



Idiom Comprehension Level of 60-72-Month-Old Children *

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Abstract

This study aims to determine the level of comprehension of idioms, a type of figurative language, among 60-72-month-old children in the preschool period. The research, conducted using a survey model, involved 108 children attending three preschool education institutions. The data for the study were collected using the *Idiom Comprehension Scale*, which was developed based on idioms found in children's books. The scale included 18 different idioms, rated for transparency and familiarity levels and presented within the contextual framework of the relevant children's books. Face-to-face interviews were conducted with the participants during the data collection, and their responses were recorded. Two experts evaluated and scored the responses, and the results were transferred to a statistical program. In line with the research questions, descriptive statistics, the Mann-Whitney U test, the Friedman test, and the Wilcoxon Signed-Rank test were applied to analyze the data. The findings revealed that only a few participants could comprehend the idioms. Additionally, it was found that opaque idioms were understood less than transparent and semi-transparent idioms. Furthermore, children with high familiarity levels were observed to comprehend idioms better than those with medium or low familiarity levels. While age was found to be an influential factor in idiom comprehension, gender did not make a significant difference. The study results highlight the need for adjustments in preschool education programs and instructional practices to support the development of children's idiomatic comprehension skills. Based on these findings, several recommendations have been proposed.

Keywords

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Introduction

Early childhood is characterized by rapid development. During this time, children lay the foundation for the social, cognitive, and linguistic skills they will use in later years. Linguistic development significantly influences social and cognitive skills, facilitating and accelerating children's adaptation to society. Therefore, linguistic development not only supports other areas of development but also helps children acquire the unique norms of culture and its specific patterns of language use.

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The knowledge children acquire during the language acquisition process can be broadly categorized into two domains: grammatical knowledge, which governs the internal workings of language, and pragmatic knowledge, which pertains to its use. Born with a language acquisition device (Chomsky, 1957), children interact with adults in their environment, gaining experience with a specific language and beginning to acquire its fundamental structures. Alongside the basic rules governing language functioning, children also acquire figurative language, which may appear to operate outside these rules yet is a natural component of language use specific to a given society. Figurative language can be defined as language that deviates to some extent from conventional principles and uses words or sentences in ways that diverge from their literal meanings (Gibbs, 1994; Glucksberg, 2001). Figurative language, which corresponds to the creative dimension of natural language (Carter, 2004), encompasses various forms such as metaphor, simile, irony, and idioms (Cacciari & Padovani, 2012). As a part of everyday language, figurative language reflects how a culture perceives phenomena and events alongside societal norms (Gibbs & Beitel, 1995). Since the intended meaning in figurative language is often conveyed through different linguistic structures (Gibbs & Colston, 2012), interpreting these expressions requires understanding beyond literal meanings. This is particularly evident in idioms, one type of figurative language. Therefore, determining the level at which children comprehend idioms can provide insights into their figurative language skills and overall linguistic development.

Idioms are one of the most frequently encountered types of figurative language. However, it is often stated that understanding idioms is a challenging task (Buckingham, 2006; Celce-Murcia & Larsen-Freeman, 1999). The difficulty stems from several factors, such as idioms comprising multiple words, yet functioning as a single lexical unit, having a unique syntactic structure, and possessing a specific meaning (Jaeger, 1999; Yağiz & Izadpanah, 2013). Despite these challenges, idioms occupy a significant place in the vocabulary of almost every language. Turkish is considered a language rich in idioms (Göçer, 2012; Kenzhalin, 2017; Şalvarlı, 2010; Türkben, 2019). Assessing children's comprehension of idioms during the acquisition of Turkish is crucial for determining their proficiency in figurative language, understanding their linguistic and cultural development, and providing opportunities for comparison with idiom comprehension in other languages.

Idioms

Idioms, considered fixed expressions, are a subcategory of vocabulary. Their distinguishing feature is that their meaning differs from the literal or syntactic meaning of the individual words that compose them (Gibbs, 1994; Glucksberg, 2001; Jackendoff, 1983). Often to achieve more effective expression or a specific emphasis, Idioms are formed by expressing the intended meaning through words that differ from those directly reflecting it. For this reason, idioms carry syntactic and semantic constraints (Akkök, 2009; Jones & Kaschak, 2009). For example, the Turkish idiom *etekleri zil çalmak* (literally "skirts ringing with bells"), which consists of three words, does not convey the literal meaning of skirts with bells making noise (!), but rather the figurative meaning of "being happy." This situation, which is challenging for children to interpret during the language acquisition process, arises from the figurative nature of idioms, which does not align with the conventional language processing mechanism. Idioms, which are considered not as syntactic arrangements but as reflections of conceptual systems in the mind (Dobrovolskij & Piirainen, 2005; Kövecses & Szabo, 1996; Langlotz, 2006), require the engagement of distinct interpretive processes in language acquisition, due to their unique characteristics.

Idioms, which possess culturally specific features (Colston, 2015), are fixed expressions, meaning that the words within an idiom cannot be rearranged, other words cannot be inserted, and synonyms cannot replace any of the words (Can & Ercan, 2017; Cieślicka, 2015; Glucksberg, 1993; Karabağ & Coşan, 2000). Although idioms have a syntactic structure, they are processed and perceived more like single lexical units than complete sentences and can take on various forms. However, it is also noted that in some idioms, syntactic structure can partially contribute to accessing the figurative meaning (Cieślicka, 2015). These features place idioms in a distinct position in language acquisition and development.

Comprehension of idioms

When linguistic processes alone are insufficient for understanding idioms, it becomes necessary to rely on context. When idioms emerge within a contextual framework, their comprehension and interpretation becomes more accessible (Gibbs, 1991; Peçenek & Ay, 2010). The semantic void resulting from syntactic and semantic deviations is typically bridged through contextual indicators. This process necessitates the presence of adequate semantic guidance within the context. As children develop both world knowledge and contextual sensitivity, this accumulated information transforms into a reference resource for idiom comprehension. According to Levorato, Nesi, and Cacciari (2004), when children encounter specific idioms in context, they either utilize contextual cues to access the idiomatic meaning or suspend contextually inappropriate interpretations. This perspective validates the notion that context serves as a crucial resource in idiom comprehension.

Familiarity and transparency levels similarly influence idiom comprehension. An idiom's familiarity is based on its frequency of occurrence. Children at early ages more readily incorporate frequently encountered and familiar idioms into their mental lexicon. These types of idioms are processed more efficiently and are more accessible than others (Giora, 2003). Studies have demonstrated that highly familiar idioms are comprehended more effectively (Nippold & Rudzinski, 1993; Nippold & Taylor, 2002). However, when confronted with unfamiliar idioms, children tend to interpret individual words separately rather than grasping the idiomatic meaning (Cieślicka, 2015). Beyond familiarity, transparency level also serves as a critical factor in idiom comprehension. Transparency refers to the relationship between the idiomatic meaning and the basic meanings of the constituent words (Glucksberg, 2001). Accordingly, idioms may be classified as opaque, transparent, or semi-transparent. For example, in Turkish, the idiom *ocağına incir ağacı dikmek* (literally, "to plant a fig tree in one's hearth") is considered opaque, *uykuya dalmak* ("to fall asleep") is transparent, and *canı yanmak* ("to feel hurt") is semi-transparent. Research has shown that children can more easily understand transparent idioms but struggle with opaque ones (Gibbs, 1991; Nippold & Taylor, 1995).

Acquisition of idioms

The acquisition of idioms occurs throughout the natural language learning process. However, the literature suggests that due to their unique structural characteristics, children acquire idioms only after mastering conventional, non-figurative language (Dalak, 2017; Nikoalenko, 2004). Levorato (1993) examines the acquisition of idioms by children as a developmental process consisting of five stages. Children tend to interpret idioms literally in the first stage, and this phase spans from birth to approximately age six. In the second stage, observed around ages 7-8, children begin to use contextual clues to infer the correct meaning. By the third stage, around ages 9-10, they start to grasp the figurative dimension of language. Children begin to understand idioms as fixed expressions in the fourth stage, which includes later childhood years. Finally, in the last stage, they rely on their figurative language proficiency to recognize that linguistic structure and semantic content can differ. Idiomatic acquisition, like other types of figurative language (Nippold, 2006), unfolds gradually over time. As language acquisition and development progress, children realize that idioms do not need to be analyzed and should instead be stored in long-term memory as single lexical units (Swinney & Cutler, 1979). When an idiom stored in memory is needed in a communicative context, it is accessed directly. According to Gibbs' (1980) Direct Access Model, linguistic stimuli activate the figurative or idiomatic meaning stored in memory through all forms of figurative interpretation, including idioms.

