semantic grading and conceptual base are expected to establish a norm for future research as well.

Keywords: acquisition of idioms, compositionality, familiarity, contextual backup, conceptual metaphors and metonymy, Global Elaboration Model, figurative competence

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CHAPTER 1

INTRODUCTION

1.1. CLEARING THE GROUNDS

Human language comprises various expressions with secondary meanings which differ from literal interpretations and which come to serve specific discourse goals. Figurative language, with its most frequent types such as proverbs, idioms, metaphors etc. has come to be one of the most intriguing aspects of human language and thus, with the complexity of such thought-provoking issues as conceptual structuring, it has attracted the attention of many scholars in cognitive linguistics, psycholinguistics, semantics and applied linguistics. One specific type, the idiomatic expressions are found in a majority of human languages and they stand out as a remarkable area of investigation since they are considered to shed light on the human cognition and conceptual systems.

Mastery of one's mother tongue requires the efficient use of nonliteral language forms such as idioms, proverbs, irony and the like. Similarly, the course of language development implies a gradual increase both in the number and density of nonliteral language forms and a conscious awareness of the literal-nonliteral dichotomy. Idioms, with their ubiquitous nature, are popular linguistic and cultural elements in communication as they are considered to be concise instances of speech with a depth of meaning. They are fascinating simply because they push the limits of human imagination; complex phenomena are verbalized through a limited number of words in idiomatic expressions, and they explain abstract phenomena via concrete items that would otherwise be difficult to comprehend, and they make our ordinary conversation more vivid and colorful. All in all, with their structural, semantic and discourse features and constraints, idiomatic expressions are frequently used in communication and reflect the conceptual structures in the human mind.

In the traditional sense, idioms are multi-word expressions either with highly frozen or relatively flexible componential structure and whose meanings may or may not be the sum

of the meanings of the individual parts. In addition, idiomatic expressions exhibit different frequencies of occurrence throughout natural languages (Popiel and McRae, 1988).

The traditional treatment of idioms regarded little or no relationship between the literal and figurative senses of idioms, in other words, the literal meanings of the constituent parts had little or no effect on the idiomatic meaning (Ortony et al, 1985); or idiomatic phrases were regarded as dead metaphors whose meanings cannot be determined through an analysis of their individual meanings (Fraser, 1970; Katz, 1973). This, in turn, led to the hypothesis that children learn idioms as giant lexical units rather than by analyzing constituent parts (Hoffman and Honeck, 1980; Ackerman 1982). However, Gibbs (1987), Gibbs and Nayak (1989), Gibbs et al (1989) and Nunberg (1978) posited, on the contrary, that compositionality ascribed some degree of meaning relationship between the literal and figurative senses of idioms. In this regard, nondecompositional idioms exhibit no relationship between the literal and figurative senses of an idiom, on the other hand, in decompositional idioms the figurative meaning is a metaphorical extension of the literal meaning.

As for idiomaticity, there are two points of view regarding the phenomenon of how meanings and conceptual relations are constructed. One view regarded the phenomenon of idiomaticity as basically semantic in the sense that the individual parts of idioms have specific meanings that semantically interact with each other; and the other one adopted a cognitive point of view advocating that idiomatic phrases may also contain conceptual metaphors. In this context, the cognitive-linguistic view asserts that many idioms are conceptually motivated, that is, the conceptual metaphors underlying many idioms provide links and mappings between two seemingly independent domains of knowledge to help language users make associations in the conceptual repertoire and it is through these connections that they are able grasp the overall meaning of idiomatic expressions. All in all, the meaning of many idioms, within the bounds of the cognitive view, seems to be dependent on the domains of knowledge in the human conceptual system, and conceptual metaphors help us identify the idiomatic meaning through conceptual associations.

Research investigating the acquisition of idioms in a developmental framework showed that the acquisition process is indeed a life-long process which apparently starts in early

childhood, subsequently improved by formal educational settings through school years, and interestingly it is a process in which the full, perfect figurative competence is never expected to be realized (Nippold and Taylor, 2005). Also, the developmental schema revealed that factors such as age, contextual information, semantic compositionality, familiarity, the general reading-comprehension skills and the conceptual organization helps to explain this protracted acquisition process of idioms.

The purpose of this research is to examine some of the basic aspects of how young children come to understand idiomatic expressions during early language acquisition. In this context, the present study aims to describe the developmental age trends of Turkish primary school children aged 7, 9 and 11 in idiom comprehension and interpretation with specific reference to context, age and the semantic transparency of the idiomatic expressions, and in an attempt to demonstrate the conceptual and lexical knowledge involved in the comprehension and interpretation processes of Turkish idiomatic phrases.

1.2. THE NATURE OF FIGURATIVE LANGUAGE AND FIGURATIVE COMPETENCE

Figurative language characteristically differs from literal language in three aspects. According to Levorato (1993), *a*. there is always a gap between the individual meanings of an idiom and the *communicative intentions* of a speaker, which depends on a distinction between what is said and what is meant; *b*. figurative language heavily depends on *conventionality*, which means that the figurative meaning of an idiom show differences from the original literal meaning and assume additional meanings through conventions among speakers of that language. Research by Gibbs and Nayak (1989) revealed that conventionality involves an automatization of the figurative meaning in that the recognition of the idiomatic meaning is prioritized over the literal meaning and thus it takes less time to realize the figurative meaning first; and *c*. figurative language is heavily *context-bound*, and the degree of the conventionality of the expression directly influences the meaning value of the expression along with contextual cues.

These three criteria are considered to have a considerable role in children's acquisition of figurative language. For instance, the failure by children to grasp the figurative meaning may be due to the fact that they cannot realize the distinction between what is said and what is meant; the lack of awareness that the conventional meaning may differ from the literal one, and they may not make use of contextual cues which is essential for the identification of the core meaning.

The term figurative competence, in Levorato and Cacciari (1992) and Levorato (1993)'s terms, can be defined as the acquisition of the ability to deal with figurative language, is a gradual, developmental process that is acquired piece-by-piece throughout one's linguistic development. In this regard, language learners at the initial stages of figurative competence are supposed to develop an awareness of the above skills, paying specific attention to communicative intentions, conventionality and contextual cues. In addition, a hypothetical full-figurative competence necessitates the following linguistic abilities on the side of a language user (Levorato, 1993:104).

a. the gradual broadening of word meaning, its position in a given semantic domain, and its paradigmatic and syntagmatic relations,
b. the ability to understand the dominant, peripheral and polisemous meanings of a word, and also the ability to perceive the relationship between a given meaning and other related meanings,
c. the ability to suspend a purely referential strategy,
d. the ability to understand the figurative uses of a word and the relationship between the literal and the figurative meaning,
e. the ability to process large amounts of language, such as a text or dialogue sequence, in order to identify the meaning of ambiguous or unknown expressions,
f. the ability to use figurative language productively in the creation of new figures of speech by means of the lexical and syntactic transformation of pre-existing figures of speech.

Figurative competence, in this sense, involves an interrelated series of abilities to understand the secondary meanings of a word; to go beyond the literal-referential strategy; to use contextual information and to be able to use figurative language.

1.3. COMMON FORMS OF FIGURATIVE LANGUAGE

Research has also focused on the types of nonliteral language forms; the acquisition order of those figurative language samples, and specific discourse goals attained by them. For instance, Kreuz and Roberts (1993: 154-163) mentioned ten different types of figurative language which are frequently employed in literary texts and daily speech. The most common types are as follows:

Metaphors: They are frequent literary tools, which most often have some other underlying conceptual metaphors, that enable language users to express their thought in different ways, and technically they employ *the familiar* to express *the unfamiliar* as in 'The sermon was a sleeping pill'.

Metonymies: Metonymy is a figure of speech in which a thing or concept is not called by its own name, but by the name of another thing or concept which are closely associated, as in 'Hollywood' to refer to the U.S. film industry

Hyperboles: They are deliberate exaggerations which fulfill discourse goals of speakers in certain situations, as in 'The cafeteria line was a mile long'

Idioms: They are conventionalized expressions which are semantically decomposable and whose meaning is tied to an underlying metaphor which represents that concept. For instance, the conceptual metaphor ANGER IS HEAT IN A PRESSURIZED CONTAINER underlies the idiom *hit the roof.*

Rhetorical questions: They are indirect assertions framed as questions to fulfill a discourse goal and whose answers are obvious as in the example '*Who do you think you are?*'

Simile: The explicit comparison between two concepts is called a simile as in '*My job is like a jail*'.

Irony: Irony is the opposite of what one says to fulfill a discourse goal as in '*What gorgeous weather!*' (said in a stormy weather).

Understatement: It is deliberate underemphasis to make a situation seem less important than it is, as in '*Waterloo was not France's finest hour*'.

Indirect requests: They are requests for action on the part of the hearer which are stated obliquely, as in '*Do you know what time it is?* to implore one to leave the house.

Bernicot et al (2007) investigated the order of the acquisition of nonliteral language forms by children aged 6, 8 and 10 in a story completion task. The study employed four nonliteral forms: *a*. idioms (eg. "change your tune"); *b*. indirect requests (such as "cold air is coming in the window" to mean "close the window"); *c*. conversational implicatures either in the form of semantic-inference implicatures (in which character A explicitly asked a question "Should I mow the lawn? that referred to a particular lexical domain and character B replied in another semantic domain "The nephews are taking a nap"), or sarcastic-inference implicatures (in which character A asked a question "Should I open the parasol?" and character B replied "No, I really like getting sunburnt"). The results indicated that nonliteral language comprehension and metapragmatic knowledge are acquired in different orders. For instance, the comprehension order was in turn *semantic-inference implicatures, indirect requests, idioms,* and *finally sarcastic-inference implicatures*. However, the metapragmatic knowledge, which is the ability to reflect upon language, emerged at a later age of 8, and interestingly, children at the age of 6 demonstrated either no or very little awareness of metapragmatic knowledge. In other words, the children understood the nonliteral language forms well before they expressed metapragmatic knowledge. In short, as Laval (2003) posited, metapragmatic knowledge begins to emerge at the age of 8 and develops until age 10 or older.

Idiomatic expressions have semantic, poetical, rhetorical and discursive functions. Among those, Roberts and Kreuz (1994) identified the specific discourse goals attained by language users in using idiomatic expressions. The research aimed at figuring out when and why a figurative expression is used, with the belief that such an exploration is crucial in

understanding the meaning underlying each expression. Accordingly, the discourse goals underlying idiomatic expressions were found to be conventional; to be eloquent; to be humorous; to emphasize; to add interest; to clarify; to get attention and to show positive or negative emotion.

1.4. SOME BASIC FEATURES OF IDIOMS

Idiomatic expressions have some inherent qualities that distinguish them from other instances of language use such as fixed phrases, sayings, collocations and the like. However, not all features may apply to all idiomatic constructions. To illustrate, not all idioms may have literal meanings and not all idioms may have a metaphoric base. Below is the characterization of such inherent qualities of idiomatic expression:

Proverbiality

One of the main characteristics of idiomatic phrases is that they are generally used to describe and explain a recurrent situation in virtue of its resemblance to a phenomenon.

Ambiguity

Most idioms have double meanings, which entails ambiguity (Lodge and Leach, 1975). In this regard, an idiomatic phrase has supposedly a basic literal meaning on the one hand and a secondary idiomatic meaning on the other. In other words, idiomatic expressions entail two distinct semantic representations, a literal one and a figurative one. As an example, the idiomatic expression *çocuk oyuncağı* has both the literal interpretation 'a child's toy' and the figurative interpretation 'very easy to do'. Upon hearing such an expression in communication, the task of the language user is to find out the intended meaning of the speaker.

Conventionality

Idioms can also be regarded as the conventionalized part of the lexicon. Nunberg, Sag and Wasow (1994:492) define conventionality as 'the relation among a linguistic regularity, a situation of use and a population that has implicitly agreed to conform to that regularity'. In

this regard, if this implicit agreement is ignored, one cannot predict the use and meaning of an idiom taking into consideration the individual meanings of constituents in isolation.

Flexibility vs Frozenness

Frozenness and flexibility of an idiom can be explained as the degree of lexical and syntactic operations an idiomatic expression might undergo. In simpler terms, flexible idioms may undergo some lexical and syntactic transformations and still preserve their idiomatic value, however, frozen idioms do not allow transformational operations. In the Gibbs and Gonzales article, such idioms as 'cry over spilled milk, take under one's wings, go against the grain' are shown to be highly frozen idioms, and on the contrary, idioms like 'lay down the law, turn over a new leaf, make up one's mind' are shown to be very flexible idioms (1985:247). Additionally, the frozen idiom 'kick the bucket' certainly refers to one's death, however, the passive transformation of the same phrase 'the bucket was kicked by sb.' is not said to be idiomatic at all. On the other side of the continuum, the flexible idiom 'throw in the towel' which idiomatically means to give up, can be passivized into the phrase 'The towel was thrown in by him' and this phrase is still considered to be idiomatic and still having associations with the concept of giving up. With regard to the lexical and syntactic transformations, idioms may undergo such limited internal modifications as quantification, topicalization, gerund nominalization, adverb insertion, particle movement, passivization and so on. To illustrate, quantification can be seen in the example 'touch *a couple of* nerves', and topicalization can be seen in '*His closets*, you might find skeletons in' (Nunberg, Sag and Wasow 1994: 501).

Above all, research has shown that the degree of frozenness has some pedagogical and semantic implications on the comprehension, classification and memory for idioms.

First, in the Gibbs and Gonzales study (1985), subjects processed the frozen idioms faster than the flexible ones, which is an indication of the 'more lexicalized' position of the frozen idioms in the mental lexicon; and plus, it was easier for the subjects to recall the flexible idioms simply because they were involved in a dual processing of the literal and figurative meanings of the idioms which made these expressions more memorable.

Second, there is close relationship between the degree of frozenness and the internal semantics of an idiom. Gibbs et al (1989) demonstrated that decomposable idioms were less disrupted by lexical changes than nondecomposable idioms. This is so because the constituents of decomposable idioms contribute separately to the figurative meaning, thus a substitution between one of the constituents and a synonym is supposed to result in minimum interference with the figurative meaning.

Figuration

As part of the figurative language, idiomatic phrases –though not necessarily- are considered to employ some abstract metaphoric and metonymic relations underlying the conceptual structuring.

Affect

Idiomatic expressions cannot be regarded as instances of neutral language use, on the contrary, they always convey a particular affective stance.

1.5. ACQUISITION AND COMPREHENSION PROCESSES OF IDIOMS

Studies investigating the comprehension and the developmental acquisition of idiomatic expressions have identified four main criteria which influence the ease with which an idiom is understood. The familiarity level of the idiomatic expression (Nippold and Taylor, 2001; Levorato and Cacciari, 1992; Laval 2003), the degree of semantic analyzability involved in an idiomatic expression (Gibbs, 1987, 1991; Cain, Towse and Knight, 2009; Levorato and Cacciari, 1999), the context in which an idiom takes place (Cain, Oakhill and Lemmon, 2005; Levorato and Cacciari, 1995; Nippold, Moran and Schwarz, 2001) and the reading-comprehension level of children involving inference skills to interpret idioms (Oakhill et al, 2012; Nesi et al, 2006; Levorato et al, 2004, 2007; Cain and Oakhill, 1999; Cain et al, 2001).

There are both uniform and conflicting results as to the comprehension of idiomatic phrases in a developmental framework. Some studies indicated that the acquisition of idiomatic meaning did not accelerate until after age nine (Lodge and Leach, 1975), and on the other hand, Abkarian et al (1992) maintained that children begin to realize the nonliteral meaning

in idiomatic phrases at the age of 6. In addition, in a developmental study investigating the age trends in the acquisition of idiomatic expressions at the ages of 9-10-11, Pollio and Pollio (1974) concluded that children were able to produce a substantial number of novel and frozen figures 'as early as at the age of 9'. Furthermore, Vosniadou and Ortony (1983) even claimed that children at the age of 4 already have some rudimentary metaphorical competence and thus can distinguish among literal, metaphorical and anomalous comparisons in tasks including hierarchical ordering and class-inclusion relations. Thus, children were observed to have raised an awareness that the terms in the metaphorical pairings belonged to different conventional categories even at the age of 4. All in all, the dichotomy in the results concerning the figurative developmental trends in children seems to originate mainly from methodological approaches and specific tasks employed in the experimental designs (Levorato and Cacciari, 1995). The overall findings in the relevant literature, despite some of the conflicting results on the processing and comprehension of idiomatic phrases, have consistently argued that comprehension precedes production; and similarly, children are able to use figurative language well in advance of their ability to monitor their own figurative language use. To put it in other words, metalinguistic abilities –the ability to reflect upon language use- concerning figurative language is the final stage that can be realized in the formal operational stage in Piagetian terms (1972). According to the cognitive development theory as asserted by Piaget, then, children can produce figurative language in the concrete operational stage, however, the metalinguistic abilities such as explicating the use of such language in abstract terms emerge in the formal operational stage.

Part of the conflicting results concerning the comprehension of idiomatic expressions may be due to the fact that such variables as context, familiarity and the semantic transparency may not have been controlled in the experimental design. For instance, since idiomatic expressions are used in specific contexts most of the time, presenting them in isolation in the experimental design would produce inconsistent results. Even, the type of context, such as literal biasing or figurative biasing context, may ascribe certain positive or negative influence on the comprehension process of idioms.

Two major hypotheses in literature, namely the Language Experience Hypothesis and the Global Elaboration Hypothesis, have been used to account for idiom acquisition. The Language Experience Hypothesis asserts that children acquire idioms with the level of exposure to such linguistic items. The hypothesis acknowledges only the ease with which children comprehend familiar idioms, since the degree of familiarity increases the possibility of understanding of an idiom (Ezell and Goldstein, 1991; Nippold and Martin 1989; Prinz 1983). However, the hypothesis fails to explain the difficulty for children in understanding unfamiliar idioms. A more comprehensive approach, as against the Language Experience Hypothesis, emerged in an attempt to explain the comprehension of idiomatic expressions under the name the Global Elaboration Hypothesis (Levorato and Cacciari, 1992; Levorato 1993). The gist of the hypothesis is that the skills required for the comprehension of literal language are at work also for the comprehension of idiomatic expressions. The Global Elaboration Hypothesis is also based on the idea that the comprehension and production of figurative language do not require special procedures or source of knowledge. In other words, the general linguistic and cognitive development of children, including the strategies, processes and world knowledge used for the comprehension of language in general, can also explain idiom acquisition. The Global Elaboration Hypothesis also suggests that the comprehension of idiomatic meanings is based on the ability to go beyond a local, piece-by-piece elaboration of a text to search for a global and coherent meaning (Levorato and Cacciari, 1995:263). Here the facilitatory effect of context steps in to lead children integrate figurative language into the global representation of a text.

Basically, the Global Elaboration Model is based on the assumption that the comprehension and production of idiomatic expressions are inseparable from the development of figurative language, that is, the development of children's ability to produce and understand idioms run in parallel with the development of the same linguistic abilities on which figurative language as well as language in general are based. Accordingly, Levorato and Cacciari (1992), Levorato (1993) and Levorato and Cacciari (1995) posited that there is a link between the acquisition of figurative language and general linguistic development. Thus, the acquisition of figurative language is closely linked to the development of cognitive processes in general

and that the mechanisms underlying the comprehension and production of both literal and figurative languages are not necessarily different. Since, cognitive functioning is based on the principle of economy and the idea that different processing mechanisms could be activated for different stimuli goes against this principle. In short, Levorato and Cacciari (1992) assume a common mechanism in which the ability to process figurative language occurs in parallel with and as a function of a more general ability to process language.

In this unitary cognitive model, Levorato (1993) emphasizes the fact that the acquisition of idiomatic expressions by children is realized through the development of some general linguistic skills such as coding, making inferences, activating world knowledge, imagination and creativity, realizing the communicative intention of the speaker, activating metalinguistic knowledge and knowledge relating to the different kinds of discourse or text. Briefly, the Global Elaboration Model involves an integrated and developmental series of linguistic, mental and cognitive abilities in which children intellectually progress to leave aside nominal realism and suspend literal processing and to construct semantic links between words, domains and figurative mappings.

1.6. MODELS, HYPOTHESES AND RESEARCH ON IDIOM COMPREHENSION

The current section gives a detailed account of the hypotheses and models that serve to explain the common access and retrieval processes which underlie the comprehension of idiomatic expressions.

1.6.1. The Idiom List Hypothesis

The Idiom List Hypothesis by Bobrow and Bell (1973) stems from the belief that the idiomatic meaning is understood by combining several words into a complex idiom word and finding the meaning of the phrase by a search through a mental idiom word dictionary. The hypothesis thus acknowledges that there are two separate idiomatic and literal modes of processing sentences. Accordingly, the idiomatic meaning results from processing the idiom as a word. In this sense, idioms are stored in and accessed from a private list apart from the normal lexicon and a special idiomatic processing is required to access items in the list. Thus,

upon first encounter of the idiom, the language user is involved in a literal interpretation of the idiom first. If the literal meaning does not make any sense within the corresponding context, then they access a mental idiom list, which functions as a mental idiom dictionary, to select the figurative meaning among the choices. In other words, literal analysis is a pre-condition before the idiomatic processing takes place. To illustrate, the hypothesis contends that –in a lexical decision task- upon hearing an idiomatic phrase like '*ayağını kaydırmak* (literally to trip sb. up)', subjects would react faster to DÜŞMEK/TO FALL which is semantically related to 'kaydırmak', instead of RISK OF LOSING ONE'S JOB, which is the semantic equivalent of the idiom.

1.6.2. Lexical Representation Hypothesis

In a challenge against the Idiom List Hypothesis, Swinney and Cutler (1979) proposed the Lexical Representation Hypothesis for the processing of idioms. They rejected the former hypothesis simply because it made use of post-perceptual measures for support of inferences about ongoing idiom comprehension processes. Their aim was to reveal how the comprehension mechanism computed nonliteral meanings and to measure reaction times for the access and processing of literal and idiomatic phrases.

Contrary to the Idiom List Hypothesis, the Lexical Representation Hypothesis is based on the belief that there is neither special idiom list in the mental lexicon nor any special processing for the idiomatic expressions. Idioms are simply stored and accessed from the usual lexicon as any other item, and more importantly, this hypothesis assumes a spontaneous computation of the literal and idiomatic meanings at the same time (Estill and Kemper, 1982). The hypothesis indicates that as soon as individual words are accessed from the lexicon and structural analysis is undertaken on these words, then exactly at the same time the lexical access of the entire string takes place. In its simple sense, the computation of a literal meaning and an idiomatic meaning should take place simultaneously; they should be as fast as each other; both meanings should compete with each other and the most appropriate wins at the end of the processing, and idioms are stored and accessed as normal lexical items. To illustrate, the hypothesis contends that –in a lexical decision task- upon hearing an idiomatic phrase like '*ayağını kaydırmak* (literally to trip sb. up)', subjects would react as fast as both

to DÜŞMEK/TO FALL which is semantically related to 'kaydırmak', and RISK OF LOSING ONE'S JOB, which is the semantic equivalent of the idiom.

1.6.3. The Direct Access Theory

The Direct Access Theory of Gibbs (1980) emerged as complementary to the previous Lexical Representation Hypothesis and as against the serial processing approach of the Idiom List Hypothesis. Likewise, the hypothesis introduced idioms as long words in the lexicon. Conversely, the hypothesis ignored the literal-figurative competition during the access-process act, and instead asserted that the meanings of idiomatic phrases can be accessed directly, without the interference of literal processing. Therefore, the gist of the Direct Access Theory implies that the literal meaning of an idiomatic phrase is not the core meaning that comes to mind in the first place. Support for the gist of the theory is presented in the Gibbs 1980 study: subjects spent more time processing idioms with literal meanings than those with idiomatic interpretations, because they were involved in a double processing of the idiom when they were shown the idiom in a literal context, which counts as the unconventional use of an idiom. The double processing of the idiom resulted in longer times of comprehension, since the idiomatic meaning was first analyzed and then rejected in the literal context. According to the hypothesis, the more conventional the utterance, the easier it will be for a person to find an appropriate interpretation in the right context. Unconventional utterances, on the contrary, such as the literal use of idiomatic expressions required additional processing to find and verify some schemata in memory to account for the sentence. In conclusion, conventionality determined the ease with which idiomatic expressions were comprehended. To illustrate, the hypothesis contends that –in a lexical decision task- upon hearing an idiomatic phrase like '*ayağını kaydırmak* (literally to trip sb. up)', subjects would react faster to RISK OF LOSING ONE'S JOB, which is the semantic equivalent of the idiom, instead of .DÜŞMEK/TO FALL which is semantically related to 'kaydırmak'.

1.6.4. The Configuration Hypothesis

The configuration hypothesis rejects the previous 'idioms-as-long-words' view and instead points out to the role of constituent meanings for activating the idiomatic meaning. In this

respect, idiomatic phrases contain complex relationships of individual words, and the literal and figurative meanings of are spontaneously activated in the lexicon. In addition, the hypothesis acknowledges the existence of some '*key'* points in each idiom which function as a mental signal or a trigger point that enable the hearer recognize the idiom as a configuration as a whole (Cacciari and Tabossi 1988:678). It is only after this configurational realization of the idiom as a lexical unit consisting of individual parts that the hearer looks for the idiomatic meaning. For instance, the lexical *key* to activate the idiomatic meaning in the phrase 'When in ***Rome***, do as the Romans do' is the bolded *Rome*. Here the lexical unit Rome is supposed to indicate the trigger point which enables the hearer to configure the phrase as an idiom and progress from the literal reading to the idiomatic interpretation. Therefore, the gist of the hypothesis is that upon hearing the key, one can activate the idiomatic meaning. Finally, the hypothesis asserts that individual lexical items are represented in the lexicon only in one form and there is no need the mark them as literal or figurative.

1.6.5. The Decompositionality Hypothesis

The Decompositionality Hypothesis by Gibbs and Nayak (1989) and Gibbs et al (1989) postulates that idioms possess some degree of semantic analyzability, which means that the individual meanings of the constituents of an idiom contribute to the general figurative meaning. In this sense, idioms can be classified according to their levels of semantic analyzability, that is, the degree to which their constituent meanings contribute to the figurative meaning. Thus, in parallel with the compositional view of idioms (Nunberg, 1978), idioms can be either decomposable/semantically analyzable or nondecomposable. For instance, the idiom 'pop the question' is decomposable in the sense that there is a cognitive-semantic correspondence between *pop-ask* and *the question/marriage*. On the other hand, nondecomposable idioms are those whose constituents do not contribute to the overall idiomatic meaning. For example, one might have difficulty in interpreting the expression 'kick the bucket' simply because the constituent meanings do not directly contribute to the idiomatic meaning (Gibbs et al, 1989:577). Additionally, the compositionality view operates on the belief that the semantic analyzability of an idiom is a matter of degree and in this regard some idioms may be more or less decomposable, or some of them may be considered

moderately decomposable. The hypothesis also holds that the figurative meanings of the individual items are stored in the mental lexicon and they are activated in the idiomatic context. One further premise of the hypothesis is that compositional idioms are supposed to be more flexible and allow lexical and syntactic modifications better than nondecomposable idioms. The Decompositionality Hypothesis has some implications regarding the comprehension of idioms. Gibbs et al (1989) found shorter processing times for decomposable idioms, and conversely, longer processing times for nondecomposable idioms simply because subjects found it almost impracticable to process these non-analyzable idioms compositionally in the comprehension process.

1.6.6. The Global Elaboration Model

The developmental model for the acquisition of figurative competence proposed by Levorato and Cacciari (1992; 1995) and Levorato (1993) puts forward the claim that the ability for the acquisition of figurative competence is tied to the development of a series of linguistic skills. The gist of the hypothesis is:

> "the reliance on a global elaboration of the information that incorporates and guides the processing of each local piece of information, whether it is a single word, an idiom or a sentence. Context…makes it possible to go beyond the local piece of information and reach the global sense of the text." (Levorato and Cacciari 1995: 262)

According to the Global Elaboration Model, the acquisition of idioms is an ongoing process that starts in early childhood around 4 or 5 years of age and never gets perfection even in adults. At the initial stages of the Global Elaboration Model, children are observed to interpret idioms literally simply because they are tended to process the text word-by-word in a shallow way rather than to search for a global and coherent meaning of the text (Ackerman, 1982; Nippold and Duthie, 2003; Abkarian et al, 1992; Levorato and Cacciari, 1992, 1995).

The model is a gradual, developmental phase in which children are involved in six successive/sequential phases; starting with the ground Level 0, which is a naïve one-by-one matching of the object and its name, up to Level 5, which represents near-perfection of meta-

linguistic competence. In addition, the gradual development of figurative competence starts with limited concrete, referential and literal linguistic competence, and ends with metalinguistic competence. The levels of the model can be regarded as the connecting parts of a chain and they progress in a developmental sequence both in cognitive and intellectual aspects, which means that a child cannot fulfill the requirements of Level 4 without mastering the requirements of Level 2.

Each step of the model is characterized by Levorato as follows (p.119-122):

Level 0

In this phase children are not aware that language is conventional, and they believe that an object and its name are one and the same thing. Children in this group would believe that if we change the name for an object, it would also change its material properties. This nominal-realist phase asserts that there is a direct relationship between the object and its name in this phase, in other words, the object is totally identified with its name.

Level 1

Children in this phase overcome the previous nominal-realism, and the name for an object is not considered as part of it anymore. Level 1 dictates the child the prominence of meaning and now the name refers to a meaning. The conceptual categorization processes in the cognitive system of children now tell them that one linguistic item can be given to different referents, and by the same token, several linguistic items can point to the same referent.

Children of this phase are still involved in a literal strategy in interpreting language items because a. there is a shallow processing of linguistic information; b. there is still a heavy tendency to believe that the meaning(s) of individual parts of a lexical item come together to form the final meaning, and finally c. there is a tendency to consider only the concrete elements of an expression.

Level 2

There is a progress towards *literal suspension* in this phase, in which children can act beyond the literal and referential use of language. Children in this group can benefit from context

and inferential processing to arrive at meaning and coherence. In other words, these children can perceive the incongruency of a literal processing with the contextual cues around an idiom. Children simply go beyond the literal interpretation with the help of contextual information. At this stage, children can benefit from the flexible nature of language and can use linguistic labels to form analogies and metaphors. They are partly aware of the discrepancy between an expression and its meaning to arrive at the conclusion that this incongruency is not a communicative error or a semantic anomaly. Thus, children employ inferential processes which would resolve this anomaly and establish coherence. They also make use of semantic information along with contextual information to assess the appropriate interpretation of the idiomatic expression. Children aged 7 to 8 are assumed to belong to this group.

Level 3

This phase leads children to discover the arbitrary nature of language and realize that language may not be literal all the time, with an emphasis on meaning rather than on individual linguistic items. Level 3 tells children not to rely too much on the surface form of a linguistic expression for meaning and they know that they can use language for various communicative purposes, and also that literal language is only a small part of that vast communicative repertoire. The ability to comprehend and use figurative language types such as idioms, metaphors and similes is one of the consequences of this developmental phase. Individual linguistic items in context serve as a clue to the discovery of meaning. They are also aware of the fact that speakers may employ any means to express communicative intentions. Cognitively, children at the age of 9 to 10 are losing their concreteness in thinking. Furthermore, in this productive phase, children realize the complex relationship between the referent and meaning, that is, one may apply to many and in turn many may apply to one. Most importantly, children at this stage realize the communicative force and effectiveness of specific expressions such as the figurative ones over the others.

Level 4

Children in this phase can link expressions to information and concepts already acquired and so may acquire conventionalized expressions such as idioms, formulaic expressions and so on. Level 4 has a limitation in itself, that is, expressions are understood and produced as indivisible units and this holistic approach does not allow the child to analyze the parts of an expression.

Level 5

This stage renders the individual as a competent language speaker, with near-perfection in figurative language abilities. Figurative competence, or meta-linguistic awareness, is realized in this stage, which is characterized as the ability to reflect on the meaning of a figurative expression and on the relationship between the referent and the meaning. Language can be analyzed in order to understand the relationship between communicative intentions and surface expressions. Children can now reconstruct meaning by making semantic inferences about the components of the idiom and by referring to their world knowledge. The strategies for interpreting figurative meaning and the inferential processes can be employed with or without the aid of context. Having reached competency, children can now understand idiomatic expressions even when they are lexically or syntactically modified.

1.6.7. The Language Experience Hypothesis

The language experience hypothesis is based on the idea that a child's ability to comprehend figurative language is primarily dependent on the exposure level to that language, and that the frequency of exposure of children to figurative language is the main factor explaining the acquisition process (Ortony et al, 1985; Prinz 1983; Ezell and Goldstein, 1991; Nippold and Rudzinski, 1993). In this sense, adequate exposure is considered to improve performance on figurative language. One measure with which exposure is related is the familiarity levels of figurative language forms such as idioms, metaphors, hyperbole and irony. Accordingly, the gist of the hypothesis indicates that frequency of occurrence, or familiarity with specific nonliteral language forms, has a positive correlation with comprehension levels for these language items. The relevant literature indicated that, for instance, children outperformed

with familiar nonliteral language items compared with unfamiliar ones. Ortony et al (1985) investigated the effect of exposure to cultural street game of 'sounding' and formal instructions on the comprehension of figurative language forms, and found out that children aging between 10 to 12 who were engaged more often with the ritualized verbal game of sounding understood figurative language better than the control group who were trained in the traditional approach. However, the hypothesis was challenged by Levorato and Cacciari (1992) whose findings indicated that familiarity played a minor role in the acquisition process and only for children who are not yet able to use contextual information, and that familiarity per se is not adequate to explain how children acquire figurative language.

CHAPTER 2
SURVEYING THE RELEVANT LITERATURE

2.1. ASPECTS INFLUENCING THE COMPREHENSION OF IDIOMATIC EXPRESSIONS

Studies involving the acquisition and comprehension of idiomatic expressions have consistently argued that such variables as familiarity, context, decompositionality, the general reading-comprehension skills and the underlying conceptual knowledge have relative influence on the comprehension process, and also idioms are observed to differ in their degree of difficulty for children, adolescents and adults. In this section the factors influencing the comprehension process for idioms will be reviewed with reference to relevant literature.

2.1.1. Context

One of the essential factors promoting idiom comprehension is the use of informative context. Research has shown that children and adolescents can gradually give more figurative answers when linguistic context provides cues for the meanings of idiomatic expressions. To put it in other words, idioms may have a possible literal interpretation, however, whether or not the target meaning is literal or figurative is shaped totally by the specific information involved in the context. If the communicative environment provides sufficient informative context for an unknown linguistic item, then it will present a cognitive framework in which a language user may interpret contextual cues to process the intended meaning of that unknown item. In Levorato and Cacciari's terms, the ability to use contextual information involves "constructing a coherent semantic representation and integrating it with the lexical and semantic information carried by the figurative expression" (1992:416).

To put it in other words, context has a facilitatory effect on the comprehension of idioms since it provides the necessary semantic information to reach the figurative meaning by enabling them to go back and forth between contextual cues to solve the literal vs figurative dichotomy. Thus, the very ability to use contextual information may help us understand how

figurative competence develops over time, since, in parallel with the cognitive development of the child, context is shown to enable children to progress from the literal strategy to the figurative interpretation and to give the necessary semantic information to retain the coherence of the text.

In line with the Global Elaboration Model, Levorato et al, 2007; Oakhill et all, 2012; Nesi et al, 2006; Qualls and Harris, 1999, Qualls et al, 2003 found out a constructive effect of context in facilitating comprehension of idiomatic expressions, which enabled children to progress from a local and piece-by-piece evaluation of linguistic items to a holistic and coherent meaning.

The earliest age interval in the current literature is seen in Abkarian et al (1992). The researchers employed 3, 4, 5 and 6-year-old groups to test their comprehension of idiomatic phrases in and out of context conditions in a picture selection task which was assumed as appropriate to their general cognitive levels. The results indicated a linear trend for these age groups to produce more literal answers. As expectedly, the existence of supportive context did not prove helpful to contribute to the overall figurative meaning. In general, preschool and early primary grade children did not demonstrate sensitivity to the nonliteral meanings of idiomatic expressions and accordingly there was a significant preference and a ceiling-level performance for literal choices. Only by the age of 6, they were partly observed to respond to either figurative or wrong figurative choices, a finding which is similar to the one seen in (Cacciari and Levorato, 1989).

Similarly, Ackerman (1982) found a developmental pattern in children aged 6, 8 and 10. In this study, context was manipulated to bias an idiomatic, a literal or a neutral interpretation of the final sentences in the short stories which emerged either in the form an idiomatic phrase or a changed form. The results indicated that there were strong developmental increases in making idiomatic interpretations when supportive context was present. The presence of context, in line with the Global Elaboration Model, indicated that children realized the incongruency between the literal interpretation and the contextual information and therefore constructed an idiomatic interpretation in a trial and error manner.

In a study investigating the role of context in skilled and less-skilled comprehenders aging between 8 and 10, Oakhill et al (2012) found that better comprehenders were more likely to use context appropriately and realize that a figurative interpretation was required, which seemed to depend on a better and qualified monitoring and inferential skills that improved with age. Clearly, there seemed an interaction between age and meaning condition, and in this case, younger children were less able to choose an appropriate interpretation of the figurative expressions.

In short, studies investigating the role of context (Cain, Oakhill and Lemmon, 2005; Levorato and Cacciari, 1995; Nippold, Moran and Schwarz, 2001; Levorato et al, 2004; Cain et al, 2009; Holsinger and Kaiser, 2010; Simpson, 1989) have consistently found out that *a*. contextual information has a facilitating effect in ambiguity resolution: for instance, when context is sufficiently predictive of a single meaning, either literal biasing or figurative biasing, it will lead to retrieval of that meaning alone, and in the case of a neutral context, the most frequently occurring meanings is activated; and that *b*. skilled comprehenders were better able to understand the nonliteral meanings of idiomatic expressions in context in comparison with less-skilled comprehenders. All in all, context is observed to have a facilitating effect on idiom comprehension in children, specifically with children having superior inference skills, which seems to develop over age.

2.1.2. The Semantic Structure of Idioms

One aspect for the comprehension and use of idioms is the semantic structure of the idioms. The semantic structure involves the relationship between the individual meanings of the components of an idiom and the general figurative meaning of the idiom itself. In other words, it can be treated as a matter of relatedness between the literal and figurative meanings of an idiomatic expression and idioms are observed to have varying degrees of semantic transparency. The relevant literature points outs to the role of compositionality in idiom comprehension (Nippold and Rudzinski, 1993; Gibbs, 1991; Nippold and Taylor, 1995, Levorato and Cacciari, 1999; Subaşı-Uzun, 1992; Arıca-Akkök, 2007, 2008), in the sense that the processing of the meanings of the individual parts of an idiom contributes to the idiomatic meaning. The degree of compositionality and the internal semantics of the idiom

which involve further word associations and logical inferences seem to have a constructive effect on the comprehension of idioms.

Also, in contrast to Ackerman (1982) and Strand and Fraser (1979) who asserted that children learn idioms as single lexical units, Gibbs (1987, 1991) argued that idioms differ in their semantic analyzability and there may be metaphorical extensions of the literal meanings. Thus, language users may employ different strategies for comprehension when they encounter idioms. For instance, some idioms are learnt in a rote manner and some of them are comprehended from the semantic analysis of the individual meanings of the components in an idiom.

To illustrate, Gibbs (1991) demonstrated that children's comprehension of idioms depended on their intuitions about the internal semantics of these figurative expressions. Accordingly the results suggested that among the 5, 6, 8 and 9 age groups younger children (5 and 6-year-olds) understood decompositional idioms better than nondecompositional idioms. 8 and 9 year-olds understood both kind of idioms equally well in supportive contexts, however when idioms were presented out of context, they were able to interpret decomposable idioms better than nondecomposable idioms.

