Measuring Correlation between Word Class Frequency and Simulated Early Lexical Development Based on Data Analysis from Preschool Short Stories

Ahmed Alduais [1], Seda Gökmen [2]

Abstract

This paper aimed at examining the claim that short-stories prepared for preschool children contain a theory-based system which could be reflected on early lexical development. Besides, we investigated the claim that word-class frequency and/or occurrence could be used as a predictor for a child's early lexical development based on views from *behaviourism*, *the frequency hypothesis* and *ZIPF's law*. The correlational approach was followed to measure the two identified variables, namely, simulated early lexical development (represented by preschool materials) as the dependent variable and word-class frequency and/or occurrence (with and without repetition/ frequency) as the independent variable. A series of short-story consisting of ten short-stories was analysed in terms of word-class into eight word-classes and then into different semantic categories. The use of Minitab (17th) version yet running both descriptive and inferential statistical tools indicated that the calculated percentage of the content words were clearly higher than those of the function words (43%, 5%, 6%, 26% and 6%) as compared to only (5%, 8% and 1%) respectively. Moreover, Pearson's product-moment correlation indicated a strong yet positive correlation between word-class frequency and/or occurrence and simulated early lexical development, r=0.965, p < .0005. Similarly, independent t-test result further indicated that word-class with repetition has statistically significantly higher early lexical development rate (378 ± 438) compared to word-class without repetition (99 ± 111), t(7) = 1.72, p = 0.130. Based on our presented results, it could be concluded that short-stories prepared for preschool children contained a theory-based system which could be reflected on early lexical development-supported by the fact that there was a clear word-class classification and systematised system for the distribution of word-class in terms of content words (over majority) and function words (minor representation) yet semantic categorisation. Also, word-class frequency and/or occurrence could be used as a predictor simulating child's early lexical development-supported with the reached strong positive correlation between the two correlated variables.

[1] Beijing Normal University, Faculty of Edu., Institute of International & Comparative Education, China, ibnalduais@gmail.com
[2] Ankara University, Faculty of Languages History and Geography, Dept. of Linguistics, Turkey, seda_gokmen@yahoo.com

Introduction

In learning the lexicon of a language, children must learn about the forms of words (i.e. their pronunciation and their internal structure) and the syntax of words (i.e. whether they are nouns or verbs…' (Clark, 1995, p. 16). However, children go through different stages developing their lexicon. Yet, these stages are accompanied and/or supported by both internal and external mechanisms and factors leading towards proper lexical development (see O'Grady, 2005; Juffs, 1996; Gleitman & Landau, 1994; Ingram, 1989). A wide range of data in language acquisition states that children tend to acquire more objects (nouns) than actions (verbs) in their early lexical development (e. g. Clark, 1995, 2009; Lust, 2006; Guijarro-Fuentes, Larrañaga, & Clibbens, 2008; Richards, Daller, Malvern, Meara, & Milton, 2009). To this end, we also know that 'language acquisition does not take place in a vacuum… [children] acquire a sign system which bears important relationships to both cognitive and special aspects of their life' (Hickmann, 1986, p. 9). Actually, several studies have been conducted accounting for children's vocabulary spurt, yet analysing this spurt in terms of word-class, frequency, occurrence, etc. (see Rowland, 2014; Clark, 1995, 2009; Golinkoff et al., 2000; Leow & Lardiere, 2009). A language user associates forms with semantic features... [that is to say] children are not born with such associations' (Hogeweg, 2009, p. 4). Children, to a great extent, depend on context to reach the required meaning while building their early lexical development (ibid). With reference to frequency hypothesis, '... order of development in L2 acquisition is determined by this frequency with which different linguistic items occur in the INPUT' (Tavakoli, 2013, p. 145). Following also the ZIPF's law for word frequency (Zipf, 1949), one could assume that word frequency and occurrence might be correlated to early lexical development. That is to say, they might play a vital role in the increase of child lexical development. Regardless of the type of this role, be it incidental vocabulary acquisition or directed vocabulary acquisition (through instruction), frequency and occurrence might have a positive role in child lexical development. As a matter of fact, several studies have been conducted investigating early lexical development in relation to frequency, occurrence and many other factors as discussed below. The studies are reviewed chronologically (recent-old).

Previous Research

To start with, Pinto, Tarchi, and Bigozzi (2016), they investigated development in narrative competences from oral to written stories in five seven year old children. One hundred twenty two children—Italian native speakers without any abnormal psychiatry record took part in the study. The study was two folded where in children's oral narrative competence were assessed at the end of the last year of kindergarten and written narrative competence—at the end of the first grade. It was concluded that there is 'a predictive relationship between narrative competence in oral productions in kindergarten and narrative competence in written productions in the first grade' (p. 8). That is to say, early story reading followed by story-telling affected positively the written narrative competence in the later stages.

Another study by Wu, Vissiennon, Friederici, and Brauer (2016) examined pre-schoolers' brain rely on semantic cues prior to the mastery of syntax during sentence comprehension. First six preschool children without any psychiatry record participated in the study in addition to a group of 16 adults for comparative purposes. The researchers used fMRI to measure sentence processing responses. The study conclusion presented neural and behavioural evidence of the view that children unlike adults who rely more on syntactic cues for sentence comprehension, they— children rely more on semantic cues.

Moreover, Choi (2016) investigated effects of L1 and L2 glosses on incidental vocabulary acquisition (IVA) and lexical representations. One hundred eighty native speakers of Korean (10th grade) took part in the study. They were divided into three groups: reading an English story L1 (Korean) glosses, reading the English story with L2 (English) glosses and reading the English story without glosses. There were also two sets of words: two times frequency 2F and four times frequency 4F. The retention of both sets was compared. Results indicated the impact of L1 and L2 glosses on IVA with minor difference in favour of L2 glosses in the case of long-term retention, but not in the case of short-term retention.

Furthermore, Baker, Vernon-Feagans, and Family Life Project Investigators (FLP) (2015) assessed fathers' language input during shared book activities in terms of providing links to children's kindergarten achievement. A number of families were selected to take part in the study from among the FLP study. The independent variable was children at the age of 60 months old as compared to the dependent variable, kindergarten outcomes. The study was concluded with three main findings. First 'fathers' mean of length of utterance rather than number of different words was related to children's vocabulary skills', (p. 58) supported by findings from earlier theories like ecological theory stating that early learning is 'dependent' (ibid) and based on external factors including parent's instruction and other social factors. Second, longer utterances provided by fathers might have resulted into stronger reasoning skills during the shared picture book task. Third, education and family economic status seem to be clearly affecting children's kindergarten achievement (ibid).

Additionally, Thompson, Fletcher-Flinn, Wilson, McKay, and Margrain (2015) studied learning with sub-lexical information from emerging reading vocabulary in exceptionally early and normal reading development. Two samples of cases (exceptional readers) participated in this study: 3-5 years with 7 year word reading and 5.0-5.2 with 9 year word reading. In both samples, there were normal groups (non-exceptional reader or normal readers) years old and 8-9 years old. Both were considered for comparison purposes in terms of learning sub-lexical information from emerging reading vocabulary. Six experiments were conducted. Three cognitive theories were tested against early learning of exceptional readers: Ehri, Share and Byrne theories wherein it was shown that all of them lack taking into consideration 'readers' lexical-semantic responses' (p. 183). On the other hand, Knowledge Sources theory seems to have a better application to 'exceptionally early readers' (ibid).

In addition to what have been mentioned above, Mousavi and Gholami (2014) examined effects of watching flash stories with or without subtitles and reading subtitles on incidental vocabulary acquisition (IVA) of elementary learners. An experimental approach was used where in two groups of participants acted as experimental groups and one group as the control group (total 28 Iranian participants). Results indicated clearly that in both cases be it watching flash stories with or without subtitles—approved positive impact on IVA as compared to normal or context reading which has less impact on IVA.