Since the comprehension and interpretation of idioms, like other types of figurative language, are complex and challenging (Deamer, Pouscoulous, & Breheny, 2010), children must demonstrate sufficient development in language and other dimensions contributing to understanding. Competencies such as world knowledge, interpretive ability, and contextual awareness indirectly support children's linguistic comprehension skills. Developmentally focused research indicates that children often struggle with idioms, primarily because they respond to idioms using literal interpretative strategies (Ackerman, 1982). The inconsistency between meaning and syntactic structure necessitates learning idioms as inseparable lexical units (Cacciari & Glucksberg, 1990; Gibbs, 1994; Levorato & Cacciari, 1999). The child's linguistic and cognitive development becomes a determining factor at this point. The literature highlights that children with advanced cognitive abilities understand idioms better (Kövecses & Szabó, 1996; Langlotz, 2006).

Studies on children's levels of idiom comprehension have yielded varying results. While some sources show that children can thoroughly learn idioms during the primary school years (ages 8-10) (Gibbs, 1991; Nippold & Taylor, 1995), other research indicates that children in the preschool period can also understand many idioms. Research conducted by Ionescu and Ilie (2018) demonstrates that children aged 4-5 are capable of comprehending idiomatic expressions. Another investigation determined that children between ages 4-9 can grasp idioms with high transparency levels (Caillies & Le Sourn-Bissaoui, 2006). Likewise, research has established that children younger than 5 years can interpret idioms when provided with contextual support (Levorato & Cacciari, 1995). While adult-like comprehension typically emerges around age 10, evidence suggests that idiom acquisition begins during ages 6-7 (Vulchanova, Vulchanov, & Stankova, 2011). Scholarly literature identifies recognition, transparency, context, and general linguistic competence as critical factors in idiom comprehension (Cain & Towse, 2008; Cain, Towse, & Knight, 2009; Nippold & Duthie, 2003). As children possess these abilities at varying degrees, the age at which idiom comprehension develops may fluctuate according to linguistic environment and individual developmental characteristics.

A range of investigations has explored how idiomatic expressions are understood in the Turkish language. Most of these studies focus on children in primary school, older age groups, or idioms in textbooks. For instance, Kara (2015) conducted a study showing that children aged 7-11 progressively acquire idioms. Similarly, Pektaş (2014) researched the extent to which idioms are included among the linguistic arts in children's books. Other studies have also investigated idioms in the context of primary and secondary school children and textbooks (Baş, 2013; Türkben, 2019; Uysal, 2015; Uysal & Gökmen, 2016). In contrast to these studies, the research by Arslan, Dönmez, Davarcıoğlu, Eren, and Aytar (2019) focused on preschool children, and aimed to determine how they perceived idioms in books prepared for this age group through illustrations. Additionally, studies investigating idiomatic comprehension skills in preschool children have been conducted in languages other than Turkish (Caillies & Le Sourn-Bissaoui, 2006; Ionescu & Ilie, 2018; Levorato & Cacciari, 1995).

This study, like the limited number of studies conducted in Turkish, focuses on preschool children, but examines the influence of different variables on idiom comprehension. It presents idioms found in children's books to children within the idioms' contextual framework. It identifies the effects of familiarity and transparency levels on comprehension, addressing a significant gap in understanding figurative language acquisition in this age group. In summary, while studies in the literature on idiom comprehension generally focus on older age groups compared to preschool children, this research highlights the initial stages of the developmental process by focusing on idiomatic comprehension in early childhood, emphasizing familiarity and transparency. Furthermore, this study, conducted in a language as rich in idioms as Turkish, examines the impact of presenting idioms within context on children's comprehension processes, offering a unique contribution to language acquisition and cultural transmission. The research provides insights for developing educational materials supporting early childhood linguistic and cognitive development. Within this framework, the study aims to determine the general level of idiom comprehension among participants and whether this varies based on the transparency and familiarity levels of idioms and the participants' age and gender.

Method

This study, designed as a survey model, aims to examine the level of idiom comprehension in preschool children. Research conducted using the survey model aims to describe a specific situation as it exists (Karasar, 2000). Similarly, since this study seeks to determine the level of development in idiom comprehension skills among 60-72-month-old preschool children, it has been conducted within the framework of the survey model.

Study group

The study group consists of 108 preschool children. Age and gender criteria were considered in selecting the participants. Since figurative language typically begins to develop after a certain level of natural language acquisition, participants were selected from among children aged 60-72 months, and younger children were excluded from the study. The participants included 53 girls and 55 boys attending three independent preschool institutions affiliated with the Ministry of National Education (MEB) in Antalya during the 2019-2020 academic year.

Data collection tool

This study's data were collected using the Idiom Comprehension Scale and the Information Form. The Idiom Comprehension Scale is a measurement tool developed by the researchers specifically for preschool children aged 5-6 years. During the development of the scale, separate procedures were conducted for the dimensions of familiarity and transparency. To achieve this, children's books used in preschool institutions affiliated with the Ministry of National Education (MEB) and read to children during various activities were examined, and the idioms used in these books were identified. Approximately 200 books were reviewed, and idioms were found in only 25 of them. 65 idioms were identified in these 25 books, and those deemed suitable for the study's purpose were selected. Suitability here refers to idioms that carry relative value in terms of transparency and familiarity, as well as those deemed appropriate for the linguistic and cognitive levels of the participating children.

For the selected idiomatic expressions, expert evaluation was solicited, and following their assessment, 40 idioms with their contextual applications were incorporated into the preliminary scale draft. To evaluate the recognition factor of these expressions, interviews were conducted with 120 youngsters who possessed characteristics comparable to the main study participants. These children were questioned about their prior exposure to the 40 draft idioms and the regularity with which they had encountered them. Their responses allowed researchers to classify idiom exposure frequency into three categories: high, moderate, and minimal. The transparency dimension of these expressions was assessed using the Lawshe methodology, which necessitates expert consultation during scale construction. This technique requires input from between 5 and 40 specialists (Yeşilyurt & Çapraz, 2018; Yurdugül, 2005). For this investigation, seven authorities evaluated the idioms' transparency levels—five specialists in Turkish Education and two in Preschool Education. Any expression flagged by even a single expert as problematic regarding the connection between literal and figurative meanings was eliminated from consideration. This rigorous process ensured complete content validity for the Idiom Comprehension Scale.

The selection criteria for scale inclusion—specifically, appearance in children's literature and appropriate transparency and familiarity characteristics—directly address the central research objectives. The application of Lawshe's methodology for content validity determination reflects the significance of these selection parameters. The expressions identified through this systematic approach are displayed in Table 1.

Table 1. Distribution of items in the ICS based on familiarity and transparency characteristics

| | Idioms with High Familiarity Rate | Idioms with Moderate Familiarity Rate | Idioms with Low Familiarity Rate |
|--------------------------------|---------------------------------------|---|--|
| Opaque Idioms | Başı dönmek [to feel light-headed] | Yalayıp yutmak [to slurp something up] | Sürüsüne Bereket [mother lode] |
| | Kafası karışmak [to get confused] | Yol açmak [to make way] | İçinden geçirmek [to bargain for something] |
| Semi-transparent idioms | Canı sıkılmak [to be in a state] | Göz atmak [to peep at] | Kolaçan etmek [to nose about] |
| | Canı yanmak [to get hurt] | Hızını alamamak [to get carried away] | Gözü ilişmek [to catch sight of] |
| Transparent idioms | Uykuya dalmak [to fall asleep] | Rekor kırmak [to break a record] | İz sürmek [to scent out] |
| | Ağzı sulanmak [to lick the lips] | Vakit geçirmek [to kill time] | Akıl erdirememek [to be at a loss] |

To further substantiate the Idiom Comprehension Scale's reliability, researchers computed both difficulty coefficients and discrimination parameters for individual test items. The difficulty indices of the items ranged from 0.02 to 0.35, while the discrimination indices ranged from 0.00 to 0.51. The average difficulty index of the test was calculated as 0.145, and the average discrimination index was 0.256. All items had positive discrimination indices, indicating that the items were sufficiently discriminative (Kubiszyn & Gary, 2013). The scale's internal consistency was evaluated using Cronbach's Alpha coefficient, which was calculated as 0.496. Although this value is below the generally accepted threshold of 0.70 in the literature, researchers such as Taber (2018) and Özdamar (1999) have stated that values of 0.45 and above can also be considered acceptable. The multidimensional nature of the scale (familiarity and transparency) was identified as a significant factor influencing internal consistency. Based on these analyses, the final version of the scale, consisting of 18 items, was determined to be sufficient for measuring idiomatic comprehension skills in preschool children.