In addition, Nippold and Taylor (1995) studied the effect of semantic transparency and familiarity on the development of idiomatic language between the ages of 11, 13 and 17 in a forced-choice task, and found a corresponding correlation between transparency, familiarity and idiom understanding. In this case, the results showed that transparent and relatively familiar idioms were much easier to comprehend in these age groups than the less familiar and opaque idioms. These results also provide evidence for the Language Experience Hypothesis.

Levorato and Cacciari (1999) conducted a similar research with younger age groups between 7 and 9 year-olds. The research yielded similar results to that of Nippold and Taylor (1995), suggesting that the level of similarity between the meanings of the constituent words and the figurative meaning of the idiom exert either a positive or negative influence on the choice of appropriate answers. This meant that the children in both age groups recognized the

meaning of semantically analyzable idioms better than semantically non-analyzable idioms in the presence of a supportive context. However, in the second experiment, there was a clear and gradual developmental pattern in the acquisition of idiomatic expressions by 6, 8 and 10-year-old students. In the case of the absence of context, the ability to identify the correct idiomatic answer slowly increased among the three age groups. The results also suggested that the general reading-comprehension levels, which develops over age, also seem to have an effect on the comprehension of idioms.

As mentioned earlier, the experimental design and the specific tasks employed in the investigation of the role of transparency and context on the comprehension of idiomatic phrases may not always produce similar results. For instance, Gibbs (1987) examined the role of transparency in idiom comprehension with aged 5 through 9. He specifically employed two kinds of tasks: a forced choice task and an explanation task. On the explanation task, children's responses were more accurate for transparent idioms, however, on the forced-choice task, differences between the transparent and opaque idioms were much less apparent.

2.1.3. Familiarity

The degree of familiarity for an idiom was shown to have a relative effect both on the perception and production of idiomatic expressions. In this regard, highly familiar idiomatic expressions are frequently encountered in daily language and those expressions are mostly used in their figurative senses. Therefore, the retrieval of the idiomatic meaning for highly familiar idioms may be quite easier in comparison with the retrieval of the idiomatic meaning for highly unfamiliar idioms, which –in turn- is supposed to be more difficult and to take longer times of processing.

Both the Acquisition via Exposure Hypothesis (Nippold and Rudzinski, 1993) and the Language Experience Hypothesis (Ortony et al, 1985; Prinz 1983; Ezell and Goldstein, 1991; Nippold and Rudzinski, 1993) postulate that the frequency of exposure of children to figurative language is the main factor explaining the acquisition process. In this regard, children are expected to exhibit gradual development in idiom acquisition with increasing age simply because older children are more exposed to figurative language types, and

consequently, older children may recognize and respond to highly familiar idioms more quickly and appropriately since such kind of idioms are considered to be lexicalized in the mental lexicon.

In a cross-cultural comparison of the familiarity levels of idiomatic expressions, Nippold and Taylor (2001) indicated that adults rated the idioms significantly higher in familiarity than the adolescents, and there was no significant difference in idiom familiarity between the two corresponding groups across the American and Australian cultures. The results are consistent with the findings of Nippold and Martin (1989); and Nippold and Rudzinski (1993) in the sense that familiarity for idioms is related to age, educational background and literacy skills. For instance, in the 1993 study, Nippold and Rudzinski exhibited that in the 11, 14, and 17 age groups, performance gradually improved across age factor, and that high familiarity idioms were easier to explain than moderate or low-familiarity idioms. Interestingly, easier idioms also tended to be more transparent. Overall, the results seem to support the Language Experience Hypothesis, which asserts that the comprehension of idiomatic expressions is directly related to the amount of exposure one has to such expressions (Ortony et al, 1985). In this regard, adult groups, as compared to adolescents and children, seem to be more exposed to language activities involving the use of idioms.

Schweigert (1985, 1987) investigated the role of familiarity on idiom comprehension with undergraduate students. In the first study, the idiomatic phrases were presented in three different types of sentences: literal biasing, idiomatic biasing or neutral. The general reading times for the idiomatic expressions revealed that the less familiar idioms took more time to process than familiar idioms; and the familiar idioms both in the literal biasing and figurative biasing sets took less time to process than the unfamiliar idioms. In short, there was a reading time advantage for familiar idioms over less familiar idioms both in idiomatic and literal sentences, a result consistent with the Direct Access Theory/Idiomatic Processing Hypothesis (Gibbs, 1980, Ortony et al 1978) which argued that processing of an idiom's figurative meaning precedes processing of its literal meaning. And in the second study, sentences containing idioms used either literally or figuratively were presented for 100msec per presentation. The serial brief presentation method also revealed that sentences containing

idioms used literally required more presentations than those containing idioms used figuratively, which again provided evidence for the Idiomatic Processing Hypothesis.

2.1.4. The General Reading-Comprehension Skills

The current literature has shown that children's ability to comprehend idiomatic phrases is correlated with their ability to understand a text in general and the ability draw inferences within the bounds of a text, consequently, inference making can be regarded an essential part of skilled reading (Nesi et al, 2006; Oakhill, 2012; Cain et al, 2001, 2003; Cain and Oakhill, 1999; Levorato et al 2007; Singer 1994). In this regard, skilled readers were observed to construct coherent and integrated text representations in normal reading situations, which seems to stem from the ability to draw inferences necessary to link up ideas in a discourse (Casteel and Simpson, 1991). On the other hand, less-skilled comprehenders were demonstrated to construct incomplete representations of text which resulted from poor vocabulary knowledge, deficiencies in cognitive processing skills, poor general knowledge and a poor command of word-decoding (Cain and Oakhill, 1999; Long et al, 1997). The main problem with the less-skilled comprehenders seems to be the fact that they can integrate textual information at a local level but they are unable to produce a coherent integrated model of the text as a whole. Briefly, less-skilled comprehenders seem to be poor at inference making and they cannot produce as many inferences as more skilled comprehenders.

In line with the view which advocates the correlation between text comprehension ability and idiom comprehension ability, Levorato et al (2007) conducted a longitudinal study with 6-year-olds and concluded that even an 8-month-interval produced improvements both in text comprehension and idiom comprehension, thus, children who improved in text comprehension also improved in idiom comprehension.

Similarly, Nesi et al (2006) examined children's ability to complete idiom fragments in short stories, which was based on productive skills, with the hypothesis that reading-comprehension skills are related to the ability to produce figurative completions. Accordingly, the results indicated that, among the children aged 7 to 10, less-skilled comprehenders provided more literal completions than skilled comprehenders, and in

contrast, skilled and older children provided more idiomatic completions and benefited from contextual information to disambiguate idiomatic expressions. In other words, the more a child was proficient in understanding a text, the more often s/he produced an idiomatic completion and the less often a literal answer.

2.1.5. The Underlying Conceptual Knowledge

The cognitive-linguistic approach to the comprehension of idioms asserts that the meanings of idioms are not formed arbitrarily, instead, language users may refer to the use of conceptual knowledge for idiom comprehension. Conceptual knowledge can be described as the interrelated patterns of knowledge in our conceptual system. This kind of conceptual knowledge may therefore form the basis of the meaning of idioms by providing *motivation* (Kövecses and Szabo, 1996). To put it in other words, many idioms can be regarded as the products of our conceptual system. In this approach, the meaning of idioms emerges from our more general knowledge of the world embodied in our conceptual system. The motivation for idioms means the embodied knowledge in our conceptual system, which, according to Kövecses and Szabo, 1996; Kövecses 2010) is realized through three cognitive mechanisms called as *metaphor, metonymy* and *conventional knowledge*. Research on the cognitive motivation for the comprehension of idioms (Nayak and Gibbs, 1990; Gibbs and O'Brien; Gibbs, 1992, 1995) indicated that the use of many idioms is motivated by such conceptual knowledge as metaphors, metonymies and conventional knowledge. The results showed that conceptual knowledge was activated in the comprehension of idiomatic expressions and also, the knowledge of domains on which idioms are based may either trigger or constrain the comprehension of idioms in a positive or negative way.

2.2. THE SEMANTIC CLASSIFICATION OF IDIOMS

The semantic classification of idioms is based on the idea of the predictability of idiom meanings. Thus, the four basic classification systems all share the common belief that the individual parts of idioms have specific meanings which semantically interact with each other. Below are the four comprehensive classification systems in the relevant literature:

2.2.1. Classification of idioms according to their degree of semantic decomposition (Gibbs et al, 1989:60; Gibbs, 1991)

a. *Normally Decomposable Idioms*: They are the idioms with constituent words whose meanings directly contribute to the overall figurative meaning, and it is important to note that the individual components have a literal relationship to their figurative referents.
   Example: The idiom 'pop the question' has words which are related to the figurative meaning. That is, there is a correspondence between the word *pop* and the idea of *suddenly asking/proposing*; and there is a correspondence between the word *question* and *marriage proposal*.
b. *Abnormally Decomposable Idioms*: They are also a type of decomposable idioms but their individual words have a metaphorical relationship to their figurative meanings. That is, there is a different relationship between their individual parts and their idiomatic referents. In abnormally decomposable idioms, each component part does not by itself refer to some component of the idiomatic referent but only to some metaphorical relation between the individual part and the referent.
   Example: The idiom 'spill the beans' has the word *spill* which corresponds to the '*reveal'* meaning, however, there is a less direct, metaphorical relationship between the word *beans* and the meaning '*secrets'*. In another case, in the example of 'carry a torch', we can identify the figurative referent only by virtue of our knowledge of torches as conventional metaphors for descriptions of warm feelings.
c. *Nondecomposable Idioms*: They are the idioms whose constituents do not contribute to the overall figurative meaning. In this case, language users have difficulty in breaking these idiomatic phrases into their component parts.
   Example: The idiom 'kick the bucket' has words whose meanings have nothing to do with the idiomatic meaning 'to die'.

2.2.2. Classification of idioms according to their semantic degrees (Subaşı-Uzun, 1991:34-36)

a. *1st Degree Idioms*: These are also called the full idioms. In these kind of idioms there is no direct correspondence between the individual meanings of the constituents and

overall figurative meaning. In the idiomatization process, individual words leave their referential meanings and acquire their idiomatic meaning. '*Aba altından değenek göstermek*' is considered to be such an example.

b. *2nd Degree Idioms*: These are also called the quasi-idioms. In the idiomatization process, at least one or more constituents have connotational value. For instance, the idiomatic phrase '*adam kıtlığı*' consists of two referents, the former having a connotational value with the meaning 'sb. who is useful' and the latter having a denotational meaning 'in the absence of', which come together to form the idiomatic meaning 'the absence of a useful person'. In this process, the connotational referent also incorporates the denotational meaning into the final idiomatic meaning. '*Adam olmak and ağız değiştirmek*' are instances of 2nd degree idioms.

c. *3rd Degree Idioms*: These are the type of idioms in which the idiomatization process is the weakest one, since all the constituents have connotational value. In the idiomatization process, these connotational referents tightly keep their meaning and thus incorporate into the idiomatization. In other words, the general idiomatic meaning equals the summation of these connotational meanings. For example, in the idiom '*adamına düşmek*', the referents assume connotational meanings: *adam* corresponds to 'an expert-like person' and *düşmek* corresponds to 'meet sb'. Thus, the total of the connotational meanings lead us to the overall idiomatic meaning. '*Adamdan saymak and başına ekşimek*' are other instances of the 3rd degree idioms.

2.2.3. Classification of idioms according to transparency levels

(Cacciari and Levorato 1998: 163)

a. *Transparent idioms*: The easiness in comprehension for these kind of idioms is the result of the relationship between an idiom's component words and its stipulated meaning. In other words, their idiomatic meaning can be figured out through inferences based on the knowledge of the domain in which the idiom originated. For example 'to cry over spilled milk' has close associations with the meaning 'to be unhappy about what cannot be undone'

b. *Quasi-metaphorical idioms*: They involve the strategy of using a metaphorical background and thus evoking a stereotypical instance of an entire category. For instance, 'feeling like a caged animal' has the metaphorical base to mean 'feeling constrained'.
c. *Opaque idioms*: In these kind of idioms, there is no relationship between literal and idiomatic meanings. 'to eat the leaf' would bring to mind the literal meaning 'eating a specific green vegetable', however, the literal meaning has nothing to do with the figurative meaning 'to understand a secret'.

2.2.4. Classification of idioms according to levels of semantic compositionality (Nunberg, Sag and Wasow, 1994: 496-497)

a. *Idiomatically combining expressions*: Idiomatically combining expressions are those whose meanings are distributed among their parts, that is to say, they refer to idioms whose individual parts convey traceable parts of the overall figurative meaning such as 'take advantage'. In the case of 'take advantage' there is a correspondence between the meaning of the idiom and the meaning of the individual parts which would be paraphrased as 'take=derive and advantage=benefit'.
b. *Idiomatic phrases*: They do not distribute their meanings to their parts and thus they may be regarded as complete phrases in the lexicon, such as 'kick the bucket', and 'saw logs' (which means breathing noisily during one's sleep).

2.3. RESEARCH ON IDIOMS IN THE TURKISH CONTEXT

The first comprehensive attempts on the effect of semantic and cognitive features of idiomatic expressions on interpretation and comprehension processes appeared in early 1990s. Subaşı-Uzun, for the first time, introduced the semantic classification of Turkish idioms (1991) and subsequently, investigated the effect of internal semantics of idioms and familiarity levels on the comprehension processes among children aging 8-12 and young adults aging 18-24 (1992). In this context, the main finding was the fact that the comprehension and interpretation difficulties for 1st degree idioms-whether familiar or unfamiliar- pointed clearly to an internal semantic classification matter. Thus, participants

had difficulty in interpreting the unfamiliar 1st and 2nd degree idioms, while both age groups were gradually successful in interpreting familiar and 3rd degree idioms.

In another comprehensive study, Arıca-Akkök studied the predictability levels of English idioms (2007) and Turkish idioms (2008) in a semantic and cognitive continuum. In the English idioms context, undergraduate Turkish students were mostly observed to predict the meanings of familiar 2nd and 3rd degree idioms with a metonymic motivation; and on the other hand, for the unfamiliar group, they were mostly able to predict the meanings of 3rd degree idioms with a metonymic motivation. In the Turkish idioms context, undergraduate students were observed mostly to predict the meanings of familiar 2nd degree idioms with a metaphoric motivation; and on the other hand, for the unfamiliar group, they were mostly able to predict the meanings of 3rd degree idioms with a metaphoric motivation. The results of the two studies indicate that both the semantic and cognitive properties of idioms play a deterministic role on the prediction and interpretation levels of idioms, both studies having the common point that familiar, and 2nd and 3rd degree idioms are easier to interpret; however, the English idiomatic setting favored the metonymic motivation and in contrast the Turkish idiomatic setting favored the metaphoric motivation. Further studies are needed to confirm the generalizability of the results concerning the metaphor vs metonymy contribution to the overall comprehension of idiomatic language.

In a similar study investigating the predictability levels of Turkish idioms by undergraduate students, İşeri (2010) observed that they still exhibited deficiencies in their idiomatic language competencies. In other words, even the undergraduate students may not have developed full competence for the understanding and interpretation of idiomatic expressions. Thus, the results indicated that, the undergraduate students were able to predict the meanings of 3rd degree idioms better than 2nd and 1st degree idioms through a semantic analysis by using the meanings of individual lexical items of the more transparent idioms.

Çalışkan (2010) suggested an education model for the teaching of idioms to young children who are learning Turkish as a foreign language. In this model, she advocated the classification of idioms according to their common metaphorical base, which contained a common *conceptual key*. In this regard, school age students are encouraged to be involved in

either classification or matching tasks for idioms that are based on conceptual keys. To illustrate, the conceptual key 'distress stands for nose' includes the idiom group *burnundan gelmek, burnunu sürtmek* etc. In a matching task, for instance, students were required to match the most suitable idiom(s) with the corresponding conceptual key, choosing among a pool of idiom list.

In a further attempt to investigate the efficiency of the conceptual key model on the teaching of emotion metaphors and idioms in a bilingual setting, Çalışkan (2013) found out that the 10 and 12-year-old students who are treated with conceptual keys performed statistically better than the traditional group in the recall and interpretation tests for metaphors and idioms. Thus students who were trained in the familiarization, classification and matching activities, regarding conceptual keys such as ÜZÜNTÜ AŞAĞIDADIR, MUTLULUK YUKARIDADIR, were better able to remember, interpret and finally transfer conceptual knowledge to other related idioms. One of the advantages of the model seems to be teaching of idioms more effectively in a limited time when compared with the activities involving pictures and stories accompanying idioms. However the study leaves the question 'which idioms and conceptual keys to be employed in exactly what age and in which classes' unanswered.

Another study considering the age-related performance on the understanding of Turkish idioms was carried out by Peçenek (2008). Thus, participants aged 11, 15 and 19 were involved in idiom familiarity, analyzability and explanation tasks. The age variable was found to be associated with familiarity, that is to say, as the age increased the performance on the familiarity task also increased. For instance, the performance level of the 11 year-olds was relatively low compared with the 15 and 19 year-olds. However, the 11 year-old group interestingly performed as well as the 15 and 19 year-old participants in the idiom analyzability task, in which students were asked to rate the transparency levels of individual idioms. In addition, the performance in the idiom explanation task was also found to be associated with age variable. All in all, the performance of the 11-year-group was relatively low compared to the elder group. In a different series of study, Peçenek and Ay (2009; 2010) also described the effect of cognitive style differences-namely the intuitive and analytical

styles- on idiom explanation tasks involving idioms related to the act of 'speaking', to find out that there was no significant difference in terms of explanation types between the two groups: oral repetition; explaining the meaning of an idiom using another idiom; making no explanation; and explanation by sound association.

Mangır (2012) investigated the idiomatic expressions in the 2012 Turkish course book written for 5th graders; classified them according to the semantic degrees as suggested by Subaşı-Uzun (1991) and evaluated the cognitive relevance of these idioms to the receptive vocabulary skills of 5th graders in accordance with the 2005 Report of the Turkish Board of Education and Discipline on the Teaching of Turkish Classes. She identified 145 idioms, which turned out to be unevenly dispersed between narrative and informative texts; she found out that the course book contained 1st degree idioms such as *bit yeniği, prieyi deve yapmak, kabak başına patlamak* etc., which –she argues- may not be suitable for the cognitive development of the 5th graders; and also, the majority of the idioms were either 2nd or 3rd degree idioms, which can be regarded as constructive for the cognitive development of the 5th graders. She also stated that the total number of idioms (145) is too much for 5th graders in the sense that the 11-year-students are in the transition period from the concrete operational stage to the formal operational stage according to Piaget's cognitive development theory (1973), and they may still have difficulty in understanding abstract concepts. On this point, Piaget (1962) himself had also posited that the production and comprehension of metaphors as figurative devices must await the later stages of concrete operations, which roughly corresponds to 11 to 12 years of age. Since it is in this period that the child is supposed to internalize the ability to categorize, the hierarchical ordering of classes and class-inclusion relations which is characteristic of the concrete-operational stage. Theoretically, Mangır (2012) was led to argue that the 5th grade (or 11-year-age) is cognitively the ideal stage to teach them the nonliteral language forms such as idioms, metaphors and the like. Last but not least, she concluded that 5th graders should be given fewer idioms, preferable the 2nd or 3rd degree idioms, and those should be repeated at intervals to be internalized in the mental lexicon.

In a cross-sectional study, Bayraktar and Yaşar (2005) demonstrated that the teaching of idioms that is backed up with visual materials and supportive short stories yielded better results in the long-term memory than the traditional teaching of idioms. In parallel with their findings, they concluded that the teaching of idioms should take place at about 11 year-age considering their cognitive capabilities.

Bulut and Çelik-Yazıcı (2004) investigated the strategies and the effect of L1 on learners' processing of L2 idioms. Participants aged from 24 to 27 were involved in a series of idiom recognition task which consisted of formal, informal and slang idioms in English. The results revealed that participants mainly made use of context for guessing idiomatic meanings, and other than that, if context did not help, they used such strategies as using background knowledge, literal meaning and transfer from L1, which meant that participants dependent on their L1 in processing the idioms. All in all, the study showed that L2 learners utilized a variety of strategies when they encountered unfamiliar idioms in English. In addition, the type of idioms, namely formal, informal or slang idioms did not affect the comprehension process. The use of contextual clues seemed to be the most frequent strategy in the comprehension process.

In the investigation of 5th graders' comprehension of proverbs and idioms, Bağcı (2010) found out a positive correlation between children's success in Turkish classes and their comprehension levels; also there was no significant difference between the performance of male and female students, which seems to contradict with the results of Kara et al (2005). Furthermore, in the completion task, the 5th graders mostly tended to choose the synonymous distractors instead of idiomatic completions, which led him to assume that 11-year-students still had some difficulty in the literal-nonliteral distinction. There was a 65% success in the idiom-meaning matching task, and this amount decreased to 43% in the completion task. The results seem low simply because the researcher has focused on productive skills and there was no specific criteria set for the difficulty level of idioms in the design of the study.

The only study regarding the comprehensive and productive skills of 8th graders was carried out by Göçer (2012). In the completion and multiple choice tasks and in the writing assignment, the 8th graders were demonstrated to answer 114 cases out of 147 correctly in

the completion task, and in the multiple choice task, students correctly answered 24 cases of the 42 questions. When compared with the 5th graders, the 8th graders seem to have developed a better figurative competence, since they are already in the formal operational stage according to Piaget's cognitive development theory (1973).

Kara et al (2005) investigated the role of such variables as age and gender on the comprehension level of idioms in a metalinguistic awareness task. Without any specific criteria on the selection of idioms, the researchers concluded that girls performed better on the completion and meaning-matching tasks than boys; also the 14-year-olds performed better than 12-year-olds in the same activities.

Finally, in a review of the Turkish curriculum, Özbay and Melanlıoğlu (2009) suggested that the teaching of idioms should center around the social values which are mentioned in the MEB curriculum for social studies, for instance, 'hardwork' to include *alın teri dökmek, dört elle sarılmak* etc; 'solidarity' to include *ağız birliği etmek, kanat germek* etc.; 'love and respect' to include *ana kuzusu, ilk göz ağrısı* and so on.

2.4. THE TRADITIONAL vs THE COGNITIVE-LINGUISTIC VIEW OF IDIOMS

2.4.1. The Traditional View of Idioms

The traditional view of idioms proposes a non-compositional feature of idioms and label them as lexical items with specific syntactic features and a private meaning, and more importantly, idioms are confined to be a matter of language only. Accordingly, Weinreich (1969), Fraser (1970) and Katz and Postal (1963) regard an idiom as a complex expression whose meaning cannot be derived from the meanings of its elements, simply because the overall figurative meaning of an idiom is not a compositional function of the meaning of constituent parts. In a similar vein, Swinney and Cutler (1979) defines an idiom as a string of words whose meaning cannot be derived from the meanings of the individual words. To illustrate, the meaning of *kick the bucket* has nothing to do with the meanings of *kick* or *bucket*. In addition Aksan (1998; 2002) regards idioms as fixed lexical items with a basic nonliteral function; expressing a concept or a situation; having a power of expression and sometimes having a historical background that explains its origins.

Clearly, these traditional characterization of idioms seems to run against the compositional and cognitive view of idioms in the sense that figurative meanings are assigned to the set of words involved in an idiom which seem to have lost their literal meanings. In addition, the traditional view seems to ignore the cognitive aspect on the comprehension of idioms, which regard idioms as independent of the conceptual system. All in all, the traditional view treats idiomatic phrases as independent lexical items in the mental lexicon, not sharing the common cognitive properties in the human conceptual system. Furthermore, Kövecses and Szabo (1996) asserts that idiom dictionaries working in the traditional approach simply list such idioms as '*to spit fire, the fire went out, set fire, fire away*' in an alphabetical order, but more importantly, they seem to totally ignore the underlying relationship between the expression and the conceptual knowledge. Such alphabetical lists, as they are criticized by cognitivist linguists, may only serve to answer such simple questions as 'how many idiomatic phrases are there containing the word fire?' To sum up, the traditional view regards idioms, which have a special meaning and certain syntactic properties, as a matter of language only. In this case, linguistic meaning seems to be divorced from the human conceptual system and moreover, idioms are considered to be isolated from each other in the conceptual system.

2.4.2. The Cognitive-Linguistic View of Idioms

The traditional views on such linguistic matters as meaning, figurative language, the form-meaning relationship etc. were challenged by the proponents of cognitive linguistics from the 1980s on. This new approach to language emphasized the role of human cognition in the acquisition, storing, processing, and structuring our general understanding and knowledge about the world.

Specifically, the cognitive-linguistic view of idioms, which is diametrically opposed to the traditional view, is based on the idea that idioms are products of our conceptual system rather than being a matter of language only. In other words, many idioms are conceptually motivated, which entails an interplay between domains of knowledge in the human conceptual system. In addition, the proponents of this view (Lakoff and Johnson 1980; Gibbs 1990; Kövecses and Szabo 1996) put an emphasis on the systematicity of conceptual

motivation for the meaning of many idioms, unanimously claiming that most idioms are based on conceptual metaphors and metonymies, thus a systematic motivation for the meaning of idioms arises from the mappings between source and target domains. Briefly, the cognitive-linguistic view of idioms posits that the meaning of many idioms has a conceptual base and those meanings arise from our more general knowledge of the world.

2.4.2.1. Conceptualization and Conceptual Interaction

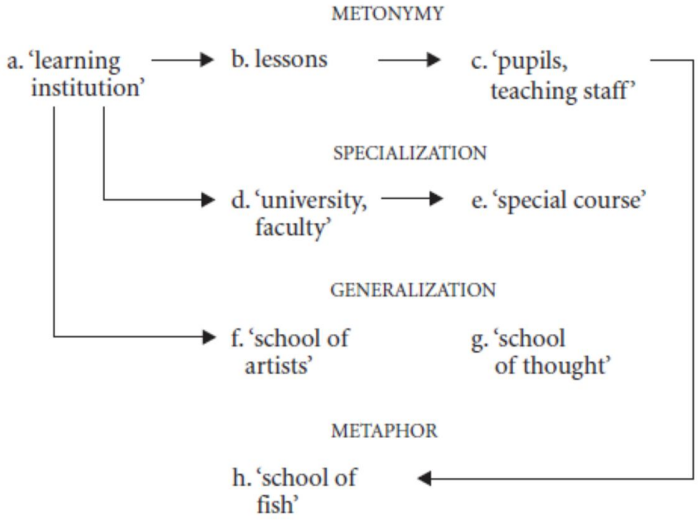
The human mind is programmed to perceive, process, store, sort out, compare and systematically categorize various stimuli which they encounter in the world. Therefore, language users, depending on these cognitive processes, involve in mental and linguistic activities in order to construct and develop beliefs about the external world. Consequently, the human mind has a cognitive tendency to process raw data from the external world and subsequently structure them into highly-ordered schemas (Langacker, 1987). In this context, knowledge consists of meaningful conceptual categories, which simply refers to the mental representation of knowledge and meaning, to be grouped together in a functional way in the human mind. Functionality here implies the organization of knowledge in an economical way to avoid random and chaotic structuring.

For instance, upon hearing the term *hummingbird*, language users can imagine a general idea of how a hummingbird looks like, simply because the inherent BIRD concept in the human mind entails the subsequent concepts of BEAKED, FEATHERED and CHIRP. Conceptualization therefore consists of such complex sets of mental processes to include image-schemas (Lakoff, 1987; Johnson, 1987) such as PATH, CONTAINER, UP-DOWN, PART-WHOLE and basic-level structures (Rosch, et al, 1976) such as superordinate, basic and subordinate levels for the concepts respectively PLANT, TREE, and OAK. Conceptual units are understood only with reference to their relationship in the hierarchical organization. For instance, the concept OAK becomes meaningful in its relation to TREE, and similarly, the concept TREE is meaningful in its relation to the concept PLANT.

According to Dirven and Verspoor (1998), the human conceptualizer, which is responsible for transforming the objective external stimuli in the world into the subjective concepts and

conceptual categories, also primarily undertakes the tasks of first a) perceiving objects as wholes, then b) creating concepts and conceptual categories through sorting out these whole objects; and finally c) creating interlinks between conceptual structures. Here at this point, the cognitive-linguistic view of idioms posits that the underlying conceptual metaphors and conceptual metonymies come into force in the third stage above, namely in the process of making linkages between certain conceptual domains, such as the interlinks involved between the two domains FIRE and LOVE in the conceptual metaphor LOVE IS FIRE as realized in the idiomatic expression 'She is an *old flame*'. In a similar vein, Danesi (2000) proposed three types of conceptual networks in order to explain the interplay between conceptual domains. The *denotative network*, which takes the basic and concrete meanings of concepts; on the other hand the *connotative network* and *metaphorical network* rely on indirect associations by inference. Briefly, the human cognitive system comprises networks of conceptual domains which are responsible for representing and organizing knowledge, and in this sense concepts are regarded to be holding relationships between themselves in the conceptual networks and thus a specific concept can be referred to in order to understand or explain the other. Finally, the theory of *radial network* (Brugman and Lakoff, 2006) was introduced to reveal the sense relations among conceptual domains. The theory asserts that all the senses of a word are linked to each other in a radial network and based on cognitive processes such as generalization, specialization, metonymy and metaphor. In the radial network, the links between members are not arbitrary, and some meanings are always more central and other senses occur in a continuum from less central to the peripheral. The sense relations through cognitive processes are shown below in Figure 1.

Figure 1: Radial network of the senses of *school* indicating sense extensions (adapted from Dirven and Verspoor, 2004:35)



2.4.2.2. The Conceptual Motivation for Idioms

The cognitive-linguistic view of idioms stipulates three cognitive mechanisms which are responsible for motivating the idiomatic meaning. These are in turn conceptual metaphor, conceptual metonymy and conventional knowledge. An illustration of the idiomatic meaning within the bounds of conceptual motivation is seen below (Kövecses, 2010).

Idiomatic meaning: the overall special meaning of an idiom

Cognitive mechanisms: metaphor, metonymy, conventional knowledge

Conceptual domains: one or more domains of knowledge

Linguistic forms and their meanings: the words that comprise an idioms, their syntactic properties together with their meanings

Example: 'to spit fire'

Special idiomatic meaning: 'be very angry'

Cognitive mechanism: ANGER IS FIRE

Conceptual domain(s): FIRE and ANGER

Linguistic forms: spit; fire

Meanings of forms: 'spit' and 'fire'

2.4.2.3 Idioms with a metaphoric basis

Conceptual metaphors are assumed to trigger the interplay between two domains of knowledge. The source domain is usually a familiar physical domain and the target domain is a less familiar abstract domain (Lakoff and Johnson 1980). In a typical conceptual metaphor, the source domain convey bits of information to have an understanding about the target domain. To illustrate, for instance, the idiom *spit fire* has the underlying ANGER IS FIRE conceptual metaphor in which the domain of fire (the physical source domain) is used to understand the domain of anger (the abstract target domain). The mappings between the domains entail that the concept of anger is comprehended via the concept of fire. To elaborate, in the case of the idiom *spit fire* which has the underlying ANGER IS FIRE conceptual metaphor, the language user would make the inference that when the fire is not under control it may be dangerous, accordingly, the inference would apply to the target domain of ANGER in the sense that when anger is intense and out of control it may also be dangerous for others. In short, conceptual metaphors provide the links or mappings between two seemingly independent domains. Kövecses and Szabo (1996) argue that conceptual metaphors can be seen as conceptually motivating the use of words such as *fire* in the idioms they occur, contributing to the general meaning of the idiom through links and mappings between the two domains and connections in our conceptual system. To sum up, the general meaning of an idiom is determined by the basic inference strategies, connotations involved in the analysis process, and the specific mappings between the source and target domains.

2.4.2.4. Idioms with a metonymic basis

Conceptual metonymy, which underlies many idiomatic expressions, also plays a significant role in the construction of the semantic extension of concepts. Conceptual metonymy specifies one aspect in a conceptual domain while referring to some other element which is in a contiguity relationship with it (Dirven and Werspoor, 2004). The distinction between conceptual metonymy and conceptual metaphor is that metonymy involves linkages between concepts in a single domain, in contrast, metaphors involve mappings between two separate domains. The cognitive process in metonymy necessitates that one conceptual entity (the vehicle/the more salient one) provides mental access to another conceptual entity (the

target/the less salient one) in the same domain (Kövecses, 2002; Lakoff, 1987). The following are exemplary cases of conceptual metonymy (Dirven and Verspoor, 2004:41).

PERSON FOR HIS NAME	I'm not in the phone book.
POSSESSOR FOR POSSESSED	My tire is flat.
AUTHOR FOR BOOK	This year we read Shakespeare.
PLACE FOR PEOPLE	My village votes Labour.
PRODUCER FOR PRODUCT	My new Macintosh is superb.
CONTAINER FOR CONTAINED	This is an excellent dish.

The cognitive-linguistic view of idioms characterizes metonymy as involving one conceptual domain, such as the hand, which codifies a 'stand for' relationship between two entities as can be seen in the metonymies below (Kövecses and Szabo, 1996:337):

THE HAND STANDS FOR CONTROL
THE HAND STANDS FOR THE PERSON
THE HAND STANDS FOR THE ACTIVITY
THE HAND STANDS FOR THE SKILL

The idiom *put one's hands in one's pockets* involves the THE HAND STANDS FOR THE ACTIVITY conceptual metonymy to produce the motivation for the idiomatic meaning 'deliberately do nothing'.

2.4.2.5. Conventional Knowledge

Conventional knowledge denotes the common information about a conceptual domain in a given society. To illustrate, the idiomatic expression *handful* necessitates the conventional knowledge that the hand is relatively small to hold many objects at the same time, thus leading to the idiomatic meaning 'a small quantity or amount'.

Conclusion

The cognitive-linguistic view of idioms posits that, as opposed to the traditional view, there is a conceptual base for the structuring and comprehension of idiomatic phrases and also, this new approach to figurative language regards idioms as the product of human conceptual system which entails an interplay between domains of knowledge. The sense and conceptual relations can be thus summarized as in Table 1 below, which is adapted from Dirven and Verspoor (2004:41).

Table 1. Conceptual relations in semasiological and onomasiological analysis

Conceptual relations	In semasiology (how senses of one word relate to each other)	In onomasiology (how concepts and words relate to each other)
1. hierarchy (top/bottom)	generalizing and specializing e.g. *school of artists vs school of economics*	conceptual domain: taxonomies (e.g. *animal, dog, labrador*) and lexical fields (e.g. *meals*)
2. contiguity (close to sth.)	metonymic extensions of senses (*school as institution-lessons-teaching stuff*)	conceptual metonymy e.g. CONTAINER FOR CONTAINED
3. similarity (like sth.)	metaphorical extensions of senses (*win an argument*)	conceptual metaphor e.g. ARGUMENT IS WAR

2.5. OBSERVATIONS ON THE 2009 REPORT OF TEACHING TURKISH CLASSES ISSUED BY THE TURKISH BOARD OF EDUCATION AND DISCIPLINE

As can be seen in the following chapter, the study focuses on the developmental age trends and the cognitive readiness levels of the primary school Turkish children aged 7, 9 and 11 in the comprehension process of idiomatic expressions. For this reason, observing the targets of the Turkish language educational curriculum in primary schools and understanding the nature of idiom teaching / learning atmosphere as planned by the Turkish Board of Education and Discipline were thought to be necessary.

The 2009 curriculum on the teaching of Turkish classes, which is an educational guide issued by the Turkish Board of Education and Discipline, aims to raise individuals who are able to use Turkish correctly and efficiently, to think critically and creatively, to involve in intertextual readings, and who are also initiative and sociable. The curriculum does not treat grammar as a separate discipline, instead, it is introduced into other learning domains. When the learning of figurative language is taken into consideration, specifically the idiomatic phrases – in line with the purposes of the current research- there is absolutely and unfortunately no explicit mention of idioms in the sections of vision, main targets and general skills.

A key word search on the main targets of the curriculum reveals such prominent skills as listening, speaking, reading, writing, visual reading, visual presentation, the correct and efficient use of Turkish, critical thinking, comprehension, classification, association, criticizing, anticipation, analysis, synthesis, evaluation, intertextual reading, enriching vocabulary, scientific and creative thinking, self-expression, communication, cooperation, problem-solving, search for knowledge, discovering, interpretation, the love and respect for reading and writing and etc. More interestingly, even the exposition of the receptive skills such as reading and listening do not make any specific reference to idiomatic expressions.

The first and a very general mention of the lexical skills is introduced in one of the learning domains, namely the reading section. It is emphasized that ‘vocabulary studies should be given adequate importance in order to improve reading-comprehension skills; and also

vocabulary studies should include activities for searching and finding meanings, and some other mental activities' (p. 16). However, there is again no mention about the specific types of vocabulary, such as figurative language, nor any specific technique to employ such non-literal language.

The direct explicit mention of the idiomatic and nonliteral language types appear in the learning output sections for only 10 and 11 year-students, which correspond to 4th and 5th grades in the former educational system. In other words, the awareness of and the ability to distinguish between literal and nonliteral language seems to be assigned only to age 10 and above. This is simply to say that types of nonliteral language is ignored for the 7-8-9 age groups. In addition, only 10 and 11 year-groups are seen capable of distinguishing between the literal and nonliteral, and they are further encouraged to use nonliteral language types such as proverbs, idioms, metaphors, humor etc. in cases involving reading, listening, writing and speaking activities. Briefly, an evaluation of the 2009 Report of the Turkish Board of Education and Discipline on the Teaching of Turkish Classes reveal that the awareness and use of nonliteral language forms, such as idioms, proverbs, metaphors, humor and the like, is restricted only to 10-year-students and above.

CHAPTER 3
THE STUDY

3.1. THE SIGNIFICANCE OF AND THE NEED FOR THE STUDY

Relevant literature in both psycholinguistics and cognitive linguistics have both witnessed challenges to the traditional treatment of literalness and developmental trends in the comprehension process of idioms by children (Gibbs, Nayak and Cutting, 1989; Cacciari and Glucksberg, 1990; Nunberg, Sag and Wasow, 1994; Cacciari and Levorato, 1989; 1998). However, there have been few attempts to investigate the nature of idiomatic expressions in a developmental framework in Turkish, considering both the semantic and cognitive properties. In this regard, a thorough investigation of idiomatic expressions in a developmental framework may account for how children develop figurative competence, progressing through cognitive thresholds, with a conscious awareness of the suspension of the literal strategy and by a realization of the idea that lexical items can have secondary meanings for figurative, pragmatic, and discourse purposes.

In this regard, the present study qualifies as the first comprehensive developmental research investigating the age trends in the early acquisition of idiomatic expressions. Previous research have mainly concentrated on older age groups, the earliest one starting with age 8 (Subaşı-Uzun, 1992) and mainly investigating the linguistic behavior of 11, 12, 13, 14, 15-year old students which are considered to be in the formal operational stage, and above, including adults and undergraduate students ranging between 18 and 22. Notably, in some cases, previous research was carried out in bilingual settings in which Turkish was taught as a foreign language; or the experimental design either employed English idiomatic sets varying in familiarity and compositionality, or investigated the effect of L1 on idiom comprehension in L2. In its entirety, the current research sets the age interval as early as to age 7 in parallel with the Global Elaboration Model on idiom comprehension and, in a cross-sectional approach, compares the performance of 7, 9 and 11-year-olds in the comprehension of real Turkish idioms in a monolingual setting, which is assumed to present a clear representation of the early acquisition of idioms by primary school children. In this sense,

the processes by which younger children acquire and improve their knowledge of idioms are of great interest to researchers who aim to understand the nature of later language development.

In addition, the current research forms a distinct point of view in constructing the idiom lists, since it presents clear definitions on the selection criteria. As opposed to previous research, which referred to adult opinion in the formation of idiom lists in terms of familiarity, this research collected real-time data in real-time settings from the subjects themselves aging between 8 and 11 which would eliminate selection bias. This practical and realistic orientation is expected to provide precision both in the preparation and evaluation of experimental data, and concurrently, the results based on such practical and realistic data are expected to provide a clear picture of the comprehension processes underlying the acquisition of idiomatic expressions.