Besides, Marchetto and Bonatti (2013) examined word and possible words in early language acquisition. The researchers built their research on the view that child language acquisition is based on both finding words and their systematic structure in relation to other words. Seven experiments were conducted where in 16, 18-month old infants took part in the 1, 2, 3 and 5 experiments, compared to the 16, 12-month old infants in 4, 6 and 7 experiments. All infants were from Italian-speaking families with no psychiatry record. In all experiments, children were exposed to artificial language with the assumption that 'infants' sensitivity to possible words appears to be more primitive and fundamental than their ability to find actual words', (p. 130). It was concluded that both 12 and 18-month infants can 'extract possible words when the familiarisation stream contains marks of segmentation' (ibid). On the contrary, none can do so 'when the stream is continuous' though the former group can do so when 'computing statistical relationships among syllables' (ibid).

One more study is that by Foster (2013) who conducted a longitudinal study on the relationship between the lexical acquisition of children, socio-economic status and classroom environment. Preschool was the targeted range age of this study. Results indicated that family education level and income might predict lexical level of children, but not their level changes. Moreover, classroom environment might also predict early lexical development, but not so across time.

Trautman (2009) also investigated early lexical acquisition in terms of possible benefits of child-centred and multi-modal input in the absence of coordinated joint attention. 9-12 months old infants participated in the study. They were video-taped during natural interactions with their caregivers. The researcher used child-centred referring to caregiver communication. Results approved the view that the caregivers' social engagements and interaction with infants enhance lexical acquisition and word learning.

Berry (2007) too, yet following a longitudinal approach, accounted for the influence of specific aspects (e.g. verbal memory, vocabulary and complex language) as bases for predicting preschool children's language on growth in reading comprehension across elementary school. Three hundred sixty four subjects from low-income families were the subjects of the study. Results indicated that vocabulary might predict reading comprehension level as compared to complex language which might not be so. Semantic and syntactic knowledge yet the interaction between these two components didn't support the view that they can be used as predictors and/or enhancers for preschool children's language development, namely lexical development.

At the same sense, Gökmen (2005) accounted for the conceptual distribution and/or conceptualisation of word-class with more focus on nouns' class of visual materials used in preschool education in Turkey. This point was approached with reference to Clark's (1995) categorisation of word class mainly nouns. The study was concluded with a number of inferences including: 1) some word class categories occurred significantly more than the others e.g. people, animals, food, drink, etc., and 2) there seems to be a system for lexical acquisition in the investigated materials.

More than that, Collins (2004) conducted an experimental study examining ESL pre-schoolers' English vocabulary acquisition and story comprehension from story book reading. Eighty native-speakers of Portuguese at the preschool age range took part in the study. They were tested for vocabulary knowledge in L1 (Portuguese) and L2 (English). Participants in the control group listened to 8 stories read three times with explanations including the targeted objectives of the study as compared to the control group participants who listened to the same stories read for three times without the explanations. Conclusions indicated that L1 vocabulary skills is not correlated to L2 vocabulary skills. Nevertheless, supporting explanations enhance lexical acquisition during story reading other than reading without supporting explanations.

Other studies include that of Gillette (2001) who examined acquisition of the lexicon in terms of limiting word to word pairing procedures. A set of 48 words divided into two sets was abstracted from video corpus based on four 18-24 months children and their mother's video-taped conversations, was used as data in this study. The experimental subjects included 84 undergraduates with English as L1. The purpose was to assess linguistic and non-linguistic cues in increase of early vocabulary acquisition. The study was based on the view that early vocabulary acquisition is majored by nouns other than verbs. Yet and according to the researcher, gathering between both linguistic (syntactic) and non-linguistic cues would increase the chances of early lexical acquisition.

Again, James (2001) conducted and experimental study investigating lexical access in preschool children. Two experiments were designed where in the first group included 34 children with the age range 3.5—performing lexical tasks in response to 'synthesized and natural speech by pointing to targeted word on a picture book template' (p. 4). The second group included 47 children with age range 2-5 performing 'a lexical decision task while listening to digitised speech using a mixed picture distractor displayed on a capacitive touch computer monitor' (p. 5). Results indicated that 'linguistic processing for synthesised speech was qualitatively different [from] natural speech' and '2-3 year old children displayed equal amounts of phonological and semantic interference' with an emerging 'gradation of change in activation interference with 'semantic interference dominating by 5 years old' children (p. 5).

Last but not the least, Jensen (1999) tested word-families and the mental lexicon for a morpho-semantic lexical network. Two groups of students, nursing vs. psychology students took part in the study. Both online and offline tasks were performed. Nursing students were taken as the experimental group considering the fact that they are more exposed to Latin terminology and words' roots than the psychology students. Results indicated that system organisation in mental lexicon seems to be similar between students with and without prior instruction as in the case of this study between nursing and psychology students.

With that in mind, we have not come across any studies approaching the correlation between word-class frequency/occurrence and simulated early lexical development using simulated data and with reference to views from *behaviourism*, *the frequency hypothesis* and *ZIPF's law* yet using a correlational research approach. A major importance of this study is that listed lexical items could be used to build a database for early lexical development based on the presented findings in this study. Another point is results and listed lexical items could be considered for teaching vocabulary be it in schools for native speakers of the Turkish Language or in the case of learning the Turkish Language as a second and/or foreign language.

The Present Study

The overall purpose of this study is to examine the correlation between word-class frequency/occurrence and simulated early lexical development using data abstracted from preschool short-stories. The guiding questions for our study are:

1. Do short-stories prepared for preschool children contain a theory-based system which could be reflected on early lexical development?

2. Can word-class frequency and/or occurrence be used as a predictor for a child's early lexical development?

Method

Participants

The targeted population are preschool children. However, our present study did not include any participants for two reasons: 1) the study was based on analysis of data abstracted from preschool short-stories, and 2) the objectives of the study did not require the inclusion of human participants in our study. By this mean, based on the results of the study, preschool children could function as participants for experimental studies build on the results of this study. Thus, the selected short-stories for the included data were randomly selected, that is, following *random sampling*.

Design

The study followed a correlational approach where it can be depicted in a notational form as it follows:

R X O+ r+

R X O- r-

where:

R= word class frequency/ occurrence (variable 1: independent)

O= preschool material (standing for simulated early lexical development (variable 2: dependent)

X= abstracted data from preschool short stories

O+= words with repetition

O-= words without repetition

r= correlation coefficient

r+= presence of correlation between the two variables

r-= absence of correlation between the two variables

Materials

A short-story series was used in this study. The abstracted and analysed data is based on the analysis of this series in terms of word-class. The series consists of 10 short stories in Turkish. The stories are prepared for preschool children. The table below shows the details of this series.

Table 1. Preschool Material Information

Name of series	Cin Ali'nin Hikâye Kitapları
Author	Rasim Kaygusuz
Drawings	Selçuk Seymen
Publisher	Cin Ali Yayınları, Ankara, Turkey
Publication date	September, 2013
Story name in English	**No. of pages**
Jin Ali's Horse	16
Jin Ali's Ball	16
Jin Ali's Teetotum	16
Jin Ali and the Lamb with Black Eyes	16
Jin Ali's Games	16
Jin Ali Starts School	17
Jin Ali at School	18
Jin Ali at Children's Garden	16
Jin Ali with the Elephant Barber	19
Jin Ali and the Short Trip	16

Procedure

Setting: During the period 25.10.2015 and 25.12.2015 this study was conducted in the Department of Linguistics, Faculty of Languages, History and Geography, Social Sciences Institute, Ankara University, Ankara, Turkey.

Data-collection: The data was collected on the basis of the lexical analysis of the ten short-stories. The whole texts were divided into eight word-classes: nouns, pronouns, adjectives, verbs, and adverbs representing content words, and prepositions, conjunctions and interjections representing function words.