The Idiom Comprehension Scale is a measurement tool based on children explaining the meanings of idioms presented within a context. An example item from the scale is as follows:

"Ece learned to read when she was only three years old, and reading became her favorite thing. She devours newspapers and books, reading stories about heroes who fight for others. She imagined the person she wanted to become." After presenting such items to the children, two experts evaluated their responses, as correct, partially correct, or incorrect: 2, 1, and 0 scores were assigned, respectively. During the development of the scale, a pilot study was conducted in which the draft scale was applied to 20 children. The pilot study confirmed that the children understood the items and that there were no other issues, allowing the research to proceed.

The other data collection tool used in the study was the Personal Information Form. This form recorded the gender and age of the participating children. The responses obtained from the Idiom Comprehension Scale were analyzed about the participants' personal information for interpretation.

Data Collection and Analysis

The researcher conducted the data collection process. Face-to-face interviews were held with the participants in an empty room at their school. Before the interviews, participants were informed about the process, and detailed explanations were provided on how to respond to the items in the scale, using examples of different idioms. Within this framework, the children were told that sentences containing idioms from certain books would be read to them, and they would be asked to explain the meaning of the idioms. Practice was conducted using different methods to ensure that the children understood the instructions. Subsequently, the idioms included in the scale were presented to the children within the context of the sentences from which they were taken, and their responses were recorded. Each interview lasted approximately 25-30 minutes. In addition to the earlier example, another item from the scale is as follows: "Ayla learned all the intricacies of flying a plane and could now perform both straight and inverted manoeuvres." One day, she set a record by reaching an altitude of 4,200 meters." In this item, the children were asked to explain the meaning of the idiom *rekor kırmak* ("to break a record"). No intervention was made in the participants' responses.

During the data analysis phase, the accuracy of the responses was reviewed and determined by two experts, and the responses were coded. If a child's response fully matched the idiom's meaning, 2 points were awarded; if it partially matched, 1 point was given; and if the response was entirely incorrect, 0 points were assigned. This scoring was conducted independently by the two expert evaluators. The inter-rater agreement percentage was calculated as 0.92. The responses were then transferred to a statistical program, and necessary descriptive analyses were performed. To determine the comprehension levels of idioms based on their transparency and familiarity characteristics, the Friedman Test was applied to analyze the total scores, which did not show a normal distribution. The Wilcoxon Signed-Rank Test was used to identify the relationship between transparency levels. Additionally, since the total scores obtained from the scale did not show a normal distribution based on participants' gender and age, the Mann-Whitney U Test was applied to address the relevant research question.

Results

The first research question aimed to determine the participants' level of idiom comprehension. The results of the descriptive statistical analysis conducted for this purpose are presented in Table 2.

Table 2. Descriptive statistics regarding total scores received from the ICS

| Idiom | Participants Who Received 0 Point | | Participants Who Received 1 Point | | Participants Who Received 2 Points | | Total Score |
|---|-----------------------------------|-------------|-----------------------------------|------------|------------------------------------|------------|-------------|
| | f. | % | f. | % | f. | % | |
| 1. Rekor kırmak [to break a record] | 100 | 92,6 | 3 | 2,8 | 5 | 4,6 | 13 |
| 2. Yalayıp yutmak [to slurp sth up] | 83 | 76,9 | 25 | 23,1 | 0 | 0,0 | 25 |
| 3. Gözü ilişmek [to catch sight of] | 93 | 86,1 | 14 | 13,0 | 1 | 0,9 | 16 |
| 4. Başı dönme [to feel light-headed] | 104 | 96,3 | 3 | 2,8 | 1 | 0,9 | 5 |
| 5. Canı yanmak [to get hurt] | 73 | 67,6 | 3 | 2,8 | 32 | 29,6 | 67 |
| 6. Kafası karışmak [to get confused] | 90 | 83,3 | 14 | 13,0 | 4 | 3,7 | 22 |
| 7. İz sürmek [to scent out] | 85 | 78,7 | 2 | 1,9 | 21 | 19,4 | 44 |
| 8. Yol açmak [to make way] | 104 | 96,3 | 1 | 0,9 | 3 | 2,8 | 7 |
| 9. Vakit geçirmek [to kill time] | 106 | 98,1 | 0 | 0,0 | 2 | 1,9 | 4 |
| 10. Ağzı sulanmak [to lick the lips] | 89 | 82,4 | 8 | 7,4 | 11 | 10,2 | 30 |
| 11. İçinden geçirmek [to bargain for sth] | 87 | 80,6 | 5 | 4,6 | 16 | 14,8 | 37 |
| 12. Hızını alamamak [to get carried away] | 101 | 93,5 | 0 | 0,0 | 7 | 6,5 | 14 |
| 13. Uykuya dalmak [to fall asleep] | 70 | 64,8 | 2 | 1,9 | 36 | 33,3 | 74 |
| 14. Kolaçan etmek [to nose about] | 94 | 87,0 | 6 | 5,6 | 8 | 7,4 | 22 |
| 15. Sürüsüne Bereket [mother lode] | 99 | 91,7 | 2 | 1,9 | 7 | 6,5 | 16 |
| 16. Göz atmak [to peep at] | 91 | 84,3 | 16 | 14,8 | 1 | 0,9 | 18 |
| 17. Canı sıkılmak [to be in a state] | 90 | 83,3 | 16 | 14,8 | 2 | 1,9 | 20 |
| 18. Akıl erdirememek [to be at a loss] | 103 | 95,4 | 0 | 0,0 | 5 | 4,6 | 10 |
| Total | 1662 | 85,5 | 120 | 6,2 | 162 | 8,3 | 444 |

When Table 2 is examined, it is observed that participants scored the lowest on the idiom *vakit geçirmek* ("to pass time") and the highest on the idiom *uykuya dalmak* ("to fall asleep"). Of the responses given by the participants to the items in the test, 85.5% received a score of 0, 6.2% received a score of 1, and 8.3% received a score of 2. In total, 85% of the responses were incorrect, while 14.5% were partially or entirely correct.

The second research question investigated whether participants' success in understanding idioms differed based on familiarity levels. The results of the descriptive statistical analysis conducted for this purpose are presented in Table 3.

Table 3. Descriptive Statistics Regarding Scores Received Based on Familiarity Level