Last but not least, the practical benefits and the efficacy of the research should bear implications for curriculum design and for a better implementation of the teaching of idiomatic expressions in Turkish classes in primary school. All in all, the findings of the research should provide comparable results with international studies and thus contribute to the early acquisition of one of the nonliteral language forms, namely idiomatic expressions.

3.2. PURPOSE OF THE STUDY

The main aim of this research is to investigate the developmental age trends and the cognitive readiness levels of primary school children aged 7, 9 and 11 in the comprehension process of idiomatic expressions in line with the Global Elaboration Hypothesis which was introduced by Levorato and Cacciari (1992; 1995) and Levorato (1993), and the Decompositionality Hypothesis put forward by Gibbs and Nayak (1989) and Gibbs et al (1989). The relevant literature in the Turkish context argue that age 11 is cognitively the ideal stage to present them the nonliteral language forms such as idioms, metaphors and the like in formal educational settings, as this age group being the transitional period from the concrete operational to formal operational stage (Mangır, 2012; Bayraktar and Yaşar, 2005; Peçenek, 2008). However, other works in a developmental framework have shown that the acquisition of idioms is an ongoing process that starts in early childhood around 4 or 5 years of age, which is fundamentally based on rote-learning at the initial stages, and then gradually progresses to have a literal orientation from 5 to 8, and then finally assumes a figurative orientation from 8 onwards.

In this regard, Abkarian et al (1992) and Cacciari and Levorato (1989) demonstrated that children as early as at the age of 6 responded to either figurative or wrong figurative choices in idiom comprehension tasks in the presence of supportive contexts. Likewise, the earliest age group in the Turkish context is seen to be 8 in the work of Subaşı-Uzun (1992), in which she demonstrated that 8-year-olds were successful in interpreting familiar and third-degree idioms. The main aim of this research is, therefore, to provide data from Turkish primary school children by setting the age criteria to as early as 7 to examine the validity of the Global Elaboration Hypothesis. If, in the early acquisition of the idiomatic expressions, the 7-year-olds can respond to third-degree and familiar idioms appropriately, the data obtained can be regarded as support for the hypothesis; if, on the other hand, the same age group responds literally to the third-degree and familiar idioms at a ceiling level, then the data obtained can be regarded as evidence that refutes the Global Elaboration Hypothesis.

The study also aims to analyze the possible role of supportive contextual information in accordance with the Global Elaboration Hypothesis. Specifically, one aim of the study is to

investigate whether there are significant differences in the presence and absence of context and thus compare children's performances in and across age groups. It is highly possible that children can gradually give more figurative answers when linguistic context provides cues for the meanings of idiomatic expressions. Studies so far unanimously agreed that context had a facilitating effect in the comprehension of idiomatic expressions, which enabled children to gradually progress from a local and piece-by-piece evaluation of linguistic items to a holistic and coherent meaning, specifically the children aged 8 and above (Levorato et al, 2007; Oakhill et all, 2012; Nesi et al, 2006; Qualls and Harris, 1999, Qualls et al, 2003). However, within the bounds of the Global Elaboration Hypothesis, Abkarian et al (1992) and Cacciari and Levorato (1982) observed that children aged 7 and below were able to make use of contextual information at a minimal level or not at all. One possible interpretation for this underdeveloped ability of the younger children is related to the fact that the ability to comprehend idiomatic expressions is tied to the development of a series of linguistic skills such as general reading-comprehension skills, inferential skills and making use of the meanings of the individual lexical items involved in an idiom. Consequently, children with better reading-comprehension skills –which develops along age dimension- are expected to better make use of contextual information and thus realize the literal vs figurative dichotomy both in comprehension and paraphrasing tasks.

The second aim of the study is to examine whether or not the compositionality effect influences children's acquisition of idiomatic phrases in line with the Decompositionality Hypothesis put forward by Gibbs and Nayak (1989) and Gibbs et al (1989). Previous research have shown that the meanings of the individual components in normally decomposable or third-degree idioms systematically contribute to the general figurative meanings of the idioms (Nippold and Rudzinski, 1993; Gibbs, 1991; Nippold and Taylor, 1995, Levorato and Cacciari, 1999; Subaşı-Uzun, 1992; Arıca-Akkök, 2007, 2008). In this regard, children's analysis of each component in decomposable idioms has a facilitating effect, even at the age 7, on comprehending these phrases when compared to non-decomposable idioms which must be learned as frozen semantic units. Accordingly, we assume that the rote learning for opaque idioms necessitates forming an arbitrary relationship between the idiomatic phrase and the

intended figurative meaning, because of the fact that nondecomposable idioms provide little information about the figurative meaning.

A third aim of the study is to examine whether or not the degree of familiarity for an idiom, that is the frequency of exposure of children to idioms, has an effect on the acquisition of idiomatic expressions. Research have shown that retrieval of the idiomatic meaning for highly familiar idioms is quite easier in comparison with the highly unfamiliar idioms (Nippold and Martin, 1989; Nippold and Rudzinski, 1993; Ezell and Goldstein, 1991). However, the current study also aims to exhibit the strategies employed in the comprehension of unfamiliar idioms by children.

Finally, the study also aims to examine whether conceptual knowledge is activated in the comprehension of idiomatic expressions by primary school children. In order to do this, we specifically referred to the wrong figurative answers given by the three age groups and tried to understand whether there was consistency in terms of conceptual structuring and in the patterns of answers including figurative explanations, that is, whether the use of conceptual metaphors, metonymies and conventional knowledge formed a consistent patterning among the age groups.

Briefly, we aim to investigate the roles of familiarity, contextual information, compositionality and conceptual structuring on the comprehension of idiomatic expressions in order to better describe the developmental stages in the acquisition idiomatic expressions.

3.3. THE HYPOTHESES

1. There will be an observable developmental gap between the performances of the 7-year-old-group on the one hand and the 9 and 11 year-old-groups on the other hand, the 9-year-old-group representing the transitional quality.

2. Familiarity levels of idioms are expected to facilitate the comprehension process of idiomatic expressions for the 7, 9 and 11-year-old-groups, specifically for the familiar idioms.

3. The semantic composition of idioms are expected to facilitate the comprehension process of idiomatic expressions for the 7, 9, and 11-year-old-groups, specifically for the third-degree idioms.

4. Context is expected to have a constructive and facilitating effect on the comprehension of idiomatic expressions in specifically the older age groups.

5. Primary-school children should exhibit at least partial employment of such cognitive mechanisms as conceptual metaphor, conceptual metonymy and conventional knowledge in the interpretation of idiomatic expressions depending on their age and cognitive readiness levels.

3.4. THE RESEARCH QUESTIONS

1. When the familiarity level criterion is considered for the comprehension performances of different age groups among primary school children, which Turkish idioms qualify as the most and the least familiar ones?

2. When the performances of children at 7, 9 and 11 ages are taken into consideration, what qualitative and quantitative differences are observed in terms of;
   a. the semantic transparency and familiarity levels of idioms and,
   b. the contribution of contextual backup

3. What cognitive implications do the results of the wrong figurative answers present?

3.5. BOUNDARIES OF THE STUDY

The current study focused mainly on three aspects which are considered to have relative influence both on the comprehension and acquisition of idiomatic expressions. Namely, they are the degree of *compositionality* (the relatedness between the literal and figurative meanings), the *familiarity level* (the frequency of exposure of children to idioms) and the presence of *contextual information* (supportive contextual cues for the figurative meaning of an idiom). Beside these factors, previous research indicated that the general reading-comprehension skills of children is also another significant factor that primarily influences the comprehension and acquisition of idiomatic phrases. However, this study is limited to the three variables mentioned above and future research may take into consideration the possible effect of the general reading-comprehension skills on the comprehension of idiomatic expressions. In general, the study was designed to include students with average reading comprehension skills in state schools. Also, students with attention deficiencies, bilingual students and mentally retarded students (which are called 'kaynaştırma öğrencileri') were also excluded from the study in order to establish homogeneity among the participants.

In addition, the study is limited to the performances of the early age groups, including the 7, 9 and 11-year-old students, as opposed to the studies which mostly concentrated on students aged 11 and above. In this case, the current study may present valuable data for a description of the developmental stages in the early acquisition of idioms in the Turkish context.

Another limitation of the study is that factors such as gender, socio-economic status and the educational levels of the families into which children are born were not controlled, and the selection of the participants was based totally on random sampling to minimize the effects that those uncontrolled factors would probably have on the comprehension process of idioms.

A further limitation of the study is that the study employed only paraphrasing and explanation tasks for data collection rather than forced-choice or multiple-choice tasks, simply because previous research have shown that paraphrasing or explanation tasks required high degrees of metalinguistic effort and thus revealed nuances and subtle factors affecting figurative competence that would otherwise be obscured by simple multiple-choice tasks. Furthermore, the paraphrasing task proved more advantageous as "it required the individual to reflect upon

the meaning of a lexical unit and to state explicitly what is known implicitly" (Nippold and Rudzinsky, 1993: 729). Accordingly, we expected the paraphrasing tasks to be more sensitive to the processes underlying the acquisition of idiomatic expressions by children aged 7 through 11. Considering the general cognitive capacities of the younger children, we preferred to use only one and standard test design for all age groups.

A final limitation of the study is that in the implementation stage, we planned to include the top and the bottom 15% of the comprehensive idiom lists for precision matters. However, the classification of the lists revealed that only 4 of the idioms were missing in the first and last 15%s. For selection purposes, we also included those middle-ranked 4 idioms ('*beyni durmak, el atmak, başının etini yemek, el değmemiş*') in order to establish the final experimental idiom list which exactly included 40 idioms. These middle-ranked (in familiarity) idioms are not expected to influence the general results of the study.

Last but not least, further research is needed which would employ other tools of data collection such as multiple-choice tasks, mental imagery tasks, picture selection tasks etc in order to assess whether employing different tasks that are based on more receptive skills would produce comparable results in the comprehension of idioms. Finally gender roles may be taken into consideration to assess whether males perform better than females or vice versa.

CHAPTER 4
METHODOLOGY

The methodology chapter consists of three sections. The first section specifies the pilot study which formed the basis of the main experimental study with a concern about the selection of idiomatic expressions, the specific comprehension tasks to be employed and the general design of the study. The second section concerns the data collection process, which further comprises the norming phase and the main experiments. Finally, the third section includes information about the data analysis.

4.1. THE PILOT STUDY

The pilot study was designed to be a practical guideline for the establishment of the necessary data collection tools for the main study. Thus the study aimed in a limited scope to investigate the developmental patterns and comprehension of Turkish idioms among 7, 9 and 11 year-old-students (Kara and Büyükkantarcıoğlu, 2012). The pilot study had the research questions:

a. What is the developmental pattern in the comprehension of Turkish idioms among the 7, 9 and 11 year-old-children?
b. What kind of factors are involved in the process of idiom comprehension and which age groups (efficiently) benefit from these factors?

The pilot study employed 15 children, which were evenly distributed among age groups, 12 idioms, 6 transparent and 6 opaque, and the experimental tasks were consecutively a picture selection task, a recall task and a paraphrasing task. The picture selection task required children to make a choice between two of the pictures either depicting the literal meaning or the figurative meaning. In the recall task, children read a short story giving contextual information for the idiom at the end, and after a while they were asked to recall the specific idiom at the end of the story. In the final paraphrasing task, children read the short stories including a specific idiom and after a while they were asked to paraphrase the meaning of the idiom.

The study showed that the 7-year-old children were completely literally oriented in the picture selection task. They were involved in a word-by-word processing of the individual parts of the idioms and they mainly focused on the concrete aspects of the idiomatic expression. The 9-year-old-students, who represent the transitional period in the figurative competence, mainly focused on figurative choices, however they still had traces of literal processing in the picture selection task. The 11-year-old children chiefly preferred figurative options and they were able to employ different processing strategies in the interpretation phase.

The paraphrasing task revealed a different pattern for the age groups. There was a partial improvement in the performances of the 7-year-old-group in the paraphrasing task in the light of contextual backup. The most significant improvement was observed in the 9-year-old children when contextual information was provided. In this case, as opposed to the picture selection task, the 9-year-old-children were able to promote to either to the figurative or (un)related figurative answers, which meant that these transitional age group were able to attribute more elaborate figurative answers to the idiomatic expressions. The 11-year-old-group was observed to attain a more mature form of figurative competence when compared to the younger age groups.

In its entirety, the study suggested that the younger age groups had traces of literal orientation and if they were provided with a rich informative context, they were well able to promote to figurative answers, and this figurative competence gained a great impetus from age 9 on. However, the distribution of the answers did not produce significant difference across the transparency factor within the same age groups. In conclusion, the pilot study had significant implications for the design of the main experiments. First, it suggested that the paraphrasing task would be a much more suitable measure of the nuances in terms of the underlying processes in the idiomatic interpretation. Second, it implied that the classification of the idioms across transparency features needs to be reviewed and expert opinion should be sought instead of referring to adult-intuitions. And finally, the study provided some valuable selection of highly familiar and unfamiliar idioms to be employed in the main experiments.

4.2. DATA COLLECTION TOOLS

The research has employed three data-collection tools.

1. **Formation and Norming of the Idiom Frequency Lists**

2. **Paraphrasing Task for Idioms out of Context (Experiment 1)**

a. Paraphrasing task for the meanings of familiar idioms out of context
b. Paraphrasing task for the meanings of unfamiliar idioms out of context
c. Paraphrasing task for the meanings of 1st degree idioms out of context
d. Paraphrasing task for the meanings of 3rd degree idioms out of context

3. **Comprehension Task for Idioms in Context (Experiment 2)**

a. Comprehension task for familiar idioms in context
b. Comprehension task for unfamiliar idioms in context
c. Comprehension task for 1st degree idioms in context
d. Comprehension task for 3rd degree idioms in context

4.2.1. FORMING THE IDIOM FREQUENCY LISTS

Idiom familiarity, or in other terms the frequency of exposure for children was measured by means of a preliminary survey which determined the selection of the familiar and unfamiliar Turkish idioms.

4.2.1.1. The Preliminary survey

In order to eliminate the selection bias and to get a clear picture of the exposure process, we did not refer to teacher-opinion as applied in previous literature, in which teachers were asked to rate the frequency with which children may have experienced idioms in textbooks, conversations, on TV etc. Instead, primary school students aging 8, 9, 10 and 11 in each school grade were directly treated as test subjects for the creation of the idiom frequency lists.

4.2.1.2. Participants

Students living in two different geographical areas participated the survey on a voluntary basis. 444 students attending İstanbul Kudret Saraçoğlu İlkokulu, 297 students attending Kayseri Mustafa-Müjgan Boydak İlkokulu and 161 students attending Kayseri Habibe Taş İlkokulu volunteered to participate the survey. The mean age for the second grades was 8,4, the mean age for the third grades was 9, 1; the mean age for the fourth grades was 10,5; and the mean age for the fifth grades was 11,4. The students who were reported by their teachers as having mainstreaming education, who were called 'kaynaştırma öğrencileri', were excluded from the study, because in the initial stages of the data collection, these kind of students with special needs were observed to have inattentiveness and to produce incomplete answers. Also two students who were reported to be bilinguals were excluded from the study.

4.2.1.3. Materials and Procedure

4.2.1.3.1. The Norming Phase and the Selection Criteria

The first stage of the selection of idioms involved a thorough skimming and scanning of the Turkish course books for primary school students. The investigation revealed a total of 161 idioms. The analysis of the 2010/2011 MEB Turkish course books and workbooks published for 7 to 11-year-old students revealed that of the 161 idioms employed in 10 different books 74 idioms belonged to body-part idioms which constituted almost half of the idioms. These 74 idioms were observed to center around 20 subcategories of body parts to include '*ağız, ayak, baş, beyin burun, dil, diş, diz, dudak, el, göğüs, göz, kafa, kalp, karın, kulak, omuz, yanak, yürek*, and *yüz'*. The second stage of the selection process involved identifying body-part idioms with dual meanings from the Turkish idiom dictionary (Yurtbaşı, 1996) to enrich the idiom lists. In the third and final stage of the idiom selection process, we identified idioms with dual meanings that we considered familiar or unfamiliar for primary school children. The resulting lists were combined for the appraisal and norming tests. In this phase, idioms with multiple meanings and idioms containing some kind of violence were excluded from the list. In addition, taking into consideration the general cognitive levels of the second grade students, great care was taken to select idioms whose literal and figurative meanings have mostly concrete referents. In other words, idioms denoting complex emotional states were

excluded from the general list. As a final step, in the norming phase, idioms which are considered to have a dominant literal sense, and idioms containing similes which are based on explicit resemblance between the source and the target domains were also excluded from the list. The final list which exactly contained 282 idioms were evenly distributed into five discrete lists in a random order of the idioms. Each list was designed to include around 55 idioms considering the attention and boredom levels of the second grade students. Table 2 shows the distribution of numbers across idioms and participants in the norming phase.

Table 2. The Distribution of the Numbers of Idiom and Participants in The Process of the Formation of Idiom Lists

Idiom Lists	***Number of Idioms***	***Number of Participants***
1st List	59	198
2nd List	51	186
3rd List	51	174
4th List	59	173
5th List	62	171
Total	***282 idioms***	***902 participants***

4.2.1.3.2. Procedure

To enhance the validity of the norming phase, children in each grade were required to predict the meaning of each idiom in the list simply by giving a definition in their own words. Other receptive, ready-made tasks such as multiple-choice questions were avoided for validity reasons. Participants were not informed about the aim of the study and they were told to regard the items in the list as phrases, avoiding the use of the term 'idiom'. The lists that were provided for each age group contained around 55 idioms considering the attention levels and in order not to interrupt the general ongoing of classes. The prediction task consisted of several sessions until each child carefully answered all questions individually in a silent environment in the classroom. They were given enough time consecutively to finish their task. An important issue concerning the second graders, who had just developed the writing skills, was that we had to wait until the end of the spring semester to get better results from the eight-year-group, who were still very slow in the writing task. The entire norming phase was carried out with several sessions in a period of 4 months and the answers given by

participants were evaluated either as depicting the figurative meaning which were counted as *correct* or the ones which were labeled as literal, not complete, or unrelated, to be taken as *incorrect*.

4.2.1.4. The Outcomes

The preliminary survey on the identification of the frequency of idioms produced five different lists indicating the familiarity levels of specific idioms whose selection criteria were discussed above. All in all, the lists indicate –on a real time basis in which real primary school children aging 8 to 11 responded to the definition task in a formal setting - how and to what extent children are familiar or unfamiliar with the idioms in question. The end results with the frequency values are shown in the consecutive five lists below. The frequencies has a reading that progress from the least familiar idiom at the top of the list to the most familiar idiom at the bottom of the list. Or in other words, the idiomatic phrases at the top of the lists indicate the unfamiliar idioms for the primary school students and the idiomatic phrases at the bottom of the lists indicate the familiar idioms for the primary school students. As a rule of thumb, the exposure level of students to idioms is shown to gradually increase as we go down the list. The bolded items indicate the forty test items that are used in Experiment I and Experiment II, which were selected after the semantic and cognitive classification systems.

Table 3. The First Idiomatic Frequency List

	Idiom	*The number of figurative answers across age groups*				
		11	*10*	*9*	*8*	***Frequency***
2	**Leyleği havada görmek**	**-**	**-**	**-**	**-**	**0**
3	**Buluttan nem kapmak**	**1**	**-**	**-**	**-**	**1**
5	Sinek avlamak	3	1	1	-	5
1	Ağzı süt kokmak	5	1	-	-	6
4	**Kök söktürmek**	**3**	**3**	**-**	**-**	**6**
9	Elmanın iki yarısı	6	-	-	-	6
11	İz bırakmak	4	2	-	1	7
6	Kabak tadı vermek	3	3	1	1	8
8	Arazi olmak	5	3	2	-	10
7	Nalları dikmek	4	4	3	1	12
12	Leke sürmek	6	3	-	3	12
13	İkili oynamak	9	5	2	1	17
14	Yüz karası	13	3	2	1	19
15	Ağır dilli	11	3	6	7	27
16	El üstünde tutmak	19	8	3	1	31
17	Boğazı açılmak	13	9	9	-	31
25	Aklı başından gitmek	16	9	7	3	35
18	Tadı tuzu yok	14	13	6	3	36
27	Yol göstermek	18	7	7	5	37
20	Toz kondurmamak	22	19	3	3	47
10	Pireyi deve yapmak	18	15	3	12	48
21	Kapıyı göstermek	24	20	4	1	49
19	Boy ölçüşmek	19	18	12	1	50
24	Gözden çıkarmak	22	13	13	5	53
26	Vurdumduymaz	30	21	5	1	57
22	Yatağa düşmek	23	21	13	1	58
28	Ekmek parası	23	25	12	3	63
23	Deliksiz uyku	21	26	19	3	69
29	Avucunu yalamak	40	19	19	7	85
30	Sırt sırta vermek	38	29	16	3	86
32	Ağzı var dili yok	32	34	11	9	86
31	Yüz yüze gelmek	31	33	20	3	87
34	Başının tacı	39	29	16	6	90
39	Kafası şişmek	30	31	22	7	90
33	Ağaç olmak	33	36	18	9	96
36	Fırça yemek	41	25	19	11	96
37	Eli kolu bağlı	36	30	24	8	98
42	Bir deri bir kemik	41	34	22	3	100
35	Gözyaşlarını tutamamak	41	31	23	11	106
38	Göz kulak olmak	37	32	29	8	106
41	Dişini sıkmak	37	35	26	13	111
44	Kafa dinlemek	38	35	27	11	111
52	Ana kuzusu	37	37	30	7	111
45	Eline yüzüne bulaştırmak	42	31	31	11	115
43	Göz atmak	36	24	42	15	117
40	Şekerleme yapmak	28	38	33	19	118
50	Baş başa kalmak	46	29	31	14	120
49	Yan gelip yatmak	41	36	28	16	121
47	Dili pabuç kadar	42	33	35	12	122
46	Çeneni tut	42	35	31	21	129
51	Kuş beyinli	44	36	32	21	133
54	**Burnunun dibinde**	**44**	**42**	**32**	**16**	**134**
48	**Çocuk oyuncağı**	**40**	**39**	**35**	**22**	**136**
53	**Dört gözle beklemek**	**41**	**37**	**41**	**21**	**140**
55	Sulu göz	45	45	35	17	142
57	**Tatlı dilli**	**49**	**45**	**39**	**15**	**148**
56	**Kulak misafiri olmak**	**51**	**45**	**38**	**19**	**153**
58	**Yüreği ağzına gelmek**	**52**	**48**	**40**	**22**	**162**
59	**Kalbini kırmak**	**54**	**50**	**51**	**29**	**184**

Table 4. The Second Idiomatic Frequency List

	Idiom	*The number of figurative answers across age groups*				
		11	*10*	*9*	*8*	***Frequency***
4	**At hırsızı**	**-**	**3**	**-**	**-**	**3**
3	Yılan hikayesi	3	2	1	-	6
7	Tuzlu	7	3	2	-	12
8	**Ayağını kaydırmak**	**6**	**6**	**-**	**-**	**12**
2	Göz önüne almak	5	4	1	4	14
1	Işık tutmak	6	3	5	1	15
5	**Gözünü kırpmadan**	**11**	**7**	**-**	**-**	**18**
19	**Elden düşme**	**-**	**18**	**-**	**-**	**18**
6	Göz ağrısı	11	6	2	-	19
9	Şimşekleri üzerine çekmek	5	15	-	1	21
15	Giderayak	11	13	2	-	26
16	Eli armut toplamak	8	18	2	1	29
10	Beyninden vurulmuşa dönmek	11	15	5	-	31
18	Kalpleri bir olmak	9	17	4	1	31
13	Tükürdüğünü yalamak	9	21	1	2	33
12	Göz yummak	15	21	6	1	43
20	Gözü yükseklerde	15	22	6	3	46
21	Aralarından su sızmamak	11	26	6	3	46
14	**El değmemiş**	**20**	**21**	**6**	**3**	**50**
11	Saç baş yolmak	19	10	13	10	52
23	Yediği önünde yemediği ardında	15	31	7	3	56
17	Film çevirmek	23	19	12	5	59
29	Bir karış sürat	23	24	13	8	68
27	Gözü arkada kalmamak	23	23	15	9	70
32	Yük olmak	22	33	11	5	71
36	Çorbada tuzu olmak	26	31	15	2	74
25	Parmağında oynatmak	24	36	9	10	79
28	El koymak	22	33	12	13	80
33	Kafa ütülemek	27	26	21	6	80
26	Eli cebine gitmemek	27	36	8	10	81
35	Eli açık	26	40	9	7	82
31	Kazık yemek	27	37	11	9	84
30	Burnundan gelmek	23	41	15	6	85
34	Babasının oğlu	20	30	26	9	85
37	Yüz kızartıcı	31	42	8	5	86
22	Burnundan ateş püskürmek	22	36	15	19	92
40	Parmaklarını yemek	22	42	15	14	93
24	Kuş bakışı	31	29	28	7	95
38	Araları açılmak	30	39	17	17	103
39	Dilinde tüy bitmek	34	43	21	17	115
46	Ağzından bal damlamak	36	47	26	11	120
43	Ayaklarına kapanmak	29	41	25	27	122
41	**Başının etini yemek**	**33**	**42**	**27**	**21**	**123**
42	Yumuşak kalpli	34	37	26	26	123
44	Ağzından baklayı çıkarmak	39	41	28	16	124
45	Kafasının tası atmak	31	45	29	22	127
48	Kıl payı	32	45	32	21	130
49	Ağzı bozuk	36	45	33	20	134
47	Taş kalpli	36	47	38	25	146
50	**Dilini mi yuttun**	**42**	**51**	**36**	**34**	**163**
51	**Çenesi düşük**	**40**	**51**	**40**	**40**	**171**

Table 5. The Third Idiomatic Frequency List

	Idiom	*The number of figurative answers across age groups* 11	10	9	8	***Frequency***
1	**Diş bilemek**	**-**	**-**	**-**	**-**	**0**
2	**Parmağına dolamak**	**-**	**-**	**-**	**-**	**0**
4	Yolunu şaşırmak	2	-	-	-	2
3	Ensesi kalın	1	3	-	-	4
5	**Eli kalem tutmak**	**3**	**2**	**-**	**-**	**5**
8	**Sırtı kaşınmak**	**4**	**5**	**-**	**-**	**9**
6	**Sırtüstü yatmak**	**7**	**3**	**-**	**-**	**10**
7	**Alnını karışlamak**	**6**	**5**	**1**	**-**	**12**
10	Ayakaltı	4	4	5	1	14
14	Kökünü kazımak	5	5	4	1	15
12	Deneme tahtası	7	4	4	2	17
9	Meydanı boş bulmak	11	7	-	-	18
18	Soğukkanlı	9	7	2	1	19
11	Beyin yıkamak	14	7	3	1	25
17	Elden kaçırmak	14	12	5	-	31
19	Göklere çıkarmak	23	11	-	-	34
16	Ayaklı kütüphane	20	16	-	-	36
21	Bardağı taşıran son damla	19	17	-	-	36
13	Kendini dev aynasında görmek	19	16	2	1	38
22	Gözaltına almak	14	14	10	0	38
15	Kucak açmak	22	11	4	2	39
20	Kafasında şimşekler çakmak	25	8	6	1	40
23	Kanatları altına almak	27	13	2	1	43
32	Tadını kaçırmak	25	11	12	1	49
28	Tuttuğunu koparmak	32	16	4	3	55
25	Tepeden tırnağa	30	21	5	-	56
26	Ateşle oynamak	35	21	1	-	57
30	Göz göre göre	33	21	7	1	62
24	Borcu gırtlakta olmak	29	23	10	1	63
27	İki ayağı bir pabuca girmek	37	18	11	1	67
29	Başı sıkışmak	33	25	7	2	67
36	Kılını bile kıpırdatmamak	33	21	13	4	71
34	İki yüzlü	36	23	12	3	74
35	İçine kapanık	34	24	15	3	76
31	Ağzı sulanmak	33	28	12	10	83
39	Aklını kaçırmak	36	22	22	3	83
33	Gözünün yaşına bakmamak	38	27	11	8	84
37	Gözü tutmamak	40	26	15	3	84
42	Küçük dilini yutmak	36	28	18	4	86
38	Omuz omuza vermek	45	29	15	2	91
40	Gözü doymaz	38	28	18	10	94
41	Ağzı açıkta kalmak	38	28	22	8	96
47	Arkasından konuşmak	44	26	26	3	99
43	Kitap kurdu	43	28	18	13	102
44	**Altını üstüne getirmek**	**39**	**33**	**22**	**8**	**102**
48	El birliği	44	29	26	8	107
45	Dil dökmek	38	35	26	9	108
46	Gözden geçirmek	38	34	28	10	110
49	Kafadan atmak	41	35	38	10	124
50	Ağzını bıçak açmamak	47	39	32	18	136
51	**Karnı zil çalmak**	**49**	**45**	**43**	**28**	**165**

Table 6. The Fourth Idiomatic Frequency List

	Idiom	*The number of figurative answers across age groups*				***Frequency***
		11	*10*	*9*	*8*	
2	Ağzının içine bakmak	2	-	-	-	2
7	Havanı alırsın	2	-	-	-	2
3	**Diş geçirmek**	**1**	**-**	**-**	**2**	**3**
13	Yumurta kapıya dayanmak	4	-	-	-	4
4	Mürekkep yalamış	-	5	-	-	5
10	**Ateş bacayı sarmak**	**3**	**2**	**-**	**1**	**6**
15	Ele almak	5	1	-	-	6
1	Ayak sürümek	4	5	-	-	9
17	Karnı tok olmak	5	2	2	-	9
22	Suyu ısınmak	6	2	1	1	10
14	Dört elle sarılmak	11	1	-	-	12
21	Mumla aramak	5	4	1	3	13
23	Yağ çekmek	8	4	1	-	13
11	Köşeyi dönmek	3	3	2	7	15
5	Aydınlatmak	11	4	1	-	16
9	Kapalı kutu	4	9	-	3	16
29	Pestilini çıkarmak	7	2	3	4	16
25	Elden ayaktan düşmek	2	12	3	-	17
19	Diken üstünde olmak	14	2	1	1	18
20	Göz önüne gelmek	13	2	2	1	18
16	Eli kulağında	7	12	1	-	20
24	Boyunun ölçüsünü almak	10	9	1	1	21
6	Dirsek çürütmek	11	8	3	-	22
8	İki yakası bir araya gelmemek	10	10	-	2	22
18	Tuz buz olmak	4	8	1	11	24
30	El ayak öpmek	8	10	4	4	26
34	Yangından mal kaçırmak	10	18	-	-	28
35	Masal okumak	16	10	3	1	30
31	İğne ipliğe dönmek	9	18	2	2	31
12	Kuş uçmaz kervan geçmez	8	16	3	5	32
32	Gözden kaçmak	12	13	8	1	34
27	Gözüne takılmak	19	11	6	1	37
36	Paçaları tutuşmak	14	9	8	7	38
28	İçinden çıkamamak	19	19	1	1	40
33	El sürmemek	5	25	7	6	43
26	Baş kaldırmak	14	26	2	3	45
37	Ağzı kulaklarına varmak	19	31	4	1	55
41	Çamur atmak	25	29	8	5	67
39	Ayağının altına almak	21	29	11	7	68
44	Aralarına kara kedi girmek	28	33	8	3	72
43	İşi başından aşkın	31	31	9	7	78
42	Kafa tutmak	26	31	17	8	82
38	Kolları sıvamak	32	27	16	8	83
40	Yerin dibine girmek	34	29	7	13	83
45	Aklı bir karış havada	34	32	15	3	84
46	Defterden silmek	35	35	10	6	86
52	Yer yarıldı içine girdi	35	32	21	9	97
48	Kafayı üşütmek	32	38	15	14	99
49	Her kafadan bir ses çıkmak	37	37	22	3	99
50	Alın teri dökmek	34	41	28	2	105
47	Tüyleri diken diken olmak	35	35	25	14	109
54	Göz gezdirmek	36	43	23	12	114
53	Numara yapmak	36	41	26	17	120
55	**Dilimin ucunda**	**42**	**46**	**23**	**11**	**122**
51	Oyuna gelmek	36	41	31	20	128
56	Elini çabuk tut	39	42	30	21	132
59	Gözü yollarda kalmak	44	45	25	18	132
58	Çenesi açılmak	33	50	25	28	136
57	**Asık yüzlü**	**41**	**43**	**27**	**26**	**137**

Table 7. The Fifth Idiomatic Frequency List

	Idiom	*The number of figurative answers across age groups*				
		11	*10*	*9*	*8*	***Frequency***
1	**Çiçeği burnunda**	**1**	**-**	**-**	**-**	**1**
10	**Göbeği çatlamak**	**-**	**1**	**-**	**-**	**1**
2	**Karın ağrısı**	**1**	**-**	**-**	**1**	**2**
4	**Kulakları paslanmak**	**2**	**-**	**-**	**-**	**2**
5	Tuzu kuru	1	-	-	1	2
6	Yanağından kan damlamak	2	-	-	-	2
8	Yol ayrımına gelmek	3	-	-	-	3
7	Yaş tahtaya basmak	2	2	-	-	4
3	Kılı kırk yarmak	3	-	-	2	5
14	Yüksekten uçmak	2	3	-	-	5
9	Bir ayağı çukurda	1	2	2	1	6
15	Göz önünde bulundurmak	3	3	1	-	7
12	El değiştirmek	3	4	1	1	9
11	Turşusu çıkmak	1	6	2	1	10
13	Yatak yorgan yatmak	5	6	2	-	13
24	Süt kuzusu	6	7	2	3	18
20	Elinin altında olmak	6	12	1	1	20
16	Gözünü boyamak	9	7	6	-	22
26	Ağıza sakız olmak	8	8	6	2	24
19	Üzerinde kara bulutlar dolaşmak	8	8	6	4	26
23	Ok yaydan çıktı	16	5	4	1	26
25	Yollara düşmek	13	6	6	2	27
18	Dişini tırnağına takmak	13	11	3	1	28
21	Göğsünü kabartmak	17	6	5	-	28
22	El sıkışmak	14	7	2	5	28
17	Düşe kalka	12	8	7	5	32
29	Sırtından vurmak	17	9	6	1	33
31	Rengi solmak	14	13	4	4	35
27	Kulağına küpe olmak	22	11	8	0	41
28	Tam üstüne basmak	16	16	6	5	43
35	Etekleri zil çalmak	19	16	2	9	46
32	Dilinden düşmemek	21	15	5	6	47
43	Parmağını bile kıpırdatmamak	16	19	9	3	47
34	Yarı yolda bırakmak	20	16	11	5	52
41	Yüz vermek	19	17	10	10	56
42	Gözü ısırmak	28	16	13	1	58
38	Kafa kafaya vermek	27	18	12	2	59
37	Her taşın altından çıkmak	25	20	10	6	61
40	Külahları değişmek	15	22	17	10	64
39	Kazık atmak	24	22	13	6	65
46	Başını kaşımaya vakti olmamak	24	28	15	6	73
44	Yollarını gözlemek	30	19	20	6	75
45	Ağzı var dil yok	28	25	12	10	75
36	Gözlerinin içi gülmek	23	23	16	15	77
52	Ağzından çıkanı kulağı duymamak	25	30	17	9	81
47	**Beyni durmak**	31	32	13	6	82
48	**El atmak**	29	34	12	7	82
55	Aklı başına gelmek	30	27	19	9	85
53	Dili tutulmak	30	30	23	8	91
51	İpucu vermek	30	31	17	14	92
50	Gözüm üzerinde	31	27	18	18	94
49	Kulak vermek	32	26	20	17	95
54	Sözünü kesmek	26	33	24	15	98
56	Bir kulağından girip diğer kulağından çıkmak	26	36	20	16	98
58	Gözden düşmek	29	35	28	16	108
57	**Birbirini yemek**	**25**	**37**	**35**	**15**	**112**
61	Ayakaltında dolaşmak	29	32	39	14	114
60	**Göze girmek**	**36**	**38**	**31**	**11**	**116**
59	**Eli ayağı titremek**	**34**	**37**	**30**	**16**	**117**
62	**Her işe burnunu sokmak**	**41**	**44**	**40**	**28**	**153**

4.2.2. EXPERIMENT 1

Experiment I was designed to examine the predictive mechanisms of 7, 9, and 11-year students when the idioms were presented out of context. With the current design, the subjects in the first experiment comprised the control group. To begin with, the resulting lists of the preliminary survey provided the basis for the selection and classification of idioms across familiarity and semantic grading levels.

4.2.2.1. Participants

In Experiment I, which constitutes the second data collection phase of the study, both the design and the implementation process involved 480 participants living in Ankara who were considered to be representing middle-class socioeconomic group. 160 students attending Beytepe İlkokulu, 160 students attending Şehit Erhan Ar İlkokulu and 160 students attending Cenk Yakın Ortaokulu volunteered to participate the experiment. The schools were all situated in Ankara, and the mean age for the first graders was 7,2; the mean age for the third graders was 9,5 and the mean age for the fifth graders was 11,4. The students who were reported by their teachers as having mainstreaming education, who were called 'kaynaştırma öğrencileri', were excluded from the study because they were observed to have inattentiveness and to produce incomplete answers during the initial stage of the implementation. Students who were reported to be bilinguals were also excluded from the study. All in all, the great majority of students were reported by their teachers to have average or superior learning capacities. Participants were randomly assigned to the relevant groups in the paraphrasing tasks.

4.2.2.2. Materials and Procedure

A thorough analysis was applied in order to classify and designate the final 40 test items in Experiment I. We selected as experimental stimuli the top 15% idioms and the bottom 15% idioms in each of the five idioms sets to produce a wide collection of 80 idioms, among which those final 40 test items were selected, representing the most and the least familiar idioms. The 'familiarity frequencies' were taken as the basic selection criterion for the identification of the most and the least familiar idioms. Accordingly, the idioms with a familiarity level of the first 15% in the list and below were taken as the 'least familiar (or unfamiliar) idioms';

and the idioms with a familiarity level of the last 85% in the list and above were taken as the 'most familiar idioms'. The final test items to be employed in Experiments I and II are described below.

Table 8. The descriptive statistics for the familiarity frequencies of the idioms in **List 1**

N	Valid	59
	Missing	3
Percentiles	15	10,00
	25	31,00
	50	86,00
	75	117,00
	85	133,00

List 1: The values in percentiles (the top and bottom 15% idioms) are given for List 1 in Table 8. In accordance with our selection criteria, idioms with a familiarity frequency of 10 and below were selected as the unfamiliar idioms: 'leyleği havada görmek', 'buluttan nem kapmak', and 'kök söktürmek'. Idioms with a familiarity frequency of 133 and above were selected as the familiar idioms: ' Burnunun dibinde' 'çocuk oyuncağı', 'dört gözle beklemek', 'tatlı dilli', 'kulak misafiri olmak', 'yüreği ağzına gelmek', and 'kalbini kırmak'.

Table 9. The descriptive statistics for the familiarity frequencies of the idioms in **List 2**

N	Valid	51
	Missing	11
Percentiles	15	18,00
	25	31,00
	50	74,00
	75	103,00
	85	123,00

List 2: The values in percentiles (the top and bottom 15% idioms) are given for List 2 in Table 9. In accordance with our selection criteria, idioms with a familiarity frequency of 18 and below were selected as the unfamiliar idioms: 'at hırsızı', 'ayağını kaydırmak', 'gözünü kırpmadan' and 'elden düşme'. Idioms with a familiarity frequency of 123 and above were selected as the familiar idioms: 'başının etini yemek', 'dilini yutmak' and 'çenesi düşük'.