Authenticity: Having completed the lexical analysis of the data into word-classes, the researcher shared the collected data with a Turkish native-speaker with BA in linguistics. She went through the tables to make sure that the classification was valid and reliable. Her provided comments indicated some concerns about some words specially adverbs and prepositions which were confused for acting as both. This confusion was later cleared with the point that the analysis was context-based where in some words can sometimes act as both prepositions and adverbs.

Assessing: Each word was classified into a certain word-class in terms of context and word position in the sentence. Morphological inflections such like those indicating tense, plural, genitives, etc. were dropped as they fall out of the scope of this study. Derivational inflections; however, were kept as their availability change the word-class which is within the scope of our study.

Preliminary analysis steps: It has been already mentioned that our selected series consists of 10 short-stories. Having this in mind, each short-story was first analysed separately into a table with eight columns consisting the eight word-classes with an accompanying column for word frequency. After that, repeated words were deleted and replaced by word frequency for each word. A word which occurred only one time in the whole book, the number (1) was used. Following these tables, a summary table was made to indicate the number of each word-class in the whole book. Other analysis details and procedures are mentioned below in the results' section.

Results

Minitab, 17th version, was used for the analysis of the collected data and abstracting statistical answers for the raised questions in this study. Generally both descriptive and inferential statistics were used. To remind ourselves of the raised questions in this study, they were:

1. Do short-stories prepared for preschool children contain a theory-based system which could be reflected on early lexical development?

2. Can word class frequency and/or occurrence be used as a predictor simulating child's early lexical development?

Table 2. Word-Class Distribution for Short-Story 1

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	121	19	15	67	16	8	22	2	270
Percentage	44.81	7.04	5.55	24.81	5.92	2.96	8.15	0.74	%100

The above table (2) presents the word-class frequency and percentages of the first short-story. It can be seen that the largest number of word-class is nouns with (121) with (44.81%) words including repeated words. On the other hand, the least frequent word-class is interjections (2) with only (0.74%). In comparison between content and function words, again nouns would be the most occurring class (121: 44.81%), compared to the adjectives as the least occurring word-class (15: 5.55%). For function words, conjunctions is the most occurring word-class with (22: 8.15%) as compared to interjections, the least occurring word-class (2: 0.74%).

Table 3. Word-Class Distribution for Short-Story 2

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	127	24	23	100	17	4	26	2	323
Percentage	39.32	7.43	7.12	30.96	5.26	1.24	8.05	0.62	%100

Table (3) shows the statistical results for the second short-story. In general, nouns is the most occurring word-class with (127: 39.32%) and interjections is the least occurring word-class (2: 0.62%). In terms of content and function words, while nouns is again the most occurring word-class with (127: 39.32%), adverbs in this time is the least occurring word-class with (17: 5.26%). As for function words, conjunctions is once again the most occurring word-class with (26: 8.05%), compared to interjections representing the least occurring word-class with (2: 0.62).

Table 4. Word-Class Distribution for Short-Story 3

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	117	11	16	97	23	21	34	1	320
Percentage	36.56	3.44	5.00	30.31	7.18	6.56	10.62	0.31	%100

Table (4) illustrates the statistical results for the third short-story. Whereas nouns' class is the most occurring word-class with (117: 36.56%), interjections is the least occurring word-class with only (1: 0.31%). In contrast yet in terms of content words, nouns is the number one occurring word-class (117: 36.56%) as compared to pronouns, this time, as the least occurring word-class with just (11: 3.44%). For function words, conjunctions is the number one occurring word class with (34: 10.62); compared to interjections, the least occurring word-class with only (1: 0.31%).

Table 5. Word-Class Distribution for Short-Story 4

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	136	5	16	86	22	22	29	6	322
Percentage	42.24	1.55	4.97	26.71	6.83	6.83	9.01	1.86	%100

Table (5) presents statistically the results of the fourth short-story. It could be clearly seen that nouns is the major word-class with (136: 42.24%) as compared to the minor word-class, interjections with only (6: 1.86%). In terms of content words, while nouns is the number one occurring word-class with (136: 42.24%), pronouns is the last number occurring word-class with not more than (5: 1.55%). For function words, whereas conjunctions is the most occurring word-class with (29: 9.01%), interjections is the least occurring word class with just (6: 1.86%).

Table 6. Word-Class Distribution for Short-Story 5

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	143	12	16	92	27	21	32	7	350
Percentage	40.86	3.43	4.57	26.28	7.71	6.00	9.14	2.00	%100

Table (6) presents statistics for the fifth short-story. Nouns' class is the dominating word-class with (143: 40.86%); compared to the minor dominating word-class, interjections, with just (7: 2.00%). In the case of content words, the least occurring word-class is pronouns with only (12: 3.43%) as compared to the major occurring word-class, nouns, with more than 140. Conjunctions' class again stands as the most occurring word class among function words with (32: 9.14); compared to the least occurring word-class— interjections with just (7: 2.00%).

Table 7. Word-Class Distribution for Short-Story 6

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	164	21	26	108	32	20	31	6	408
Percentage	40.20	5.15	6.37	26.47	7.84	4.90	7.60	1.47	%100

Table (7) shows the statistical results for the sixth short-story. Nouns' class represents the highest frequent word-class with (164: 40.20%), in comparison to interjections' class representing the lowest frequent word-class with just (6: 1.47%). While nouns' class is the most occurring among content words and conjunctions' class among the function words with (164: 40.20%, 31: 760) respectively, pronouns' class is the least one among content words and interjections' class is the least one among the function words with (21: 5.15%, 6: 1.47%) respectively.

Table 8. Word-Class Distribution for Short-Story 7

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	217	51	20	110	31	12	39	2	482
Percentage	45.02	10.58	4.15	22.82	6.43	2.49	8.09	0.41	%100

Table (8) presents statistical data for the seventh short-story. While nouns is the most frequent word-class, interjections is the least frequent word-class with (217: 45.02%, 2: 0.41) respectively. Comparatively, nouns and conjunctions are the highest frequent word-classes among both content and function words; compared to adjectives and interjections as the lowest frequent word-classes with just (20: 4.15%, 2: 0.41%) respectively.

Table 9. Word-Class Distribution for Short-Story 8

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	196	14	22	89	21	24	25	3	394
Percentage	49.75	3.55	5.58	22.59	5.33	6.09	6.34	0.76	%100

Table (9) shows the statistical results for the eighth short-story. The number one occurring word-class is nouns with (196: 49.75%). On the other hand, the least occurring word-class is interjections with only (3: 0.76%). Similarly, nouns is the most frequent word-class among content words and conjunctions is so among function words with (196: 49.75, 25: 6.34) respectively. Nevertheless, pronouns is the least frequent word-class among content words and interjections is so, too, among function words with (14: 3.55%, 3: .76%) respectively.

Table 10. Word-Class Distribution for Short-Story 9

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	197	28	53	122	32	31	31	9	503
Percentage	39.16	5.57	10.54	24.25	6.36	6.16	6.16	1,79	%100

Table (10) presents statistical data for the ninth short-story. The over majority of the words in this story are nouns with (197: 39.16%). On the other hand, the minor words in this story are interjections with no more than (9: 1.79%). The major word-class among content words is nouns and major word-classes among function words are both prepositions and conjunctions with (197: 39.16%, 31: 6.16, 31: 6.16) respectively. In contrast, the minor word-class among the content words is pronouns as compared to interjections, the minor word-class among the function words in this story, with (28: 5.57%, 9: 1.179%).

Table 11. Word-Class Distribution for Short-Story 10

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
Frequency	215	10	32	101	17	16	22	0	413
Percentage	52.05	2.42	7.75	24.45	4.12	3.87	5.33	0.00	%100

Table (11) shows the frequency and occurrence of word-classes in the tenth short-story. It can be again seen that nouns' class is the most frequent as compared to the least frequent word-class, interjections (215: 52.05%, 0: 0.00%) respectively. In comparison, the most occurring word-class among content words is nouns' class and the most occurring word-class among the function words is conjunctions with (215: 52.05%, 22: 5.33) respectively. On the other hand, the least occurring word-class among the content words is pronouns and the least occurring one among the function words is interjections with just (10: 2.42%, 0: 0.00%). Thus, this is the only story where zero occurrence of word-class has occurred.