| | Participants Who Received 0 Point | | Participants Who Received 1 Point | | Participants Who Received 2 Points | | Total Score |
|--|-----------------------------------|-------------|-----------------------------------|------------|------------------------------------|-------------|-------------|
| | f. | % | f. | % | f. | % | |
| Idioms with low familiarity | | | | | | | |
| Sürüsüne Bereket [mother lode] | 99 | 91,7 | 2 | 1,9 | 7 | 6,5 | 16 |
| İçinden geçirmek [to bargain for sth] | 87 | 80,6 | 5 | 4,6 | 16 | 14,8 | 37 |
| Kolaçan etmek [to nose about] | 94 | 87,0 | 6 | 5,6 | 8 | 7,4 | 22 |
| Gözü ilişmek [to catch sight of] | 93 | 86,1 | 14 | 13 | 1 | 0,9 | 16 |
| İz sürmek [to scent out] | 85 | 78,7 | 2 | 1,9 | 21 | 19,4 | 44 |
| Akıl erdirememek [to be at a loss] | 103 | 95,4 | - | 0 | 5 | 4,6 | 10 |
| Total | 561 | 86,6 | 29 | 4,4 | 58 | 9,0 | 145 |
| Idioms with moderate familiarity | | | | | | | |
| Yalayıp yutmak [to slurp it up] | 83 | 76,9 | 25 | 23,1 | - | - | 25 |
| Yol açmak [to make way] | 104 | 96,3 | 1 | 0,9 | 3 | 2,8 | 7 |
| Göz atmak [to peep at] | 91 | 84,3 | 16 | 14,8 | 1 | 0,9 | 18 |
| Hızını alamamak [to get carried away] | 101 | 93,5 | - | - | 7 | 6,5 | 14 |
| Rekor kırmak [to break a record] | 100 | 92,6 | 3 | 2,8 | 5 | 4,6 | 13 |
| Vakit geçirmek [to kill time] | 106 | 98,1 | - | - | 2 | 1,9 | 4 |
| Total | 585 | 90,3 | 45 | 6,9 | 18 | 2,8 | 81 |
| Idioms with high familiarity | | | | | | | |
| Başı dönmek [to feel light-headed] | 104 | 96,3 | 3 | 2,8 | 1 | 0,9 | 5 |
| Kafası karışmak [to get confused] | 90 | 83,3 | 14 | 13 | 4 | 3,7 | 22 |
| Canı sıkılmak [to be in a state] | 90 | 83,3 | 16 | 14,8 | 2 | 1,9 | 20 |
| Canı yanmak [to get hurt] | 73 | 67,6 | 3 | 2,8 | 32 | 29,6 | 67 |
| Uykuya dalmak [to fall asleep] | 70 | 64,8 | 2 | 1,9 | 36 | 33,3 | 74 |
| Ağzı sulanmak [to lick the lips] | 89 | 82,4 | 8 | 7,4 | 11 | 10,2 | 30 |
| Total | 516 | 79,6 | 46 | 7,1 | 86 | 13,3 | 218 |

When Table 3 is examined, it is observed that the total score participants received from idioms with a medium level of familiarity (81), was the lowest, while the total score from idioms with a high level of familiarity (218), was the highest. Among idioms with a low level of familiarity, participants scored the lowest on the idiom akıl erdirememek, ("to fail to comprehend") with a score of 10, and the highest on the idiom iz sürmek, ("to track") with a score of 44. For idioms with a medium level of familiarity, the lowest score was on the idiom vakit geçirmek ("to pass time") 4, and the highest score was on the idiom yalayıp yutmak ("to devour") 25. Among idioms with a high level of familiarity, başı dönmek ("to feel dizzy") received the lowest score of 5, while the uykuya dalmak ("to fall asleep") received the highest score of 74.

For idioms with a low level of familiarity, 86.6% of the participants' responses were incorrect, while 13.4% were partially or entirely correct. For idioms with a medium level of familiarity, 90.3% of the responses were incorrect, while 9.7% were partially or entirely correct. For idioms with a high level of familiarity, 79.6% of the responses were incorrect, while 20.4% were partially or entirely correct.

The Friedman's test was conducted to determine whether participants' success in understanding idioms differed based on familiarity levels. The analysis revealed a significant difference in participants' success, in understanding idioms with low, medium, and high levels of familiarity ($X^2=37.919$, $p<0.05$). The Wilcoxon Signed-Rank Test was used to identify which groups differed. According to the test results, there was a significant difference between participants' success in understanding idioms with a low level of familiarity and idioms with a medium level of familiarity ($Z=-3.456$, $p<0.05$, $r=0.33$). Participants' success in understanding idioms with a low level of familiarity (mean rank=1.96) was higher than their success idioms with a medium level of familiarity (mean rank=1.66).

There was also a significant difference between participants' success in understanding idioms with a low level of familiarity and idioms with a high level of familiarity ($Z=-3.604$, $p<0.05$, $r=0.34$). Participants' success in understanding idioms with a high level of familiarity (mean rank = 2.38) was higher than in understanding idioms with a low level of familiarity (mean rank = 1.96). Additionally, there was a significant difference between participants' success in understanding idioms with a medium level of familiarity and their success in understanding those with a high level of familiarity ($Z=-5.971$, $p<0.05$, $r=0.57$). Participants exhibited greater proficiency in comprehending highly recognizable idiomatic expressions (mean rank=2.38) when compared to their performance with moderately familiar idioms (mean rank=1.66).

The third research question aimed to determine whether participants' success in understanding idioms differed based on transparency levels. The findings of the descriptive analysis conducted for this purpose are presented in Table 4.

Table 4. Descriptive Statistics Regarding Scores Based on Transparency Level

| | Participants Who Received 0 Point | | Participants Who Received 1 Point | | Participants Who Received 2 Points | | Total Score |
|--|-----------------------------------|-------------|-----------------------------------|------------|------------------------------------|-------------|-------------|
| | f. | % | f. | % | f. | % | |
| Opaque Idioms | | | | | | | |
| Yalayıp yutmak [to slurp it up] | 83 | 76,9 | 25 | 23,1 | - | - | 25 |
| Başı dönmek [to feel light-headed] | 104 | 96,3 | 3 | 2,8 | 1 | 0,9 | 5 |
| Kafası karışmak [to get confused] | 90 | 83,3 | 14 | 13,0 | 4 | 3,7 | 22 |
| Yol açmak [to make way] | 104 | 96,3 | 1 | 0,9 | 3 | 2,8 | 7 |
| İçinden geçirmek [to bargain for sth] | 87 | 80,6 | 5 | 4,6 | 16 | 14,8 | 37 |
| Sürüsüne Bereket [mother lode] | 99 | 91,7 | 2 | 1,9 | 7 | 6,5 | 16 |
| Total | 567 | 87,5 | 50 | 7,7 | 31 | 4,8 | 112 |
| Semi-transparent Idioms | | | | | | | |
| Gözü ilişmek [to catch sight of] | 93 | 86,1 | 14 | 13 | 1 | 0,9 | 16 |
| Canı yanmak [to get hurt] | 73 | 67,6 | 3 | 2,8 | 32 | 29,6 | 67 |
| Hızını alamamak [to get carried away] | 101 | 93,5 | - | - | 7 | 6,5 | 14 |
| Kolaçan etmek [to nose about] | 94 | 87,0 | 6 | 5,6 | 8 | 7,4 | 22 |
| Göz atmak [to peep at] | 91 | 84,3 | 16 | 14,8 | 1 | 0,9 | 18 |
| Canı sıkılmak [to be in a state] | 90 | 83,3 | 16 | 14,8 | 2 | 1,9 | 20 |
| Total | 542 | 83,6 | 55 | 8,5 | 51 | 7,9 | 157 |
| Transparent Idioms | | | | | | | |
| Rekor kırmak [to break a record] | 100 | 92,6 | 3 | 2,8 | 5 | 4,6 | 13 |
| İz sürmek [to scent out] | 85 | 78,7 | 2 | 1,9 | 21 | 19,4 | 44 |
| Vakit geçirmek [to kill time] | 106 | 98,1 | - | - | 2 | 1,9 | 4 |
| Ağzı sulanmak [to lick the lips] | 89 | 82,4 | 8 | 7,4 | 11 | 10,2 | 30 |
| Uykuya dalmak [to fall asleep] | 70 | 64,8 | 2 | 1,9 | 36 | 33,3 | 74 |
| Akıl erdirememek [to be at a loss] | 103 | 95,4 | - | 0 | 5 | 4,6 | 10 |
| Total | 553 | 85,4 | 15 | 2,3 | 80 | 12,3 | 175 |

According to Table 4, participants scored the lowest on opaque idioms and the highest on transparent idioms. Among opaque idioms, participants scored the lowest on the idiom *başı dönmek* ("to feel dizzy"), with a score of 5, and the highest on the idiom *içinden geçirmek* ("to think to oneself") with a score of 37. For semi-transparent idioms, the lowest score was on the idiom *hızını alamamak* ("to lose control") with a score of 14, and the highest score was on the idiom *canı yanmak* ("to feel hurt") with a score of 67. Among transparent idioms, the lowest score for the idiom *vakit geçirmek* ("to pass time") was 4, and the highest score for the idiom *uykuya dalmak* ("to fall asleep") was 74.

87.5% of the participants' responses were incorrect for opaque idioms, while 12.5% were partially or entirely correct. 83.6% of the responses were incorrect for semi-transparent idioms, while 16.4% were partially or entirely correct. For transparent idioms, 85.4% of the responses were incorrect, while 14.6% were partially or entirely correct.