Table 10. The descriptive statistics for the familiarity frequencies of the idioms in **List 3**

N	Valid	51
	Missing	11
Percentiles	15	11,60
	25	19,00
	50	56,00
	75	86,00
	85	102,00

List 3: The values in percentiles (the top and bottom 15% idioms) are given for List 3 in Table 10. In accordance with our selection criteria, idioms with a familiarity frequency of 11,6 and below were selected as the unfamiliar idioms: 'diş bilemek', parmağına dolamak', eli kalem tutmak', 'sırtı kaşınmak', 'sırtüstü yatmak', and 'alnını karışlamak'. Idioms with a familiarity frequency of 102 and above were selected as the familiar idioms: 'altını üstüne getirmek' and 'karnı zil çalmak'.

Table 11. The descriptive statistics for the familiarity frequencies of the idioms in **List 4**

N	Valid	59
	Missing	3
Percentiles	15	9,00
	25	16,00
	50	32,00
	75	84,00
	85	109,00

List 4: The values in percentiles (the top and bottom 15% idioms) are given for List 4 in Table 11. In accordance with our selection criteria, idioms with a familiarity frequency of 9 and below were selected as the unfamiliar idioms: 'diş geçirmek' and 'ateş bacayı sarmak'. Idioms with a familiarity frequency of 109 and above were selected as the familiar idioms: 'dilimin ucunda' and 'asık yüzlü'.

Table 12. The descriptive statistics for the familiarity frequencies of the idioms in **List 5**

N	Valid	62
	Missing	0
Percentiles	15	5,00
	25	16,75
	50	42,00
	75	81,25
	85	94,55

List 5: The values in percentiles (the top and bottom 15% idioms) are given for List 5 in Table 12. In accordance with our selection criteria, idioms with a familiarity frequency of 5 and below were selected as the unfamiliar idioms:'çiçeği burnunda', 'göbeği çatlamak', 'karın ağrısı', and 'kulakları paslanmak'. Idioms with a familiarity frequency of 94.55 and above were selected as the familiar idioms: 'birbirini yemek', 'göze girmek', 'eli ayağı titremek' and 'her işe burnunu sokmak'.

To summarize shortly, in the first phase of the classification, the 282 idioms, which were identified in the preliminary survey, were arranged according to frequency order in five different sets. Consequently, in the second and final phase, the top and bottom 15% idioms were classified according to semantic grading and cognitive motivation levels as suggested by Subaşı-Uzun (1991) and Kövecses and Szabo (1996). The whole process ended in 10 familiar idioms, 10 unfamiliar idioms, 10 first-degree idioms and 10 third-degree idioms.

4.2.2.3. Why body-part idioms?

It is widely known that there are plenty of idioms in Turkish involving figurative language and the question to be asked is what kind of idioms should take place in the current research. The present section explains the reasons behind the selection process of idioms relating to body-parts as the test items considering both the theoretical and practical aspects. First of all, the theoretical background of the study focuses on revealing the cognitive mechanisms underlying the comprehension of idiomatic expressions, which is expected to contribute to an effective and systematic teaching of idioms. Theoretically, Kövecses (2001), and Lakoff and Johnson (1999) argue that the relevant part of cognitive linguistics investigating idioms

should focus on the most common ones for a search of the underlying systematicity of concepts, and furthermore, the human body is the most directly experienced source domain on which concepts and idioms are construed. In this sense, certain source domains –such as the human body- may be considered as more productive than others. Accordingly the idioms that make reference to human body organs, which are based on this frequent source domain, should also be the most frequent idioms in the language.

Second, practically this view is supported with a thorough analysis of the 2010/2011 MEB Turkish course books and workbooks published for 7 to 11-year-old students. The investigation of the books revealed that of the 161 idioms employed in 10 different books contained 74 body-part idioms which constituted almost half of the idioms. The 74 idioms were observed to center around 20 subcategories of body parts to include '*ağız, ayak, baş, beyin burun, dil, diş, diz, dudak, el, göğüs, göz, kafa, kalp, karın, kulak, omuz, yanak, yürek*, and *yüz'*. A corpus-based analysis of the relevant body-part words indicated that some of them –even totally ignoring their lemmas- are basically among the most frequent 1000 words in the TUDD (Aksan et al, 2012). For instance the word *göz* recurs 269 times, *dil* 483 times, *el* 300 times, *baş* 638 times, and *yüz* 407 times.

In short, body-part words and body-part idioms are considered to be one of the main groups both in the cognitive structuring and in the mental lexicon; they are used frequently in daily language; and they have a concrete base for understanding.

The resulting implementation lists of idioms are seen in tables 13-16 below:

Table 13. Classification of familiar idioms across cognitive motivation, conceptual structure and componential feature

Idiom	*Cognitive motivation*	*Conceptual Structure*	*Componential feature*
1- Dört gözle beklemek	metaphorical	LONGING FOR STH. OR EXCITEMENT IS INCREASE IN QUANTITY	body-part
2- Tatlı dilli	metaphorical	IDEAS ARE FOOD	body-part
3- Kulak misafiri olmak	metaphorical	HEARING IS SEEING	body-part
4- Kalbini kırmak	metaphorical	PEOPLE ARE FRAGILE OBJECTS	body-part
5- Dilini yutmak	metaphorical	IDEAS ARE FOOD	body-part
6- Çenesi düşük	metaphorical	TALKING TOO MUCH IS DOWNWARD ACTION	body-part
7- Karnı zil çalmak	metaphorical	THE BODY IS A CONTAINER	body-part
8- Dilinin ucunda olmak	metaphorical	LINGUISTIC EXPRESSIONS ARE CONTAINERS	body-part
9- Her işe burnunu sokmak	metaphorical	EVENTS ARE PHYSICAL CONTAINERS	body-part
10- Göze girmek	metaphorical	EYES ARE CONTAINERS	body-part

Table 14. Classification of unfamiliar idioms across cognitive motivation, conceptual structure and componential feature

Idiom	*Cognitive motivation*	*Conceptual Structure*	*Componential feature*
1- Göbeği çatlamak	metaphorical	THE STOMACH IS A CONTAINER	body-part
2- Kulakları paslanmak	metaphorical	THE BODY IS A MACHINE	body-part
3- Diş geçirmek	metaphorical	HUMAN BEHAVIOR IS ANIMAL BEHAVIOR	body-part
4- Alnını karışlamak	metaphorical	ANGER IS BRUTAL RESPONSE	body-part
5- Eli kalem tutmak	metonymic	INSTRUMENT STANDS FOR ACTION	body-part
6- Elden düşme	metaphorical	POSSESSING STH. IS HOLDING IN THE HAND	body-part
7- Sırtı kaşınmak	metaphorical	DESERVING PUNISHMENT IS THE ITCHING SENSE ON ONE'S BACK	body-part
8- Ayağını kaydırmak	metaphorical	FAILURE IS DOWN	body-part
9- Gözünü kırpmadan	metonymic	THE EYE STANDS FOR ACTION	body-part
10- Parmağına dolamak	metaphorical	RECURRENCE OF AN EVENT OR STATE IS PHYSICALLY REPEATING STH.	body-part

Table 15. Classification of first-degree idioms across cognitive motivation, conceptual structure and componential feature

Idiom	*Cognitive motivation*	*Conceptual Structure*	*Componential feature*
1- Leyleği havada görmek	metaphorical	LIFE IS A JOURNEY	aviation
2- Buluttan nem kapmak	metaphorical	EMOTIONAL STATES ARE NATURAL EVENTS	celestial
3- Kök söktürmek	metaphorical	PHYSIOLOGICAL STATES ARE PLANTS	biological
4- At hırsızı	metaphorical	BAD PHYSICAL COMPLEXION IS INAPPROPRIATE HUMAN BEHAVIOR	stealing
5- Diş bilemek	metonymic	ANGER IS ANIMAL BEHAVIOR	body-part
6- Ateş bacayı sarmak	metaphorical	LOVE IS FIRE	fire
7- Çiçeği burnunda	metaphorical	THE FIRST STAGE IN THE PROCESS OF STH. IS THE FLOWERING OF A PLANT	body-part
8- Birbirini yemek	metaphorical	ANGER IS ANIMAL BEHAVIOR	eating
9- Yüreği ağzına gelmek	metonymic	INCREASED HEARTRATE STANDS FOR EMOTION	body-part
10- Başının etini yemek	metaphorical	PERSISTENCE IS CONSUMING ONESELF	body-part

Table 16. Classification of third-degree idioms across cognitive motivation, conceptual structure and componential feature

Idiom	*Cognitive motivation*	*Conceptual Structure*	*Componential feature*
1- Asık yüzlü	metonymic	FACIAL EXPRESSION STANDS FOR SADNESS	body-part
2- Karın ağrısı	metaphorical	UNDESIRABLE STATES OR PEOPLE ARE DISEASES	body-part
3- Eli ayağı titremek	metonymic	PHYSIOLOGICAL EFFECT STANDS FOR EMOTION	body-part
4- Altını üstüne getirmek	metaphorical	MESSING IS SHIFTING THE PLACE OF OBJECTS	directional
5- Sırtüstü yatmak	metaphorical	NO DESIRE FOR ACTION IS LYING DOWN	body-part
6- Burnunun dibinde	metaphorical	PHYSICAL PROXIMITY IS BEING IN IMMEDIATE SIGHT	body-part
7- Çocuk oyuncağı	metaphorical	EASINESS IS A GAME	toy
8- Beyni durmak	metaphorical	THE MIND IS A MACHINE	body-part
9- El değmemiş	metonymic	THE HAND STANDS FOR POSSESSION	body-part
10- El atmak	metonymic	THE HAND STANDS FOR THE ACTION	body-part

4.2.2.4. Procedure

Experiment I was designed to measure the participants' familiarity levels out of context in a simple paraphrasing task. The aim was to have a general idea of how the participants

performed in the paraphrasing task when contextual cues were absent, prior to assessing the performance of the participants in vs out of context across familiarity and semantic grading in Experiment II. The participants were asked to give simple definitions of the expressions in the list in their own words in silent formal settings. Participants were not informed about the aim of the study and they were told to regard the items in the list as phrases, avoiding the use of the term 'idiom'. The definition task consisted of several sessions until each child carefully answered all questions individually. They were given enough time to finish their task. An important issue concerning the first graders, who had just developed the writing skills, was that we had to wait until the end of the spring semester to get better results from the seven-year-group, who were still very slow in the writing task. The paraphrasing task for the seven-year-group consisted of two sessions, regarding their writing speed and attention levels. The entire data-collection for Experiment I was carried out with several sessions in a period of 2 months.

The task consisted of:

a. Paraphrasing task for the meanings of 10 familiar idioms out of context
b. Paraphrasing task for the meanings of 10 unfamiliar idioms out of context
c. Paraphrasing task for the meanings of 10 first-degree idioms out of context
d. Paraphrasing task for the meanings of 10 third-degree idioms out of context

An illustrative example of the paraphrasing task for an unfamiliar idiom can be seen below. The complete list of the paraphrasing task designed for Experiment I is in Appendices 1-4.
Example: *Lütfen aşağıdaki ifadelerin anlamlarını yazınız, bilmediklerinizi tahmin ederek yazınız.*

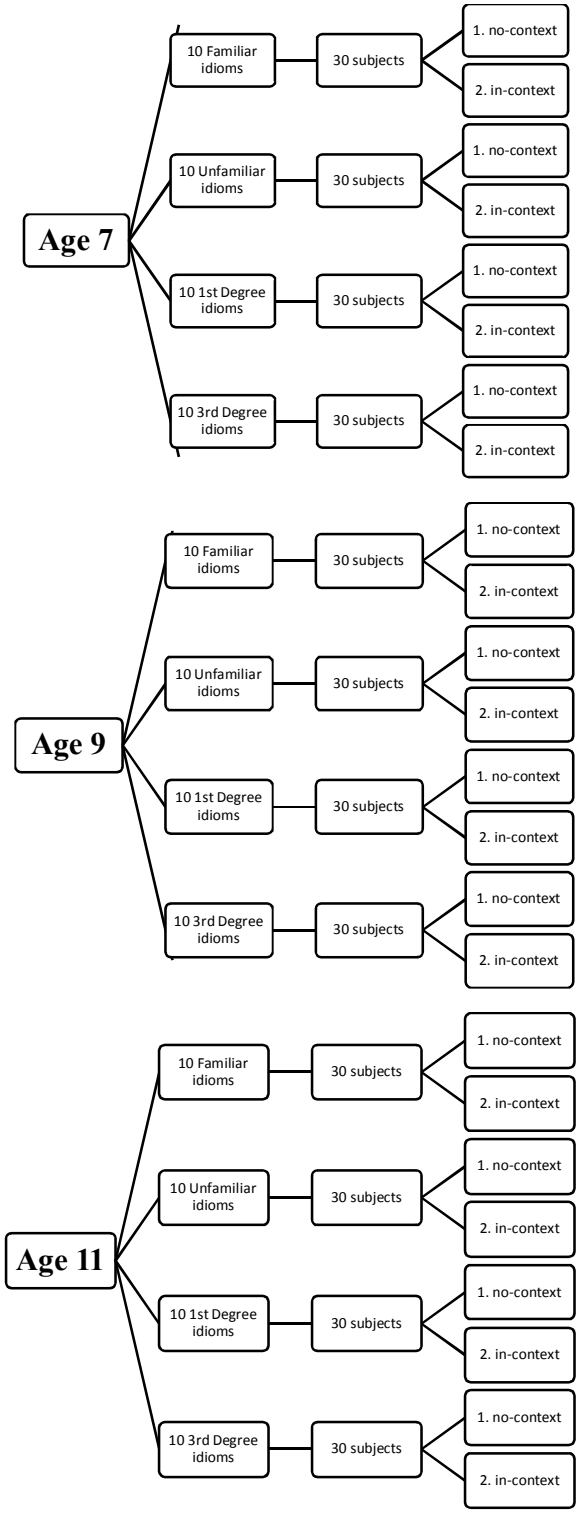
1. Ali Bey arkadaşına 'Bu sene yine leyleği havada gördün' dedi.
   'leyleği havada görmek' ifadesi ne anlama gelir?

The explanations of idioms were classified using a system which was adopted from Cain, Oakhill and Lemmon (2005). Examples are provided in Table 17.

Table 17. Examples of responses by category

Expression: Leyleği havada görmek	
Figurative answer	The response demonstrates an understanding of the figurative meanings, for example "çok gezmek" (out of context) and "gezmeyi çok abartmak" (in context)
Wrong figurative answer	The response indicates either a partial understanding of the figurative meaning, or a totally unrelated figurative meaning, for example "tatile çıkmak" (in context) and "ileri görüşlü olmak" (in context)
Literal answer	The response reflects the concrete meaning of a word in the expression, for example, "leylek yuvasına uçuyor"
Other	Responses in this category include repetitions, empty answers or " I don't know", incomplete or totally unrelated answers

Table 18. The General Design of the Study



4.2.3. EXPERIMENT II

In the second experiment we examined the effect of context on the comprehension of idiomatic expressions when applied to the same set of idiomatic expressions in the first experiment. In this case, the students in the second experiment comprised the experiment group in order to assess the effect of context on the comprehension abilities of primary school children. The data collection process involved in the comprehension task consisted of**:**

a. Comprehension test for 10 familiar idioms in context
b. Comprehension test for 10 unfamiliar idioms in context
c. Comprehension test for 10 first-degree idioms in context
d. Comprehension test for 10 third-degree idioms in context

4.2.3.1. Participants

The participants of Experiment II were the same as the ones who took part in Experiment I on a voluntary basis. The design of Experiment II required the same amount of participants. 480 primary school students aging 7, 9 and 11 who were considered to be representing middle-class socioeconomic group. Students from Beytepe İlkokulu, Şehit Erhan Ar İlkokulu, and Cenk Yakın Ortaokulu in Ankara constituted the participants of the experiment. The mean age for the first graders was 7,2; the mean age for the third graders was 9,5 and the mean age for the fifth graders was 11,4. As mentioned before, bilingual students and those who were reported to be having meanstreaming education (kaynaştırma öğrencileri) were excluded from the study simply because of incomplete answers and inattentiveness. The great majority of students were reported by their teachers to have average or superior learning capacities. None of the participants took part in a similar activity before, and they were randomly assigned to the relevant implementation groups by a technical codification which indicated the participant, age, idiom type and the specific task used in the experiment.

4.2.3.2. Materials and Procedure

One short story was made up for each of the 40 experimental idioms which mainly consisted of a setting, a complication and a solution which was expressed by the idiom itself at the end of the paragraph. Great care was taken in order to render the context as informative as possible and to create a contrastive situation within the text to make the idiomatic sense plausible. The internal validity of the short stories was obtained by consulting expert opinion. Thus, the short stories underwent several modifications to obtain the final texts. Full lists of the short stories for each idiomatic expression in the comprehension task can be found in Appendix 5-8. Within the construction process of the short stories, the cognitive level and attention of the first graders were primarily taken into consideration and the stories were rendered as compact and informative as possible. Accordingly, the mean length was *37.1 words* for each of the 10 short stories written for *first-degree idioms*; the mean length was *32.9 words* for each of the 10 short stories written for *third-degree idioms*; the mean length was *31.5 words* for each of the 10 short stories written for *familiar idioms*; and finally the mean length was *35.7* words for each 10 short stories written for *unfamiliar idioms*. All in all, the mean length for 40 short stories in the design of the study is 34.3 words. An instance of an in-context situation employed in the comprehension task can be seen below.

Example: *In-context situation*

Lütfen aşağıdaki bütün soruları her bir parçaya göre cevaplayınız.

1. PARÇA
Ali Bey ve Ahmet Bey yaz planlarından bahsetmektedir. Ali Bey bu yaz parası olmadığı için evde dinleneceğini söyler. Ahmet Bey ise gezme planları olduğunu ve sırasıyla Ankara, İzmir, İstanbul, Bursa ve Antalya'ya gideceğini söyler. Ali Bey ona 'Ooo Ahmet Bey bu sene yine **leyleği havada gördün**' der.

1. Ali Bey'in planı nedir?
2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*

   a) '**Leyleği havada görmek**' ifadesi ne anlama gelir.
   b) Leyleği havada gören birisi neler yapar?

The test paragraphs used in the comprehension task consisted of three questions. The first one was designed to be a warming up question with a simple search for contextual information. The second question was the paraphrasing task for the meaning of the idiomatic expression within the bounds and the associations of the contextual cues. The final third question was designed to be a semantic confirmation of the second question, to be called a 'confirmative paraphrasing'. The third question had qualitative content to confirm that the student did not respond by chance-factor in the second question. Consequently, such questions as 'Why did you think like that?, What would you feel in such a situation?, How did you conclude that?, How does a person react in that case? etc.

4.2.3.3. Procedure

The test items were administered exactly 4 weeks after the first experiment to the same participants with a coding system. In this case, students who responded to, for example, unfamiliar idioms out of context now were asked to respond to the same set of idioms within context. The short stories were read out loud only to the first graders since they were still relatively slow in reading skills. The third and fifth graders read the stories themselves in a silent setting and then answered the questions. Participants were given enough time to answer all the questions completely. Thus, first graders listened to only two stories in each meeting and the whole process took five sessions for complete and valid processing. After reading/listening to the short stories, each participant was asked to answer the three questions, first responding to the simple reading-comprehension question; then to paraphrase the meaning of the idiomatic expression, and finally to explain the confirmative reasons for the second answer. The participants were not informed about the aim of the study. The entire process for data collection in Experiment II took exactly 3 months.

The responses given to the paraphrasing (second question) and the confirmative paraphrasing (third question) tasks were classified using the same system employed in Experiment I, with only one addition. The responses given to the first comprehension question were codified either as *correct* or *incorrect* depending on the extent to which contextual information corresponded with the content of the question.

Table 19. Examples of responses by category

Expression: Leyleği havada görmek	
Correct	The response corresponds to exact contextual information, for example, "Q: Ali Bey'in planı nedir? A: yazın evde dinlenmek"
Incorrect	The response corresponds to inaccurate contextual information, for example, "Q: Ali Bey'in planı nedir? A: tatile gitmek"
Figurative answer	The response demonstrates an understanding of the figurative meanings, for example "çok gezmek" (out of context) and "gezmeyi çok abartmak" (in context)
Wrong figurative answer	The response indicates either a partial understanding of the figurative meaning, or a totally unrelated figurative meaning, for example "tatile çıkmak" (in context) and "ileri görüşlü olmak" (in context)
Literal answer	The response reflects the concrete meaning of a word in the expression, for example, "leylek yuvasına uçuyor"
Other	Responses in this category include repetitions, empty answers or " I don't know", incomplete or totally unrelated answers

As a final remark, the idiomatic expressions employed in the research had the following characteristics:

a. They are classified into four main categories: familiar, unfamiliar, first degree, and third degree
b. They exhibit mainly these syntactic structures:
   (NP)+(NP); (NP)+(VP); (NP)+(NP)+(VP)
c. There is ambiguity in most of the idiomatic expressions which entail a literal reading and an idiomatic reading.

4.3. ANALYSIS OF THE DATA

The norming phase of the idiomatic frequency lists comprised the formation of the familiarity lists by referring to the linguistic knowledge of the children aged 8 through 11. A total of 902 participants were asked to paraphrase the meanings of 282 items. The answers were coded manually as either correct idiomatic answers or incorrect, to later establish the frequency lists in tables 3 through 7, which demonstrate the frequencies for each idiom across different age groups.

The second phase of the data analysis comprised the formation of the familiar and unfamiliar idioms to be employed in the main experiments. Each of the 5 frequency lists were computed to present the top and bottom 15%s, in which the top %15 percent represented the highly familiar idioms, and the bottom 15% represented the unfamiliar idioms. Tables 8 through 12 demonstrate the corresponding percentile for each specific frequency list.

The third phase of the data analysis involved the coding of no-context and in-context answers as correct, incorrect, figurative, wrong figurative, literal and other by referring to expert opinion. The distribution of the no-context, in-context I, in-context II and in-context III answers for each of the familiar, unfamiliar, first-degree and third-degree idioms among the 7, 9 and 11 age-groups were assessed using the Chi-square test and/or Fisher's Exact test.

In each age group, the difference between the no-context and in-context 2 situation for each idiom; and the difference between the no-context and in-context 3 situation for each idiom were assessed with the Marginal Homogeneity test.

The chi-square test was used in the cumulative evaluation of the idioms across age groups.

CHAPTER 5

FINDINGS

5.1. CONTEXT-BASED AND AGE-BASED FINDINGS FOR THE FAMILIAR IDIOMS

5.1.1. Findings for the idiom 'dört gözle beklemek'

Table 20. *Statistical results for the idiom 'dört gözle beklemek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	15	50	29	96.7	30	100	26,9	0,000*
	Wrong Figurative	3	10	0	0	0	0		
	Literal	10	33.3	1	3.3	0	0		
	Other	2	6.7	0	0	0	0		
In-context I	Correct	30	100	30	100	30	100	-	-
	Wrong	0	0	0	0	0	0		
In-context II	Figurative	18	60	29	96.7	30	100	25,0	0,000*
	Wrong Figurative	0	0	1	3.3	0	0		
	Literal	2	6.7	0	0	0	0		
	Other	10	33	0	0	0	0		
In-context III	Figurative	22	73.3	30	100	30	100	14,6	0,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	0	0	0	0	0	0		
	Other	8	26.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *dört gözle beklemek*, which literally translates 'to wait with four eyes', has the target figurative meaning 'to wait eagerly for something; to look forward to something'. The confirmative paraphrasing task revealed the figurative answers 'heyecanla beklemek; hemen gelsin istemek; süpriz beklemek; sabırsızlık ve merakla beklemek' by all age groups. The 7-year-old group was observed to have traces of literal orientation with such answers indicating either the denotative aspects of *göz*: 'iki gözlü; gözleri kızarmak; görmek; gözümüzü açmak', or the denotative aspects of *beklemek*: 'iki saattir bekliyorum'. Although the 7-year-old group

was observed to increase their performance in the in-context situation, the increase did not yield statistical difference, which indicated partial contribution of contextual cues. In contrast the 9 and 11-year-old-participants exhibited a ceiling-level performance both in the no-context and in-context situations. Consequently, these older age groups did not need contextual cues for the interpretation of the highly familiar idiom *dört gözle beklemek*. There was only one case of literal description on the surface level by a 9-year-old participant, and even in that case the incomplete answer 'dört göz' is a slang term which is metaphorically used to mean a person with glasses.

In terms of conceptual structuring, the wrong figurative answers given by the 7-year-old participants seemed to center around the conceptual metaphor LONGING FOR STH. OR EXCITEMENT IS INCREASE IN QUANTITY which also forms the basis of the idiom *dört gözle beklemek*. In this case, the intensity of the emotion could be attributed to the quantity involved in the idiomatic expression, that is, having more eyes could result in more attention or more boredom as in the wrong figurative answers 'dikkatli olmak; sıkılmak'.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups. Since all the answers are evenly distributed, the data set yielded no statistical comparison.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically

different at a meaningful level (p<0,001). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference (p>0,05), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level (p<0,001). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group (p>0,05).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group (p>0,05).

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group (p>0,05).

5.1.2. Findings for the idiom 'tatlı dilli'

Table 21. *Statistical results for the idiom 'tatlı dilli'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	12	40	28	93.3	29	96.7	33,5	0,000*
	Wrong Figurative	1	3.3	0	0	1	3.3		
	Literal	14	46.7	2	6.7	0	0		
	Other	3	10	0	0	0	0		
In-context I	Correct	19	63.6	30	100	30	100	22,2	0,000*
	Wrong	11	36.7	0	0	0	0		
In-context II	Figurative	19	63.3	30	100	30	100	19,7	0,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	5	16.7	0	0	0	0		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	18	60	30	100	30	100	22,7	0,000*
	Wrong Figurative	3	10	0	0	0	0		
	Literal	1	3.3	0	0	0	0		
	Other	8	26.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *tatlı dilli*, which literally translates 'to have a sweet tongue', has the target figurative meaning 'to tell nice things to people'. The confirmative paraphrasing task revealed the figurative answers 'güzel sözlerle konuşmak; iyi ve güzel sözler söylemek; hoş sözlü; sözleriyle insanları sevindiren' by all age groups. The 7-year-old-group was observed to be literally oriented in the no-context situation with such answers indicating the denotative aspects of *tatlı* (sweet food/dessert) and *dil* as in 'tatlı yemek; bir şeyi tatmak; dilinde tatlı olmak; tatlı pasta yaptı; dili çok tatlı; makarna çok tatlıymış'. The increase in the performance of the 7-year-old-group indicated statistical difference between the distribution of answers across no-context and in-context situations, which suggests partial exploitation of contextual cues by them. In addition, the 7-year-old-group was observed to give literal answers in five cases in spite of the presence of contextual cues. In contrast, the 9 and 11-year-old-groups were observed to have a ceiling-level performance both in the no-context and in-context situations for the interpretation of the familiar idiom *tatlı dilli*.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context situation I*** revealed that the distribution of answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,05$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

5.1.3. Findings for the idiom 'kulak misafiri olmak'

Table 22. *Statistical results for the idiom 'kulak misafiri olmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	16	53.3	29	96.7	30	100	26,8	0,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	13	43.3	1	3.3	0	0		
	Other	1	3.3	0	0	0	0		
In-context I	Correct	29	96.7	30	100	30	100	1,8	1,000*
	Wrong	1	3.3	0	0	0	0		
In-context II	Figurative	22	73.3	29	96.7	30	100	12,7	0,002*
	Wrong Figurative	2	6.7	0	0	0	0		
	Literal	1	3.3	1	3.3	0	0		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	22	73.3	29	96.7	30	100	12,3	0,001*
	Wrong Figurative	3	10	0	0	0	0		
	Literal	1	3.3	1	3.3	0	0		
	Other	4	13.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *kulak misafiri olmak*, which literally translates 'to be an ear-guest', has the target figurative meaning 'to listen to someone accidentally'. The confirmative paraphrasing task revealed the figurative answers 'konuşulanları gizlice dinlemek; habersiz dinlemek;

istemeden duymak' by all age groups. The 7-year-old-group was observed to have traces of literal orientation with such answers indicating the denotative aspects of *misafir* and *kulak* in the following literal answers 'kulağında yara çıkmak; kulaklı bir canavar olabilir; misafir olmak; kulağında sarı şeyler var'. Although the 7-year-old-group was observed to increase their performance in the in-context situation, there was no statistical difference between the distribution of answers across no-context and in-context situations. In one case, a 7-year-old-participant was observed to give a literal interpretation even in the in-context situation. In contrast, the 9 and 11-year-old participants exhibited a ceiling-level performance both in the no-context and in-context situations, and as they already gave full correct answers for this idiom in the no-context situation, they did not need contextual cues for the interpretation of the idiom in the in-context situation. There is only one case in which a 9-year-old-participant gave a literal answer in both the no-context and in-context situations, which might suggest very limited traces of the literal strategy. In other words, chances are the 9-year-old participants may not have accomplished the transition from the literal stage to the figurative stage.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p>0,05$).

5.1.4. Findings for the idiom 'kalbini kırmak'

Table 23. *Statistical results for the idiom 'kalbini kırmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	29	96.7	29	96.7	30	100	3,7	1,000
	Wrong Figurative	0	0	0	0	0	0		
	Literal	0	0	1	3.3	0	0		
	Other	1	3.3	0	0	0	0		
In-context I	Correct	29	96.7	30	100	30	100	1,8	1,000*
	Wrong	1	3.3	0	0	0	0		
In-context II	Figurative	27	90	30	100	30	100	4,2	0,104*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	0	0	0	0	0	0		
	Other	3	10	0	0	0	0		
In-context III	Figurative	30	100	30	100	30	100	-	-
	Wrong Figurative	0	0	0	0	0	0		
	Literal	0	0	0	0	0	0		
	Other	0	0	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *kalbini kırmak*, which literally translates 'to break one's heart', has the target figurative meaning 'to hurt one's feelings'. The confirmative paraphrasing task revealed the figurative answers 'üzülmek; kötü söz söylemek; incitmek; birisine kötü bir şey yapmak' by all age groups. Interestingly, this idiom was the only one which received full correct figurative interpretation by all the three age groups. The finding indicate that the idiom kalbini kırmak is a highly familiar idiom and it is well automatized in the mental lexicon of the participants. There was not a single instance of literal interpretation even by the 7-year-old-group.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that there is no difference among the distribution of Figurative, Wrong Figurative, Literal and Other answers given by 7, 9 and 11 age groups. Since all the answers are evenly distributed, the data set yielded no statistical comparison.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

5.1.5. Findings for the idiom 'dilini yutmak'

Table 24. *Statistical results for the idiom 'dilini yutmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	23	76.7	27	90	30	100	8,5	0,021*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	5	16.7	3	10	0	0		
	Other	2	6.7	0	0	0	0		
In-context I	Correct	28	93.3	30	100	30	100	2,8	0,326*
	Wrong	2	6.7	0	0	0	0		
In-context II	Figurative	25	83.3	28	93.3	30	100	5,9	0,094*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	3	10	2	6.7	0	0		
	Other	2	6.7	0	0	0	0		
In-context III	Figurative	29	96.7	30	100	30	100	1,8	1,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	0	0	0	0	0	0		
	Other	1	3.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *dilini yutmak*, which literally translates 'to swallow one's tongue', has the target figurative meaning 'not willing to speak'. The confirmative paraphrasing task revealed the figurative answers 'konuşmamak; çok sessiz; susmak; istemek ama konuşmamak; korkudan konuşamamak; şaşırıp/donup kalmak; hiçbir şey diyememek; şok olup konuşamamak' by all age groups. The 7-year-old-group was observed to have traces of literal orientation with such answers indicating the denotative aspects of *dil* and *yutmak* in the following examples 'dilini yemek; dili kayıp olmuş; dili içeride; dili acır; ağzımızdaki dili yutmak'. All in all, the 7-year-old-participants performed equally well when compared with the older age groups in the interpretation of the idiom (23 figurative answers out of 30 in the no-context situation). This, again, indicates that the idiom *dilini yutmak* is a highly familiar idiom across all age groups. The 7-year-old-group interpreted the idiom literally three time in the in-context situation. Similarly, there were three instances of literal interpretation of the idiom by the 9-year-old-participants both in the no-context and in-context situation. The findings indicate

that younger age groups may not still have accomplished the transition from the literal stage to the figurative stage.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group (p>0,05).

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group (p>0,05).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group (p>0,05).

5.1.6. Findings for the idiom 'çenesi düşük'

Table 25. *Statistical results for the idiom 'çenesi düşük'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	16	53.3	27	90	30	100	23,7	0,000*
	Wrong Figurative	7	23.3	0	0	0	0		
	Literal	6	20	3	10	0	0		
	Other	1	3.3	0	0	0	0		
In-context I	Correct	26	86.7	30	100	30	100	6,0	0,032*
	Wrong	4	13.3	0	0	0	0		
In-context II	Figurative	23	76.7	28	93.3	30	100	10,8	0,005*
	Wrong Figurative	3	10	0	0	0	0		
	Literal	1	3.3	2	6.7	0	0		
	Other	3	10	0	0	0	0		
In-context III	Figurative	27	90	28	93.3	30	100	5,8	0,292*
	Wrong Figurative	1	3.3	1	3.3	0	0		
	Literal	0	0	1	3.3	0	0		
	Other	2	6.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *çenesi düşük*, which literally translates 'to have an open jaw', has the target figurative meaning 'to be talkative'. The confirmative paraphrasing task revealed the figurative answers 'çok konuşan; geveze; sürekli/fazla konuşan; gereksiz yorumlar yapan; hiç susmamak' by all age groups. The 7-year-old-group was observed to have traces of literal orientation with such answers indicating the denotative aspects of *çene* and *düşmek* as in

'aşağı düşmüş; ağız; çenesi uzun'. Similarly, there were three instances of literal answers in the 9-year-old-group, and interestingly, the same participants still continued to give literal interpretations even in the in-context situation. In general, the 9 and 11-year-old-participants performed at a ceiling level with their figurative answers. Furthermore, the 7-year-old-group initially gave figurative answers in the no-context situation at a moderate-level (16 correct answers out of 30) and then in the presence of contextual information there was statistical difference in their performance (27 figurative answers out of 30). The findings indicate that although the 7-year-old-group is literally oriented in general, they can still partly benefit from contextual information in the interpretation of an idiom.

At the conceptual level, the wrong figurative answers given by the 7-year-old-group seemed to center around the conceptual metaphor BAD IS DOWN, instead of the original underlying conceptual metaphor TALKING TOO MUCH IS DOWNWARD ACTION . Since the common schema DOWN is associated with bad qualities in human life, the younger children might have associated the DOWN schema with bodily or psychological states of being 'sorry, lazy, slim or silent' as suggested by their Turkish equivalents in the answers 'üzgün, tembel, zayıf, suskun'.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***in-context I situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,05$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to with the No-context situation.

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p>0,05$).

5.1.7. Findings for the idiom 'karnı zil çalmak'

Table 26. *Statistical results for the idiom 'karnı zil çalmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	24	80	29	96.7	30	100	7,9	0,015*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	6	20	1	3.3	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	30	100	30	100	30	100	-	-
	Wrong	0	0	0	0	0	0		
In-context II	Figurative	29	96.7	30	100	30	100	1,8	1,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	0	0	0	0	0	0		
	Other	1	3.3	0	0	0	0		
In-context III	Figurative	28	93.3	30	100	30	100	2,7	0,326*
	Wrong Figurative	2	6.7	0	0	0	0		
	Literal	0	0	0	0	0	0		
	Other	0	0	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *karnı zil çalmak*, which literally translates 'to have rings in one's stomach', has the target figurative meaning 'to be very hungry'. The confirmative paraphrasing task revealed the figurative answers 'karnı aç olmak; acıkmak; yemek yemek istiyor; çok acıkmak' by all age groups. When the near-ceiling performances are taken into consideration, this idiom turned out to be a highly familiar idiom among all age groups. The three age groups equally performed well both in and out of context. However, there are only six instances of literal answers by the 7-year-old-group in the no-context situation, which were then successfully promoted into figurative answers in the in-context situation. In the literal interpretation of the idiom, 7-year-old-participants mostly concentrated on the denotative aspects of *zil* as in 'zil çaldı'.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups. Since all the answers are evenly distributed, the data set yielded no statistical comparison.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p=0,05$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,05$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.1.8. Findings for the idiom 'dilinin ucunda olmak'

Table 27. *Statistical results for the idiom 'dilinin ucunda olmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	9	30	26	86.7	28	93.3	44,2	0,000*
	Wrong Figurative	0	0	1	3.3	2	6.7		
	Literal	21	70	3	10	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	28	93.3	30	100	30	100	2,7	0,326*
	Wrong	2	6.7	0	0	0	0		
In-context II	Figurative	13	43.3	30	100	30	100	37,0	0,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	12	40	0	0	0	0		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	16	53.3	30	100	30	100	25,8	0,000*
	Wrong Figurative	4	13.3	0	0	0	0		
	Literal	5	16.7	0	0	0	0		
	Other	5	16.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *dilinin ucunda olmak*, which literally translates 'to be on the tip of one's tongue', has the target figurative meaning 'almost remembering something but not to be able to utter it'. The confirmative paraphrasing task revealed the figurative answers 'biliyor ama söyleyemiyor; söylemeye çok az kaldı; hemen söyleyememek; söylemek üzere; hatırlar gibi olmak ama söylemeyemek' by all age groups. 7-year-old-group was observed to have mostly

developed a literal interpretation strategy with their answers indicating the denotative aspects of *dil* and the related concepts *ağız* (mouth) and *yemek* (food). The most typical answers by the 7-year-old-group were 'diline birşey batmış; acı; yiyecek; sakız; dili yaralı; tat almak; dudak; şeker var; tatlı'. The 7-year-old-group did not improve their performance in the in-context situation and there was no statistical difference between the distributions of their answers in and out of context. On the other hand, the 9 and 11-year-old-participants performed at a ceiling-level and gave figurative answers almost all the time. The only exception is in the 9-year-old-group with three instances of literal answers in the no-context situation, as in 'acı, dilinin yanında, diline birşey batmış', which were then upgraded into figurative answers with the help of contextual information.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

5.1.9. Findings for the idiom 'her işe burnunu sokmak'

Table 28. *Statistical results for the idiom 'her işe burnunu sokmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	15	50	29	96.7	30	100	28,3	0,000*
	Wrong Figurative	9	30	0	0	0	0		
	Literal	6	20	1	3.3	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	25	83.3	29	96.7	30	100	6,1	0,044*
	Wrong	5	16.7	1	3.3	0	0		
In-context II	Figurative	20	66.7	30	100	30	100	16,5	0,000*
	Wrong Figurative	4	13.3	0	0	0	0		
	Literal	4	13.3	0	0	0	0		
	Other	2	6.7	0	0	0	0		
In-context III	Figurative	15	50	30	100	30	100	30,6	0,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	5	16.7	0	0	0	0		
	Other	9	30	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *her işe burnunu sokmak*, which literally translates 'to dip one's nose in everything', has the target figurative meaning 'to interrupt everything'. The confirmative paraphrasing task revealed the figurative answers '(gereksizce) herşeye karışmak; çok bilmiş; her lafa atlamak' by all age groups. The 7-year-old-group was observed to have traces of literal orientation with such answers indicating the denotative aspects of *burun* and *sokmak* as in 'elini sokar; burnunu karıştırmak; yemek koklamak; burnunu sokmak'. Although the same age group was observed to increase their performance in the in-context situation, it did not produce statistical difference. In contrast, the 9 and 11-year-old-participants performed at a ceiling level with their figurative answers and thus the idiom her işe burnunu sokmak turned out to be a highly familiar idiom. Accordingly, there was no need for contextual backup for the older age groups. Context seemed to have partial constructive effect on the performances of the 7-year-old-group.