To this end, we have analysed each short-story separately. It is very clear the nouns' class is the dominating word-class as compared to interjections, the least dominating word-class. In the next part, we will present analysis for the total data, in terms of word-class and also content and function words.

Table 12. Word-Class Distribution For Preschool Series

Word Class	Noun	Pronoun	Adjective	Verb	Adverb	Preposition	Conjunction	Interjection	Total
*Repetition-	330	32	77	200	90	22	27	16	794
*Repetition+	1303	163	162	772	148	157	264	22	2991
Total	**1633**	**195**	**239**	**972**	**238**	**179**	**291**	**38**	**3785**
%	41.56	4.03	9.70	25.19	11.33	2.77	3.40	2.01	%100
%	43.56	5.45	5.42	25.81	4.95	5.25	8.83	0.73	%100
%	**43.14**	**5.15**	**6.31**	**25.68**	**6.29**	**4.73**	**7.69**	**1.00**	**%100**

*Repetition frequency number of each word class excluding (-) and then including (+) the number of any repeated lexical item.

The above table (12) illustrates the total number of word-classes individually and in total in addition to the percentages of each (the first three rows for frequencies and the last three rows for

percentages respectively (1 to 4, 2 to 5 and 3 to 6). The total number of all words is (3785). When considering the occurrence and frequency issue, the total number of words decreases to (2991) and (794) for words which have only occurred once. By this means, we could early expect a significant different between word-class occurrence and early lexical development.
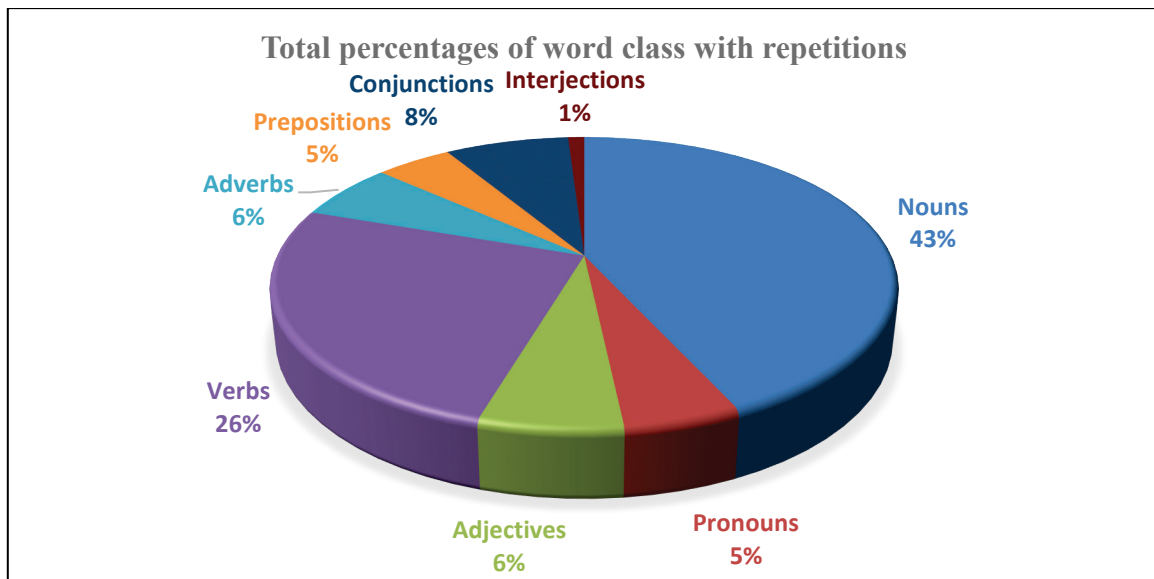

Figure 1. Percentages of Word-Classes

Figure (1) illustrates the percentages of word-class with repetitions. We can notice that nouns' class has the highest percentage representing (43%) of the total occurring words. On the other hand, interjections has the lowest percentage representing only (1%) of the whole occurring words. The percentage of nouns and verbs is significantly higher than that of adjectives, adverbs and pronouns in terms of content words, with (43% and 26%) as compared to just (6%, 6%, 5%) respectively. Moreover, the percentage of conjunctions is also higher than that of prepositions and interjections in terms of function words, though insignificant, (8%, 5%, 1%) respectively. By this means, it seems that objects (nouns) and actions (verbs) occupy most of the early lexical development be it in real language acquisition data, or in manipulated/simulated language acquisition data (as in our case -preschool short-stories based data).
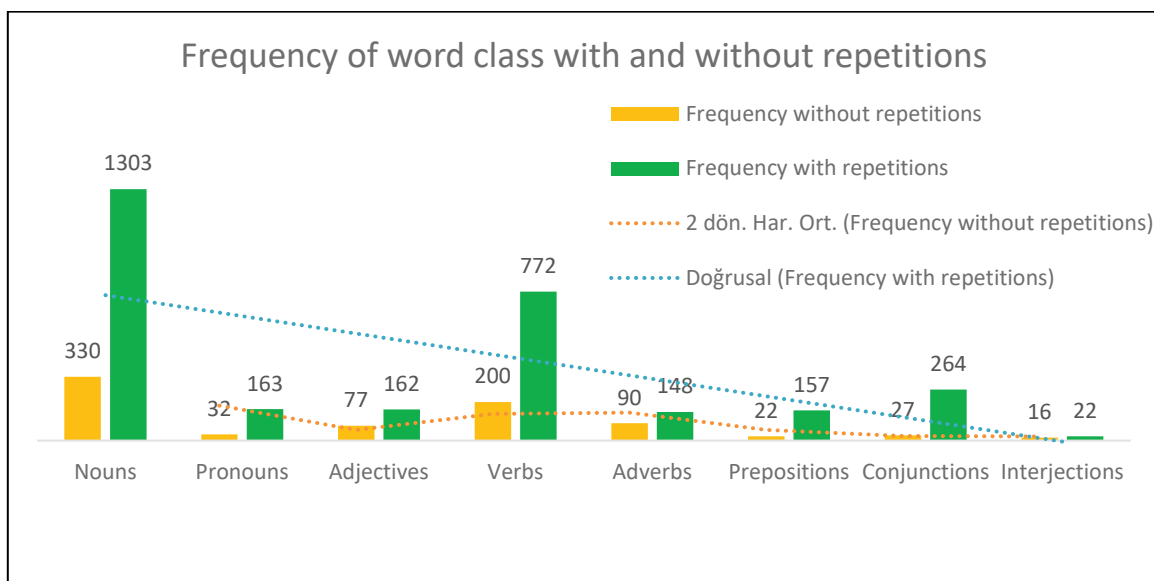

Figure 2. Frequency of Word-Classes Compared

Figure (2) presents comparative data for word-class occurrence in the preschool short-story series with and without repetition. In general, we can see sharp and moderate increases and decreases in most of the word-classes between the two categories. For instance, nouns' class goes sharply down to only (330) after it was over (1300). Similarly, verbs' class noticeably decreases to just (200) after it was over (770). However, the only word-class where insignificant change occurred is that for interjections where in the occurrence difference does not even exceed 6 times frequency. This significant difference between word-classes occurrence could primarily lead us to the positive expectations in regard to our second raised question in this study. *We expected that even preschool materials are presented in a systematic way correlating to child lexical development.*