The Friedman Test was conducted to determine whether participants' success in understanding idioms differed based on transparency levels. The analysis revealed a significant difference in participants' success in understanding opaque, semi-transparent, and transparent idioms ($\chi^2=7.154$, $p<0.05$). To identify which groups differed, the Wilcoxon Signed-Rank Test was used. According to the test results, there was a significant difference between participants' success in understanding opaque and semi-transparent idioms ($Z=-2.574$, $p<0.05$, $r=0.24$). Participants' success in understanding semi-transparent idioms (mean rank=2.03) was higher than in understanding opaque idioms (mean rank=1.83). Additionally, there was a significant difference between participants' success in understanding opaque and transparent idioms ($Z=-3.576$, $p<0.05$, $r=0.34$). Participants' success in understanding transparent idioms (mean rank=2.14) was higher than their success in understanding opaque idioms (mean rank=1.83). However, no significant difference was found between participants' success in understanding semi-transparent and transparent idioms ($Z=0.788$, $p>0.05$).

Do Participants' Success in Understanding Idioms Differ by Age?

The fourth research question examined whether participants' success in understanding idioms differed by age. For this purpose, the Mann-Whitney U test was conducted. According to the test results, participants' success in understanding idioms significantly differed by age ($U=837.000$, $Z=-2.299$, $p<0.05$, $r=0.22$). Participants aged 66-72 months had higher success in understanding idioms (median=4, $n=30$) than participants aged 60-65 (median=3, $n=78$).

Do Participants' Success in Understanding Idioms Differ by Gender?

The fifth research question investigated whether participants' success in understanding idioms differed by gender. To address this, the Mann-Whitney U test was conducted. The analysis results indicated that participants' success in understanding idioms did not significantly differ by gender ($U=1414.500$, $Z=0.266$, $p>0.05$, $r=0.02$).

Discussion and Conclusion

This study, which aimed to determine the extent to which idioms are acquired and understood, found that 60-72-month-old children are just beginning to acquire idioms in Turkish. Among the participating children who encountered idioms with varying levels of transparency and familiarity within a given context, only 15% were able to partially or fully understand them. Other studies aiming to determine the level of idiom comprehension have yielded different results. Some studies have found that children understand idioms as early as preschool age (Nippold & Martin, 1989; Qualls & Harris, 1999). However, it has also been noted that the stages of idiom acquisition—such as identification, interpretation, explanation, and usage—are achieved at different ages (Caillies & Le Sourn-Bissaoui, 2013; Nippold & Taylor, 2002). Research has shown that the age for recognizing or noticing idioms is around 5 years (Nikoalenko, 2004); their interpretation continues throughout adolescence (Nippold & Taylor, 2002); and the ability to explain idioms develops between the ages of 6 and 11 (Caillies & Le Sourn-Bissaoui, 2013). Their usage occurs at even later ages (Nippold, 2007). The data obtained in this study revealed that 60-72-month-old (5-6 years old) children have begun to partially understand idioms but cannot explain them.

Many factors contribute to the comprehension of idioms. Among these, developmental competencies such as language skills, figurative language skills, world knowledge, and the ability to use contextual clues are critical (Cain et al., 2009). Research indicates that contextual elements are particularly influential in children's idiom comprehension processes (Gibbs, 1991; Levorato & Cacciari, 1999). The limited understanding of idiomatic expressions among study participants may be attributed to their inadequate utilization of contextual frameworks—specifically, their difficulty in effectively leveraging contextual indicators. Nevertheless, scholarly discourse presents varying perspectives

regarding contextual influence on idiom interpretation. According to Abkarian, Jones, and West (1992), contextual factors exercise only marginal impact on idiom comprehension among children below six years of age. Following this theoretical position, one might hypothesize that children participating in this investigation failed to employ contextual information as an interpretive resource when processing idioms. Furthermore, challenges in accurate idiom comprehension correlate with developmental factors including age, cognitive capabilities, and distinct personal attributes. The developmental progression of participating children regarding these dimensions may have constituted additional obstacles impeding their ability to grasp idiomatic meanings.

An additional research outcome demonstrated that study participants exhibited enhanced comprehension of highly recognizable idiomatic expressions. The notion of recognition pertains to expressions commonly encountered in everyday communication (Beck & Weber, 2016; Nippold, Moran, & Schwarz, 2001). Regular exposure and consequent immersion in linguistic elements constitutes a critical factor influencing both language acquisition processes and developmental trajectories (Lust, 2006; Tavakoli, 2013). It is evident that this principle also applies to idioms. However, there are differing views regarding the role of familiarity in idiom comprehension. Some researchers argue that familiarity is important around the age of 7 but becomes less significant in later years (Levorato & Cacciari, 1992), while others suggest that this dimension continues to play a role in idiom comprehension even in later years (Nippold & Taylor, 2002). For the children in this study, familiarity emerged as a factor that facilitated idiom comprehension. It can be said that the participants, who were found to be in the early stages of idiom acquisition, utilized the familiarity dimension to aid their understanding.

For frequently encountered and, thus, familiar idioms, a particular semantic interpretation can be produced with the help of other variables. When these idioms are reencountered, the related meaning stored in memory can be activated (Caillies & Butcher, 2007). The appropriateness of the activated meaning can then be verified using contextual clues. However, the study also found that idioms with low familiarity were better understood than those with medium familiarity. This result may be due to the idioms in the scale being presented in terms of familiarity, within a contextual framework, and with varying levels of transparency. Gibbs (1994) emphasizes that figurative language types are better understood when presented in appropriate contexts. The literature also notes that it is difficult for children to understand idioms without context (Wiejak, 2014). Since the idioms used in this study were taken from children's books and presented within a specific contextual framework, it is possible that the participants effectively used contextual clues to understand some idioms. This phenomenon may have generated a distinction in comprehension between expressions with minimal and moderate recognition levels. Previous scholarly investigations have established a robust correlation between recognition and both figurative understanding and idiomatic knowledge (Flores D'arcais, 1993; Levorato & Cacciari, 1992; Libben & Titone, 2008; Nippold & Taylor, 1995; Schraw, Trathen, Reynolds, & Lapan, 1988). Ultimately, the findings derived from this investigation corroborate the assertion that recognition constitutes a significant determinant in the interpretation of idiomatic expressions.

Additional research finding demonstrated that participants exhibited superior comprehension of transparent idiomatic expressions compared to opaque ones. Transparency level refers to the relationship between constituent words' basic meanings and the expression's figurative interpretation (Glucksberg, 2001; Langlotz, 2006). According to this framework, expressions where literal word meanings connect with figurative meaning are classified as transparent, while those lacking such connections are designated opaque. When processing transparent expressions, individual word meanings can serve as interpretive resources for accessing figurative significance (Kovács, 2016). Conversely, opaque expressions present considerable challenges in establishing meaningful connections between component words and figurative interpretation (Moreno, 2007). Study participants demonstrated enhanced understanding of transparent expressions relative to opaque ones. This observation suggests that transparency functions as a significant variable for children during initial phases of idiomatic language acquisition.

Numerous scholarly investigations have established transparency's significance in idiomatic expression comprehension (Nippold & Duthie, 2003; Nippold & Rudzinski, 1993; Norbury, 2004). Research conducted by Gibbs (1991) demonstrated that youngsters between ages 5-9 exhibited greater facility in explaining transparent expressions compared to opaque counterparts. When idiomatic expressions possess relative transparency, specific constituent words function as interpretive indicators for accessing figurative meaning (Caillies & Le Sourn-Bissaoui, 2006). Linguistically proficient individuals characteristically employ semantic analysis strategies when confronting ambiguous language (Titone & Connine, 1999). Consequently, the comparative ease with which transparent expressions are interpreted relative to opaque ones represents a comprehensible phenomenon for language users across developmental stages.