In terms of conceptual structuring, the wrong figurative answers given by the 7-year-old-group seemed to center around the frame ACTION OF THE BODY, which seemingly has conceptual relations with the original underlying conceptual metaphor EVENTS ARE PHYSICAL CONTAINERS, in the sense that getting involved in an activity is physically including your body in that event. Accordingly, this specific kind of embodiment was combined with the individual meanings of '*her işe* and *sokmak'* to produce the conceptual mappings between CONTAINMENT and INVOLVEMENT schemas. In this case, the frame ACTION OF THE BODY might have been associated with the bodily actions in the wrong figurative answers as in 'kavga etmek; her şeyi karıştırmak; yardım etmek'.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,05$). While the Figurative and Literal answers show similar distributions in the No-context and In-context III comparison, the Other answers increased in the In-context III situation as opposed to the

No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.1.10. Findings for the idiom 'göze girmek'

Table 29. *Statistical results for the idiom 'göze girmek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	6	20	29	96.7	30	100	62,1	0,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	24	80	1	3.3	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	30	100	30	100	1,8	1,000*
	Wrong	1	3.3	0	0	0	0		
In-context II	Figurative	17	56.7	30	100	30	100	23,9	0,000*
	Wrong Figurative	2	6.7	0	0	0	0		
	Literal	6	20	0	0	0	0		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	22	73.3	30	100	30	100	12,9	0,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	3	10	0	0	0	0		
	Other	5	16.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom göze girmek, which literally translates 'to enter one's eyes', has the target figurative meaning 'to appreciate someone'. The confirmative paraphrasing task revealed the figurative answers 'sevilmek; aferin sana; beğenmek; dikkatini çekmek; kendini beğendirmeye çalışmak; beğenilmek' by all age groups. The 7-year-old-group was observed to be literally oriented to a great extent in their performances with literal answers in the no-context situation, indicating the denotative aspects of *göz* and *girmek* as in 'göze bir şey kaçması; görmek; etinin içine sokmak; bakmak; kör; pislik girer; gözüne toz kaçtı; gözü kaygan; gözüne top değdi'. However, there was statistical difference in their performances in the light of contextual backup. Simply, the performances of the 7-year-old-group increased to a great extent with the help of contextual information. On the other hand, the 9 and 11-

year-old-participants performed at a ceiling level with their figurative answers both in and out of context. There was only one instance of literal answer by the 9-year-old-group and that answer turned into a figurative one in the in-context situation. All in all, context had a partial improvement in the performances of the 7-year-old-group.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative answers show similar distributions in the No-context and In-context II comparison, the Figurative and Other answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative answers show similar distributions in the No-context and In-context III comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.2. CONTEXT-BASED AND AGE-BASED FINDINGS FOR THE UNFAMILIAR IDIOMS

5.2.1. Findings for the idiom 'göbeği çatlamak'

Table 30. *Statistical results for the idiom 'göbeği çatlamak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	3	10	4	13.3	28,2	0,000*
	Wrong Figurative	0	0	7	23.3	14	46.7		
	Literal	30	0	20	66.7	12	40		
	Other	0	0	0	0	0	0		
In-context I	Correct	27	90	30	100	30	100	4,2	0,104*
	Wrong	3	10	0	0	0	0		
In-context II	Figurative	11	36.7	28	93.3	25	83.3	32,6	0,000*
	Wrong Figurative	3	10	2	6.7	4	13.3		
	Literal	12	40	0	0	1	3.3		
	Other	4	13.3	0	0	0	0		
In-context III	Figurative	18	60	30	0	25	83.3	17,9	0,000*
	Wrong Figurative	6	20	0	0	4	13.3		
	Literal	1	3.3	0	0	1	3.3		
	Other	5	16.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *göbeği çatlamak*, which literally translates 'to have cracks on one's belly', has the target figurative meaning 'to have a hard time in doing something'. The confirmative paraphrasing task revealed the figurative answers 'zorluk; zorlanmak; uğraşmak; zor ve yorucu olmak; uğraştırmak' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively. The three age groups mostly concentrated on either literal or wrong figurative answers. The 7-year-old-group was completely literally oriented in their initial guesses of the meaning of the idiom, indicating the denotative aspects of either *göbek* or *çatlamak* as in 'göbeği kıpkırmızı; göbeği çatlak; göbeğini kesmek; hastaneye gitmek; acı; ameliyat'. However, contextual information seemed to have partial influence on the comprehension of the idiom, as there is statistical difference between the distributions of answers in and out of contexts. In this way, the

confirmative paraphrasing task seemed to be an efficient way of observing whether the younger children really comprehended the idiomatic expression. Since, most of the 7-year-old-participants still gave literal answers in the in-context II situation, which is basically a comprehension task based on simple definitions of the idiomatic expression, and then they were observed to promote either to wrong figurative or figurative answers which confirms the partial contribution of contextual information on the comprehension process. Likewise, the 9 and 11-year-old-participants exhibited a gradual literal tendency in the initial interpretation process of the idiom. Most importantly, these older age groups were also observed mainly to give wrong figurative answers in the no-context situation, a behavior different from the 7-year-old-group. In addition, these older age groups were observed to fully benefit from the specific contextual information at a ceiling-level. There was a superior statistical difference between the distributions of answers in the no-context and in-context situations.

The 9 and 11-year-old-groups were also observed to employ the literal sense of the idiom. Most of these answers seem to have emerged from the denotative aspects of the idiomatic expression. However, these kind of answers by the 9 and 11-year-old-participants seem to be motivated by the conceptual metaphor THE STOMACH IS A CONTAINER, simply because the older age groups seemed to have made the inference that filling a container from inside with too many items would result either in an overflow of the items or a swelling, damage, or crack on the surface of the container. In this case, the stomach stands for the container and if someone eats too much, there would be swelling on the stomach as in 'çok yediği için karnı şişmek; çok doymak; çok yemek yemek'. On the other hand, the wrong figurative answers given by these older age groups suggest the existence of the frame FRAGILE OBJECT in association with the negative aspects of 'çatlamak (to crack)' as projected in the wrong figurative answers 'mutsuz olmak, kızmak, sıkıntıya düşmek'.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically

different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,01$). The Figurative, Wrong Figurative and Other answers of the participants increased in the In-context II situation as opposed to the No-context situation; and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). The Figurative, Wrong Figurative and Other answers of the participants increased in the In-context III

situation as opposed to the No-context situation; and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.2. Findings for the idiom 'kulakları paslanmak'

Table 31. *Statistical results for the idiom 'kulakları paslanmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	4	13.3	4	13.3	53,2	0,000*
	Wrong Figurative	1	3.3	7	23.3	23	76.7		
	Literal	29	96.7	19	63.3	3	10		
	Other	0	0	0	0	0	0		
In-context I	Correct	28	93.3	30	100	30	100	2,7	0,326*
	Wrong	2	6.7	0	0	0	0		
In-context II	Figurative	5	16.7	11	36.7	25	83.3	46,4	0,000*
	Wrong Figurative	3	10	13	43.3	4	13.3		
	Literal	20	66.7	6	20	1	3.3		
	Other	2	6.7	0	0	0	0		
In-context III	Figurative	22	73.3	22	73.3	29	96.7	17,5	0,001*
	Wrong Figurative	0	0	6	20	0	0		
	Literal	7	23.3	2	6.7	1	3.3		
	Other	1	3.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *kulakları paslanmak*, which literally translates 'to have rust in one's ears', has the target figurative meaning 'not to listen to music for a long time'. The confirmative paraphrasing task revealed the figurative answers 'uzun zamandır şarkı dinlememek; müzik dinlemek isteriz; radyoyu açarız; hiç şarkı dinlememek; güzel ses duymamak' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively. The three age groups mostly concentrated on either literal or wrong figurative answers when the idiom was presented out of context. The 7-year-old-group was completely literally oriented in their initial guesses of the meaning of the idiom, indicating the denotative aspects of *kulak* and *pas* as in 'kulakları pislenmiş; kulakları kirlenmiş; paslanmış; tozlu; kulakları kanar; kulağı ağırmak; sağır olmak; kirli; banyo yapmadığı için kulağı kirli'. Context seemed to have partial influence on the initial performances of the 7-year-old-participants in the in-context I situation. However, the paraphrasing task revealed that there was statistical difference in their interpretation of the

in-context II situation, which indicated that contextual information provided helpful data for the formation of the idiomatic meaning.

In this way, the confirmative paraphrasing task proved to be an effective way of observing whether the younger children really comprehended the idiomatic expression. Since, most of the 7-year-old-group still gave literal answers in the in-context II situation, which is basically a comprehension task based on a simple definitions of the idiomatic expression, and then they were observed to promote either to wrong figurative or figurative answers with the help of contextual cues.

Likewise, the 9 and 11-year-old groups exhibited a gradual literal tendency in the initial interpretation process of the idiom when it was presented out of context. Most importantly, these two age groups, different from the 7-year-old-group, were also observed to give wrong figurative answers in the no-context situation. All in all, the older age groups fully benefited from the specific contextual information, since there was a superior statistical difference between the distributions of answers in no-context and in-context situations. Interestingly, the 9 and 11-year-old participants somehow gave literal answers both in in-context I and in-context II situations ranging between 2 and 6 out of 30 cases.

In terms of conceptual structuring, the wrong figurative answers given by the 9 and 11-year-old participants seemed to center around the conceptual metaphor THE BODY IS A MACHINE. This conceptual metaphor is based on the source domain of a machine which is supposed to work on a regular mechanical basis with the technical help of energy and regular maintenance. That is, the machine needs oil in order to work properly which in turn entails the inference that if a machine is not lubricated then it does not work properly, and if it does not work, it collects dust throughout time. Following this conceptual pattern, the participants might have concentrated on the MACHINE schema and produced the wrong figurative answers indicating inactivity, dysfunction or malfunction as seen in the examples ‘artık iyi duyamamak; uzun süre ses duymamak; bir şeyi uzun zamandır yapmamak; kendini özletmek; uzun zamandır haber alamamak; konuşamamak; kötü işler geçirmek; uzun süre görüşememek; konuşmalardan rahatsız olmak’. As seen in the examples, the older age groups

were not able to assign the mappings between the source and target domain properly in their wrong figurative answers.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context IIsituation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is also different ($p<0,05$), it is observed that all age groups performed differently.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative and Wrong Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,01$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the

No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.3. Findings for the idiom 'diş geçirmek'

Table 32. *Statistical results for the idiom 'diş geçirmek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	1	3.3	2	6.7	43,5	0,000*
	Wrong Figurative	0	0	14	46.7	21	70		
	Literal	30	100	15	50	7	23.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	26	86.7	30	100	30	100	6,0	0,032*
	Wrong	4	13.3	0	0	0	0		
In-context II	Figurative	17	56.7	25	83.3	24	80	21,7	0,000*
	Wrong Figurative	1	3.3	5	16.7	5	16.7		
	Literal	10	33.3	0	0	1	3.3		
	Other	2	6.7	0	0	0	0		
In-context III	Figurative	20	66.7	28	93.3	28	93.3	11,8	0,014*
	Wrong Figurative	3	10	2	6.7	2	6.7		
	Literal	3	10	0	0	0	0		
	Other	4	13.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *diş geçirmek*, which literally translates 'to insert one's teeth into something', has the target figurative meaning 'to be able to control or overcome someone'. The confirmative paraphrasing task revealed the figurative answers 'rakiplerimizi yenmek; kazanmak;

başarmak; mağlup etmek' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively. The three age groups mostly concentrated on either literal or wrong figurative answers in the no-context situation. The 7-year-old-group was completely literally oriented in their initial guesses of the meaning of the idiom, indicating the denotative aspects of *diş* and *geçirmek* as in 'dişi çıkmak; dişi kırılmak; dişinin düşmesi; dişimiz çürük; diş fırçalamak; diş ağrısı; dişini çekmek; dişini bir şeye geçirmek'. Context seemed to have partial influence on the performances of the 7-year-old-participants in the in-context situations. The paraphrasing task showed that there was statistical difference between the distribution of answers in the no-context and the in-context situations, a finding indicating that context provided helpful data for the formation of the figurative meaning.

The 9 and 11-year-old-groups exhibited a gradual literal tendency in the initial interpretation of the idiom in the no-context situation. Furthermore, they were also observed to give wrong figurative answers in the no-context situation, which is a distinguishing feature of the older age groups when compared with the 7-year-old-group. In addition, the older age groups fully benefited from the specific contextual information and there was a superior statistical difference between the distributions of answers in the no-context and in-context situations.

In terms of conceptual structuring, the wrong figurative answers given by the 9 and 11-year-old-participants seemed to center around the conceptual metaphor HUMAN BEHAVIOR IS ANIMAL BEHAVIOR, which is based on the conceptual mappings between the source domain ANIMAL BEHAVIOR and the target domain CONTROL. However, the wrong figurative answers by the older age groups seemed to center around either the target domain or the source domain. The wrong figurative answers indicating the CONTROL schema were realized through the expressions 'onu da kendilerinden yapmak; bir kişinin aklını yönetmek; sahip olmak; onu da istemek; herşeyden haberdar olmak; ilgilenmek'; and the ANIMAL BEHAVIOR schema was realized through 'saldırmak; kavga etmek; öldürmek; şiddet uygulamak; kötü bir şeyler yapmak; sıkıştırmak'. Briefly, the older age groups were not able to assign the conceptual mappings between the source and target domains in the wrong figurative answers.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.4. Findings for the idiom 'alnını karışlamak'

Table 33. *Statistical results for the idiom 'alnını karışlamak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	1	3.3	5	16.7	6	20	34,6	0,000*
	Wrong Figurative	4	13.3	17	56.7	20	66.7		
	Literal	25	83.3	8	26.7	4	13.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	27	90	30	100	30	100	4,2	0,104*
	Wrong	3	10	0	0	0	0		
In-context II	Figurative	14	46.7	25	83.3	28	93.3	23,8	0,000*
	Wrong Figurative	2	6.7	4	13.3	1	3.3		
	Literal	10	33.3	1	3.3	1	3.3		
	Other	4	13.3	0	0	0	0		
In-context III	Figurative	17	56.7	28	93.3	29	96.7	25,9	0,000*
	Wrong Figurative	0	0	2	6.7	1	3.3		
	Literal	5	16.7	0	0	0	0		
	Other	8	26.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *alnını karışlamak*, which literally translates 'to hit one's forehead' has the target figurative meaning 'to challenge someone'. The confirmative paraphrasing task revealed the figurative meanings 'kızmak; sinirli olmak; uyarmak; fırça atmak' by all age groups. The initial findings in the no-context situation showed that none of the age groups were able to interpret the idiom figuratively. The three age groups mostly concentrated on either literal or wrong figurative answers in the no-context situation. The 7-year-old-group was completely literally oriented in their initial guesses of the meaning of the idiom, indicating the denotative aspects of *alın* and *karışlamak* as in 'alnını ölçmek; alnını ovmak; alnını kaşımak; boyunu ölçmek; alnımız buruşmuş; alnına vurmak; ölçü; ölçmek'. Context seemed to have partial influence on the performances of the 7-year-old-participants in the no-context situations. The in-context situations revealed that there was statistical difference between the distribution of answers in the no-context and in-context situations, which suggested that contextual information provided helpful data for the formation of the idiomatic meaning.

The 9 and 11-year-old-groups exhibited a gradual literal tendency in the initial interpretation of the idiom in the no-context situation. Different from the 7-year-old-group, these older age groups were observed to give wrong figurative answers in the no-context situation. In addition, the older age groups fully benefited from the specific contextual information and there was a superior statistical difference between the distributions of answers in the no-context and in-context situations.

In terms of conceptual structuring, the wrong figurative answers given by the 9 and 11-year-old-participants seemed to center around the PHYSICAL FORCE/FIGHT schema involved in the conceptual metaphor ANGER IS BRUTAL RESPONSE. The participants mainly concentrated on the PHYSICAL FORCE/FIGHT schema with their illustrations such as 'kabadayı gibi olmak; sinirlenip dövmek; vurmak; yaralamak'. More interestingly, the participants developed a mental image of 'someone thinking, with one of his hands touching his head', representing the MENTAL ACTIVITY schema. Such instances were realized through the following illustrations 'aklını okumak; kafasını bulandırmak; zihnini okumak; aklını çalıştırmak;

düşünmek; bulamamak; beyin gücü; karşısındakinin ne bildiğini anlamak; beynini okumak; düşünce vermek'.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,01$). The Figurative

and Other answers of the participants increased in the In-context II situation as opposed to the No-context situation; and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,05$). The Figurative and Other answers of the participants increased in the In-context III situation as opposed to the No-context situation; and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.5. Findings for the idiom 'eli kalem tutmak'

Table 34. *Statistical results for the idiom 'eli kalem tutmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	7	23.3	7	23.3	11	36.7	41,6	0,000*
	Wrong Figurative	2	6.7	18	60	18	60		
	Literal	21	70	5	16.7	1	3.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	27	90	30	100	30	100	4,2	0,104*
	Wrong	3	10	0	0	0	0		
In-context II	Figurative	17	56.7	11	36.7	23	76.7	44,2	0,000*
	Wrong Figurative	0	0	18	60	7	23.3		
	Literal	9	30	1	3.3	0	0		
	Other	4	13.3	0	0	0	0		
In-context III	Figurative	23	76.7	13	43.3	23	76.7	27,9	0,000*
	Wrong Figurative	1	3.3	17	56.7	7	23.3		
	Literal	4	13.3	0	0	0	0		
	Other	2	6.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *eli kalem tutmak*, which literally translates 'to hold a pen', has the target figurative meaning 'to be educated and to know how to read and write'. The confirmative paraphrasing task revealed the figurative meanings 'yazı yazmak; okuryazar; eğitimli; okumuş ve bilgili; yazı yazmayı bilen' by all age groups. The initial findings in the no-context situation revealed that the older age groups mainly concentrated on either wrong figurative or figurative answers, while the 7-year-old-group mainly gave literal answers. The literal orientation of

the younger age group indicated the denotative aspects of *el* and *kalem* as in 'kalem tutmak; elinit tutmak; elimiz çok yorulur; elinde kalem var'. Context seemed to have partial influence on the performances of the 7-year-old-participants in the no-context situations.

The 9 and 11-year-old-participants exhibited minimal literal tendency in the initial interpretation of the idiom in the no-context situation. They were also observed to give wrong figurative answers as opposed to the younger groups in the no-context situation. Interestingly, the 9-year-old-participants were not able to benefit fully from contextual cues as effectively as the 11-year-old-participants. For the first time throughout the experimental implementation, the 9-year-old-participants lagged behind the 7-year-old-group in the use of contextual cues for the interpretation of this idiomatic expression.

In terms of conceptual structuring, few participants among the three age groups were able to benefit from the conceptual metonymy INSTRUMENT FOR ACTION in the no-context situation. In only a few cases, they were able to benefit from the related metonymy PEN FOR EDUCATION and the conventional knowledge that a writing tool such pen or pencil is an essential part of literacy. However, the figurative answers of the participants were observed to center around two schemata: EDUCATIONAL ACTIVIY schema, which is closely related to the notion of literacy; and the ABILITY schema which is further related to the concepts of control and authority. The first one, EDUCATIONAL ACTIVIY schema included the following wrong figurative answers 'çalışmak; okuyan birisi; çalışkan ve planlı; öğrenmek; başarılı; çok çalışmak'. The second schema ABILITY included the following wrong figurative answers 'bir işi iyi yapabilen; en iyi; zorlanmak; çok güçlü olmak;hiç yorulmayan; halen birşeyler yapabilmek; genç olmak; yönetebilmek; becerebilmek; becerikli'.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is also different ($p<0,05$), it is observed that all age groups performed differently.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,05$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,01$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,01$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.6. Findings for the idiom 'elden düşme'

Table 35. *Statistical results for the idiom 'elden düşme'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	7	23.3	8	26.7	63,4	0,000*
	Wrong Figurative	0	0	12	40	20	66.7		
	Literal	30	100	11	36.7	2	6.7		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	29	96.7	30	100	1,3	1,000*
	Wrong	1	3.3	1	3.3	0	0		
In-context II	Figurative	5	16.7	14	46.7	22	73.3	54,9	0,000*
	Wrong Figurative	2	6.7	14	46.7	8	26.7		
	Literal	18	60	2	6.7	0	0		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	15	50	20	66.7	22	73.3	15,9	0,005*
	Wrong Figurative	5	16.7	9	30	8	26.7		
	Literal	4	13.3	1	3.3	0	0		
	Other	6	20	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINS

The idiom *elden düşme*, which literally translates 'to drop something from one's hand', has the target figurative meaning 'second hand; used'. The confirmative paraphrasing task revealed the figurative meanings 'eski eşya; eski; uygun fiyatlı; ikinci el; kullanılmış eşya' by all age groups. The initial findings indicated that the older age groups mainly concentrated either on wrong figurative or figurative answers, while the 7-year-old-group completely gave literal answers. The literal orientation of the younger age group suggested the denotative aspects of *el* and *düşürmek* as in 'kırılır; kalem elden düşer; elden birşey düştü; elden kayma; kayıp düşme; elinden kayıp düşmek; düşürmek; eli tutmuyor'. Contextual information seemed to have partial contribution on the performances of the 7-year-old-participants in the in-context situations. The confirmative paraphrasing task yielded statistical difference between the distributions of answers, which showed that contextual information provided partial helpful data for the 7-year-old-participants for the formation of the figurative meaning.

The 9-year-old-group exhibited literal tendency in the no-context situation, however, the presence of contextual information enabled them to improve their performances both in the in-context I and in-context II situations. The 11-year-old-group on the other hand was observed to give more wrong figurative answers in the no-context situation, and furthermore, they were able to promote to figurative answers in the in-context situations.

In terms of conceptual structuring, few participants among the 9 and 11-year-old groups were able to benefit from the conceptual metaphor POSSESSING STH. IS HOLDING IN THE HAND in the no-context situation. The semantic inferences that they employed during the production of wrong figurative answers revealed the BAD IS DOWN conceptual metaphor which was realized through such illustrations as 'önemli bir makamdan düşmek; bir alt kısma düşmek; zarara uğramak; derslerinde başarısız olmak; kötüleşmek; sevilmemek; yarışmadan elenmek'. In addition, there was another priming schema, BAD, which was realized through such usages as 'kötü; kalitesiz; başarısız; hiç çalışmayan; sağlam olmayan; kıymetsiz; beğenilmeyen; kullanışsız'. As seen from the illustrative examples, the second component of the idiom, *düşmek*, was associated with the BAD IS DOWN metaphor to produce the wrong figurative answers.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). The Figurative, Wrong Figurative and Other answers of the participants increased in the In-context III situation as opposed to the No-context situation; and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,01$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.7. Findings for the idiom 'sırtı kaşınmak'

Table 36. *Statistical results for the idiom 'sırtı kaşınmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	13	43.3	18	60	47,4	0,000*
	Wrong Figurative	0	0	8	26.7	2	6.7		
	Literal	30	100	9	30	10	33.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	29	96.7	29	96.7	0,4	1,000*
	Wrong	1	3.3	1	3.3	1	3.3		
In-context II	Figurative	18	60	27	90	29	96.7	15,5	0,001*
	Wrong Figurative	1	3.3	1	3.3	0	0		
	Literal	10	33.3	2	6.7	1	3.3		
	Other	1	3.3	0	0	0	0		
In-context III	Figurative	21	70	28	93.3	29	96.7	15,6	0,000*
	Wrong Figurative	0	0	2	6.7	0	0		
	Literal	7	23.3	0	0	1	3.3		
	Other	2	6.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *sırtı kaşınmak*, which literally translates 'to have itching on one's back', has the target figurative meaning 'to deserve punishment or beating'. The confirmative paraphrasing task revealed the figurative meanings 'ceza vermek; yaramazlık yapmak; ceza almak; birisini kızdırmak; başı derde girmek; yaptığına pişman etmek; kötü sonuçlar olabilir; dayak yiyebilir; ceza alabilir' by all age groups. The initial findings indicated that the older age groups mainly concentrated on figurative, wrong figurative and literal answers, while the 7-year-old-group was completely literally oriented. The literal orientation of the younger group indicated the denotative aspects of *sırt* and *kaşınmak* as in 'sırtını kaşımak; böcekten sırtı kaşınır; elle kaşımak; sırtına birşey girmek; sırtı acımak'. Context seemed to have partial contribution on the performances of the 7-year-old-group in the in-context situations.

The 9 and 11-year-old-groups also showed literal tendency during the no-context situation. This literal interpretation strategy may be attributed to the fact that this idiom has a literal

meaning which has an equal priming-and even more- in the mental lexicon. However, the older age groups benefited fully from contextual backup to promote to the figurative meaning of the idiom.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

B. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,01$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,01$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,01$). While the Wrong Figurative and Other and answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,01$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.8. Findings for the idiom 'ayağını kaydırmak'

Table 37. *Statistical results for the idiom 'ayağını kaydırmak'*

Context +/-	Response Type	Age 7		Age 9		Age 11		χ^2	p
		n	%	n	%	n	%		
No-context	Figurative	0	0	4	13.3	3	10	52,4	0,000*
	Wrong Figurative	0	0	17	56.7	21	70		
	Literal	30	100	9	30	6	20		
	Other	0	0	0	0	0	0		
In-context I	Correct	27	90	30	100	30	100	4,2	0,104*
	Wrong	3	10	0	0	0	0		
In-context II	Figurative	4	13.3	16	53.3	25	83.3	40,4	0,000*
	Wrong Figurative	7	23.3	11	36.7	3	10		
	Literal	14	46.7	3	10	2	6.7		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	11	36.7	26	86.7	29	96.7	29,4	0,000*
	Wrong Figurative	13	43.3	3	10	1	3.3		
	Literal	6	20	1	3.3	0	0		
	Other	0	0	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *ayağını kaydırmak*, which literally translates 'to slide one's feet', has the target figurative meaning 'to make someone loose his/her job'. The confirmative paraphrasing task revealed the figurative meanings 'işten kovmak; gününü göstermek; kızıp işten atmak; işini elinden almak' by all age groups. The initial findings indicated that the older age groups mainly concentrated on wrong figurative and literal answers, while the 7-year-old-group completely gave literal answers. The literal orientation of the 7-year-old-group indicated the denotative aspects of *ayak* and *kaymak*/*kaydırmak* as in 'ayağımız kayar; kaygan yerde düşmek; suda kayıp düşmek; banyoda kaydım; buza basmak; paten yapmak; yere buz atmak'. Contextual information seemed to have partial contribution on the performances of the 7-year-old-participants in the in-context situations, and the confirmative paraphrasing task yielded statistical difference between the no-context and in-context II situation.

The 9 and 11-year-old-groups exhibited both literal and wrong figurative tendency in the no-context situation, however, the presence of contextual information enabled them to improve their performances both in the in-context I and in-context II situations.

As for conceptual structuring, few participants were able to benefit from the conceptual metaphor FAILURE IS DOWN in the no-context situation. Apart from the correct figurative answer 'to make someone loose his/her job', some 11-year-old-participants produced the wrong figurative answer 'başarısı düşmek/ one's success has decreased' which is also based on the conceptual metaphor FAILURE IS DOWN. Other than that, the semantic inferences that they employed during the production of wrong figurative answers revealed the BAD IS DOWN metaphor. The wrong figurative answers 'aşağılamak; aşağıda kalmak; tuzağa düşürmek, kötü bir duruma sokmak; başarısına engel olmak; kötü yola sürüklemek; sinirli olmak; dövmek; kandırılmak; birini zayıf düşürmek; zarar vermek; başına kötü işler getirmek; hile yapmak; işi zorlaştırmak' were based on the BAD IS DOWN metaphor.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). While the Other

answers show similar distributions in the No-context and In-context III comparison, the Figurative and Wrong Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,01$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,01$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,01$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,01$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context

situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.9. Findings for the idiom 'gözünü kırpmadan'

Table 38. *Statistical results for the idiom 'gözünü kırpmadan'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	8	26.7	15	50	69,7	0,000*
	Wrong Figurative	0	0	15	50	13	43.3		
	Literal	30	100	7	23.3	2	6.7		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	30	100	30	100	1,8	1,000*
	Wrong	1	3.3	0	0	0	0		
In-context II	Figurative	6	20	19	63.3	26	86.7	47,4	0,000*
	Wrong Figurative	4	13.3	9	30	4	13.3		
	Literal	6	20	2	6.7	0	0		
	Other	14	46.7	0	0	0	0		
In-context III	Figurative	26	86.7	28	93.3	26	86.7	3,7	0,413*
	Wrong Figurative	2	6.7	2	6.7	4	13.3		
	Literal	0	0	0	0	0	0		
	Other	2	6.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *gözünü kırpmadan*, which literally translates 'without blinking', has the target figurative meaning 'immediately; without thinking/losing time'. The confirmative paraphrasing task revealed the figurative answers 'hızlıca; hemen; koşa koşa; anında; hiç sorgulamadan' in all age groups. The initial findings indicated that the older age groups mainly concentrated on figurative and wrong figurative answers, while the 7-year-old-group completely gave literal answers. The literal orientation of the 7-year-old-group indicated mainly the denotative aspects of *göz* and *kırpmak* as in 'gözü acır; bakmak; göz kırpmam yarışması; gözüm kapandı; gözlerimi kırpmadan baktım; gözüm açık; gözü hareketsiz'. Contextual information seemed to have partial contribution on the performances of the 7-

year-old-group in the in-context I situation, however, the confirmative paraphrasing task yielded statistical difference between the no-context and in-context II situation.

The 9 and 11-year-old-groups mainly produced figurative and wrong figurative answers in the no-context situation, however, contextual backup enabled them to improve their performances in the in-context situations, leading to superior statistical difference. The 9-year-old-participants produced literal answers in the no-context situation however they were reduced to minimal amount with the help of contextual backup.

As most of the wrong figurative answers were related to the second figurative meaning of the idiom, such as 'without interval', the data did not produce enough information to compare conceptual structures.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,01$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.2.10. Findings for the idiom 'parmağına dolamak'

Table 39. *Statistical results for the idiom 'parmağına dolamak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	0	0	0	0	67,4	0,000*
	Wrong Figurative	0	0	26	86.7	25	83.3		
	Literal	30	100	4	13.3	5	16.7		
	Other	0	0	0	0	0	0		
In-context I	Correct	25	83.3	30	100	30	100	7,9	0,010*
	Wrong	5	16.7	0	0	0	0		
In-context II	Figurative	8	26.7	21	70	23	76.7	36,9	0,000*
	Wrong Figurative	4	13.3	8	26.7	7	23.3		
	Literal	12	40	1	3.3	0	0		
	Other	6	20	0	0	0	0		
In-context III	Figurative	22	73.3	21	70	24	80	12,5	0,016*
	Wrong Figurative	2	6.7	8	26.7	6	20		
	Literal	1	3.3	1	3.3	0	0		
	Other	5	16.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *parmağına dolamak*, which literally translates 'to wrap something on one's finger', has the target figurative meaning 'to repeat something frequently'. The confirmative paraphrasing task revealed the figurative meanings 'her zaman anlatmak; sık sık anlatmak; tekrarlamak; çok söylemek; bir olaydan çok bahsetmek; sürekli konuşup o konuyu unutmamak; abartmak; işi iyice uzatmak' by all age groups. The initial findings indicated that the 7-year-old-group completely gave literal answers, and on the other hand, the older age groups mainly produced wrong figurative answers. The literal orientation of the 7-year-old-group indicated the denotative aspects of *parmak* and *dolamak* as in 'ip dolamak; eline ip sarmak; parmağı acımak; elimi üstüne koydum'. Contextual information seemed to have partial contribution on the performances of the 7-year-old-group in the in-context situations, and the confirmative paraphrasing task yielded statistical difference between the no-context and in-context II situation.

The 9 and 11-year-old-participants were observed to mainly produce wrong figurative answers, however, contextual backup enabled them to promote their answers to figurative answers both in the in-context I and in-context II situations.

As for conceptual structuring, no age group was able to directly benefit from the conceptual metaphor RECURRENCE OF AN EVENT OR STATE IS PHYSICALLY REPEATING STH. The semantic inferences that they employed during the production of the wrong figurative answers systematically revealed only the RECURRENCE schema which was realized through such illustrations as 'kafaya takmak; başından gitmemek; herşeye karışmak'. The examples suggest that either a bodily action or mental activity recurred frequently.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,05$). The Figurative, Wrong Figurative and Other answers of the participants increased in the In-context II situation as opposed to the No-context situation; and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative answers show similar distributions in the No-context and In-context III comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the

Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.3 CONTEXT-BASED AND AGE-BASED FINDINGS FOR THE FIRST-DEGREE IDIOMS

5.3.1. Findings for the idiom 'leyleği havada görmek'

Table 40. *Statistical results for the idiom 'leyleği havada görmek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	0	0	2	6.7	61,9	0,000*
	Wrong Figurative	1	3.3	14	46.7	27	90		
	Literal	29	96.7	16	53.3	1	3.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	19	63.3	25	83.3	10,9	0,004*
	Wrong	1	3.3	11	36.7	5	16.7		
In-context II	Figurative	4	13.3	16	53.3	9	30	69,7	0,000*
	Wrong Figurative	0	0	10	33.3	21	70		
	Literal	20	66.7	4	13.3	0	0		
	Other	6	66.7	0	0	0	0		
In-context III	Figurative	4	13.3	19	63.3	10	33.3	71,7	0,000*
	Wrong Figurative	0	0	6	20	20	66.7		
	Literal	24	80	5	16.7	0	0		
	Other	2	6.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *leyleği havada görmek*, which literally translates 'to see a stork in the air' has the target figurative meaning 'to travel frequently'. The confirmative paraphrasing task revealed the figurative meanings 'birçok yere gitmek; çok gezmek; gezmeyi çok abartmak; çok yeri gezmek' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively, a situation stemming from the fact that the meanings of the individual parts of the idiom did not systematically contribute to the general figurative meaning of the idiom. The 7-year-old-group was observed to be totally literally oriented, while the older age groups gradually concentrated on literal or wrong figurative answers. For the younger age group, contextual information did not contribute to the formation of the figurative meaning, and accordingly there was no statistical difference between the no-context and in-context situations. The literal answers by the 7-

year-old-group indicated mainly the denotative aspects of *leylek* and *hava* as exemplified in 'kuş gördüm; leylek yukarda uçuyor; çünkü onlar uçar; kanatlarıyla uçar; leyleği görünce mutlu olurum; leyleği havada gördüm; uçmak; havada uçan hayvanları görmek; leylek yuvasına uçuyor; yuva yapıyorlar; leylek'.

The 9 year-old-group was observed to be literally oriented in the initial interpretation of the idiom out of context. However, the presence of context seemed to have partial contribution to the formation of the figurative meaning for the 9-year-old-group. The 11-year-old-group, who mainly gave wrong figurative answers, were not able to promote to the figurative meaning, simply because, instead of interpreting the 'travel' notion in the text, they tended to interpret the 'monetary wealth' notion by the inference that if someone travels a lot, s/he is assumed to be rich.

In terms of conceptual structuring, the wrong figurative answers revealed the HAPPY IS UP and the GOOD IS UP conceptual metaphor. Interestingly, one of the 7-year-old-participants produced the wrong figurative answer 'günün güzel geçmesi' which was based on the HAPPY IS UP metaphor. In addition, the older age groups, produced the wrong figurative answers 'şanslı olmak; bereket; çok çalışmak; kısmetli olmak; şanslı olmak; başarmak; bolluk' which were based on the GOOD IS UP conceptual metaphor. Also, the older age groups were also able to use conventional knowledge for the production wrong figurative answers such as 'havaların soğuması; sıcak bir yere göç etmek; yeni yıla geçmek; yaz aylarının gelmesi; kış aylarının gelmesi', which were associated with the migration of storks.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is also different ($p<0,05$), it is observed that all age groups performed differently.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context

situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.3.2. Findings for the idiom 'buluttan nem kapmak'

Table 41. *Statistical results for the idiom 'buluttan nem kapmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	0	0	0	0	51,5	0,000*
	Wrong Figurative	2	6.7	17	56.7	28	93.3		
	Literal	28	93.3	13	43.3	2	6.7		
	Other	0	0	0	0	0	0		
In-context I	Correct	30	100	30	100	30	100	-	-
	Wrong	0	0	0	0	0	0		
In-context II	Figurative	5	16.7	16	53.3	23	76.7	40,5	0,000*
	Wrong Figurative	5	16.7	10	33.3	7	23.3		
	Literal	18	60	4	13.3	0	0		
	Other	2	6.7	0	0	0	0		
In-context III	Figurative	5	16.7	19	63.3	24	80	39,3	0,000*
	Wrong Figurative	8	26.7	9	30	6	20		
	Literal	7	23.3	2	6.7	0	0		
	Other	10	33.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *buluttan nem kapmak*, which literally translates 'to catch humidity from the cloud' has the target figurative meaning 'to resent from tiny details'. The confirmative paraphrasing task revealed the figurative answers 'hemen küsmek; boşuna üzülmek; yanlış düşünmek; herşeye küsmek; hemen kırılıp küsmek; küçük şeylere hemen küsmek; gereksiz yere küskün davranmak' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively, a situation stemming from the fact that the meanings of the individual parts of the idiom did not systematically contribute to the general figurative meaning of the idiom. The 7-year-old-group was observed to be completely literally oriented, while the older age groups gradually produced literal or wrong figurative answers. For the younger age group, contextual information did not contribute to the formation of the figurative meaning and accordingly there was no statistical difference between the no-context and in-context I situation. The literal answers by the 7-year-old-group indicated mainly the denotative aspects of *bulut*, *nem* and *kapmak* as

exemplified in ‘yağmurdan ıslanmak; yağmur yağmak; buluttan serinlik almak; bulutlar beyazdır; buluttan nem düşer’.

The 9 year-old-group was observed to be literally oriented in the initial interpretation of the idiom out of context. However, contextual information partially contributed to the formation of the figurative meaning for the 9-year-old-group. The 11-year-old-group, who mainly gave wrong figurative answers, were able to promote to correct figurative answers.

In terms of conceptual structuring, the wrong figurative answers revealed the PART/WHOLE schema embedded in the conceptual metaphor ACQUISITION IS OBTAINING PARTIAL FEATURES FROM THE WHOLE as illustrated in ‘onun yanında kala kala ona benzemek; başkasından bir davranış almak; başkasının hastalığının sana geçmesi; bilgileri/sırları duymak; gördüğü birşeyi taklit etmek’. In these cases, the older age groups might have probably made the inference that the word *bulut* stood for the source domain representing the WHOLE schmea which inherently included the source of information, ability etc.; and the word *nem* stood for the tiny details and parts to be obtained from the whole. The wrong figurative answers also included the HAPPY IS UP metaphor in the illustrative cases of ‘neşeli olmak; mutlu olmak’. Finally, the participants made use of their conventional knowledge that ‘rain occurs through clouds’ and inferentially they made the semantic associations to produce the wrong figurative answer ‘hüzünlenip ağlamak’.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups. Since all the answers are evenly distributed, the data set yielded no statistical comparison.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,05$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative and Wrong Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other

answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.3.3. Findings for the idiom 'kök söktürmek'

Table 42. *Statistical results for the idiom 'kök söktürmek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	4	13.3	7	23.3	73,5	0,000*
	Wrong Figurative	0	0	19	63.3	22	73.3		
	Literal	30	100	7	23.3	1	3.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	28	93.3	30	100	30	100	2,8	0,326*
	Wrong	2	6.7	0	0	0	0		
In-context II	Figurative	3	10	19	63.3	25	83.3	59,5	0,000*
	Wrong Figurative	4	13.3	10	33.3	5	16.7		
	Literal	14	46.7	1	3.3	0	0		
	Other	9	30	0	0	0	0		
In-context III	Figurative	2	6.7	20	66.7	25	83.3	52,7	0,000*
	Wrong Figurative	12	40	10	33.3	5	16.7		
	Literal	9	30	0	0	0	0		
	Other	7	23.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *kök söktürmek*, which literally translates 'to make someone remove roots', has the target figurative meaning 'to give someone a hard time in doing something'. The confirmative paraphrasing task revealed the figurative answers 'zorlanmak; çok düşünmek; çok fazla zorlanmak; zor; yormak; yapana kadar canı çıkmak; yapamayacağı şeyleri yaptırmak; çok çalıştırmak' by all age groups. The initial findings in the no-context situation revealed that all the three age groups had great difficulty in interpreting the figurative answer. The 7-year-old-participants were totally literally oriented, while the older age groups gradually gave wrong figurative or figurative answers. For the younger age group, contextual information did not contribute to the formation of the figurative meaning and thus there was no statistical difference between the distribution of answers in the no-context and in-context situations. The literal answers by the 7-year-old-group indicated the denotative aspects of *kök* and *sökmek* as exemplified in 'kök kalır; toprak; çiçeği kopartırız; ağaçlarda kök var; ağacı kesmek; çiçeklerin kökünü kesmek; ağaç; çiçek sökmek; kök bağlamak'.