Having presented word-classes, now the following part will be an account for the lexical categorisation of our data supported with the below calculated statistical results. It should be noted; however, our lexical analysis is based on previous studies, mainly those including (Clark, 1995, 2009; Golinkoff et al., 2000; Gökmen, 2005).
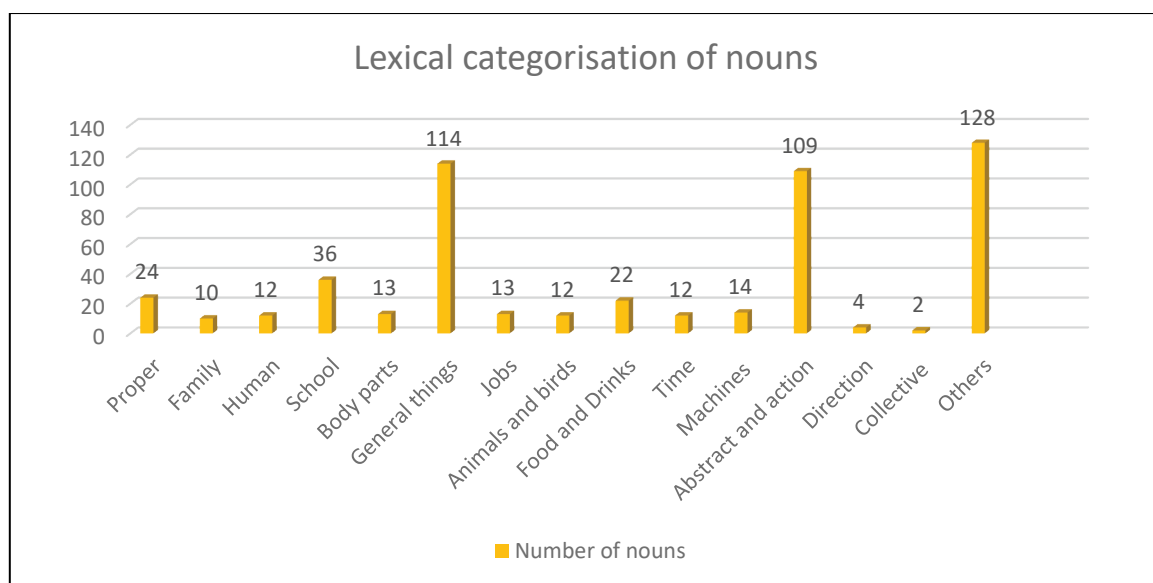

Figure 3. Lexical Categorisation of Nouns

Figure (3) illustrates the categorisation of nouns' class which we divided into 15 categories. As it could be seen that the over abstracted lexical categories are common and frequent ones including: proper, family, human, school, body parts, jobs, animals and birds, food and drinks nouns, etc. Examples for these categories include: Ali, mother, sister, classroom, hand, bottle teacher, horse, water, hour, car, excitement, left, group and box respectively. Since lexical categorisation is not a major objective in our study, so much more attention was given to frequency and occurrence other than the quality of categorisation itself. By this mean, we can conclude here that the data included different categories of nouns with over majority for basic objects needed for early lexical development for children in the preschool period.
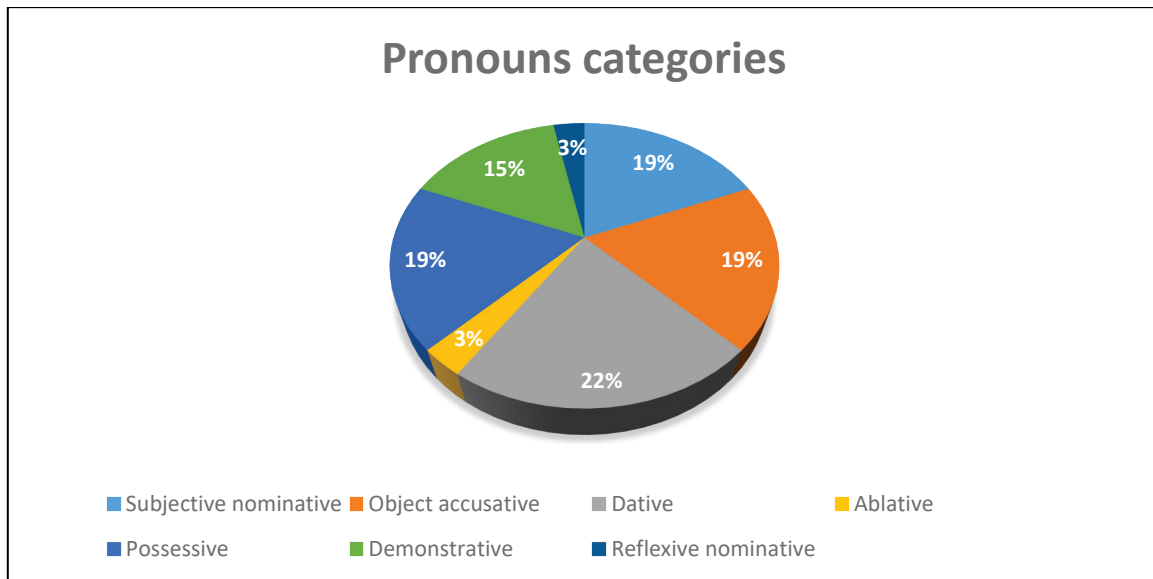
Figure 4. Lexical Categorisation of Pronouns

Figure (4) shows the categorisation of pronouns' class where in the data included 7 categories. The over majority occurring category is dative pronouns with the percentage of (22%). All, subjective nominative pronouns, possessive pronouns and object pronouns have the same percentage (19%). On the other hand, the lowest percentage is for both ablative pronouns and reflexive ones, with just (3%). Examples for these categories include: he, him, to him, from/of/by him, his, this and himself respectively.
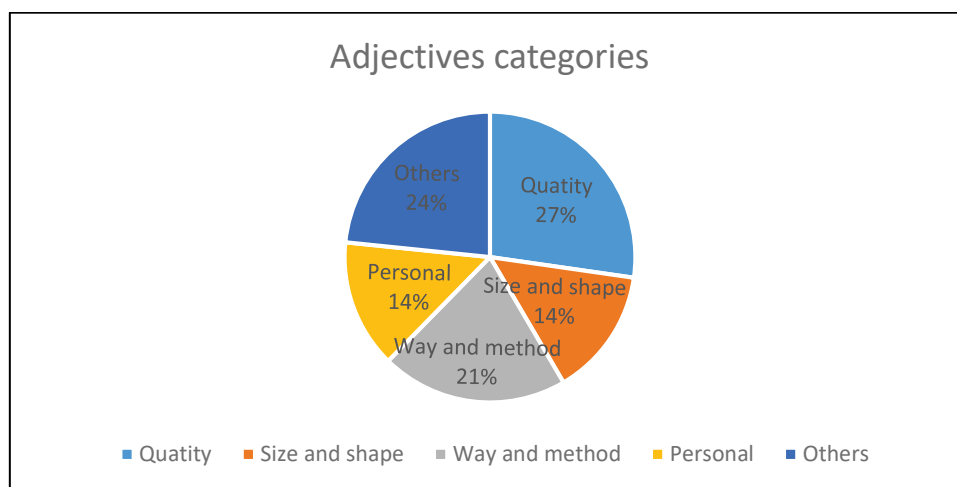