The investigation's outcomes indicate that developmental stage constitutes a significant determinant in children's ability to interpret figurative expressions. Even a six-month age difference can significantly affect the level of idiomatic understanding. Children aged 66-72 months understood idioms better than those aged 60-65 months. This can be attributed to several reasons, one of which is developmental level. During the language acquisition process, children acquire complex linguistic structures significantly between the ages of 67 and 72 months (Ayrancı, 2018). This acquisition may relatively influence their ability to comprehend idioms. Additionally, older children have more linguistic experience and are therefore more advanced in linguistic competence (Gibbs, 1991). As a result, the effort required to comprehend idioms is carried out with greater linguistic capacity and processing power in these children. Furthermore, older children are more developed in abstraction skills (Uysal & Gökmen, 2016), which may make it easier for them to understand idioms.

On the other hand, gender differences did not create a significant distinction in the children's idiom comprehension level. One possible reason is that gender-based linguistic development may not yet be a determining factor for the children participating in this study. In other words, the underlying skills required for idiom comprehension are likely related to variables other than gender, which explains why no difference was observed between boys and girls in this study. Wiejak (2014), in attempting to explain the difficulties children face in understanding figurative language, emphasizes factors such as limited world knowledge, restricted linguistic knowledge, lack of contextual usage skills, and insufficient verbal explanation abilities. These factors generally develop independently of gender. However, some studies have found that gender can be a differentiating variable (Lutzer, 1991; Seçilmiş, 1996; Taner, 2003; Taner & Başal, 2005; Yıldırım Dođru, Alabay & Kayılı, 2010), while others have found it to be ineffective (Damar, 2007; Demir, 2006; Erdoğan, Bekir, & Aras, 2005; İpek, 2006). This investigation revealed no gender-based disparities between male and female participants concerning their ability to interpret idiomatic expressions.

This investigation's results demonstrate that recognition and transparency parameters substantially shape idiomatic comprehension capabilities during early developmental stages. The observation that youngsters more readily interpret highly recognizable and transparent expressions corresponds with outcomes from investigations conducted across diverse linguistic contexts (Kamanga & Banda, 2017; Nippold & Rudzinski, 1993). Cain, Oakhill, and Lemmon (2004) established that children demonstrate enhanced comprehension of figurative language presented within recognizable frameworks, indicating strong correlation between recognition and reading comprehension abilities. Correspondingly, Colston (2015) proposes that figurative language acquisition accelerates when cognitive demands are minimized and expressions align with established linguistic patterns. During comprehension processes, interpretive indicators embedded within transparent expressions appear to facilitate meaning construction, enabling children to connect abstract concepts with tangible representations without significant difficulty (Aljabri, 2013). Regarding educational implications, integrating predominantly transparent and highly recognizable idiomatic expressions into early language curriculum could enhance children's capacity to identify verbal constructions during formative developmental periods (Cieślicka, 2015). Furthermore, children's capacity to articulate thoughts effectively through acquired cultural and linguistic conventions contributes to lexical enrichment within educational environments. These findings suggest that dedicating time and activities to idioms during the preschool period can contribute to children's language development and cultural knowledge. Therefore, it is recommended that both families and educators adopt an approach that considers the principles of familiarity and transparency to enhance children's discourse skills.

This study has limitations related to the participants, the idioms used, and cultural specificity. The participants consisted of 60-72-month-old children attending three independent preschool institutions in Antalya, which may limit the generalizability of the findings. Another limitation concerns the idioms included in the scale. The idioms, selected from children's books and categorized based on their familiarity and transparency levels, do not encompass all idioms used in Turkish. A final limitation pertains to linguistic and cultural factors. The findings obtained from this study, conducted with idioms specific to the Turkish language and culture, may not be directly comparable to similar studies conducted in other languages or cultures, as this could lead to erroneous conclusions. Therefore, the results of this study should be interpreted within the context of these limitations.

In conclusion, the study found that 60-72-month-old children who are native speakers of Turkish are at an initial level in their ability to comprehend idioms. They could partially evaluate variables such as familiarity and transparency, which significantly impact comprehension. Additionally, it was found that age, as a developmental factor, creates a significant difference in idiom comprehension, while gender does not play a notable role. The unique characteristics of the idioms used and individual differences are of great importance in studies on idiom comprehension. Therefore, it is recommended that similar studies be conducted with other groups and different idioms to validate the findings of this research. Furthermore, studies involving other types of figurative language could help understand how figurative language acquisition develops alongside natural language acquisition. Research could also be conducted to expose children to idioms from different cultures and to determine their reactions to these culturally specific expressions. Additionally, it can be suggested that some adjustments be made in early childhood education programs and classroom language activities to support idiom comprehension and general figurative language skills. For instance, it is recommended that programs include more idioms, as they better reflect cultural elements, that teachers develop a more conscious discourse in this regard, and that more idioms be incorporated into books prepared for children.

References

- Abkarian, G. G., Jones, A., & West, G. (1992). Young children's idiom comprehension: Trying to get the picture. *Journal of Speech and Hearing Research*, 35(3), 580-587. doi:10.1044/jshr.3503.580
- Ackerman, B. P. (1982). On comprehending idioms: Do children get the picture? *Journal of Experimental Child Psychology*, 33(3), 439-454. doi:10.1016/0022-0965(82)90058-3
- Akkök, E. A. (2009). Yabancı dilde deyimlerin öğretilmesi. *Dil Dergisi*, 143, 59-77.
- Aljabri, S. S. (2013). EFL students' judgments of English idioms familiarity and transparency. *Journal of Language Teaching and Research*, 4(4), 662-669.
- Arslan, E., Dönmez, F. Z., Davarcıoğlu, S., Eren, C. K., & Aytar, F. A. G. (2019). Okul öncesi öykü kitaplarındaki deyimler ve çocukların bu deyimlere ilişkin algıları. *Amasya Üniversitesi Eğitim Fakültesi Dergisi*, 8(2), 315-351.
- Ayrancı, B. B. (2018). 0-12 Yaş dil gelişimi uygulamaları ve yapılması gerekenler. *Kırıkkale Üniversitesi Sosyal Bilimler Dergisi (KÜSBD)*, 8(1), 13-34.
- Baş, B. (2013). İlköğretim okulları için hazırlanan deyim sözlükleri üzerine bir değerlendirme. *Ana Dili Eğitimi Dergisi*, 1(1), 24-31. doi:10.16916/aded.16016
- Beck, S. D., & Weber, A. (2016). Bilingual and monolingual idiom processing is cut from the same cloth: The role of the L1 in literal and figurative meaning activation. *Frontiers in Psychology*, 7, 1-16. doi:10.3389/fpsyg.2016.01350.
- Buckingham, L. (2006). A multilingual didactic approach to idioms using a conceptual framework. *Language Design*, 8, 35-45.
- Cacciari, C., & Glucksberg, S. (1990). Understanding idiomatic expressions: The contribution of word meanings. In G. B. Simpson (Ed.), *Understanding word and sentence* (pp. 217-240). Amsterdam: Elsevier.
- Cacciari, C., & Padovani, R. (2012). The development of figurative language. In M. J. Spivey, K. McRae, & M. F. Joanisse (Eds.), *The Cambridge handbook of psycholinguistics* (pp. 505-522). New York: Cambridge University Press.
- Caillies, S., & Butcher, K. (2007). Processing of idiomatic expressions: Evidence for a new hybrid view. *Metaphor and Symbol*, 22(1), 79-108. doi:10.1207/s15327868ms2201_3
- Caillies, S., & Le Sourn-Bissaoui, S. (2006). Idiom comprehension in French children: A cock-and-bullstory. *European Journal of Developmental Psychology*, 3(2), 189-206. doi:10.1080/17405620500412325
- Caillies, S., & Le Sourn-Bissaoui, S. (2013). Nondecomposable idiom understanding in children: Recursive theory of mind and working memory. *Canadian Journal of Experimental Psychology*, 67(2), 108-116. doi:10.1037/a0028606
- Cain, K., Oakhill, J., & Lemmon, K. (2004). Individual differences in the inference of word meanings from context: The influence of reading comprehension, vocabulary knowledge, and memory capacity. *Journal of Educational Psychology*, 96(4), 671-681. doi:10.1037/0022-0663.96.4.671
- Cain, K., & Towse, A. S. (2008). To get hold of the wrong end of the stick: Reasons for poor idiom understanding in children with reading comprehension difficulties. *Journal of Speech, Language, and Hearing Research*, 51(6), 1538-1549. doi:10.1044/1092-4388(2008/07-0269)
- Cain, K., Towse, A. S., & Knight, R. S. (2009). The development of idiom comprehension: An investigation of semantic and contextual processing skills. *Journal of Experimental Child Psychology*, 102(3), 280-298. doi:10.1016/j.jecp.2008.08.001
- Can, Ö., & Ercan, G. S. (2017). Deyim sözlüklerinde >A< yazıbirimi altında sıralanan Türkçe deyimlerin edimbilimsel olarak ulamlaştırılması. In N. Kansu Yetkiner & M. Şahin (Eds.), *Dilbilim çeviribilim yazıları: Prof. Dr. Lütfiye Oktar'a armağan* (pp. 45-54). Ankara: Anı Yayıncılık.
- Carter, R. (2004). *Language and creativity: The art of common talk*. London/New York: Routledge.