The 9-year-old-group was observed to give literal answers in the initial interpretation of the idiom out of context. However, contextual information partially contributed to the formation of the figurative meaning for the 9-year-old-group. The 11-year-old-group, who mainly gave wrong figurative answers, were able to promote to the correct figurative meaning.

In terms of conceptual structuring, the correct figurative answers revealed that a small number of the older age groups were able to benefit from the PHYSIOLOGICAL STATES ARE PLANTS, by making the inference and by referring to the conventional knowledge that removing roots is typically a difficult activity. Other than that, the REVENGE schema is primed with the wrong figurative answers such as 'hesap sormak; kötü davranmak; birisini sinirlendirmek; bunaltmak; hıncını çıkarmak; işkence; eziyet etmek; kin tutmak', which are probably the outcome of the conventional knowledge that by forcing people to do difficult things is a way of taking revenge.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal and Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group (p<0,001). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group (p<0,001). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.3.4. Findings for the idiom 'at hırsızı'

Table 43. *Statistical results for the idiom 'at hırsızı'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	1	3.3	2	6.7	21,8	0,000*
	Wrong Figurative	0	0	6	20	13	43.3		
	Literal	30	100	23	76.7	15	50		
	Other	0	0	0	0	0	0		
In-context I	Correct	23	76.7	30	100	29	96.7	9,9	0,005*
	Wrong	7	23.3	0	0	1	3.3		
In-context II	Figurative	9	30	19	63.3	19	63.3	37,4	0,000*
	Wrong Figurative	0	0	4	13.3	10	33.3		
	Literal	18	60	7	23.3	1	3.3		
	Other	3	10	0	0	0	0		
In-context III	Figurative	18	60	23	76.7	20	66.7	21,6	0,000*
	Wrong Figurative	2	6.7	2	6.7	10	33.3		
	Literal	5	16.7	5	16.7	0	0		
	Other	5	16.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *at hırsızı*, which literally translates 'someone who steals horses', has the target figurative meaning 'very bad looking person'. The confirmative paraphrasing task revealed the figurative answers 'çirkin; dağınık; kötü görünümlü; kötü kıyafetli; kötü tipli; üstü başı dağınık; garip görünümlü; bakımsız' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively, a situation stemming from the fact that the meaning of the individual parts of the idiom did not systematically contribute to the overall figurative meaning of the idiom. The 7-year-old-group was completely literally oriented, while the older age groups gradually gave literal and wrong figurative answers in the no-context situation. For the young age group, contextual information partially contributed to the figurative meaning and there was statistical difference between the distribution of answers between the no-context and in-context situations. The literal answers by the 7-year-old-group indicated mainly the denotative aspects of *at* and *hırsız* as illustrated in 'atları çalar; hırsız atı kaçırır; yem; at olmak; hırsız; polisler onu yakalar'.

The older age groups were literally oriented in the initial interpretation of the idiom out of context. However, contextual information partially contributed to the formation of the idiomatic meaning for the older-age-groups. The literal orientation of the older age group may be attributed to the fact that the figurative meaning and the literal meaning of the idiom can be primed on an equal basis, in other words both meanings may be used, more or less, equally frequently in real situations.

In terms of conceptual structuring, the wrong figurative answers revealed that the older age groups made use of the schema INAPPROPRIATE HUMAN BEHAVIOR which is attributable to being a thief as in the examples 'bir bilgiyi ele geçirmek; sahtekar; yabancı birisi; yalan söyleyen birisi; hiç sevilmeyen birisi; hırsızlar acele eder'.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context IIsituation*** is also different ($p<0,05$), it is observed that all age groups performed differently.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,05$). While the Wrong

Figurative answers show similar distributions in the No-context and In-context II comparison, the Figurative and Other answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative answers show similar distributions in the No-context and In-context II comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context

situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.3.5. Findings for the idiom 'diş bilemek'

Table 44. *Statistical results for the idiom 'diş bilemek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	0	0	1	3.3	43,8	0,000*
	Wrong Figurative	0	0	12	40	22	73.3		
	Literal	30	100	18	60	7	23.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	27	90	29	96.7	30	100	3,0	0,318*
	Wrong	3	10	1	3.3	0	0		
In-context II	Figurative	7	23.3	18	60	23	76.7	54,7	0,000*
	Wrong Figurative	0	0	11	36.7	6	20		
	Literal	19	63.3	1	3.3	1	3.3		
	Other	4	13.3	0	0	0	0		
In-context III	Figurative	8	26.7	21	70	26	86.7	32,2	0,000*
	Wrong Figurative	9	30	9	30	3	10		
	Literal	10	33.3	0	0	1	3.3		
	Other	3	10	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *diş bilemek*, which literally translates 'to sharpen one's teeth', has the target figurative meaning 'to wait for the right time to get revenge'. The confirmative paraphrasing task revealed the figurative meanings 'rakibi için plan düşünmek; ne yapabilirim diye

düşünmek; rakibini dövmeyi düşünmek; intikam almayı düşünmek; öcünü almak için çalışmak; gizlice tuzak kurmak; uygun zamanı beklemek; hazırlanıp pusuya yatmak; karşılık vermek; bir kişiye kötülük yapmak için hazırda olmak' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively. The 7-year-old-group was completely literally oriented, while the older age groups gradually concentrated on literal or wrong figurative answers. For the younger age group, contextual information seemed to have partial contribution for the formation of the figurative meaning. The literal answers by the 7-year-old-group indicated the denotative aspects of *diş* and *bilemek* as exemplified in 'köpek dişleri sivridir; dişi çıkar; sivri; diş çekmeye yarar; dişi keskinleştirmek; dişi çektirip sivri bir diş taktırmak; bir yerleri keser; dişim ağrıdı; kalemi sivri açmak; dişi fırçalamak'.

The older age groups gradually gave literal or wrong figurative answers in the initial interpretation of the idiom out of context. However, the presence of contextual information moderately contributed to the figurative meaning of the idiom.

In terms of conceptual structuring, the wrong figurative answers revealed two types of schemata. The first one is closely related to the ANGER FOR ANIMAL BEHAVIOR conceptual metaphor in the sense that 'waiting for the right time to get revenge' necessarily entails some kind of PLANNING schema, as illustrated in the examples of 'düşünmek; arkasından iş çevirmek; bir şeyi saklamak; söylememekte inatçı olmak; kafaya takmak'. In addition, the wrong figurative answers also displayed the ANGER schema used to explain the target domain in the conceptual metaphor ANGER FOR ANIMAL BEHAVIOR, as illustrated in 'çok sinirlenmek; tedirgin olmak; kızmak; gıcık kapmak; stresli olmak; sinirli olmak'.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). The Figurative, Wrong Figurative and Other answers of the participants increased in the In-context III situation as opposed to the No-context situation; and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the

Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.3.6. Findings for the idiom 'ateş bacayı sarmak'

Table 45. *Statistical results for the idiom 'ateş bacayı sarmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	0	0	2	6.7	58,8	0,000*
	Wrong Figurative	1	3.3	9	30	26	86.7		
	Literal	29	96.7	21	70	2	6.7		
	Other	0	0	0	0	0	0		
In-context I	Correct	22	73.3	29	96.7	30	100	12,0	0,002*
	Wrong	8	26.7	1	3.3	0	0		
In-context II	Figurative	4	13.3	27	90	26	86.7	64,4	0,000*
	Wrong Figurative	1	3.3	2	6.7	4	13.3		
	Literal	16	53.3	1	3.3	0	0		
	Other	9	30	0	0	0	0		
In-context III	Figurative	5	16.7	27	90	27	90	47,5	0,000*
	Wrong Figurative	11	36.7	2	6.7	3	10		
	Literal	10	33.3	1	3.3	0	0		
	Other	4	13.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *ateş bacayı sarmak*, which literally translates 'the fire covers the chimney', has the target figurative meaning 'to be in love'. The confirmative paraphrasing task revealed the figurative meanings 'sevmek; aşık olmak; gönlünü kaptırmak; çok sevmek; kalbinden vurulmak' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively, a situation stemming from the fact that the meanings of the individual parts of the idiom did not systematically contribute to the overall figurative meaning of the idiom. The 7 and 9-year-old-groups were mainly literally oriented, while the 11-year-old-group mainly gave wrong figurative answers. For the 7-year-old-group, contextual information did not contribute to the figurative meaning at all. The literal answers by the 7-year-old-group indicated mainly the denotative aspects of *ateş*, *baca* and *sarmak* as exemplified in 'yangın; kirli olmak; duman çıkıyor; ateş bacayı

sarıyor; bütün evler yanıyor; bizi sıcak tutması; bacadan duman çıkıyor; ateş yandı; ateşle oynamak; baca yanar'.

The 9-year-old-group was also literally oriented in the no-context situation, however, contextual backup enabled them to promote to the figurative meaning. The 11-year-old-group produced mainly wrong figurative answers in the no-context situation and greatly benefited from contextual cues to produce correct figurative answers.

In terms of conceptual structuring, the wrong figurative answers suggest only the existence of the FIRE schema. However, some aspects of the FIRE schema are suggestive of the LOVE schema; for instance, the aspects of intensity and danger were realized through the expressions 'çabucak ele geçirmek' as love conquers people; 'kötü duruma düşürmek' as people sometimes feel desperate when in love; 'bir işin fazlasıyla büyümesi' as depicting the intensity felt in cases of love; 'alışmak' as one is gradually accustomed to the intensity of love, and 'ihanet etmek' as one feels completely exhausted/finished in cases of betrayal. In addition, some participants produced the wrong figurative answers 'yalanının ortaya çıkması; kızmak; sinirlenmek' which are based on the FIRE schema, which is considered to underlie the conceptual metonymy BODY TEMPERATURE FOR EMOTIONAL STATES, in the sense that whenever one lies, his/her face blushes, or whenever one get angry s/he has a red face.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$).

Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** yield no difference (p>0,05), the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level (p<0,001). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference (p>0,05), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level (p<0,001). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference (p>0,05), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group (p>0,05).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group (p<0,01). The Figurative, Wrong Figurative and Other answers of the participants increased in the In-context III situation as opposed to the No-context situation; and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group (p<0,001). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context

situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.3.7. Findings for the idiom 'çiçeği burnunda'

Table 46. *Statistical results for the idiom 'çiçeği burnunda'*

Context	Response	Age 7		Age 9		Age 11			
+/-	Type	n	%	n	%	n	%	χ^2	p
No-context	Figurative	0	0	0	0	4	13.3	57,8	0,000*
	Wrong Figurative	2	6.7	22	73.3	24	80		
	Literal	28	93.3	8	26.7	2	6.7		
	Other	0	0	0	0	0	0		
In-context I	Correct	24	80	30	100	30	100	10,1	0,003*
	Wrong	6	20	0	0	0	0		
In-context II	Figurative	3	10	21	70	22	73.3	49,4	0,000*
	Wrong Figurative	6	20	7	23.3	8	26.7		
	Literal	15	50	2	6.7	0	0		
	Other	6	20	0	0	0	0		
In-context III	Figurative	4	13.3	24	80	24	80	47,9	0,000*
	Wrong Figurative	7	23.3	4	13.3	6	20		
	Literal	8	26.7	2	6.7	0	0		
	Other	11	36.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *çiçeği burnunda*, which literally translates 'to have flowers on one's nose', has the target figurative meaning 'to be new in a profession'. The confirmative paraphrasing task revealed the figurative meanings 'yeni; işe daha yeni başladı; deneyimsiz; o işte çok gelişmemiş' by all age groups. The initial findings in the no-context situation revealed that none of the age groups were able to interpret the idiom figuratively, except for only 4 cases in the 11-year-old-group. The 7-year-old-group was totally literally oriented in the no-context situation, while the older age groups mainly gave wrong figurative answers. For the younger age group, contextual information did not contribute to the formation of the figurative meaning at all, and there was no statistical difference between the distribution of answers between the no-context and in-context situations. The literal answers given by the 7-year-old-group indicated the denotative aspects of *çiçek* and *burun* as exemplified in 'koku; çiçeği

koklamak; çiçekler burnuma geldi; mis gibi kokar; arı çiçek yer; burnuna arı konmuş; çiçeği emerken gördüm; çiçeklerin büyümesi'.

Both the 9 and 11-year-old-groups gave wrong figurative answers in the no-context situation, and contextual information greatly contributed to the figurative interpretation of the idiom in the in-context situations.

In terms of conceptual structuring, the heterogeneity of the wrong figurative answers by the older age groups did not produce systematic conceptual frames for comparison. However, only a limited number of the wrong figurative answers revealed the HAPPY schema as illustrated in 'çok mutlu; sevinçli; heyecanlı; sevgi ile', which may be interpreted as when a person is newly assigned to a job or when a person loves somebody, the HAPPY schema is one of the options that s/he can feel among a variety of emotions. Similarly, the image schema of someone smelling a flower might have evoked a person who fell in love in the minds of the older age groups.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,01$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context

situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,001$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.3.8. Findings for the idiom 'birbirini yemek'

Table 47. *Statistical results for the idiom 'birbirini yemek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	6	20	24	80	27	90	44,7	0,000*
	Wrong Figurative	1	3.3	2	6.7	2	6.7		
	Literal	23	76.7	4	13.3	1	3.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	26	86.7	30	100	30	100	6,0	0,032*
	Wrong	4	13.3	0	0	0	0		
In-context II	Figurative	13	43.3	29	96.7	29	96.7	31,5	0,000*
	Wrong Figurative	2	6.7	0	0	1	3.3		
	Literal	7	23.3	1	3.3	0	0		
	Other	8	26.7	0	0	0	0		
In-context III	Figurative	17	56.7	29	96.7	30	100	22,4	0,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	7	23.3	1	3.3	0	0		
	Other	5	16.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *birbirini yemek*, which literally translates 'to eat each other', has the target figurative meaning 'to quarrel for something'. The confirmative paraphrasing task revealed the figurative meanings 'paylaşamamak; kavga etmek; dövüşmek; itişip kakışmak' by all age groups. The 7-year-old-group was observed to be literally oriented and contextual information seemed to have partial contribution on their performances of the formation of the figurative meaning. The literal answers by the 7-year-old-group indicated the denotative aspects of *birbirini* and *yemek* as illustrated in 'birbirimizi yersek herkes yok olur; yemek; acıktım; ölmek; doymak; yemek yerken konuşmamalıyız; birlikte yemek yeriz; yemeği düzgün yemeliyiz; ikisi de biter; birisini yemeğe davet etmek'.

The initial findings in the no-context situation also indicated that the older age groups were able to interpret the idiom figuratively. These higher rates of figurative answers may be attributable to the fact that the idiom birbirini yemek, although it is a first-degree idiom in terms of semantic grading, is a relatively familiar idiom, to be ranked higher in the familiarity list. In this case, the familiarity criterion seemed to precede semantic grading. As a result, most of the older age groups correctly interpreted the figurative meaning of the idiom both in and out of context. Accordingly, the scarcity of the wrong figurative answers revealed only one aspect of the conceptual metaphor ANGER IS ANIMAL BEHAVIOR. The source domain ANIMAL BEHAVIOR was realized through such expressions like 'canını acıtmak; kendini üstün tutmak; vurmak; iddilaşmak', evoking some kind of CONTROL schema which is used to overcome an opponent in cases of confrontation and challenge.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,05$). While the Wrong Figurative answers show similar distributions in the No-context and In-context III comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,05$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,05$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p>0,05$).

5.3.9. Findings for the idiom 'yüreği ağzına gelmek'

Table 48. *Statistical results for the idiom 'yüreği ağzına gelmek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	7	23.3	28	93.3	29	96.7	57,2	0,000*
	Wrong Figurative	2	6.7	2	6.7	1	3.3		
	Literal	21	70	0	0	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	30	100	30	100	1,8	1,000*
	Wrong	1	3.3	0	0	0	0		
In-context II	Figurative	16	53.3	29	96.7	30	100	26,1	0,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	4	13.3	1	3.3	0	0		
	Other	9	30	0	0	0	0		
In-context III	Figurative	18	60	30	100	30	100	22,4	0,000*
	Wrong Figurative	7	23.3	0	0	0	0		
	Literal	1	3.3	0	0	0	0		
	Other	4	13.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *yüreği ağzına gelmek*, which literally translates 'the heart goes up into one's mouth', has the target figurative meaning 'to be afraid or excited too much'. The confirmative paraphrasing task revealed the figurative meanings 'korkmak; ödü patlamak; çok paniklemek; heyecanlanmak; endişelenmek; konuşamaz olmak; elleri titremek' by all age groups. The 7-year-old-group was literally oriented in the no-context situation and context partially contributed to the figurative interpretation of the idiom. The literal answers by the 7-year-old-group indicated the denotative aspects of *yürek*, *ağız* and *gelmek* as illustrated in 'yüreğinin eti bozulur; ağız koklamak; ağzıma yiyecek gelince onunla tadarım.

The initial findings in the no-context situation also indicated that the older age groups were able to interpret the idiom figuratively at a ceiling-level. These higher rates of figurative answers may be attributable to the fact that the idiom *yüreği ağzına gelmek*, although it is a

first-degree idiom in terms of semantic grading, is a relatively familiar idiom, to be ranked higher in the familiarity list. In this case, the familiarity criterion seemed to precede semantic grading. As a result, most of the older age groups correctly interpreted the figurative meaning of the idiom both in and out of context, and their correct figurative answers were centered around the conceptual metonymy PHYSIOLOGICAL EFFECT STANDS FOR EMOTION, or more specifically, INCREASED HEARTRATE STANDS FOR FEAR. Other than that, the scarcity of the wrong figurative answers did not provide any similar conceptual metaphors or metonymies for comparison.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). The Figurative, Wrong Figurative and Other answers of the participants increased in the In-context III situation as opposed to the No-context situation; and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p>0,05$).

5.3.10. Findings for the idiom 'başının etini yemek'

Table 49. *Statistical results for the idiom 'başının etini yemek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	10	33.3	24	80	27	90	37,2	0,000*
	Wrong Figurative	3	10	5	16.7	3	10		
	Literal	17	56.7	1	3.3	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	24	80	27	90	30	100	6,8	0,037*
	Wrong	6	20	3	10	0	0		
In-context II	Figurative	14	46.7	28	93.3	30	100	27,2	0,000*
	Wrong Figurative	4	13.3	1	3.3	0	0		
	Literal	7	23.3	1	3.3	0	0		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	18	60	28	93.3	30	100	18,9	0,000*
	Wrong Figurative	6	20	2	6.7	0	0		
	Literal	1	3.3	0	0	0	0		
	Other	5	16.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *başının etini yemek*, which literally translates 'to eat the flesh of one's brain', has the target figurative meaning 'to insist on something to happen'. The confirmative paraphrasing task revealed the figurative meanings 'ısrar etmek; çok konuşmak; aynı şeyi sürekli istemek; hep aynı şeyi tekrar etmek; çok fazla konuşup rahatsız etmek; onu yapması için zorlamak; çok kez söylemek; rahat bırakmamak'. The 7-year-old-group was observed to concentrate on either literal or figurative answers. Contextual information partially contributed to their performances. The literal answers by the 7-year-old-group indicated the denotative aspects of *baş*, *et* and *yemek* as illustrated in 'başım ağrıyor; et yemek; ağzımla yerim; sadece kafa kemiği kalır'. The initial findings in the no-context situation revealed that the older age groups were able to interpret the idiom figuratively at a ceiling level. These higher rates of figurative answers may be attributable to the fact that the idiom *başının etini yemek*, although it is a first-degree idiom in terms of semantic grading, is a relatively familiar idiom, to be ranked higher in the familiarity list. In this case, the familiarity criterion seemed to precede semantic grading. As a result, most of the older age groups correctly interpreted the figurative meaning of the idiom both in and out of context.

The relatively low frequency of the wrong figurative answers by all age groups did not yield enough data for comparison and investigating the underlying conceptual structure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$).

Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** yield no difference($p>0,05$), the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,05$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,05$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.4 CONTEXT-BASED AND AGE-BASED FINDINGS FOR THIRD-DEGREE IDIOMS

5.4.1. Findings for the idiom 'asık yüzlü'

Table 50. *Statistical results for the idiom 'asık yüzlü'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	27	90	29	96.7	30	100	6,0	0,104*
	Wrong Figurative	3	10	0	0	0	0		
	Literal	0	0	1	3.3	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	28	93.3	29	96.7	30	100	1,9	0,770*
	Wrong	2	6.7	1	3.3	0	0		
In-context II	Figurative	26	86.7	29	96.7	30	100	7,9	0,055*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	0	0	1	3.3	0	0		
	Other	3	10	0	0	0	0		
In-context III	Figurative	29	96.7	30	100	30	100	1,8	1,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	0	0	0	0	0	0		
	Other	0	0	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *asık yüzlü*, which literally translates 'to have a frowning face' has the target figurative meaning 'unhappy'. The confirmative paraphrasing task revealed the figurative meanings 'üzgün ve kötü hissetmek; canı hiç bir şey istememek; mutsuz, sıkıntılı; üzgün; somurtkan; neşesiz; keyifsiz' by all age groups. The initial findings showed that almost all the three age groups performed equally well in the no-context situation for interpreting the correct figurative answer. Unanimously, all the three age groups were able to benefit from the conceptual metonymy FACIAL EXPRESSION STANDS FOR SADNESS. In other words, both the internal semantics of the idiom, that is, the sum of the individual meanings of the idiom, and the conceptual metonymy inherent in the idiomatic expression enabled them to uncover the figurative meaning of the idiom. In addition, the three age groups did not need contextual clues as they already performed near-ceiling-levels in the no-context situation.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p>0,05$).

5.4.2. Findings for the idiom 'karın ağrısı'

Table 51. *Statistical results for the idiom 'karın ağrısı'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	13	43.3	28	93.3	64,9	0,000*
	Wrong Figurative	0	0	1	3.3	0	0		
	Literal	30	100	16	53.3	2	6.7		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	30	100	30	100	1,8	1,000*
	Wrong	1	3.3	0	0	0	0		
In-context II	Figurative	5	16.7	26	86.7	30	100	56,3	0,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	20	66.7	4	13.3	0	0		
	Other	4	13.3	0	0	0	0		
In-context III	Figurative	7	23.3	28	93.3	30	100	52,2	0,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	13	43.3	2	6.7	0	0		
	Other	9	30	0	0	0	0		

A. GENERAL FINDINGS

The idiom *karın ağrısı*, which literally translates 'a stomach-ache', has the target figurative meaning 'a problematic case or person'. The confirmative paraphrasing task revealed the figurative meanings 'baş belası; kötü insan; rahatsızlık veren; sorun yaratmak; sinir bozucu; sıkıntı veren' by all age groups. The initial findings indicated that the 7-year-old-group was completely literally oriented in the no-context situation and contextual information did not contribute to the formation of the figurative meaning. The literal orientation of the younger age group indicated the denotative aspects of *karın* and *ağrı* as illustrated in 'hasta; midesi bulanmak; ayağı çıplak gezerse/farklı birşey yerse karnı ağrır; soğuk su içersek karnımız ağrır; acı çekmek'.

The 9-year-old-group, on the other hand, was both literally and figuratively oriented in the no-context situation. This confusion between the literal and figurative meaning might have stemmed from the fact that the literal meaning of the idiom is as frequently used as the

figurative meaning. However, this age group was able to benefit from the contextual information to interpret the figurative meaning at a ceiling-level. The 11-year-old-group gave completely figurative answers early in the no-context situation.

In terms of conceptual structuring, only the older age groups seemed to have benefit from both the conceptual metaphor UNDESIRABLE STATES OR PEOPLE ARE DISEASES and the internal semantics of the idiom, bearing in mind the conventional knowledge that diseases produce problem for people, as is the case of undesirable states.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,001$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the

participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p>0,05$).

There is no difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.4.3. Findings for the idiom 'eli ayağı titremek'

Table 52. *Statistical results for the idiom 'eli ayağı titremek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	7	23.3	26	86.7	30	100	49,4	0,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	23	76.7	4	13.3	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	24	80	30	100	30	100	10,1	0,003*
	Wrong	6	20	0	0	0	0		
In-context II	Figurative	22	73.3	30	100	30	100	13,4	0,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	5	16.7	0	0	0	0		
	Other	2	6.7	0	0	0	0		
In-context III	Figurative	24	80	30	100	30	100	8,7	0,003*
	Wrong Figurative	2	6.7	0	0	0	0		
	Literal	2	6.7	0	0	0	0		
	Other	2	6.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *eli ayağı titremek*, which literally translates 'one's hands and feet are trembling', has the target figurative meaning 'to be afraid'. The confirmative paraphrasing task revealed the figurative meanings 'korkmak; heyecanlanmak; endişeli olmak; tırsımak; şok olmak; paniklemek' by all age groups. The initial findings indicated that only the 7-year-old-group was literally oriented in the no-context situation, and furthermore, contextual information greatly contributed to the formation of the figurative meaning. The literal orientation of the younger group revealed the denotative aspect of *el*, *ayak* and *titremek*, as illustrated in 'üşümek; soğukta gezmek; titremek; hasta; eli durmaz; el ve ayağın titremesi'.

The older age groups were completely figuratively oriented already in the no-context situation. They seemed to benefit from the conceptual metonymy PHYSIOLOGICAL EFFECT STANDS FOR EMOTION, or more precisely, TREMBLING STANDS FOR SCHOCK, also bearing in mind the conventional knowledge that if one is afraid, s/he is presumed to exhibit such

physiological effect as trembling of the feet and hands. Some of the literal answers given by the 7-year-old-group also suggested specific cases of physiological effects on the human body such as if someone is cold, s/he trembles, or if someone is hungry, s/he trembles.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context I situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.4.4. Findings for the idiom 'altını üstüne getirmek'

Table 53. *Statistical results for the idiom 'altını üstüne getirmek'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	7	23.3	27	90	30	100	59,5	0,000*
	Wrong Figurative	2	6.7	3	10	0	0		
	Literal	21	70	0	0	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	25	83.3	30	100	30	100	7,9	0,010*
	Wrong	5	16.7	0	0	0	0		
In-context II	Figurative	25	83.3	30	100	30	100	7,7	0,010*
	Wrong Figurative	2	6.7	0	0	0	0		
	Literal	1	3.3	0	0	0	0		
	Other	2	6.7	0	0	0	0		
In-context III	Figurative	29	96.7	30	100	30	100	1,8	1,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	0	0	0	0	0	0		
	Other	0	0	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *altını üstüne getirmek*, which literally translates 'to turn something upside down', has the target figurative meaning 'to leave something in a mess'. The confirmative paraphrasing task revealed the figurative meanings 'evi dağıtmak; bozmak; pis yapmak; darmadağın etmek; düzgünden dağınıklığa; her tarafı bozmak; mahvetmek; heryeri kirletmek; karıştırmak; berbat etmek' by all age groups. The initial findings indicated that only the 7-year-old-group was literally oriented in the no-context situation, and furthermore, contextual information greatly contributed to the formation of the figurative meaning. The literal orientation of the younger group revealed the denotative aspects of *alt*, *üst* and *getirmek* as exemplified in 'başüstü durmak; alta ve üste bakınca değişik görürüz; kumun üstüne getirmek; altındaki şeyi üstüne getirmek; altının üstüne kazayla düşmüş; yer değiştirmek; ters giyinmek; altına üstüne oturuyormuş; altına yapmak'.

The older age groups were completely figuratively oriented already in the no-context situation. They seemed to benefit both from the internal semantics of the idiom, and the conceptual metaphor MESSING IS SHIFTING THE PLACE OF OBJECTS, bearing in mind the conventional knowledge that in cases of fight, things in the environment are left in a mess, thus, things change position, especially in an upside-down orientation.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in

the ***in-context I situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.4.5. Findings for the idiom 'sırtüstü yatmak'

Table 54. *Statistical results for the idiom 'sırtüstü yatmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	9	30	22	73.3	55,4	0,000*
	Wrong Figurative	1	3.3	7	23.3	5	16.7		
	Literal	29	96.7	14	46.7	3	10		
	Other	0	0	0	0	0	0		
In-context I	Correct	28	93.3	29	96.7	30	100	1,9	0,770*
	Wrong	2	6.7	1	3.3	0	0		
In-context II	Figurative	12	40	23	76.7	29	96.7	24,2	0,000*
	Wrong Figurative	3	10	2	6.7	0	0		
	Literal	12	40	5	16.7	1	3.3		
	Other	3	10	0	0	0	0		
In-context III	Figurative	17	56.7	28	93.3	29	96.7	21,4	0,000*
	Wrong Figurative	1	3.3	1	3.3	1	3.3		
	Literal	4	13.3	1	3.3	0	0		
	Other	8	26.7	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *sırtüstü yatmak*, which literally translates 'to lie on one's back', has the target figurative meaning 'not to do anything'. The confirmative paraphrasing task revealed the figurative meanings 'çalışmamak; tembel; hiçbir şey yapmamak; boş boş durmak; hiç çabalamamak; sorumsuz' by all age groups. The initial findings indicated that the 7-year-old-group was completely literally oriented in the no-context situation, and furthermore, contextual information partially contributed to the formation of the figurative meaning. The literal orientation of the younger group revealed the denotative aspects of *sırt*, *üst*, and *yatmak* as illustrated in 'bel ağrısı; yatmak; uyumak; beli bükük; yere yatmak; yemek yediğimizde sırtüstü yatmamalıyız; sırtüstü; karın ağrısı geçirmek; düz dönmek; sırtımız ağırır; sırtı yukarıya gelir; sırtüstü yatmak iyi gelir; spor yapmak; düşmek'.

The 9-year-old-group was observed to display figurative, wrong figurative and literal answers, however they were able to benefit from contextual cues, and thus, they promoted to correct figurative answers in the in-context situations with a statistical difference. Other than that, the literal answers by the 9-year-old-group might have stemmed from the fact that the literal meaning of the idiom is as frequently used as the figurative meaning. The 11-year-old-group was already figuratively oriented in the no-context situation and they performed at a ceiling-level in the in-context situations. All in all, the older age groups were generally figuratively oriented and they seemed to benefit from the conceptual metaphor NO DESIRE FOR ACTION IS LYING DOWN. Both the internal semantics of the idiom and the inference that if someone is sleeping/resting on his/her back, which entailed the INACTIVITY schema, enabled them to produce the figurative meaning.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** is also different ($p<0,001$), it is observed that all age groups performed differently.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that there is no difference among the distribution of answers given by 7, 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative answers show similar distributions in the No-context and In-context II comparison, the Figurative and Other answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative answers show similar distributions in the No-context and In-context III comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,001$). While the Other

answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative and Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 11 age group ($p<0,05$). While the Literal and Other answers show similar distributions in the No-context and In-context II comparison, the Figurative answers increased in the In-context II situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 11 age group ($p<0,01$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.4.6. Findings for the idiom 'burnunun dibinde'

Table 55. *Statistical results for the idiom 'burnunun dibinde'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	4	13.3	27	90	27	90	62,4	0,000*
	Wrong Figurative	1	3.3	2	6.7	2	6.7		
	Literal	25	83.3	1	3.3	1	3.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	30	100	30	100	1,8	1,000*
	Wrong	1	3.3	0	0	0	0		
In-context II	Figurative	11	36.7	30	100	29	96.7	42,2	0,000*
	Wrong Figurative	1	3.3	0	0	1	3.3		
	Literal	7	23.3	0	0	0	0		
	Other	11	36.7	0	0	0	0		
In-context III	Figurative	16	53.3	30	100	30	100	27,9	0,000*
	Wrong Figurative	1	3.3	0	0	0	0		
	Literal	9	30	0	0	0	0		
	Other	4	13.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *burnunun dibinde*, which literally translates 'near one's nose', has the target figurative meaning 'very close'. The confirmative paraphrasing task revealed the figurative meanings 'tam yanında; gözünün önünde; hemen önünde; çok yakınında; burada; başucunda; yanıbaşında' by all age groups. The initial findings indicated that only the 7-year-old-group was literally oriented in the no-context situation, and furthermore, contextual information partially contributed to the formation of the figurative meaning. The literal orientation of the younger group revealed the denotative aspects of burun and dip as illustrated in 'burnu kanıyor; nefes; burnuma değersem mikrop kaparım; burnunda bir şey var; koku almak; burnunda kıl var; burnunun ucunda kalem var; burnunun içinde; pis bir ifade; burnum tıkandı; burnunun dibinde'.

The older age groups, on the other hand, were greatly figuratively oriented both in the no-context and in-context situations. They seemed to benefit from the conceptual metaphor

PHYSICAL PROXIMITY IS BEING IN IMMEDIATE SIGHT, also making the inference that if something is near your nose, it is basically within your reach, with the further entailment that if something is in front of your nose, then you can easily see or touch it within the bounds of physical proximity.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group (p>0,05).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group (p<0,01). While the Wrong Figurative answers show similar distributions in the No-context and In-context III comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group (p>0,05).

5.4.7. Findings for the idiom 'çocuk oyuncağı'

Table 56. *Statistical results for the idiom 'çocuk oyuncağı'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	13	43.3	26	86.7	29	96.7	34,6	0,000*
	Wrong Figurative	0	0	3	10	0	0		
	Literal	17	56.7	1	3.3	1	3.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	30	100	30	100	30	100	-	-
	Wrong	0	0	0	0	0	0		
In-context II	Figurative	26	86.7	30	100	30	100	6,2	0,032*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	1	3.3	0	0	0	0		
	Other	3	10	0	0	0	0		
In-context III	Figurative	29	96.7	30	100	30	100	1,8	1,000*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	1	3.3	0	0	0	0		
	Other	0	0	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *çocuk oyuncağı*, which literally translates 'a child's toy', has the target figurative meaning 'very easy to do'. The confirmative paraphrasing task revealed the figurative meanings 'çok kolay; ben de yapabilirim; çok basit; benim için kolay' by all age groups. The initial findings indicated that only the 7-year-old-group was both literally and figuratively oriented in the no-context situation, and plus, they were able to benefit from contextual cues to reach the figurative meaning in the in-context situations. The literal orientation of the younger age group revealed the denotative aspects of *çocuk* and *oyuncak* as exemplified in 'büyük oyuncağım adamımı taşıyabiliyor; oynamak; oyuncak; oynamayı sevmek; oynuyor; çocuklar oynasın diye; çocuk oyuncağı'.

The older age groups, on the other hand, were completely figuratively oriented already in the no-context situation and they did not need further contextual cues for the figurative meaning. They uniformly seemed to benefit from the conceptual metaphor EASINESS IS A GAME, also bearing in mind the conventional knowledge that playing with toys is both fun and easy.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is not statistically different. Since all the answers are evenly distributed, the data set yielded no statistical comparison.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative answers show similar distributions in the No-context and In-context II comparison, the Figurative and Other answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.4.8. Findings for the idiom 'beyni durmak'

Table 57. *Statistical results for the idiom 'beyni durmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	10	33.3	28	93.3	30	100	52,2	0,000*
	Wrong Figurative	0	0	2	6.7	0	0		
	Literal	20	66.7	0	0	0	0		
	Other	0	0	0	0	0	0		
In-context I	Correct	28	93.3	30	100	30	100	2,7	0,326*
	Wrong	2	6.7	0	0	0	0		
In-context II	Figurative	26	86.7	30	100	30	100	6,2	0,032*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	1	3.3	0	0	0	0		
	Other	3	10	0	0	0	0		
In-context III	Figurative	24	80	30	100	30	100	9,1	0,003*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	2	6.7	0	0	0	0		
	Other	4	13.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *beyni durmak*, which literally translates 'one's brain has stopped', has the target figurative meaning 'not to be able to comprehend'. The confirmative paraphrasing task revealed the figurative answers 'beyni yorulmak; düşünememek; cevaplayamamak; çok yorulmak; anlayamamak; aklını kullanamamak; zorlukla düşünmek; o an aklına gelmemek; birden unutmak; kafa yoramamak; kafası o anda çalışmamak; yapamamak; hatırlayamamak; soruları cevaplayamamak; bulamamak' by all age groups. The initial findings indicated that only the 7-year-old-group was literally oriented in the no-context situation, and furthermore, they were able to convert their literal answers into figurative answers with the help of contextual backup. The literal orientation of the younger group revealed the denotative aspects of *beyin* and *durmak* as exemplified in 'beyni durmuş; kan durmuş; beyni çalışmıyor; kansızlık; beyin durursa nefes alamazsın, elim durdu'.

The older age groups were completely figuratively oriented already in the no-context situation. They seemed to benefit both from the internal semantics of the idiom and the conceptual metaphor THE MIND IS A MACHINE. The metaphor further entailed the inference that the mind runs like a machine, and if a machine stops working it simply does not function. In this case, the older age groups were able to predict that the mind would not function properly in case of biological cessation or failure.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,05$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** is exactly the same, the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** is exactly the same, the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative answers show similar distributions in the No-context and In-context II comparison, the Figurative and Other answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative answers show similar distributions in the No-context and In-context III comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

5.4.9. Findings for the idiom 'el değmemiş'

Table 58. *Statistical results for the idiom 'el değmemiş'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	0	0	22	73.3	25	83.3	71,6	0,000*
	Wrong Figurative	2	6.7	5	16.7	3	10		
	Literal	28	93.3	3	10	2	6.7		
	Other	0	0	0	0	0	0		
In-context I	Correct	30	100	30	100	30	100	-	-
	Wrong	0	0	0	0	0	0		
In-context II	Figurative	20	66.7	26	86.7	30	100	15,0	0,001*
	Wrong Figurative	1	3.3	2	6.7	0	0		
	Literal	4	13.3	2	6.7	0	0		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	26	86.7	27	90	30	100	10,4	0,008*
	Wrong Figurative	0	0	2	6.7	0	0		
	Literal	0	0	1	3.3	0	0		
	Other	4	13.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom *el değmemiş*, which literally translates 'not (even) touched' has the target figurative meaning 'in a new condition'. The confirmative paraphrasing task revealed the figurative meanings 'yeni; çok temiz; yeni gibi; gıcır gıcır; tertemiz; düzgün; kirlenmemiş; kullanılmamış; hiç bozulmamış; hiç yıpranmamış' by all age groups. The initial findings indicated that only the 7-year-old-group was literally oriented in the no-context situation, and plus, contextual information greatly contributed to the formation of the figurative meaning. The literal orientation of the younger group revealed the denotative aspects of *el* and *değmek* as exemplified in 'dokunmak; hiç kimse ellememiş; hiç dokunmamış; elim yazmaz; el değer; eli yok; elini değmezsen anlayamazsın; dövmemek; daha almadan; iz yapmaz'.

The older age groups were completely figuratively oriented already in the no-context situation and thus they did not need contextual cues for the formation of the figurative

meaning. They seemed to benefit from the conceptual metonymy THE HAND STANDS FOR POSSESSION, also bearing in mind both the conventional knowledge and the inference that if you hold something in your hand, it symbolizes the possession of that material.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is not statistically different. Since all the answers are evenly distributed, the data set yielded no statistical comparison.