Figure 5. Lexical Categorisation of Adjectives

Figure (5) presents the categorisation of adjectives' class. We categorised the adjectives into 5 categories. The differences among the five categories are not significant. Examples of these categories include: one, small, fast, beautiful and various respectively. Thus, the included variability on this data includes the basic adjectives supporting early lexical development during preschool education.
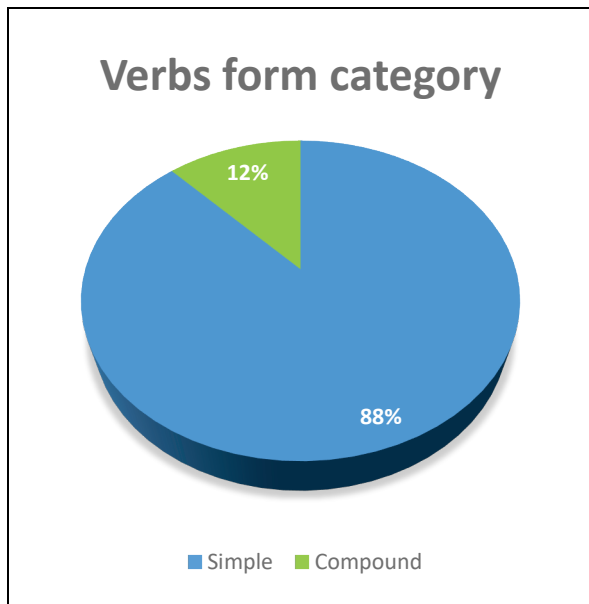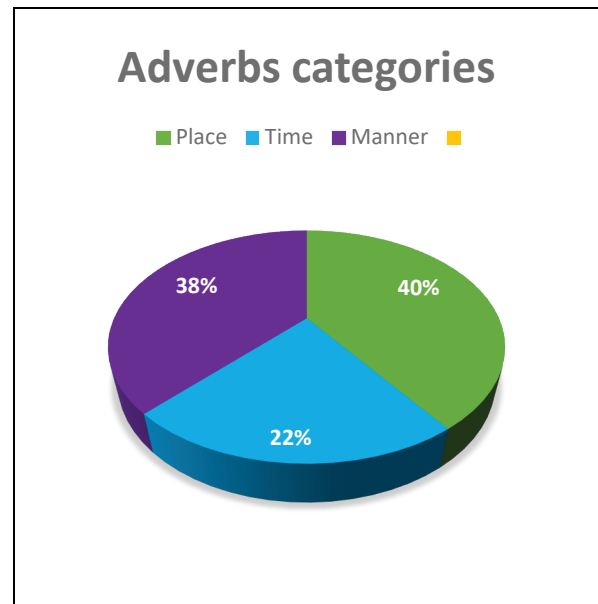
Figure 6. Lexical Categorisation of Verbs

Figure 7. Lexical Categorisation of Adverbs

Figures (6-7) illustrate categories of both verbs and adverbs' classes. First, it should be noted that in spite of the fact that verbs could be lexically classified into categories i.e. action and state verbs, but and as we mentioned earlier that lexical categorisation by itself is not a major theme is this study. For that matter, we chose to classify verbs in terms of their form as simple or compound. Simple verbs here refer to verbs with single word. However, in Turkish language as many other languages do as well, verbs could be also formed using two words, referred to helping verbs; different from those helping verbs in English in terms of use and function. Simple verbs include: read, speak and write. On the other hand, compound verbs (phrasal verbs) include: be happy, shake hands, giver permission and take care. To return to the pie charts, the verbs' pie chart indicates that the simple verbs significantly exceed the compound ones with the percentage of (88%). In the second pie chart, adverbs are categorised into three categories where adverbs of place category has the highest percentage with (40%) followed by adverbs of manner category with only (2%) difference. The lowest percentage is for the adverbs of time category with less than (25%).
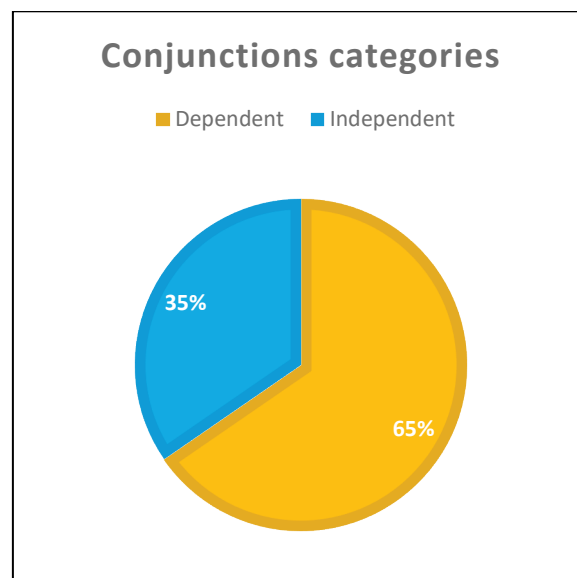
Figure 8. Lexical Categorisation of Conjunctions

Figure (8) shows the categorisation of conjunctions where two categories are used. Independent category refers to conjunctions which link between two sentences or two words in some cases including: and, or, but, however, either…or, etc. On the other hand, we used the term dependent conjunctions to refer to the case that grammar in Turkish where certain forms are used to make participles and gerunds like: when, for the fact that, as…as, as long as, as if, etc. We referred to them as dependent, because they can only become functional and meaningful when used within a sentence, unlike the independent category which can be sometimes used in normal speech with a context but not necessarily within a sentence. Thus, the pie chart indicates here that the most frequent category was the dependent one.

To this end, we can come up with a preliminary answer for our first raised question in regard to having a theory-based system for the lexical structure of preschool prepared materials. We have seen that a certain lexical system distributed in terms of eight word-class with over majority for objects (nouns) and actions (verbs). We have also seen the second part (lexical categorisation) inclusion of different categories fulfilling the linguistic desires and instinct of a human child during early lexical development. By this means, we assumed that both *behaviourisms* and *the frequency hypothesis* include the approach used in such materials where repetition (as proposed by *behaviourists* and frequency (as proposed in *the frequency hypothesis*) play a vital yet crucial role in early lexical development. In the following part, we test this hypothesis and type of relationship between word-class frequency and/or occurrence and simulated early lexical development.

Table 13. Pearson correlation of Word class without repetitions and Word class with repetitions = **0,965**
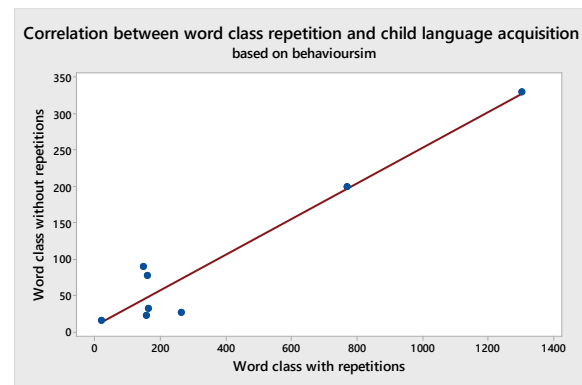
P-Value = **0,000**

Figure 9. Direction of Correlation

A Pearson's product-moment correlation was run to assess the relationship between word-class frequency and/or occurrence and early lexical development in data collected from preschool materials. There was a strong yet positive correlation between word-class frequency and/or occurrence and simulated early lexical development, r=0.965, p < .0005. All in all, this indicates that increases in frequency and occurrence of a certain word, leads to increases in (simulated) early lexical development through preschool materials. Both the significant, strong correlation and the positive correlation between the two variables support our hypothesis that early lexical development could be enhanced following the *behaviourism* and *the frequency hypothesis* where children are coerced with as many materials as possible. Yet, frequency and occurrence should be the content of this coercing rather than the materials themselves.

Table 14. Two-Sample Test
Two-sample T for Word class with repetitions vs. Word class without repetitions
N Mean SD SE Mean
With repetition 8 374 438 155
Without repetition 8 99 111 39
Difference = μ (Word class with repetitions) - μ (Word class without repetitions)
Estimate for difference: 275
95% C1 for difference: (-103; 635)
T-Testi farkı = 0 (vs ≠):
T-Değeri = 1,72 **P-Değeri** = 0,130 **DF** = 7
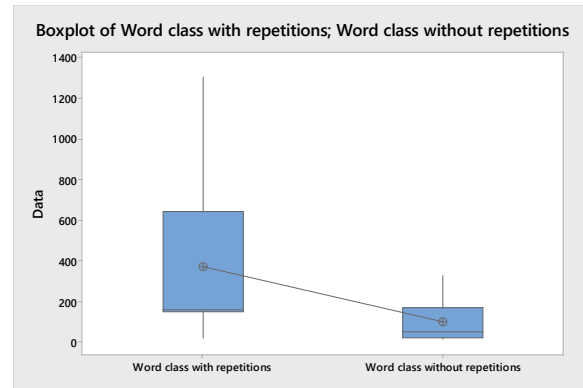
Figure 10. Difference between the Two Groups

For more reliable and valid results for our second hypothesis, an independent t-test was also run to determine if there were differences in simulated early lexical development (represented by preschool materials) and word-class frequency and/or occurrence (with and without repetition/ frequency). The results showed that word-class with repetition has statistically yet significantly higher early lexical development rate (378 ± 438) compared to word-class without repetition (99 ± 111), t(7) = 1.72, p = 0.130.