- Celce-Murcia, M., & Larsen-Freeman, D. (1999). *The grammar book: An ESL/EFL teacher's course* (2nd ed.). Boston, MA: Heinle & Heinle.
- Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton.
- Cieřlicka, A. B. (2015). Idiom acquisition and processing by second/ foreign language learners. In R. R. Heredia & A. B. Cieřlicka (Eds.), *Bilingual figurative language processing* (pp. 208-244). New York: Cambridge University Press. doi:10.1017/CBO9781139342100.012
- Colston, H. L. (2015). *Using figurative language*. New York: Cambridge University Press.
- Dalak, H. D. E. (2017). *Yabancı dil olarak Türkçe öğretiminde iletişimsel yaklaşımın deyim öğretimindeki başarıya etkisi* (Unpublished master's thesis). Hacettepe University, Ankara.
- Damar, M. (2007). *İsviçre'de yaşayan altı yaş Türk çocuklarının dil kazanımına yönelik geliştirilen Türkçe dil etkinlikleri gözlem formu geçerlik güvenirlilik çalışması* (Unpublished doctoral dissertation). Gazi University, Ankara
- Deamer, F., Pouscoulous, N., & Breheny, R. (2010). A contrastive look at the processing of metaphor and hyperbole. *UCL Working Papers in Linguistics*, 22, 1-16.
- Demir, K. N. (2006). Kültürel değişimlerin reklamlarda kadın ve erkek rol-modellerine yansımaları. *Fırat University Journal of Social Science*, 16(1), 285-304.
- Dobrovolskij D., & Piirani E., (2005). *Figurative language: Cross-cultural and cross linguistics perspectives*. Amsterdam: Elsevier.
- Erdoğan, Y., Bekir, A., & Aras, A. (2005). Alt sosyoekonomik bölgelerde ana sınıfına devam eden 5-6 yaş grubundaki çocukların dil gelişim düzeylerine bazı faktörlerin etkisinin incelenmesi. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14(1), 231-246.
- Flores D'arçais, G. B. (1993). The comprehension and semantic interpretation of idioms. In C. Cacciari & P. Tabossi (Eds.), *Idioms: Processing, structure and interpretation* (pp. 79- 98). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gibbs, R. W. (1980). Spilling the beans on understanding and memory for idioms in context. *Memory and Cognition*, 8(2), 149-156. doi:10.3758/BF03213418
- Gibbs, R. W. (1991). Semantic analyzability in children's understanding of idioms. *Journal of Speech and Hearing Research*, 34(3), 613-620. doi:10.1044/jshr.3403.613
- Gibbs, R. W. (1994). *The poetics of mind: Figurative thought, language and understanding*. Cambridge: Cambridge University.
- Gibbs, R. W., Jr., & Beitel, D. (1995). What proverb understanding reveals about how people think. *Psychological Bulletin*, 118(1), 133-154. doi:10.1037/0033-2909.118.1.133
- Gibbs, R. W. Jr., & Colston, H. L. (2012). *Interpreting figurative meaning*. Cambridge: Cambridge University Press.
- Giora, R. (2003). *On our mind: Salience, context, and figurative language*. New York: Oxford University.
- Glucksberg, S. (1993). Idiom Meanings and Allusional Content. C. Cacciari ve P. Tabossi (Ed.). *Idioms: Processing, Structure, And Interpretation* (p. 3-26). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Glucksberg, S. (2001). *Understanding figurative language*. New York: Oxford University.
- Göçer, A. (2012). İlköğretim sekizinci sınıf öğrencilerinin deyimleri kullanma yeterlikleri üzerine bir inceleme. *Karadeniz Uluslararası Bilimsel Dergi*, 4(13), 96-109.
- Ionescu, T. ve Ilie, A. (2018). Language learning in preschool children: An embodied learning account. *Early Child Development and Care*, 188(1), 4-15. doi:10.1080/03004430.2016.1189419
- İpek, N. (2006). *İlköğretim çağı çocuklarında kelime dağarcığı gelişimi* (Unpublished master's thesis). Uludağ University, Bursa.
- Jackendoff, R. (1983). *Semantics and cognition*. Cambridge: MIT.
- Jaeger, L. (1999). *The nature of idioms: A systematic approach*. New York: Peter Lang.

- Jones, J. L., & Kaschak, M. P. (2009). Do idiomatic constructions always aid language learning?. *Language Learning and Development*, 5(2), 69-93. doi:10.1080/15475440802637100.
- Kamanga, M., & Banda, F. (2017) The role of linguistic context in children's interpretation and acquisition of Cicewa idiomatic expressions: A systemic functional linguistics approach. *Southern African Linguistics and Applied Language Studies*, 35(2), 135-154. doi:10.2989/16073614.2017.1338141
- Kara, A. (2015). *Early acquisition of figurative competence: Comprehension of idiomatic expressions in Turkish between seven and eleven years of age* (Unpublished doctoral dissertation). Hacettepe University, Ankara.
- Karabağ, İ., & Coşan, L. (2000). Türkçedeki gönül, kalp ve yürek kelimeleriyle ilgili atasözleri ve deyimler ve bunların almancadaki karşılıkları. *Ankara Üniversitesi Dil Dergisi*, 96, 5-29.
- Karasar, N. (2000). *Bilimsel araştırma yöntemi*. Ankara: Nobel Yayın Dağıtım.
- Kenzhalin, K. (2017). Türk dünyasında deyim bilimi çalışmaları. *Türk Dünyası, Dil ve Edebiyat Dergisi*, 43, 107-124. doi:10.24155/tdk.2017.7
- Kovács, G. (2016). About the definition, classification and translation strategies of idioms. *Acta Universitatis Sapientiae, Philologica*, 8(3), 85-101. doi:10.1515/ausp-2016-0033
- Kövecses, Z., & Szabó, P. (1996). Idioms: A view from cognitive semantics. *Applied Linguistics*, 17(3), 326-355. doi:10.1093/applin/17.3.326
- Kubiszyn, T., & Gary, B. (2013). *Educational testing and measurement: Classroom application and practice*. John Wiley and Sons, Inc.
- Langlotz, A. (2006). *Idiomatic creativity: A cognitive-linguistic model of idiom representation and idiom-variation in English* (M. Dascal, R. W. Gibbs, & J. Nuyts, Eds.). Amsterdam/Philadelphia: John Benjamins.
- Levorato, M. C. (1993). *The development of figurative competence. Idioms: Processing, structure and interpretation*. Hillsdale, NJ: Lawrence Erlbaum.
- Levorato, M. C., & Cacciari, C. (1992). Children's comprehension and production of idioms: The role of context and familiarity. *Journal of Child Language*, 19(2), 415-433. doi:10.1017/S0305000900011478
- Levorato, M. C., & Cacciari, C. (1995). The effect of different tasks on the comprehension and production of idioms in children. *Journal of Experimental Child Psychology*, 60(2), 261-283. doi:10.1006/jecp.1995.1041
- Levorato, M. C., & Cacciari, C. (1999). Idiom comprehension in children: Are the effects of semantic analysability and context separable?. *European Journal of Cognitive Psychology*, 11(1), 51-66. doi:10.1080/713752299
- Levorato, M. C., Nesi, B., & Cacciari, C. (2004). Reading comprehension and understanding idiomatic expressions: A developmental study. *Brain and Language*, 91(3), 303-314. doi:10.1016/j.bandl.2004.04.002
- Libben, M. R., & Titone, D. A. (2008). The multidetermined nature of idiom processing. *Memory & Cognition*, 36(6), 1103-1121. doi:10.3758/MC.36.6.1103
- Lust, B. C. (2006). *Child language: Acquisition and growth*. New York: Cambridge University Press.
- Lutzer, V. D. (1991). Gender differences in preschooler's ability to interpret common metaphors. *Journal of Creative Behavior*, 25(1), 69-74. doi:10.1002/j.2162-6057.1991.tb01355.x
- Moreno, V. (2007). *Creativity and convention. The pragmatics of everyday figurative language*. Amsterdam: John Benjamin Publishing Company.
- Nikoalenko, N. (2004). Metaphorical and associative thinking in healthy children and in children with Asperger's syndrome at different ages. *Human Physiology*, 30(5), 532-536. doi:10.1023/B:HUMP.0000042608.36581.3b