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative answers show similar distributions in the No-context and In-context II comparison, the Figurative and Other answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative answers show similar distributions in the No-context and In-context III comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,05$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.4.10. Findings for the idiom 'el atmak'

Table 59. *Statistical results for the idiom 'el atmak'*

Context +/-	Response Type	Age 7 n	Age 7 %	Age 9 n	Age 9 %	Age 11 n	Age 11 %	χ^2	p
No-context	Figurative	1	3.3	22	73.3	26	86.7	68,7	0,000*
	Wrong Figurative	1	3.3	4	13.3	3	10		
	Literal	28	93.3	4	13.3	1	3.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	29	96.7	30	100	30	100	1,8	1,000*
	Wrong	1	3.3	0	0	0	0		
In-context II	Figurative	18	60	25	83.3	30	100	21,7	0,000*
	Wrong Figurative	1	3.3	4	13.3	0	0		
	Literal	6	20	1	3.3	0	0		
	Other	5	16.7	0	0	0	0		
In-context III	Figurative	23	76.7	29	96.7	30	100	13,9	0,001*
	Wrong Figurative	0	0	0	0	0	0		
	Literal	0	0	1	3.3	0	0		
	Other	7	23.3	0	0	0	0		

*Fisher's Exact test

A. GENERAL FINDINGS

The idiom el atmak, which literally translates 'to touch', has the target figurative meaning 'to help someone'. The confirmative paraphrasing task revealed the figurative answers 'yardım etmek; yardım istemek; işi başkasına vermek; yardım almak; elindekileri taşımasını istemek; iş yaptırmak; elindekileri vermek' by all age groups. The initial findings indicated that only the 7-year-old-group was literally oriented in the no-context situation, and furthermore, contextual information moderately contributed to the formation of the figurative meaning. The literal orientation of the 7-year-old-group revealed the denotative aspects of el and atmak as exemplified in 'takma eli almak; elinden bir şeyi atmak; dokunmak; el kaldırmak; hızlıca atarsa kırılır; el oyuncağını atmak; elini atmak; ellerim çok iyi çalışır; eliyle bir şey atmak; el çırpmak; elini vurursa kırılır; el öpmek; ben senin defterine ellemedim'.

The older age groups were mostly figuratively oriented already in the no-context situation, and thus, they did not need any further contextual backup. They also seemed to benefit from the conceptual metonymy THE HAND STANDS FOR THE ACTION. The metonymy also entailed the inference that stretching one's hand is mainly intended for help, a specific schema among many options.

B. CONTEXT-BASED FINDINGS

No-context Situation

The evaluation of the ***no-context situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***no-context situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context I Situation

The evaluation of the ***in-context I situation*** revealed that the distribution of the answers within the 7, 9 and 11 age groups is not statistically different ($p>0,05$).

In-context II Situation

The evaluation of the ***in-context II situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,001$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context II situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

In-context III Situation

The evaluation of the ***in-context III situation*** revealed that the distribution of Figurative, Wrong Figurative, Literal and Other answers within the 7, 9 and 11 age groups is statistically different at a meaningful level ($p<0,01$). Since the distribution of the answers given by the participants in the 9 and 11 age groups in the ***in-context III situation*** yield no difference ($p>0,05$), the 7 age group is observed to create the difference.

C. AGE-BASED FINDINGS

There is difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 7 age group ($p<0,01$). While the Wrong Figurative answers show similar distributions in the No-context and In-context II comparison, the Figurative and Other answers increased in the In-context II situation as opposed to the No-context situation, and the Literal answers decreased in the In-context II situation as opposed to the No-context situation.

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 7 age group ($p<0,001$). While the Wrong Figurative answers show similar distributions in the No-context and In-context III comparison, the Figurative and Other answers increased in the In-context III situation as opposed to the No-context situation, and the Literal answers decreased in the In-context III situation as opposed to the No-context situation.

There is no difference between the distribution of No-context answers and the distribution of In-context II answers given by the 30 participants in the 9 age group ($p>0,05$).

There is difference between the distribution of No-context answers and the distribution of In-context III answers given by the 30 participants in the 9 age group ($p<0,05$). While the Literal and Other answers show similar distributions in the No-context and In-context III comparison, the Figurative answers increased in the In-context III situation as opposed to the No-context situation, and the Wrong Figurative answers decreased in the In-context III situation as opposed to the No-context situation.

5.5. THE CUMULATIVE EVALUATION OF THE FAMILIAR IDIOMS ACROSS CONTEXTUAL FEATURES AND AGE

Table 60. *Cumulative evaluation for familiar idioms*

		Age 7		Age 9		Age 11			
		n	%	n	%	n	%	χ^2	p
No-context	Figurative	165	55	282	94.0	297	99	245.6	0,000*
	Wrong Figurative	20	6.7	1	0.3	3	1.0		
	Literal	105	35	17	5.7	0	0		
	Other	10	3.3	0	0	0	0		
In-context I	Correct	273	91	299	99.7	300	100	51.8	0.000*
	Wrong	27	9	1	0.3	0	0		
In-context II	Figurative	213	71	294	98	300	100	171.9	0,000*
	Wrong Figurative	12	4.0	1	0.3	0	0		
	Literal	34	11.3	5	1.7	0	0		
	Other	41	13.7	0	0	0	0		
In-context III	Figurative	229	76.3	297	99	300	100	143.5	0,000*
	Wrong Figurative	14	4.7	1	0.3	0	0		
	Literal	15	5.0	2	0.7	0	0		
	Other	42	14.0	0	0	0	0		

*Chi-square test

No-Context Situation

The evaluation of the no-context situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context I Situation

The evaluation of the in-context I situation revealed that while the distribution of the correct and wrong answers is different in the 7 age group when compared to 9 and 11 age groups ($p<0,001$), there is no difference between the 9 and 11 age groups ($p>0,005$).

In-context II Situation

The evaluation of the in-context II situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context III Situation

The evaluation of the in-context III situation revealed that while the distribution of the figurative, wrong figurative, literal and other answers is different in the 7 age group when compared to 9 and 11 age groups ($p<0,001$), there is no difference between the 9 and 11 age groups ($p>0,005$).

5.6. THE CUMULATIVE EVALUATION OF THE UNFAMILIAR IDIOMS ACROSS CONTEXTUAL FEATURES AND AGE

Table 61. *Cumulative evaluation for unfamiliar idioms*

		Age 7		Age 9		Age 11			
		n	%	n	%	n	%	χ^2	p
No-context	Figurative	8	2.7	52	17.3	71	23.7	396,4	0,000*
	Wrong Figurative	7	2.3	141	47	177	59		
	Literal	285	95	107	35.7	52	17.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	274	91.3	298	99.3	299	99.7	42,8	0,000*
	Wrong	26	8.7	2	0.7	1	0.3		
In-context II	Figurative	105	35	197	65.7	250	83.3	349,7	0,000*
	Wrong Figurative	27	9	85	28.3	43	14.3		
	Literal	121	40.3	18	6	7	2.3		
	Other	47	15.7	0	0	0	0		
In-context III	Figurative	195	65	244	81.3	264	88	137,1	0,000*
	Wrong Figurative	32	10.7	51	17	33	11		
	Literal	38	12.7	5	1.7	3	1		
	Other	35	11.7	0	0	0	0		

*Chi-square test

No-Context Situation

The evaluation of the no-context situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context I Situation

The evaluation of the in-context I situation revealed that while the distribution of the correct and wrong answers is different in the 7 age group when compared to 9 and 11 age groups ($p<0,001$), there is no difference between the 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the in-context II situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context III Situation

The evaluation of the in-context III situation revealed that while the distribution of the figurative, wrong figurative, literal and other answers is different in the 7 age group when compared to 9 and 11 age groups ($p<0,001$), there is no difference between the 9 and 11 age groups ($p>0,05$).

5.7. THE CUMULATIVE EVALUATION OF THE FIRST-DEGREE IDIOMS ACROSS CONTEXTUAL FEATURES AND AGE

Table 62. *Cumulative evaluation for first-degree idioms*

		Age 7		Age 9		Age 11			
		n	%	n	%	n	%	χ^2	p
No-context	Figurative	23	7.7	81	27	101	33.7	385,6	0,000*
	Wrong Figurative	12	4.0	108	36	168	56		
	Literal	265	88.3	111	37	31	10.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	262	87.3	284	94.7	294	98.0	28,7	0,000*
	Wrong	38	12.7	16	5.3	6	2		
In-context II	Figurative	78	26	222	74	236	78.7	423,5	0,000*
	Wrong Figurative	23	7.7	55	18.3	62	20.7		
	Literal	138	46	23	7.7	2	0.7		
	Other	61	20.3	0	0	0	0		
In-context III	Figurative	99	33	240	80	246	82	298,9	0,000*
	Wrong Figurative	63	21	44	14.7	53	17.7		
	Literal	82	27.3	16	5.3	1	0.3		
	Other	56	18.7	0	0	0	0		

*Chi-square test

No-Context Situation

The evaluation of the no-context situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context I Situation

The evaluation of the in-context I situation revealed that the distribution of the correct and wrong answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context II Situation

The evaluation of the in-context II situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context III Situation

The evaluation of the in-context III situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

5.8. THE CUMULATIVE EVALUATION OF THE THIRD-DEGREE IDIOMS ACROSS CONTEXTUAL FEATURES AND AGE

Table 63. *Cumulative evaluation for third-degree idioms*

		Age 7		Age 9		Age 11			
		n	%	n	%	n	%	χ^2	p
No-context	Figurative	69	23	229	76.3	277	92.3	413,7	0,000*
	Wrong Figurative	10	3.3	27	9	13	4.3		
	Literal	221	73.7	44	14.7	10	3.3		
	Other	0	0	0	0	0	0		
In-context I	Correct	280	93.3	298	99.3	300	100	33,9	0,000*
	Wrong	20	6.7	2	0.7	0	0		
In-context II	Figurative	191	63.7	279	93	298	99.3	188,8	0,000*
	Wrong Figurative	11	3.7	8	2.7	1	0.3		
	Literal	57	19	13	4.3	1	0.3		
	Other	41	13.7	0	0	0	0		
In-context III	Figurative	224	74.7	292	97.3	299	99.7	139,9	0,000*
	Wrong Figurative	7	2.3	3	1	1	0.3		
	Literal	31	10.3	5	1.7	0	0		
	Other	38	12.7	0	0	0	0		

*Chi-square test

No-Context Situation

The evaluation of the no-context situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context I Situation

The evaluation of the in-context I situation revealed that while the distribution of the correct and wrong answers is different in the 7 age group when compared to 9 and 11 age groups ($p<0,001$), there is no difference between the 9 and 11 age groups ($p>0,05$).

In-context II Situation

The evaluation of the in-context II situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

In-context III Situation

The evaluation of the in-context III situation revealed that the distribution of the figurative, wrong figurative, literal and other answers is statistically different at a meaningful level among all age groups ($p<0,001$).

CHAPTER 6

6.1. DISCUSSION

The main aim of this research was to investigate the early developmental patterns in the acquisition of Turkish idioms across such variables as age, familiarity, contextual backup, semantic grading and conceptual structuring. In general, the results suggested that the acquisition of idioms by children is not a passive learning process, instead it involves complex linguistic and cognitive skills. Children aged 7, 9, and 11 were able to recognize that language can be used figuratively to express complex abstract states and it can serve different communicative purposes other than the literal language.

The results confirmed the trend found in previous studies (Levorato and Cacciari, 1992; 1995, 1999; Cacciari and Levorato, 1998; Nippold and Martin, 1989; Cain et al., 2005). The 9 and 11-year-old-children outperformed the 7 year-old-children and differences in children's interpretation of idioms was linked to familiarity levels, the semantic grading of idioms and the main effect of context. Particularly there was a literal interpretation tendency among the younger age group, and thus they were not able to grasp the target figurative meaning of many idioms in and out of context, which involved minimal amounts of inferential processing. To elaborate, the results suggested a significant main effect of age, and there was a main effect of context, semantic grading and familiarity.

The most comprehensive account of the acquisition of idiomatic expressions within a developmental framework is the Global Elaboration Model, which was put forward by Levorato and Cacciari (1992; 1995; 1999). The Global Elaboration Model is a developmental model of figurative competence which emphasizes the critical role of context for successful idiom comprehension and can thus explain the context effects found in developmental studies. The Model states that attention to the contexts in which the idiom is presented enables the comprehenders to appreciate that a literal interpretation of the idiomatic expression is inappropriate and the context provides the necessary semantic information to derive an appropriate figurative meaning for the idiom. The term elaboration, according to Kövecses (2010), includes the mental operations and the deeper level processing that a

learner may perform in connection with a lexical item, such as associating the lexical item with a particular context, connecting and comparing it with other items belonging to the same lexical field, associating it with a mental picture, the ability to make inferences and to integrate the incoming information with his/her general knowledge, and so on.

According to this hypothesis, younger children often fail to understand idiomatic expressions, as they focus on a local interpretation of the text and do not derive a coherent and integrated model of the text as a whole (Levorato and Cacciari, 1995). Plus, the hypothesis maintains that it is also possible to understand unfamiliar and first-degree idioms if they are embedded in informative contexts. In a similar vein, the Global Elaboration Model predicts that when an unfamiliar or first-degree idiom is encountered in a text, the implausibility of a literal interpretation in the context triggers a search for a figurative meaning and thus directs the reader to reject the literal interpretation. Most importantly, the phases of figurative competence development were shown by Levorato (1993) to be as follows within the bounds of the Global Elaboration Model (p. 119-122):

1. A shallow type of processing is carried out consisting of a word-by-word elaboration of the linguistic input, in which children process language literally.
2. Children realize that a discrepancy might exist between what is said and what is expected on the basis of context. A sensitivity toward contextual information leads children older than 7 years to search for a figurative meaning.
3. Children acquire the knowledge that a communicative intention can be realized through different sentence forms, which indicates that nonliteral sentence forms are interpreted figuratively
4. An ability to use the conventional repertoire of figurative expressions is achieved by the end of primary school. The developmental gap between the ability to comprehend and to produce figurative language is progressively reduced.
5. An adult-like figurative competence is attained based on metalinguistic processes, characterized by the ability to fully produce and also use figurative language in a creative way.

The findings of the study were discussed in relation to the prominent developmental models of figurative competence and the acquisition of idiomatic expressions. One such model is the Global Elaboration Model put forward by Levorato and Cacciari (1992; 1995; 1999), according to which significant developmental improvements in idiom comprehension are seen between 7 and 12 years of age (Cain et al 2009; Levorato and Cacciari 1999). Contextual information is supposed to provide semantic support, which in turn leads to understanding and integration of the figurative meaning of an idiom within that context. The results of the present study confirmed the importance of contextual backup in the comprehension of idiomatic expressions by primary school children. The results of the study were discussed along the experimental variables in the following sequence: *a. age; b. familiarity; c. semantic analyzability; d. context, and e. conceptual structuring*.

First, the study showed a clear developmental gap between the 7-year-old-group on the one side of the continuum, and the 9 and 11-year-old groups on the other side, in which the 9-year-old group marked a great transitional quality towards figurative tendency. The study revealed that the idiomatic answers differed significantly according to age, with the older children giving a high number of correct idiomatic answers both in and out of context than the younger children did. Thus, the frequency of correct idiomatic answers steadily improved with increasing age. For instance, the 7-year-old-children rarely made correct figurative guesses throughout the study, only except for the familiar idiom task, which suggested that the early age groups did not consistently comprehend the use of idiomatic expressions.

When the age variable is taken into consideration, the overall results of the study suggested that idiom comprehension by the 7-year-old groups appears to be strongly literally oriented and thus less formulaic. This literal orientation of the younger age group can be taken as experimental evidence to account for a word-by-word processing of the idiomatic expressions, in which the younger age group assigned literal interpretations to the individual constituents involved in the idiom.

Over and above, the 7-year-old-children were distinguished in their performances from the older age groups as they were observed to exhibit poor inferential skills in the interpretation of idiomatic expressions which were embedded in contexts, and thus they were not able to

construct an integrated representation of the specific texts. One of the main reasons underlying the literal orientation and the shallow processing of the 7-year-old-group in the no-context and in-context situations stemmed from their inability to detect the incongruency between what is said and what is meant by the idiomatic expression itself, to put it in other words, they were unable to realize the semantic anomaly after the initial literal analysis of the idiomatic expressions. In addition, and perhaps more significantly, this younger age group were not able to search for a global and coherent meaning of the context and consequently, they failed in most cases to retrieve relevant information needed for elaborative inferences which were necessitated by the contextual cues. As the above instances suggest, the 7-year-old-children were not able to identify the figurative meaning of the idiomatic expressions in most cases because they employed a shallow processing of both the idiomatic expressions and the related contexts, and more significantly, they were mostly unable to integrate the chunk of information in the minimal texts of the study.

The low performance of the 7-year-old-children in general and the higher percentage of literal answers indicated a lack of awareness in contextual consistency. On the contrary, 9 and 11-year-old-children produced high amounts of figurative answers, since they had the cognitive ability to search for contextually appropriate answers. In addition, the existence of wrong figurative answers by the older age groups might suggest an understanding of the global meaning of the short stories and a lack of knowledge of the exact idiomatic expression.

In accordance with the predictions of the Global Elaboration Model (Levorato et al, 2007), the 9 and 11-year-old-children, conversely, were able to look for the contextual information which was necessary to construct a coherent semantic representation of the text and to activate the meanings associated with the idiomatic expression in the light of its context. These older age groups in the experimental group, in other words, were able to process the complete textual information which also included the idiomatic phrase. In this sense, they managed to grasp the figurative meaning of the idiom simply because they were successful in constructing the coherent semantic representation of the text.

The developmental pattern for the primary-school-children across age variable has thus demonstrated that literal tendency predominate during early childhood, around the age of 7,

and that idiom comprehension and interpretation both gradually becomes more figurative onwards, with an impetus after the age of 9. These results are consistent with previous studies of idiom comprehension and figurative language development in exhibiting gradual development and incomplete mastery of idiomatic expressions (Levorato et al. 2007; Nippold et al. 1993; 2001; Cain et al. 2009; Levorato and Cacciari, 1995), with the consistent findings that the 7-year-old-children have not yet developed a figurative strategy and the necessary inference skills to be able to interpret the target idiomatic meaning. However, this age group was observed to be moderately successful in interpreting the meanings of the familiar idioms out-of context, 165 target figurative meanings out of 300. This mediocre performance of the 7-year-old-group dramatically decreased in cases of the unfamiliar, first-degree and third-degree idioms, and plus context seemed to have only partial influence on their performances in all idiom types.

The abundance of the idiomatic and wrong figurative answers on the side of the 9 and 11-year-old-children suggested that they already left the literal orientation and were able to attain a holistic, semantic representation of the text. It is noteworthy to mention that not all the members of these older age groups were able to infer the meanings of all idioms which were embedded in contexts, a finding consistent with the Global Elaboration Model which suggested that some children within the same age groups may not have attained the requirements of the five cognitive steps mentioned in the model and thus they may lag behind the cognitive patterns of their normally developing peers. One further observation on the older age groups was that, as they were well able to interpret the meanings of the familiar and third-degree idioms at a ceiling-level, thus they did not need any further contextual support for these kind of idiom. However, as expectedly they had difficulty in interpreting the unfamiliar and first-degree idioms in the no-context situation, and they were able to benefit greatly from contextual cues in the in-context situations in attaining the correct figurative meaning.

Second, as for the familiarity variable, target idiomatic answers were given with varying degrees by all age groups who already knew the idiom, which suggested that highly familiar idioms acted to decrease the choice of literal answers. Unfamiliar idioms obtained more

literal answers by the 7-year-old-children. On the other hand, 9 and 11-year-old-children gave mainly wrong figurative answers in the no-context situation and also there were traces of literal choices by the 9 year-old-children in the no-context situation. The older age groups, who produced figurative or wrong figurative answers with familiar and unfamiliar idioms suspended the literal strategy. In this level, they perceived that language can be used figuratively other than the communicative purpose, and they used the linguistic information given by the context and by the individual parts of the idiom to give contextually coherent answers. Likewise, more figurative answers were given by older children to unfamiliar and first-degree idioms, a result which suggested that figurative competence plays an increasingly relevant role as linguistic awareness increases.

The familiarity effect, in the present design of the study, functioned to explain only a small part of the developmental process in the acquisition of idiomatic expressions. As expectedly and according to the predictions of the Acquisition via Exposure Hypothesis (Nippold and Taylor, 1995; 2002), children produced fewer literal answers for familiar idioms and more literal answers for unfamiliar idioms. In this case, the fact that a child might have heard an idiom before rendered a literal choice less likely, however, it did not guarantee the production of figurative meaning. Older children chose idiomatic answers for familiar idioms not because of prior exposure to those specific idioms, but because they were able to use such higher-order language processing strategies as making use of the individual meanings of the constituents of idioms and integrating these local information into the global meaning conveyed by the context. Taken altogether, the degree of familiarity is considered to have a partial contribution to the acquisition process of figurative competence in which children abandon a literal strategy.

The Acquisition via Exposure Hypothesis (Nippold and Taylor, 1995; 2002) contends that children acquire idioms by encountering them in everyday language. However, this hypothesis does not explain the differences in the comprehension of idiomatic expressions by children of the same age and similar exposure. In addition, the hypothesis does not have explanatory adequacy in relation to the facilitating effect of the context, which entails that, if the familiarity criterion is important for the acquisition of idiomatic phrases, then it should

explain the fact that the comprehension of the idiom should not change when the idiom is presented out of context. All things considered, the Acquisition via Exposure Hypothesis seems to provide only partial explanation with respect to the acquisition of idiomatic expressions. According to Nesi et al, the Acquisition via Exposure Hypothesis can account for the lexicalization of idioms however it is not adequate enough to explain how the acquisition of idioms happens (2006:128).

Third, in terms of semantic analyzability, contrary to the traditional view of idioms as lexicalized units in the mental lexicon (Lodge and Leach, 1975; Prinz, 1983), the findings of the study showed that children have an awareness of the fact that the meanings of the individual parts of idiomatic expressions come together to contribute to the overall figurative meaning, which seem to support the Metasemantic Hypothesis of Figurative Understanding (Nippold and Rudzinski 1993, 1998). The hypothesis asserted that beyond exposure to idioms and attention to the linguistic context, the learner analyzes the expressions internally to infer meaning, a process easier to execute when the literal and nonliteral meanings overlap.

This compositionality effect on the comprehension of idiomatic expressions supported the idea that idioms share similar compositional properties with literal language (Gibbs and Nayak, 1989). By the same token, the individual components in the third-degree idioms systematically contributed to the overall figurative meanings of the idioms across all age groups, and specifically the older age groups were observed to process these third-degree idioms in a heuristic manner by accessing the semantic representations of each component.

Third-degree idioms, in general, were much easier to interpret than the first-degree idioms, and specifically, when these third-degree idioms were presented in supportive contexts most children were able to interpret them figuratively at a ceiling-level, only with the exception that the 7-year-old-group still carried traces of literal interpretation despite contextual cues. These data suggested that most of the children, even including the 7-year-olds, attempted to do compositional analysis when understanding idiomatic expressions. In cases of third-degree idioms, children found it easier to assign independent meanings to its individual parts and combine them to reach the overall figurative meaning.

On the other side of the continuum, both the comprehension and interpretation of first-degree idioms were observed to be extremely difficult almost for all age groups because of the tendency to interpret the individual items in a compositional manner, and plus they gave consistent literal answers to first-degree idioms when no context was provided. The choice of literal answer resulted from two separate effects, namely, the absence of contextual information and the non-decompositionality of the idioms. When children did not know the meaning of the idiom, the no-context situation provided no clue for the idiomatic meaning. This contextual hindrance was combined with the lack of a semantic contribution of the constituent words to the overall figurative meaning to produce a relatively high number of literal answers. Children behaved in a different way for semantically analyzable idioms and they interpreted the third-degree idioms figuratively both in and out of context in general.

Specifically, the 7-year-old-group tended to use the meanings of the individual words to interpret idioms in the same manner as they processed any sentence in their own language. The data showed that the 7-year-old-group, who have relatively less experience with the language, found it easier to comprehend the meanings of third-degree idioms, and in contrast, they found it extremely difficult to comprehend the meanings of first-degree idioms. Younger children's attempts to perform a compositional analysis on first-degree idioms resulted in problems with the overall figurative meanings, simply because the non-literal meanings of these expressions cannot be determined from an analysis of their individual parts. Consequently, children should learn the meanings of the first-degree idioms in a rote-manner and by forming arbitrary relationships between the word string and its figurative meanings.

Fourth, our experimental results about the role of context for the interpretation of idioms are crucial for understanding of the interpretive strategies used by children, and also confirmed the results found by Nesi et al (2006) and Levorato and Cacciari (1998). Among all age groups, contextual information helped children reject the literal interpretation of an idiom with varying degrees. Thus, the results of Experiment I and II showed that children produced an idiomatic answer more often in context than without a context. Specifically, contextual information was effective in inducing a non-literal strategy for unfamiliar and first-degree idioms, besides, younger children depended more on contextual information for going

beyond literal meanings while older children needed less contextual information possibly because they have begun to acquire a figurative strategy. The presence of figurative competence in the older children was confirmed by the finding that in the no-context condition they did not mainly produce literal answers.

Overall, the production of idiomatic answers in in-context situations seemed to be determined by children's ability to use linguistic information and to evaluate the more plausible answer in a given context. In other words, children gradually become aware of the fact that context imposed some incongruency between what is said and what is meant by an idiomatic expression. Thus they searched for a figurative meaning in order to integrate the incoming information with their general knowledge and contextual cues. The older age groups greatly and effectively benefited from contextual cues only when necessary, however, the 7-year-old-group was less able to benefit from contextual cues. This partial rejection of the literal strategy even by the 7-year-old-group in the in-context situations thus showed that they were relatively aware that what is said and what is meant do not always coincide. This limited awareness of the say-mean distinction turned out to be developmentally and gradually related to overall comprehension abilities.

Clearly, contextual information enabled children to produce idiomatic answers when the semantic information conveyed by the short stories was consistent with the figurative interpretation of the idiom. Also, supportive contextual information triggered an integrated and global processing of the semantic information as suggested by Levorato and Cacciari (1992). In this sense, in order to understand an idiom, a mere elaboration of the literal linguistic information is not sufficient, instead, it is necessary to integrate the idiom's meaning into a semantic representation of the text into which it is embedded. Simply, the more coherent the semantic representation of the text, the easier the identification of the figurative meaning of the idiom. With this supportive context, 9 and 11-year-old-children performed well both comprehending and paraphrasing the meanings of the first-degree idioms. However, in cases of no-contextual support, they had difficulty in realizing the exact nonliteral meanings of the first-degree idioms. In short, contextual information helped all age groups with varying degrees to understand the figurative meaning of idioms they had never

come across before. Older children were more likely to benefit from context appropriately to realize that a figurative interpretation was required.

On a similar basis, the analysis of the wrong figurative answers also indicated that context is an important source of information for the interpretation of idioms during the acquisition process. In this case, wrong figurative answers differed with respect to age. Older children produced more wrong figurative answers than younger children for unfamiliar and first-degree idioms both in no-context and in-context situations. In addition, wrong figurative answers were less frequent in older children for familiar and third-degree idioms, who were able to process the global meaning of the short stories and were more consistent in realizing the incongruency of either literal or wrong figurative answers.

On the contrary, the 7-year-old-group was mainly literally oriented in the first-degree, third-degree and unfamiliar idioms, except with a moderate figurative tendency for the familiar idioms. Younger children were observed to be fairly good at rejecting the literal interpretation for the familiar and third-degree idioms both in no-context and in-context situations, however, they were less consistent in discriminating between figurative or wrong figurative answers for first-degree and unfamiliar idioms, which significantly suggested that younger children were sensitive to the use of figurative utterances in some situations without a clear awareness and identification of the appropriate interpretation. This might have stemmed from the fact that the 7-year-old-children failed to realize that a literal interpretation of an idiom did not fit the specific context in which it was embedded. Also, even if they realized the incongruency in some cases between the idiom and the context, because of their poor inference skills, they were unable to produce contextually appropriate interpretations. The presence of wrong figurative answers by all age groups is clearly a projection of the realization of that incongruency.

To summarize, the overall results of the study suggested that the performance of the children aged 7, 9 and 11 progressed in successive phases from a limited concrete, referential and literal linguistic competence to a metalinguistic competence across age groups, in line with the requirements of the Global Elaboration Model. In this succession, the 7-year-old-children started with a focus only on what lies under each individual component of the idiomatic

expressions, simply the core literal meanings, which mainly led to literal interpretations. This might have also stemmed from the fact that the 7-year-old-children are generally less exposed to figurative language than older children. After this simple, surface-level and referential phase, which exactly corresponds to phase 1 in the Global Elaboration Model, children aged 9 and above were observed to progress towards the realization of secondary figurative meanings and categorization of conceptual classes. On the whole, during the initial stages of figurative development, younger age groups were mainly literally oriented in the experimental tasks regardless of the idiom types, however, as their figurative competence progressed in line with the phases of the Global Elaboration Model, they gradually left this literal orientation to achieve more mature forms of elaboration.

However, as stated earlier in the 'theoretical background' section, there is always an overlapping between the consecutive phases resulting from individual differences within the same age groups. For instance, a 7-year-old-child may rarely exhibit figurative answers although carrying the characteristic features of phase 1, in contrast, a 9-year-old-child may not have fulfilled the requirements of phase 2 and above and thus exhibiting still a literal interpretation tendency.

Only a small proportion in the 7-year-old-group was aware that what was literally said was different from what was meant; thus the literal strategy was suspended and instead a secondary figurative meaning was searched even by the 7-year-old-children in the out-of-context, which further suggested that there is always an overlapping between the consecutive phases of the Global Elaboration Model in terms of figurative language development. In this case, the younger age group can be considered to be at the initial stage of overcoming nominal realism as suggested by the model, which is the starting point of figurative competence.

The results of the study further showed that children performing within the boundaries of Phase 1 and 2 focused essentially on meaning. From the 2nd and 3rd Phases on, children were observed to raise consciousness in inferential processes and it is exactly in these phases that children felt that some secondary figurative meanings were available other than the literal meanings in hand. Performance at the level of Phase 2 indicated the emergence of the ability to use contextual information to construct appropriate meanings. This finding confirmed the

results found by Qualls and Harris (1999) and Nippold et al (2001), who found positive correlations between idiom comprehension and reading-comprehension skills, and therefore claiming that the development of the comprehension of idiomatic expressions depends on the same linguistic and cognitive abilities. This kind of literal suspension seemed to happen mainly after age 7, when the children developed the capacity to understand the possible secondary figurative meaning of a linguistic expression. To put it in other words, the 9 and 11-year-old-children who were able to use contextual information seemed to have acquired the processing and inferential abilities allowing for the suspension of literal strategy. The acquisition of this figurative capacity, as confirmed by the results of the study, is due not only to the development of linguistic abilities but also to the development of more general cognitive abilities.

Older children's performances (the 9 and 11-year-olds), exhibiting mainly the traces of Phase 3, 4, and 5, revealed that they regarded idiomatic expressions as conventionalized figures of speech; and in line with the Global Elaboration Model, they realized that language may be arbitrary in nature, and finally their figurative competence enabled them to creatively comment on this arbitrary nature of language.

Fifth, as for conceptual structuring, the schematic clusters found in the wrong figurative answers by all age groups revealed that conceptual metaphors have psychological reality even in the early age groups in the interpretation of idiomatic expressions. This once again led us to assume that idiomatic expressions are not isolated linguistic expression in the mental lexicon, instead, the meanings of these figurative expressions come from the mental associations between the source and target domains, in which children tried to employ conceptual features of the source domain to understand the target domain. The fact that the children in the experimental groups systematically produced consistent metaphorical and schematic patterns in their wrong figurative answers suggested traces of conceptualization through embodiment, and also that children's knowledge about idioms is structured by different conceptual metaphors and the relevant schematic information.

This kind of conceptualization, according to Sweetser (1999), necessitates the construction of meaning at the conceptual level, which is a dynamic process. In other words, within the

bounds of cognitive semantics, meaning construction involves inferencing strategies that relate to different aspects of conceptual structure and organization. In a similar fashion, Fauconnier (1994, 1997) emphasized the role of mappings and local connections between distinct mental spaces during meaning construction.

According to the embodied-cognition view in cognitive semantics, conceptual structures derive from embodiment as realized through image-schemas, and in turn, semantic structure reflects conceptual structure (Lakoff, 1987, 1990; Johnson 1987; Talmy 2000). In this regard, image-schemas can be regarded as abstract and recurrent patterns of sensory and perceptual information that arise directly from our everyday interaction with the external world around us. Simply, image-schemas are roughly the first concepts to emerge in the human mind arising from embodied experience. This means that, embodiment is directly responsible for structuring concepts. For instance, as Evans and Green put it (2006), the vertical axis of the human body and experience with this aspect of vertical formation give rise to the UP/DOWN image-schema. To illustrate, the human body adjusts his/her posture and visual perspective for falling and rising objects in an attempt to grasp or see it, and in this way we witness the unconscious formation of the UP/DOWN image-schemas. In Evans and Green' terms, image schemas are buried deeper within the cognitive system simply because they arise from sensory experiences in the early stages of human development that precede the formation of concepts (2006).

This deep entrenchment of the conceptual organization was observed to be evident even in the wrong figurative answers of 7-year-old-children, which means in this case that, children at the age of as early as 7 have some rudimentary conceptual awareness. To illustrate, some children in the 7-year-old-group were able to develop inferential strategies for 3 specific idioms in the familiar idioms list, namely 'dört gözle beklemek, çenesi düşük, and her işe burnunu sokmak'. Their wrong figurative answers indicated that, for instance, they were able to partly benefit from the conceptual metaphors LONGING FOR STH. OR EXCITEMENT IS INCREASE IN QUANTITY; TALKING TOO MUCH IS DOWNWARD ACTION, and EVENTS ARE PHYSICAL CONTAINERS. For 'dört gözle beklemek', they were partially able to infer that the embodied experience of INCREASE IN QUANTITY would have conceptual associations with

‘increase in emotions’. So, they systematically produced the wrong figurative answers ‘dikkatli olmak’ and ‘sıkılmak’ intended for the target figurative meaning. For the second case, ‘çenesi düşük’, they were partially able to infer that the embodied experience of DOWN would have conceptual associations with ‘bad emotional and physiological states’ as depicted in the wrong figurative answer ‘üzgün, tembel, zayıf, suskun’. Finally, for the third idiom ‘her işe burnunu sokmak’, they were partially able to infer that the embodied information CONTAINMENT would have conceptual associations with ‘involvement and action of the body’ to produce the wrong figurative answers ‘kavga etmek, her şeyi karıştırmak, yardım etmek’.

These findings seem to run in parallel with those of Nippold and Duthie (2003), who conducted an experimental mental imagery task with children aged 12. Eventually, they found that mental imagery for idioms undergoes a developmental process and is associated with comprehension. Thus, 12-year-old children were able to produce relevant mental images both for transparent and opaque idioms, however, literal-concrete images were more common for opaque idioms and literal-metaphorical images were more common for transparent idioms. In this regard, the findings of Nippold and Duthie (2003) and the current study coincide in terms of the production of relevant mental imagery and image-schemas for transparent and familiar idioms. In other words, mental imagery and image-schemas which are considered to reflect the underlying conceptual metaphors in idiomatic expressions are more salient for transparent and familiar idioms, making the idioms easier to comprehend.

According to Lakoff (1987) and Johnson (1987), the idea behind metaphorical projection is that embodiment gives rise to concrete concepts, such as the CONTAINER image schema, which in turn serves to structure more abstract conceptual domains, such as STATES. It is in this way that the CONTAINER image schema is metaphorically projected onto the abstract conceptual domain of STATES, to which concepts like LOVE, TROUBLE and HEALTH belong. According to this view, the reason we can talk about being in states like love or trouble is because abstract concepts like LOVE are structured and therefore understood by virtue of the fundamental concept CONTAINER. Then it makes sense to produce such utterances as ‘we are in trouble; she fell into depression’.

Following this line of conceptual base, it is more plausible to talk about the conceptual performance of the older age groups. To begin with, the older age groups, who are cognitively considered to be representative of the formal operational stage in Piagetian terms, were able to develop creative inferential strategies for maximally exploiting the image-schemas underlying the conceptual structures inherent in the idiomatic expressions. They were observed to have an understanding of the conceptual base in almost all types of idioms. For instance, they systematically produced wrong figurative answers for the unfamiliar idiom 'kulakları paslanmak' which seemed to center around the conceptual metaphor THE BODY IS A MACHINE. Following this conceptual pattern, the participants might have concentrated on the MACHINE schema and produced the wrong figurative answers indicating inactivity, dysfunction or malfunction as seen in the examples 'artık iyi duyamamak; uzun süre ses duymamak; bir şeyi uzun zamandır yapmamak; kendini özletmek; uzun zamandır haber alamamak; konuşamamak; kötü işler geçirmek; uzun süre görüşememek; konuşmalardan rahatsız olmak'. As seen in the examples, although the older age groups were not able to assign the mappings between the source and target domain properly in their wrong figurative answers, their performance was qualitatively different from the 7-year-olds at the conceptual base.

In another case of a first-degree idiom, namely 'buluttan nem kapmak', the wrong figurative answers of the older age groups revealed the PART/WHOLE schema embedded in the conceptual metaphor ACQUISITION IS OBTAINING PARTIAL FEATURES FROM THE WHOLE as illustrated in 'onun yanında kala kala ona benzemek; başkasından bir davranış almak; başkasının hastalığının sana geçmesi; bilgileri/sırları duymak; gördüğü birşeyi taklit etmek'. In these cases, the older age groups might have probably made the inference that the word *bulut* stood for the source domain representing the WHOLE schema which inherently included the source of information, ability etc.; and the word *nem* stood for the tiny details and parts to be obtained from the whole.

To make the story short, embodied cognition, as the basis of conceptual organization and as realized through image-schemas, was shown to be evident at least in the wrong figurative answers by all age groups. Interestingly, even the 7-year-old-children were minimally, if any,

aware of the conceptual base underlying the idiomatic expressions. There was also a qualitative and creative difference between the older age group and the younger age group in terms of conceptual awareness. The most frequently occurring schemata across the interpretive strategies of the children were spatial schemata such as UP and DOWN; CONTAINMENT; FORCE; PART-WHOLE and PHYSIOLOGICAL STATES. Finally, we can say that the idiomatic interpretive strategies of children aged 7, 9 and 11 bear the imprint of embodied experience in the form of image-schemas with varying degrees.

6.2. IMPLICATIONS AND RECOMMENDATIONS FOR FURTHER RESEARCH

The acquisition of idiomatic expressions can be regarded as part of a wider phenomenon of lexical, semantic and cognitive development. In addition, the development of figurative competence on the side of children may have overlapping phases and each children may differ in performance when we consider their language processing abilities, general world knowledge, their relative familiarity levels with idiomatic phrases and some other cognitive skills such as inferencing necessary for the interpretation of texts. In this regard, the significance of the current research derives from the fact that it is the first comprehensive exploration of the receptive linguistic behavior of primary-school children aged 7, 9 and 11 on the acquisition of Turkish idiomatic expressions, encompassing a wide range of variables such as age, familiarity, transparency, contextual information and conceptual structuring.

Accordingly, the developmental framework of the study has substantial implications both for theoretical and curricular applications. In the first place, the frequency lists, which were employed in the main experiments, is distinguished in terms of the formation process as they were collected in real-time settings by referring to the linguistic knowledge of children aged 8 through 11. This distinctive quality of the idiomatic frequency lists would eliminate the selection bias in the design of research, and most importantly they would serve a valid and reliable source for further research on the topic in the Turkish context. This practical and realistic orientation would provide precision both in the preparation and evaluation of experimental data.