Discussion

The results of this study were clearly in agreement to our initial expectations. A correlational study was conducted measuring correlation between word-class frequency and simulated early lexical development based on data analysis from preschool materials. The researchers proposed two hypotheses which will be accounted for below in relation to the presented statistical results above and previous research.

In the first raised question, we expected that preschool materials could represent a theory-based system for (simulated) early lexical development. This issue was approached in relation to *behaviourism* and *the frequency hypothesis*. In both theories, we emphasised on the point of *rehearsal* (repetition/ occurrence) in accordance with indications from the *behaviourism* theory (see Tavakoli, 2013; Lust, 2006; Juffs, 1996) and (*frequency*) in accordance with *the frequency hypothesis* (see Tavakoli, 2013). There is also a reference in our literature review (introduction) to ZIPF's law; emphasising again in frequency issue (see Zipf, 1949).

Our collected data was abstracted to fulfil the proposed objectives using two analyses levels: syntactic and semantic. In the first case, the data was divided into eight word-classes ending with a systematized data for the whole material. In the second case, the word-classes were further categorised lexically, ending up again with a certain lexical categorisation for the whole data. The statistical analysis using Minitab (17th version) indicated clearly a significant difference between content words (nouns, pronouns, adjectives, verbs and adverbs) and function words (prepositions, conjunctions and interjections). Say it another way, the calculated percentages of the content words were clearly higher than those of the function words (43%, 5%, 6%, 26% and 6%) as compared to only (5%, 8% and 1%) respectively. By this means, the total percentage of all function words is (15%) less—representing the whole collected preschool material. Having this in mind, we came to the conclusion that content words are of more presence and use in preschool materials supporting early lexical development. It has been also noticed that objects (nouns) and actions (verbs) among the content words were the major word-classes. However, the total percentage of nouns' class was as two times as that of verbs' class. The other content words percentages were too clearly less where the total didn't reach even fourth of the whole total percentage of content word-class. In regard to the function words, conjunctions was the major word-class. Moreover, one part of this hypothesis was also in regard to the lexical categorisation of collected preschool material (short-stories). With reference to the results' section, it could be seen that

there was a clear indication of a possible system for categorising the collected data where in nouns were categorised into 15 categories, pronouns: 7, adjectives: 5, verbs: 2, adverbs: 3, preposition: 0, conjunctions: 2 and interjections: 0. Thus, these results in general are in agreement to previous findings indicating the over-presence and/or over-use of objects and actions (yet objects more than actions as per indicated in our data) (see Clark, 1995, 2009; Gökmen, 2005; Golinkoff et al., 2000; Trautman, 2009; Jensen, 1999; Marchetto & Bonatti, 2013).

The second hypothesis assumed that word-class occurrence/frequency could be used as a predictor simulating child's early lexical development based on analysis of preschool material (short-stories). To reach a possible answer for this doubt, two inferential statistical tools were used, namely, Pearson's coefficient correlation test and independent Two-Sample T-Test. The two proposed variables were correlated where preschool materials, the short-stories here (representing simulation of early lexical development), was the dependent variable and word-class occurrence/ frequency divided into two groups with and without repetition was the independent variable. The results of the first tool showed that there was a strong yet positive correlation between word-class frequency and/or occurrence and simulated early lexical development, r=0.965, p < .0005. Similarly, in the second run statistical tool, the results further indicated that word-class with repetition has statistically significantly higher early lexical development rate (378 ± 438) compared to word-class without repetition (99 ± 111), t(7) = 1.72, p = 0.130. To this end, we assume having a strong yet positive correlation between the two variables indicating the possibility of moving forward and diving into this area with experimental approaches dealing with real data abstracted from children's real speech. Hence, such findings are in agreement to previous studies in regard to preschool materials in their positive correlation yet effect on early lexical development (Berry, 2007; Collins, 2004; James, 2001; Mousavi & Gholami, 2014; Choi, 2016; Baker et al., 2015; Thompson et al., 2015; Wu et al., 2016; Pinto et al., 2016).

Conclusions

The present study accounted for early lexical development. It examined the use of data based on preschool material to predict early lexical development. The researchers followed the correlational research approach wherein word-class frequency/occurrence was divided into two groups with and without repetition— representing the independent variable and the simulated early lexical development—representing the dependent variable. A series of short-stories (10 short-stories) in Turkish were analysed in terms of word-class (nouns, pronouns, adjectives, verbs and adverbs—representing content words and prepositions, conjunctions and interjections—representing function words). Each word-class was further semantically categorised except prepositions and interjections. The researchers raised two questions assuming that preschool materials could represent or be used as in here—simulated early lexical development tool. It has been also proposed that this simulated early lexical development data could be used to predict early lexical development. Minitab (17th) was used to analyse the collected data and help either approve or refute the postulated hypotheses. With reference to our presented data we came to a possible end that short-stories prepared for preschool children contained a theory-based system which could be reflected on early lexical development. This was supported by the fact that there was a clear word-class classification and systematised lexicon for the distribution of word-class in terms of content words (over majority) and function words (minor representation). Yet, in terms earlier findings stating the major presence of objects (nouns) followed by actions (verbs) during early lexical development. The over percentage of content words was over (85%) of the whole data, leaving less than (15%) only for the function words. Similarly, it was close to (50%) of the whole data representing objects (nouns' class) and more than half of the same percentage for the actions (verbs' class). Furthermore, there was also a possible categorisation framework for word-class, especially for the content words—supporting the view of preschool theory-based material that could simply stand as simulated early lexical development tool. In the second hypothesis, results also supported the view that word-class frequency and/or occurrence could be used as a predictor simulating child's early lexical development. A Pearson's product-moment correlation was run to assess the relationship between word-class frequency and/or occurrence and early lexical development in data

collected from preschool materials. There was a strong yet positive correlation between word-class frequency and/or occurrence and simulated early lexical development, r=0.965, p < .0005. The Two-Sample Test also indicated that word-class with repetition has statistically yet significantly higher early lexical development rate (378 ± 438) compared to word-class without repetition (99 ± 111), t(7) = 1.72, p = 0.130. To this end, we assume having a strong yet positive correlation between the two variables indicating the possibility of moving forward and diving into this area with experimental approaches dealing with real data abstracted from children's real speech.

Limitations

This study has two limitations: time limitation and data limitation. The first one is technical where in the required time-limit for conducting the research didn't allow to dive into this area with more experimental and/or behavioural research approaches. The second limitation is that data was based on preschool material rather than real collected data from children. In other words, it might have been a good start to see first if the two variables are correlated, but again the test of the two variables by itself was not so much resulting into plausible data. This is because we indicated that we are dealing with simulated early lexical development. It would have been better if this area was investigated in relation to direct test of real preschool material i.e. short stories affecting early lexical development.

Implications

In spite of the fact that the presented data gives clear yet positive results in regard to the correlation between the two tested variables, but testing such variables with more real data based on experimental approaches would to a great extent lead to more plausible findings contributing effectively to child language acquisition in general and early lexical development in particular.