- Nippold, M. A. (2006). Language development in school-age children, adolescents, and adults. In K. Brown (Ed.), *Encyclopedia of language and linguistics* (2nd ed., pp. 368-372). Oxford: Elsevier Publishing. doi:10.1016/b0-08-044854-2/00852-x
- Nippold, M. A. (2007). *Later language development: School-age children, adolescents and young adults* (3rd ed.). Austin, TX: PRO-ED.
- Nippold, M. A., & Duthie, J. K. (2003). Mental imagery and idiom comprehension: A comparison of school-age children and adults. *Journal of Speech, Language, and Hearing Research*, 46(4), 788-799. doi:10.1044/1092-4388(2003/062)
- Nippold, M. A., & Martin, S. T. (1989). Idiom interpretation in isolation versus context: A developmental study with adolescents. *Journal of Speech and Hearing Research*, 32(1), 59-66. doi:10.1044/jshr.3201.59
- Nippold, M. A., Moran, C., & Schwarz, I. E. (2001). Idiom understanding in preadolescents: Synergy in action. *American Journal of Speech-Language Pathology*, 10(2), 169-179. doi:10.1044/1058-0360(2001/016)
- Nippold, M. A., & Rudzinski, M. (1993). Familiarity and transparency in idiom explanation: A developmental study of children and adolescents. *Journal of Speech and Hearing Research*, 36(4), 728-737. doi:10.1044/jshr.3604.728
- Nippold, M. A., & Taylor, C. L. (1995). Idiom understanding in youth: Further examination of familiarity and transparency. *Journal of Speech and Hearing Research*, 38(2), 426-433. doi:10.1044/jshr.3802.426
- Nippold, M., & Taylor, C. (2002). Judgments of idiom familiarity and transparency: A comparison of children and adolescents. *Journal of Speech, Language, and Hearing Research*, 45(2), 384-391. doi:10.1044/1092-4388(2002/030)
- Norbury, C. F. (2004). Factors supporting idiom comprehension in children with communication disorders. *Journal of Speech, Language, and Hearing Research*, 47(5), 1179-1193. doi:10.1044/1092-4388(2004/08)
- Özdamar, K. (1999). *Paket programlar ile istatistiksel veri analizi 1*. Eskişehir: Kaan Kitabevi.
- Peçenek, D., & Ay, S. (2010). Deyim tanımlama sürecinde bilişsel biçim farklılıklarının ve bağlam bilgisinin rolü. In Ç. Sağın-Şimşek & Ç. Hatipoğlu (Eds.), 24. *Ulusal Dilbilim Kurultayı bildirileri* (pp. 244-256), Ankara: Middle East Technical University.
- Pektaş, D. (2014). *Okul öncesi dönem resimli çocuk kitaplarındaki dil sanatlarının incelenmesi* (Unpublished master's thesis). Hacettepe University, Ankara.
- Qualls, C. D., & Harris, J. L. (1999). Effects of familiarity on idiom comprehension: African American and European American fifth graders. *Language, Speech, and Hearing Services in Schools*, 30(2), 141-151. doi:10.1044/0161-1461.3002.141
- Schraw, G., Trathen, W., Reynolds, R. E., & Lapan, R. T. (1988). Preferences for idioms: Restrictions due to lexicalization and familiarity. *Journal of Psycholinguistics*, 17(5), 413-424.
- Seçilmiş, S. (1996). *Anaokuluna giden ve gitmeyen erken çocukluk dönemindeki çocukların dil gelişimi ile ilgili becerilerinin incelenmesi* (Unpublished master's thesis). Hacettepe University, Ankara.
- Swinney, D. A., & Cutler, A. (1979). The access and processing of idiomatic expression. *J Verb Learn Verb Behav*, 18(5), 523-534. doi:10.1016/S0022-5371(79)90284-6
- Şalvarlı, B. (2010). *Türkçe deyim öğretimi için metin hazırlama* (Unpublished master's thesis). Çanakkale Onsekiz Mart University, Çanakkale.
- Taber, K. S. (2018). The use of Cronbach's Alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296. doi:10.1007/s11165-016-9602-2
- Taner, M. (2003). *Okul öncesi eğitimi alan ve almayan farklı sosyo-ekonomik düzeylerdeki ilköğretim birinci sınıf öğrencilerinin dil gelişimlerinin karşılaştırılması* (Unpublished master's thesis). Uludağ University, Bursa.

- Taner, M., & Başıal, H. A. (2005). Farklı sosyoekonomik düzeylerde okulöncesi eğitimi alan ve almayan ilköğretim birinci sınıf öğrencilerinin dil gelişimlerinin cinsiyete göre karşılaştırılması. *Eğitim Fakültesi Dergisi*, XVIII(2), 395-420.
- Tavakoli, H. (2013). *A dictionary of language acquisition: A comprehensive overview of key terms in first and second language acquisition*. Tehran: Rahnama. Retrieved from <https://www.researchgate.net/publication/329686850>
- Titone, D. A., & Connine, C. M. (1999). On the compositional and noncompositional nature of idiomatic expressions. *Journal of Pragmatics*, 31(12), 1655-1674. doi:10.1016/S0378-2166(99)00008-9
- Türkben, T. (2019). Türkçe ders ve öğrenci çalışma kitaplarının deyim varlığı ve öğretimi açısından incelenmesi. *Bayterek Uluslararası Akademik Araştırmalar Dergisi*, 2(2), 63-90.
- Uysal, H. (2015). *Çocuk dilinde deyimlerin anlamlandırılması ve öntürlük etkisi* (Unpublished master's thesis). Ankara University, Ankara.
- Uysal, H., & Gökmen, S. (2016). Tek dilli çocuklarda deyimlerin anlamlandırılması ve öntürlük etkisi. *DTCF Dergisi*, 56(1), 287-323. doi:10.1501/Dtcfder_0000001474
- Vulchanova, M., Vulchanov, V., & Stankova, M. (2011). Idiom comprehension in the first language: A developmental study. *Vigo International Journal of Applied Linguistics*, 8, 207-234.
- Wiejak, K. (2014). Recognition of figurative language and reading ability in Polish school children. *L1-Educational Studies in Language and Literature*, 14(1), 1-14. doi:10.17239/L1ESLL-2014.01.12
- Yağiz, O., & Izadpanah, S. (2013). Language, culture, idioms, and their relationship with the foreign language. *Journal of Language Teaching and Research*, 4(5), 953-957. doi:10.4304/jltr.4.5.953-957
- Yeşilyurt, S., & Çapraz, C. (2018). Ölçek geliştirme çalışmalarında kullanılan kapsam geçerliği için bir yol haritası. *Erzincan Üniversitesi Eğitim Fakültesi Dergisi*, 20(1), 251-264. doi:10.17556/erziefd.297741
- Yıldırım Doğru, S., Alabay, E., & Kayılı, G. (2010). Normal gelişim gösteren ve öğrenme güçlüğü olan çocukların sözcük dağarcığı ile dili anlama düzeylerinin belirlenmesi. *İlköğretim Online*, 9(3), 828-840.
- Yurdugül, H. (2005). Ölçek geliştirme çalışmalarında kapsam geçerliği için kapsam geçerlik indekslerinin kullanılması. XIV. Ulusal Eğitim Bilimleri Kongresi'nde sunulan bildiri, Denizli. Retrieved from <https://yunus.hacettepe.edu.tr/~yurdugul/3/indir/PamukkaleBildiri.pdf>