Second, the findings in this study suggest that the development of figurative language by children can contribute to our understanding of both semantic and conceptual development. In this respect, the practical outcomes of the study indicating the developmental age trends of the children in question bear implications for curriculum design and for a better implementation of the teaching of idiomatic expressions in Turkish classes in primary school. Fundamentally, the previous research on the comprehension of idiomatic expressions strictly suggested that age 12 is the ideal period for the introduction of idiomatic expressions into the Turkish classes, however, the findings of the current study suggest that children at the age of 9 is well aware of the mechanisms underlying idiom interpretation, and thus we suggest that

the efficient and comprehensive teaching of idioms may start at the age of 9 regarding the cognitive readiness levels of primary school children. Also, it is highly possible that even the 8-year-olds would perform efficiently if they are provided with convenient teaching materials.

Within the scope of the overall pattern of the developmental framework, we propose that the semantic quality of idioms should be in parallel with the cognitive development of the primary school children and in this case curriculum design for Turkish classes should mainly employ familiar and 3rd degree idioms for 7 and 8 year-old-children, and only after this period, unfamiliar and first-degree idioms may be incorporated into the curriculum provided that those kind of idioms are embedded in rich and informative contexts. Apart from the rote-learning model of idiomatic phrases, the teaching of idioms should be backed up with visual materials and supportive short stories for a permanent learning. In addition, once an idiom is taught, it should be repeated with regular intervals in other practical activities for success in the long-term memory. Put in other words, adults should monitor children in terms of when and how to use idiomatic phrases in appropriate contexts. To illustrate, after this monitoring, children should be able to figure out the corresponding types of context such as the physical, relational, situational and cultural context in using the idiomatic expressions in order to prevent a communicative failure.

Third, the conceptual systematicity observed in the wrong figurative answers of the older age groups indicated that they have developed a rudimentary conceptual strategy in the interpretation process. Regarding this receptive conceptual tendency, children may be monitored under the guidance and prompts of teachers to systematically reach the figurative meanings of idioms. If the teaching of the idioms is organized in such a way to include idioms which conceptually center around, say, ANGER IS HEAT, then children can take advantage of the underlying conceptual metaphors and metonymies. In this way, they can figure out the conceptual links between the source and target domains in order to uncover the target idiomatic meaning. Comprehensive research is needed in order to classify those kind of idioms with a common metaphorical/metonymic base, and in the long run, comprehension outcomes and the relevant mechanisms underlying those idioms should be investigated.

A limitation in our investigation of the acquisition of idioms was the production of this specific kind of figurative language. So far, research has mainly focused on receptive skills rather than productive skills. The production of idiomatic expressions by children is also important because it addresses such basic question as at what age do children begin using idioms as part of the figurative language and when is the effective and conscious use of idioms realized in specific contexts etc.

Gender-based differences in terms of both the comprehension and production skills can also be investigated in further research.

In addition, a comprehensive corpus-based study should produce frequency lists for idioms to be incorporated into the Turkish curriculum, and in this way we can further test the validity of the frequency lists employed in the current study. Furthermore, corpus-based research into the structural properties of idioms may be done in an attempt to identify syntactically fixed idioms and flexible idioms. In this way, further research is necessary to investigate the comprehension and processing of these kind of flexible and fixed idioms.

A final issue concerns the type of tasks to be employed in the research design, which means that the type of experimental tasks (receptive vs productive) may produce different results. The type of experimental tasks, (multiple-choice task, paraphrasing task, mental imagery task, picture selection task, idioms in the active and passive voice, idiom completion task etc) may better explain or fail to see the specific processing mechanisms under investigation. Therefore, researchers investigating the receptive or productive skills in idiom comprehension should adapt corresponding tasks, bearing in mind the fact that explanation or paraphrasing tasks are more challenging simply because they require the child to produce a meaningful reproduction of the meaning of an idiom.

CHAPTER 7

CONCLUSION

The present study was designed to investigate the developmental age trends of Turkish children aged 7, 9 and 11 year-old-students in terms of idiom comprehension. Apart from the simple rote-learning of idioms, and as against the traditional non-decompositional view of idioms (Weinreich 1969, Fraser 1970, Katz and Postal 1963, Swinney and Cutler 1979), the study was conducted in line with the Global Elaboration Model (Levorato and Cacciari, 1992; 1995, 1999) which regards the acquisition of idioms as part of the general linguistic skills and world knowledge, and which advocates a comprehension process during childhood involving the utilization of conceptual metaphors and the individual meanings of the constituents of an idiom in a decompositional approach.

We examined the roles of age, familiarity, contextual backup, the degree of compositionality and the underlying conceptual structures on the comprehension of idioms in order to assess the developmental stages in the acquisition process.

The overall results confirmed the trend found in previous research (Levorato and Cacciari, 1992; 1995, 1999; Cacciari and Levorato, 1998; Nippold and Martin, 1989; Cain et al., 2005; Nippold and Taylor, 1995; 2002). In this regard, the results suggested that there was a clear developmental and qualitative gap between the 7 year-old-group and the older age groups both in terms of the interpretive strategies employed in the comprehension of different idiom types such as familiar vs unfamiliar and first-degree vs third-degree idioms, and also in terms of the awareness of the underlying conceptual structures inherent in each idiom. The overall results can be summarized in five short steps:

a. There was a clear developmental gap between the 7-year-old-group on the one side of the continuum, and the 9 and 11-year-old groups on the other side, in which the 9-year-old group marked a great transitional quality towards figurative tendency, which means that literal tendency predominate during early childhood, around the age of 7, and that idiom comprehension and interpretation both gradually becomes more figurative

onwards, with an impetus after the age of 9. This finding is meaningful when evaluated with reference to the five developmental cognitive steps involved in the Global Elaboration Model. The study indicated that the 7-year-old group still belongs to Level 1 to a large extent, in the sense that the literal orientation of the younger age group can be taken as experimental evidence to account for a word-by-word processing of the idiomatic expressions. The same age group was observed to minimally fulfill the requirements of Level 2, which necessitates a conscious awareness of the incongruency between what is said and what is meant by an idiom. On the other hand, the older age groups, including 9 and 11, were observed to exhibit the traces of Phase 2, 3, and 4, mainly suggesting that they regarded idiomatic expressions as conventionalized figures of speech; and in line with the Global Elaboration Model, they realized that language may be arbitrary in nature, and finally their figurative competence enabled them to creatively comment on this arbitrary nature of language.

b. The familiarity effect, in the present design of the study, functioned to explain only a small part of the developmental process in the acquisition of idiomatic expressions. In this pattern, children produced fewer literal answers for familiar idioms and more literal answers for unfamiliar idioms. The Acquisition via Exposure Hypothesis as hold by Nippold and Taylor (1995; 2002) contends that children acquire idioms by encountering them in everyday language. However, the efficiency of the hypothesis seems to be weak when we consider the creative interpretive strategies and the psychological reality of the conceptual structure involved in idiom comprehension. All in all, the degree of familiarity had a partial contribution to the acquisition process of figurative competence, in which children abandon a literal strategy.

c. Regarding the decompositionality effect on idiom comprehension, our results suggest a pattern that challenges the traditional view of idioms according to which the internal semantics of an idiom is irrelevant and idiom constituents are deprived of any identifiable meaning. The findings indicated that children have an awareness of the fact that the meanings of the individual parts of idiomatic expressions come together to contribute to the overall figurative meaning, which seem to support the Metasemantic Hypothesis of Figurative Understanding (Nippold and Rudzinski 1993, 1998). The older

age groups were able to produce target idiomatic answers for all of the third-degree idioms in the no-context situation; and they also produced mainly wrong figurative answers for first-degree idioms in the no-context situation, which suggest that the older age groups were able to analyze the expressions internally to infer meaning. Younger children's attempts to perform a compositional analysis on first-degree idioms resulted in problems with the figurative meanings, simply because the non-literal meanings of these expressions cannot be determined from an analysis of their individual parts.

d. Contextual backup, by far, has qualified to be the most important variable in the comprehension of idiomatic expressions. Among all age groups, contextual information helped children reject the literal interpretation of an idiom with varying degrees. Thus, the results of Experiment I and II showed that children produced an idiomatic answer more often in context than without a context. Specifically, contextual information was effective in inducing a non-literal strategy for unfamiliar and first-degree idioms, besides, younger children depended more on contextual information for going beyond literal meanings while older children needed less contextual information possibly because they have begun to acquire a figurative strategy. Contextual information enabled children to produce idiomatic answers when the semantic information conveyed by the short stories was consistent with the figurative interpretation of the idiom.

e. Finally, the psychological reality of the schematic information in the minds of children had consequences on the interpretation of idiomatic expressions. This means that, children –even including the 7 year-old-group- had some rudimentary conceptual base to produce systematic patterns of schemata, as revealed in their wrong figurative answers. Specifically, the older age groups, who are cognitively considered to be representative of the formal operational stage in Piagetian terms, were able to develop creative inferential strategies for maximally exploiting the image-schemas underlying the conceptual structures inherent in the idiomatic expressions. In this respect, their performance was qualitatively different from the 7-year-olds at the conceptual base.

Briefly, the acquisition of idiomatic expressions is a gradual and protracted process which is heavily influenced by such factors as age, familiarity, transparency, contextual information and conceptual structures; and children may differ in their performance when we consider their language processing skills and their general world knowledge.

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APPENDICES

APPENDIX 1: PARAPHRASING TASK FOR FIRST-DEGREE IDIOMS OUT OF CONTEXT

Lütfen aşağıdaki ifadelerin anlamlarını yazınız, bilmediklerinizi tahmin ederek yazınız.

1. *Örnek*: Ali Bey arkadaşına 'Bu sene yine leyleği havada gördün' dedi.
   '**Leyleği havada görmek**' ifadesi ne anlama gelir?

2. *Örnek*: Ahmet Bey arkadaşına 'son zamanlarda buluttan nem kapıyorsun' dedi.
   '**Buluttan nem kapmak**' ifadesi ne anlama gelir.

3. *Örnek*: Hakan 'O bize bütün gün kök söktürdü' dedi.
   '**Kök söktürmek**' ne anlama gelir?

4. *Örnek*: Emrah 'Bu at hırsızı da nereden çıktı şimdi!' diye seslendi.
   '**At hırsızı**' ifadesi ne anlama gelir?

5. *Örnek*: Serdar onu göstererek 'diş biledi̇ği her halinden belli' diye söylendi.
   '**Diş bilemek**' ifadesi ne anlama gelir?

6. *Örnek*: Pınar Hanım ‘Baksanıza, ateş bacayı sardı bile’ dedi.

‘**Ateş bacayı sarmak**’ ifadesi ne anlama gelir?

7. *Örnek*: Çiçeği burnunda müdür de toplantıya katıldı.

‘**Çiçeği burnunda**’ ifadesi ne anlama gelir?

8. *Örnek*: Annesi ‘Siz bakmayın onlara, onlar sık sık birbirini yer’ dedi.

‘**Birbirini yemek**’ ifadesi ne anlama gelir?

9. *Örnek*: Hasan ‘Bir anda yüreğim ağzıma geldi’ dedi.

‘**Yüreği ağzına gelmek**’ ifadesi ne anlama gelir.

10. *Örnek*: Annesi ‘Sabahtan beri başımın etini yediler’ diye söylendi.

‘**Başının etini yemek**’ ifadesi ne anlama gelir?

APPENDIX 2: PARAPHRASING TASK FOR THIRD-DEGREE IDIOMS OUT OF CONTEXT

Lütfen aşağıdaki ifadelerin anlamlarını yazınız, bilmediklerinizi tahmin ederek yazınız.

1. *Örnek*: Ahmet 'Sen niçin böyle asık yüzlüsün?' diye sordu.
   '**Asık yüzlü**' ifadesi ne anlama gelir?

2. *Örnek*: Ali Bey 'Bu yeni gelen komşu tam bir karın ağrısı' diye söylendi.
   '**Karın ağrısı**' ifadesi ne anlama gelir?

3. *Örnek*: Fırat 'Onu görünce elim ayağım titredi' dedi.
   '**Eli ayağı titremek**' ifadesi ne anlama gelir?

4. *Örnek*: Hasan 'Bir anda her şeyin altını üstüne getirdi' dedi.
   '**Altını üstüne getirmek**' ifadesi ne anlama gelir?

5. *Örnek*: 'Ahmet arkadaşlarının aksine bütün gün sırtüstü yatıyordu' dediler.
   '**Sırtüstü yatmak**' ifadesi ne anlama gelir?

6. *Örnek*: Pınar kardeşine ‘İşte orada, burnunun dibinde’ dedi.
   ‘**Burnunun dibinde**’ ifadesi ne anlama gelir?

7. *Örnek*: Ahmet annesine ‘bu iş çocuk oyuncağı’ diye seslendi.
   ‘**Çocuk oyuncağı**’ ifadesi ne anlama gelir?

8. *Örnek*: Elif öğretmenine ‘Öğretmenim, napayım beynim durdu’ dedi.
   ‘**Beyni durmak**’ ifadesi ne anlama gelir?

9. *Örnek*: Pınar arkadaşına ‘Şunlara bak, hem de hiç el değmemiş!’ dedi.

   ‘**El değmemiş**’ ifadesi ne anlama gelir?

10. *Örnek*: Annesi Murat’a ‘Oğlum, şuna bir el atar mısın?’ dedi.
    ‘**El atmak**’ ifadesi ne anlama gelir?

APPENDIX 3: PARAPHRASING TASK FOR FAMILIAR IDIOMS OUT OF CONTEXT

Lütfen aşağıdaki ifadelerin anlamlarını yazınız, bilmediklerinizi tahmin ederek yazınız.

1. *Örnek*: Merve 'Tamam, biz de onu dört gözle bekliyoruz' dedi.
   '**Dört gözle beklemek**' ifadesi ne anlama gelir?

2. *Örnek*: Onun için 'Ne kadar da tatlı dilli birisi' diyorlar.
   '**Tatlı dilli**' ifadesi ne anlama gelir?

3. *Örnek*: Ahmet 'Afedersiniz, kulak misafiri oldum' dedi.
   '**Kulak misafiri olmak**' ifadesi ne anlama gelir?

4. *Örnek*: Pınar arkadaşına 'kalbini kırdım galiba' dedi.
   '**Kalbini kırmak**' ifadesi ne anlama gelir?

5. *Örnek*: Annesi ona 'Ne oldu, dilini mi yuttun?' dedi.
   '**Dilini yutmak**' ifadesi ne anlama gelir?

6. *Örnek*: Öğretmeni onun için ‘Ne kadar çenesi düşük bir öğrenci’ dedi.
‘**Çenesi düşük**’ ifadesi ne anlama gelir?

7. *Örnek*: Abdullah ‘Anne, karnım zil çalıyor’ diye seslendi.
‘**Karnı zil çalmak**’ ifadesi ne anlama gelir?

8. *Örnek*: Kemal ‘Tam da dilimin ucunda’ dedi.
‘**Dilinin ucunda olmak**’ ifadesi ne anlama gelir?

9. *Örnek*: ‘Serdar her işe burnunu sokar’ dediler.
‘**Her işe burnunu sokmak**’ ifadesi ne anlama gelir?

10. *Örnek*: Öğretmeni Can’a ‘Bu sefer gözüme girdin’ dedi.
‘**Göze girmek**’ ifadesi ne anlama gelir?

APPENDIX 4: PARAPHRASING TASK FOR UNFAMILIAR IDIOMS OUT OF CONTEXT

Lütfen aşağıdaki ifadelerin anlamlarını yazınız, bilmediklerinizi tahmin ederek yazınız.

1. *Örnek*: Serkan arkadaşına 'Ama benim de göbeğim çatladı' dedi.
   '**Göbeği çatlamak**' ifadesi ne anlama gelir?

2. *Örnek*: Elif arkadaşına 'Uzun zamandır kulaklarımız paslanmıştı' dedi.
   '**Kulakları paslanmak**' ifadesi ne anlama gelir?

3. *Örnek*: Burak 'Ona da diş geçirmek istediler' dedi.
   '**Diş geçirmek**' ifadesi ne anlama gelir?

4. *Örnek*: Karşısındakine 'senin alnını karışlarım' diye seslendi.
   '**Alnını karışlamak**' ifadesi ne anlama gelir?

5. *Örnek*: Aramızda eli kalem tutan sadece Ahmet Bey'dir.
   '**Eli kalem tutmak**' ifadesi ne anlama gelir?

6. *Örnek*: Ali kardeşine ‘Gelecek dönem bu elden düşme şeyi kullanacağız’ dedi.
   ‘**Elden düşme**’ ifadesi ne anlama gelir?

7. *Örnek*: Erdem kardeşine ‘Bak yine sırtın kaşınıyor’ dedi.
   ‘**Sırtı kaşınmak**’ ifadesi ne anlama gelir?

8. *Örnek*: Fırat arkadaşına ‘Böyle giderse Mert’in ayağını kaydıracaklar’ dedi.
   ‘**Ayağını kaydırmak**’ ifadesi ne anlama gelir?

9. *Örnek*: Ayşe şöyle dedi: ‘Tamam, hem de gözümü kırpmadan’.
   ‘**Gözünü kırpmadan**’ ifadesi ne anlama gelir?

10. *Örnek*: Arkadaşına ‘Bunu da parmağına doladı’ diye söylendi.
    ‘**Parmağına dolamak**’ ifadesi ne anlama gelir?

APPENDIX 5: PARAPHRASING TASK FOR FIRST-DEGREE IDIOMS IN CONTEXT

Lütfen aşağıdaki bütün soruları her bir parçaya göre cevaplayınız.

1. PARÇA

Ali Bey ve Ahmet Bey yaz planlarından bahsetmektedir. Ali Bey bu yaz parası olmadığı için evde dinleneceğini söyler. Ahmet Bey ise gezme planları olduğunu ve sırasıyla Ankara, İzmir, İstanbul, Bursa ve Antalya'ya gideceğini söyler. Ali Bey ona 'Ooo Ahmet Bey bu sene yine **leyleği havada gördün**' der.

3. Ali Bey'in planı nedir?

4. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a) '**Leyleği havada görmek**' ifadesi ne anlama gelir.

   b) Leyleği havada gören birisi neler yapar?

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2. PARÇA

Ayşe ve Yağmur birlikte alışverişe giderler. Fakat Hülya kendine haber verilmediği için onlara küser. Ayşe telefonda Hülya'ya şöyle der: 'Bizim senden gizli gitmek gibi bir niyetimiz yoktu. Bir anda karar verdik gittik. Sen de **buluttan nem kapıyorsun**'.

1. Ayşe ve Yağmur nereye gitmiştir?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Buluttan nem kapmak**' ifadesi ne anlama gelir?

   b. Buluttan nem kapan birisi neler hisseder, arkadaşlarına nasıl davranır?

3. PARÇA

Zeynep az önce Türkçe testinden çıktı ve Murat ona sınavını sordu. Zeynep 'Bütün soruları yapabildim fakat bazı sorularda çok ama çok düşündüm, öğretmenimiz bize resmen **kök söktürdü**' der.

1. Zeynep hangi sınavdan çıktı?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Kök söktürmek**' ifadesi ne anlama gelir?

   b. Başkasına kök söktüren birisi ona nasıl davranır?

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4. PARÇA

O gün çok önemli bir toplantı vardı. Bütün çalışanlar en güzel elbiseleriyle gelmişti. Ahmet ise tatilden henüz döndüğü için uykusuz kalmış, saçı sakalı uzamış ve ütüsüz elbiselerle toplantıya geç katılabilmişti. Müdür ona 'Bu ne hal Ahmet, **at hırsızı** gibi olmuşun' dedi.

1. Ahmet nereden dönmüştür?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**At hırsızı**' ifadesi ne anlama gelir?

   b. At hırsızı nasıl bir kimsedir, neye benzer?

5. PARÇA

Mustafa okul çıkışında eve gitmek için servis bekliyordu. İki öğrenci ona yaklaştı ve Mustafa'ya yumruk atmaya başladılar. Eski bir konu yüzünden başına bu olay gelmişti. Neyse ki ucuz atlatmıştı. Fakat Mustafa boş durur mu? O da gizliden gizliye bu iki kişi için **diş biliyordu**.

1. Mustafa ne zaman yumruk yedi?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Diş bilemek**' ifadesi ne anlama gelir?

   b. Diş bileyen birisi karşısındaki için neler yapar?

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6. PARÇA

Leyla erkek arkadaşıyla yeni tanışmıştır. Kuzeni Leyla'ya arkadaşlığının nasıl gittiğini sordu. Leyla da ona 'Onu her gördüğümde kalbim yerinden çıkacak gibi oluyor, onu çok özlüyorum ve hep yanımda olmasını istiyorum' dedi. Kuzeni ise ona şöyle dedi 'Oooo desene **ateş bacayı sardı**'.

1. Leyla'nın durumunu kim merak etmiştir?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Ateş bacayı sarmak**' ifadesi ne anlama gelir?

   b. Ateş bacayı sarınca insan kendini nasıl hisseder, neler yapar?

7. PARÇA

Mine okulunu daha yeni bitirdi, doktor oldu ve hastanede çalışmaya başladı. Diğer doktorlar o gün çok önemli bir ameliyat için toplandılar. Hastane müdürü 'Mine'nin gelmesine gerek yok, o henüz **çiçeği burnunda** bir doktor, biraz daha zamana ihtiyacı var' dedi.

1. Mine okulunu ne zaman bitirdi?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Çiçeği burnunda**' ifadesi ne anlama gelir?

   b. Çiçeği burnunda birisinin özelliği nedir?

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8. PARÇA

Ayşegül Hanım bir gün market alışverişine gider. O gün dalgın olduğu için çocuklarına sadece bir tane çikolata alır ve çocukları o çikolatayı paylaşamaz. Çocuklar bütün gün o çikolata için **birbirlerini yerler**.

1. Ayşegül Hanım kaç tane çikolata alır?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Birbirini yemek**' ifadesi ne anlama gelir?

   b. Birbirini yiyen kişiler nasıl davranır, neler yapar?

9. PARÇA
Mustafa ve ailesi hafta sonu hava güzel olunca pikniğe giderler. Yolda ilerlerken bir köpek aniden arabanın önüne çıkar ve Mustafa acil fren yapar. 'Az kaldı köpeği eziyordum, **yüreğim ağzıma geldi**' der.

1. Arabanın önüne ne çıkar?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Yüreği ağzına gelmek**' ifadesi ne anlama gelir?

   b. Yüreği ağzına gelen birisi nasıl hisseder, neler yapar?

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10. PARÇA
Babası bütün dersleri başarılı olursa karne tatilinde Kemal'e bilgisayar alma sözü verir. Fakat karne tatili gelmiştir ve babasının çok borcu olduğu için bilgisayarı alamamıştır. Kemal 15 gün boyunca babasının **başının etini yer**.

1. Babası Kemal'e neden bilgisayar alamaz?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Başının etini yemek**' ifadesi ne anlama gelir?

   b. Eğer birisinin başının etini yersen, ona nasıl davranırsın, neler yaparsın?

APPENDIX 6: PARAPHRASING TASK FOR THIRD-DEGREE IDIOMS IN CONTEXT

Lütfen aşağıdaki bütün soruları her bir parçaya göre cevaplayınız.

1. PARÇA

Burak o sene derslerine iyi çalışmasına rağmen karnesinde istediği notları alamamıştı. Bu yüzden karne tatilinde hep **asık yüzlü** olarak dolaştı.

1. Burak'ın notları nasıldı?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Asık yüzlü**' ifadesi ne anlama gelir?

   b. Asık yüzlü olduğunda kendini nasıl hissedersin, neler yaparsın?

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2. PARÇA

Barış Bey evlerinin karşısına taşınan yeni komşusundan hiç memnun değildi. Yeni komşu yüksek sesle müzik dinlediği için herkesi rahatsız ediyordu. Barış Bey 'Bu insanlar tam bir **karın ağrısı**' dedi.

1. Yeni komşular neden herkesi rahatsız ediyordu?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Karın ağrısı**' ifadesi ne anlama gelir?

   b. Bir arkadaşınız sizin için tam bir karın ağrısı ise ona nasıl davranırsınız, neler olur?

3. PARÇA

Dilek her akşam olduğu gibi okul çıkışında tek başına eve dönüyordu. Kaldırımda yürürken hızla üzerine doğru bir arabanın geldiğini gördü ve acı bir fren sesi duydu. Neyse ki ucuz atlatmıştı, ama hala **eli ayağı titriyordu**.

1. Dilek olaydan önce ne yapıyordu?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Eli ayağı titremek**' ifadesi ne anlama geliyor?

   b. Bir olay karşısında eli ayağı titreyen birisi nasıl hisseder, neler yapar?

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4. PARÇA

Melek Hanım sabah erkenden evi temizledi, çocukların odalarını düzenledi ve daha sonra market alışverişine gitti. Eve döndüğünde bir de ne görsün, sabah yaptığı temizlik boşa gitmiş, çocuklar evin **altını üstüne getirmişti**.

1. Yağmur ve fırtına ne zaman başladı?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Altını üstüne getirmek**' ifadesi ne anlama gelir?

   b. Biz evin altını üstüne getirdiğimizde annemizin tepkisi nasıl olur?

5. PARÇA

Barış bütün yaz boyunca hiç durmadan çalışır, çabalar ve para biriktirir, evine kışlık yiyecekler alır. Komşusu Metin ise geleceği hiç düşünmeden bütün yaz boyunca eğlenir, tatil yapar, gezer ve en sonunda parası biter. Kış gelip çatınca, Metin Barış'tan biraz yiyecek ve para ister. Barış ise ona 'Hayır veremem, sen bütün yaz **sırtüstü yattın**, bunu hak etmiyorsun' der.

1. Kim daha çok çalışmıştır?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Sırtüstü yatmak**' ifadesi ne anlama gelir?

   b. Arkadaşları çalışırken kendi sırtüstü yatan bir kişi nasıl birisidir?

---

6. PARÇA

Mustafa uzun zamandır evde kaybettiği kalemini arıyordu. Annesi ona 'nasıl göremezsin, işte burada, **burnunun dibinde**' diye seslendi.

1. Mustafa neyi aramaktadır?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Burnunun dibinde**' ifadesi ne anlama gelir?

   b. Şimdi burnunun dibinde olan bir nesne için örnek verebilir misin?

7. PARÇA

Ayşe ve babası akşam evde matematik ödevini yapmaktadır. Ayşe bazı soruları cevaplayamayınca babasına sorar. O da der ki 'Ver bakalım, bunların hepsi benim için **çocuk oyuncağı**'.

1. Ayşe kimden yardım ister?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Çocuk oyuncağı**' ifadesi ne anlama gelir?

   b. Senin için çocuk oyuncağı olan bir iş/olay için örnek verir misin? (Ne yapmak senin için çocuk oyuncağıdır?)

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8. PARÇA

Elif o gün matematik dersinde çok sayıda soru çözmüştü. Dersin başında soruları hızlı bir şekilde yapabiliyordu. Dersin sonuna doğru öğretmeni ona 'Hadi Elif bir tane daha yapabilirsin' dedi. Elif ise öğretmenine 'Öğretmenim artık **beynim durdu**, olmuyor ki' dedi.

1. Elif hangi soruları çözüyordu?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Beyni durmak**' ifadesi ne anlama gelir?

   b. Beynimiz durduğunda nasıl hissederiz? Neler olur?

9. PARÇA

Burak ve Cemil hafta sonunda kitap fuarına gittiler. Kendi evlerindeki kitapları artık eskidiği için başka kitaplara ihtiyaçları vardı. Her ikisi de fuardaki türlü türlü kitapları görünce, Burak şöyle dedi: 'Vay canına, şunların güzelliğine bak, hepsi gıcır gıcır, hem de hiç **el değmemiş**'.

1. Fuarda ne satılmaktadır?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**el değmemiş**' ifadesi ne anlama gelir?

   b. El değmemiş bir şeyin ne özelliği vardır?

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10. PARÇA

Hasan Bey arabasıyla market alışverişine gitti ve çok sayıda poşetle evine döndü. Evin önüne geldiğinde oğlunu çağırdı ve şöyle dedi: 'Oğlum şu poşetlere bir **el atar mısın**? Benim belim çok ağrıyor, tek başıma yapamam'.

1. Hasan Bey nereye gitti?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**El atmak**' ifadesi ne anlama gelir?

   b. Hangi durumlarda bir başkasından 'el atar mısın' diye rica ederiz?

APPENDIX 7: PARAPHRASING TASK FOR FAMILIAR IDIOMS IN CONTEXT

Lütfen aşağıdaki bütün soruları her bir parçaya göre cevaplayınız.

1. PARÇA

Merve bütün sene okulda çok çalışmıştı ve yorulmuştu. Yaz aylarında bolca gezmek, denize girmek ve bisiklete binmek istiyordu. Bu yüzden yaz tatilini **dört gözle bekliyordu**.

1. Merve yaz tatilinde neler yapmak istiyor?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Dört gözle beklemek**' ifadesi ne anlama geliyor?

   b. Bir şeyi dört gözle bekleyince insan kendini nasıl hisseder, neler yapar?

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2. PARÇA

Elif öğretmen mesleğine geçen sene başlamıştı. Her gün derse başlamadan önce öğrencilerine 'Canlarım, şirinlerim, bugün nasılsınız?' diye selamlıyor, onlarla ayrı ayrı konuşuyor, hepsine güzel öğütler veriyordu. Öğrencileri ona ne kadar da **tatlı dilli** bir öğretmen diyordu.

1. Elif öğretmen görevine ne zaman başladı?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Tatlı dilli**' ifadesi ne anlama geliyor?

   b. Tatlı dilli olan birisi nasıl bir kişidir? Neler konuşur?

3. PARÇA
Ahmet masada oturup çayını içerken, yan tarafta oturanların yeni müdürle ilgili konuştuklarını duyar. Bunun üzerine, 'Afedersiniz, **kulak misafiri oldum**, yeni müdür ne zaman gelecek?' diye sorar.

1. Ahmet ne içmektedir?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Kulak misafiri olmak**' ifadesi ne anlama gelir?

   b. Kulak misafiri olunca neler olur, neler yaparsınız?

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4. PARÇA
Pınar ve Elif birlikte matematik ödevi yapıyordu. Pınar soruları çabucak çözdü ve Elif'i beklemeye başladı. Pınar ona 'bu kadar basit soruları çözemezsen seninle bir daha çalışmam' deyince Elif çok üzüldü. Pınar 'Afedersin, **kalbini kırdım** galiba' dedi.

1. Kim daha hızlı çalışıyor?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Kalbini kırmak**' ifadesi ne anlama gelir?

   b. Kalbin kırılınca neler hissedersin, neler yaparsın?

5. PARÇA

Murat bir gün annesine şaka yapmak istedi. Yüzüne korkunç bir maske taktı ve gizlice annesine yaklaştı. Annesi onu görünce şok oldu. Murat gülümseyerek 'Ne oldu, **dilini mi yuttun**' dedi.

1. Murat yüzüne ne taktı?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Dilini yutmak**' ifadesi ne anlama gelir?

   b. Bir kişi ötekine neden 'dilini mi yuttun?' der, anlatır mısın?

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6. PARÇA

Gökhan sınıfta söz hakkı almadan hem öğretmeni hem de arkadaşlarını çok rahatsız ediyordu. Gereksiz yorumlar yapıyordu. Öğretmeni onun için 'Ne kadar **çenesi düşük** bir öğrenci' dedi.

1. Sınıfı en çok kim rahatsız ediyor?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Çenesi düşük**' ifadesi ne anlama gelir?

   b. Çenesi düşük birisi nasıl bir kişidir? Neler yapar?

7. PARÇA

Abdullah bütün gün dışarıda futbol oynadığı için eve uğrayamamıştır. Eve döndüğünde mutfaktan güzel kokular geliyordu. Annesi onunla market alışverişine gitmek ister. Abdullah annesine 'Tamam, önce bir şeyler atıştırsam iyi olacak, **karnım zil çalıyor**' der.

1. Abdullah ve annesi nereye gidecektir?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Karnı zil çalmak**' ifadesi ne anlama gelir?

   b. Karnın zil çalınca neler hissedersin, neler yaparsın?

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8. PARÇA

Öğretmeni Özlem'e bir soru sorar ve onu cevaplamasını ister. Özlem biraz düşünür ve 'Öğretmenim, **dilimin ucunda** ama söyleyemiyorum, biraz bekleyip sonra cevaplasam olur mu?' diye sorar.

1. Öğretmen Özlem'den ne ister?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Dilinin ucunda olmak**' ifadesi ne anlama gelir?

   b. Bir kişi neden 'dilimin ucunda' der? Anlatır mısın?

9. PARÇA

Fabrikanın müdürü Taner Bey işe yeni bir mühendis alacaktır. Toplantıda bu konu konuşulurken bina görevlisi Hüseyin Bey yöneticilere çay servisi yapmaktadır. Haberi duyan Hüseyin Bey oradakilere 'valla bizim bir mühendis komşumuz var, onu alırsanız çok iyi olur' der. Müdür Bey de ona '**her işe burnunu sokuyorsun**, sen kendi işine bak' der.

1. Fabrikanın müdürü kimdir?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Her işe burnunu sokmak**' ne anlama geliyor?

   b. Her işe burnunu sokan birisi nasıl bir kişidir? Neler yapar?

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10. PARÇA

Yılmaz matematik dersinden hep kötü notlar alıyordu. Fakat o gün matematik dersindeki en zor soruyu sadece Yılmaz cevaplayabilmişti. Öğretmeni ona 'Aferin bu sefer **gözüme girdin**' dedi.

1. Yılmaz hangi derste başarılı olmuştu?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Göze girmek**' ifadesi ne anlama gelir?

   b. Öğretmenin gözüne girmek için neler yaparsın? O zaman neler hissedersin?

APPENDIX 8: PARAPHRASING TASK FOR UNFAMILIAR IDIOMS IN CONTEXT

Lütfen aşağıdaki bütün soruları her bir parçaya göre cevaplayınız.

1. PARÇA

Mehmet akşam evde ödevlerini yapıyordu. Türkçe ödevini kolayca bitirdikten sonra matematik ödevine başladı. Fakat matematik soruları Türkçe sorularından çok farklıydı. Ödevi bitince 'Oh be, soruları çözene kadar **göbeğim çatladı**' dedi.

1. Mehmet hangi ödevini rahat bir şekilde yaptı?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Göbeği çatlamak**' ifadesi ne anlama gelir?

   b. Bir işi yaparken göbeğimiz çatlıyorsa, o iş nasıldır, neler hissederiz?

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2. PARÇA

İsmail Bey hafta sonları radyodan güzel parçalar dinlemeyi çok severdi. Son zamanlarda buna pek fırsatı olmamıştı. Neyse ki bu hafta sonu bir fırsatını buldu ve eşine şöyle dedi: 'Canım, uzun zamandır **kulaklarım paslandı**, şu radyoyu aç ta güzel parçalar dinleyelim, keyfimiz yerine gelsin'.

1. İsmail Bey hafta sonları ne yapmaktan hoşlanırdı?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Kulakları paslanmak**' ifadesi ne anlama gelir?

   b. Kulaklarımız paslandığında ne yapmak isteriz?

3. PARÇA
Ahmet'in takımı bu sene çok iyi futbol oynadı. Bütün rakiplerinin hepsini birer birer yendiler. Fakat çok çalışıp iyi oynamalarına rağmen sadece Eray'ın takımına **diş geçiremediler**.

1. Ahmet hangi sporla ilgileniyor?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Diş geçirmek**' ifadesi ne anlama gelir?

   b. Rakiplerimize diş geçirdiğimizde, onları ne yapmış oluruz?

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4. PARÇA
İlker Bey'in şirketi çok önemli bir proje başlatmıştı. Bu işin kısa bir sürede bitmesi gerekiyordu. İlker Bey çalışanları sık sık uyarıyordu. Onlara sert bir şekilde 'Bu işi zamanında bitirmezseniz, hepinizin **alnını karışlarım**' dedi.

1. İlker Bey çalışanları neden uyarıyordu?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Alnını karışlamak**' ifadesi ne anlama gelir?

   b. İş zamanında bitmezse İlker Bey nasıl hisseder, neler yapar?

5. PARÇA

Sıcak bir yaz günü köylüler köy meydanında oturuyordu. Yaklaşan arabadan postacı indi ve onlara bir mektup bıraktı. Postacı onlara 'Bakın bu mektup müdürlükten geliyor ve acilen cevap yazılması gerekiyor' dedi. İçlerinden birisi 'Biz bilmeyiz, aramızda sadece öğretmen hanımın **eli kalem tutar**, o gerekeni yapar mektubu gönderir' dedi.

1. Mektubu kim getirdi?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Eli kalem tutmak**' ifadesi ne anlama gelir?

   b. Eli kalem tutan birisi hangi özelliğe sahip olabilir?

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6. PARÇA

Burcu arkadaşının kolunda çok güzel bir saat görür. 'Söyle bakalım, nereden aldın bu saati?' diye sorar. Yasemin de ona 'İnternette bir site var, orada insanlar evlerindeki ihtiyaç duymadıkları eşyaları satıyorlar, hem de uygun fiyatlı. **Elden düşme**, ama olsun güzel' der.

1. Saat kimin kolunda?

3. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Elden düşme**' ifadesi ne anlama gelir?

   b. Elden düşme bir eşya alırsak, bunun avantajları ne olabilir?

7. PARÇA

Erdem evde sessizce ders çalışıyordu. Küçük kardeşi Can ise türlü türlü yaramazlıklar yapıyor ve abisini rahatsız ediyordu. Hatta masadaki vazoyu da kırmıştı. Erdem dayanamayıp kardeşine şöyle dedi: 'Bak yine **sırtın kaşınıyor**, kendimi zor tutuyorum, ayrıca anneme de söyleyeceğim'.

1. Kardeşlerden hangisi yaşça daha küçüktür?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Sırtı kaşınmak**' ifadesi ne anlama gelir?

   b. Sırtı kaşınan birisi için olayın sonunda neler olabilir?

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8. PARÇA

Mert çalıştığı işyerinde müdür beyle kavga etmişti. Müdür bey bu olaya çok kızmıştı ve içinden 'Ben sana yapacağımı bilirim' diye düşünmeye başladı. Mert iki gün işe geç gelince, bir arkadaşı ona 'Dikkat et, müdür bey her an senin **ayağını kaydırabilir**' dedi.

1. Müdür bey neden öfkelenir?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Ayağını kaydırmak**' ifadesi ne anlama gelir?

   b. Müdür Bey Mert'in ayağını kaydırırsa, bu işin sonucunda neler olabilir?

9. PARÇA

Murat o hafta çok yoğun çalışıyordu. Kadir ise evde hasta yatıyordu. Kadir Murat'ı aradı ve yardıma gelmesini istedi. Murat ona 'Elbette, çok yoğunum ama sen diyorsan **gözümü bile kırpmadan** yardıma gelirim' dedi.

1. Hasta olan kimdir?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Gözünü kırpmadan**' ifadesi ne anlama gelir?

   b. Kimlere ve hangi durumlarda gözümüzü bile kırpmadan yardım ederiz?

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10. PARÇA

Ayşe'nin başına çok komik bir olay gelmişti. En yakın arkadaşı Ece ise sık sık bu olaydan bahsediyordu. Ayşe de ona 'Yeter artık, bu olayı iyice **parmağına doladın**' dedi.

1. Ece niçin dalga geçiyor?

2. *Lütfen aşağıdaki soruları birbiriyle bağlantılı cevaplayınız.*
   a. '**Parmağına dolamak**' ifadesi ne anlama gelir?

   b. Hangi durumlarda 'parmağına doladın' deriz?