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Appendix

NOUNS

Abla
Ad
Adam
Ağabey
Ağacı
Ağızlar
Ağzı
Ahmet
Alevler
Alfabe
Ali
Amca
Anlatmayı
Anne
Abı
Araba
Araç
Arkadaşlar
Aslan
At
Atatürk
Ateş
Atlamaya
Atlar
Ay
Ayak
Ayı
Ayna
Ayşe
Baba
Bahçe
Bardaklar
Baş
Başlayacağını
Bayram
Bebekler
Beden
Bekir

Berber
Berberlik
Bey
Bilet
Boy
Burunlar
Büfeye
Bülent
Caddeler
Camekânın
Can
Cep
Cin Ali
Cuma
Çadır
Çanta
Çarşamba
Çatal
Çay
Çember
Çeşme
Çeşmede
Çetin
Çıkmaya
Çiçek
Çiğdem
Çoban
Çocuk
Daire
Dayı
Defter
Dekiler
Demetler
Dere
Ders
Dikkat
Dişler
Dondurma
Dondurmacı

Duna
Duvar
Düşmesine
Eğitim
Ekmek
El
Elbiseler
Elma
Erkek
Eşek
Eşyalar
Etraf
Ev
Fatma
Fırça
Fil
Gazete
Gelmesini
Gemi
Getirdikleri
Gez
Gezinti
Gezmeler
Gölge
Göstereceklerini
Gösteriler
Göstertesi
Gözler
Grup
Gül
Gülşen
Gün
Hafta
Hala
Halka
Hanım
Harekeler
Hava
Havuz

Heyecan
Hikâye
Hortum
İçler
İlkbahar
İnmek
İnsan
İp
İpek
İş
Kabuğunun
Kadın
Kâğıtlar
Kahkahalar
Kahve
Kalem
Kalp
Kapı
Kapı
Kaplumbağa
Kapmaca
Karagözlü kuzu
Kardeş
Karın
Kartlar
Kaşıklar
Kaval
Kaya
Kayma
Kazı
Kelebek
Kenar
Kertenkeleler
Kes
Kır
Kırbacı
Kırbaç
Kırlar
Kız

Kişilik
Kitap
Kocaman
Kollar
Kolonya
Konu
Konuşmaya
Kova
Kovayı
Köpek
Köşe
Kulaklar
Kum
Kurdele
Kuş
Kuyruk
Kuzu
Küme
Künk
Leylek
Mahalle
Masa
Mehmet
Mendil
Merdivenler
Meydanlık
Mikrofon olan
Misafir
Musluka
Müdür
Nakış
Nermin
Nesrin
Nevin
Nisan
Nuri
Oda
Oğlu
Okul

Okuma	Sırt	*Top*	Zıplayış	Başka
Osman	Silgi	*Topaca*	*Zil*	Bazı
Ot	Simit	Topacı	**PRONOUNS**	Bembeyaz
Oturma	Simitçi	*Topaç*	Bana	Beraber
Oya	Simitler	*Topladıkları*	Bazılar	Beraberce
Oynamaya	Sofra	Toplamaya	Ben	Beş
Oyun	**Sokak**	*Torba*	Beni	Beyaz
Öğrenci	~~Sol~~	*Tozlar*	Benim	Bir
Öğretimi	Sopa	*Tren*	Biz	Birbiriler
Öğretmen	Söğüt	Tuvalet	Bize	Birçok
Ömer	Söylediği	*Uçak*	Bizi	Birer
Önlük	Söz	Uçurtma	Bizim	Birinci
Ördekler	Su	Ustura	Bu	Birisi
Örgü	Suna	Üzüm	Buna	Birkaç
Palyaçolar	Susamışsa	Vagonlar	Bunlar	Boş
Parça	Sürü	Vakit	Bütün	Bütün
Parmak	Süt	Yakasını	**Kendi**	Büyük
Pat pat	Şarkı	~~Yanaklar~~	Ne	Çalan
Pazar	Şehirler	Yanlar	Neler	Çalışkan
Pazartesi	Şeker	Yanlışlar	O	Çeşitli
Peçeteler	**Şey**	Yaptığını	Ona	Çözümlü
Pencere	Şıp şıp	Yaramazlık	Onlar	Diğer
Pervane	Şiir	Yazı	Onlara	Doğru
Reklam	Tabak	Yazılar	Onlardan	Dolu
Renk	Tabure	Yazıyı	Onları	Dört
Resimler	Tahta	Yazıyı	Onların	Düz
Sabun	Tahterevalli	Yazmayı	Onu	Eğlene
Saçlar	*Taksi*	Yazmayı	Onun	En Güzel
~~Sağ~~	Tane	Yeme	Sana	Geçen
Salınacaklar	*Tank*	Yemek	Sen	Gevrek
Salkım	~~Taraf~~	Yemekler	Seni	Gönlünü
Sallananlar	*Taş*	Yenge	Senin	Götüreceği
Sandalye	Tavşan	**Yer**	Siz	Güzel
Sandık	Tazı	Yerim	Size	Her
Sefer	Temizlik	Yiyecek	Sizi	Hoparlörü
Selma	Teneffüs	Yoklama	**ADJECTIVES**	Hoş
Semaver	Tepe	**Yol**	1-A	İki
Sesler	Teyze	Yuva	Akılı	İlk
Seyirciler	Tıraş	Yuvarlak	Aldığı	İyi
Sınıf	Tırnaklar	Yüz	Altı	Kalan
Sıra	Tombala	Zaman	Az	Kalkan

Kara kara	Atlat	Dön	Kaç	Ötüş
Kaymaklı	Ayrıl	Döndür	Kaldır	Rica et
Kırmızı	Bağır	Döv	Kalk	Sabunla
Kısa	Bağla	Dur	Karşıla	Sakla
Küçük	Bak	Durdur	Katıl	Salla
Lazım olan	Bak	Düş	Kay	Sallan
Otlayan	Başla	Düzeltir	Kaybet	Sar
Öbür	Beğen	Eğil	Kayıt ettir	Sarıl
Ön	Bekle	El salla	Kes	Say
Rahat	Bık	Em	Kes	Selam ver
Sabunlu	Bıkın	Emzir	Kesil	Sev
Sıcak	Bırak	Fırçala	Kısa ol	Sever
Söylediği	Bin	Geç	Kıvır	Sever
Sulu sulu	Bit	Geçir	Kokla	Sevin
Tatlı tatlı	Bitir	Gel	Konuş	Seyret
Tek	Boz	Ger	Kopar	Sıra ol
Tek başına	Bul	Getir	Kork	Sıra yap
Temiz	Çık	Gez	Koş	Sok
Terbiyeli	Çağır	Gezin	Koş	Sor
Tıraş olan	Çal	Gir	Kovala	Sök
Türk	Çalış	Git	Koy	Söyle
Üç	Çek	Gönder	Kucakla	Söz ver
Üçü	Çeker	Gör	Kur	Sür
Yalnız	Çevir	Görme	Mele	Sürt
Yaptığını	Çık	Görün	Memnun ol	Şaklat
Yaramaz	Çıkar	Göster	Merak et	Şarkı söyle
Yemyeşil	Çıkart	Götür	Müjdele	Şaşır
Yorgun	Çırp	Götürür	Nakış işle	Tak
Yüksek	Çöz	Gül	Ok	Takıl
Zincirli	Çöz	Halka ol	Okşa	Temizle
VERBS	Dağıl	Halka Yap	Oku	Teşekkür et
Aç	Dağıt	Havalan	Okut	Tıraş et
Açıl	Dans et	Hazırla	Okutur	Tıraş yap
Açtır	De	Hopla	Ol	Tok et
Al	Dik	Hoş git	Otur	Topla
Alkışla	Dikkat et	İç	Oturt	Toplan
Anlat	Dinle	İkram et	Oyan	Tut
Anlattır	Diz	İn	Öğren	Uç
As	Dol	İndir	Öp	Uçur
At	Dolaş	İste	Ör	Uyuma
Atla	Dök	İzin ver	Ört	Uzan

Uzat	Boynuna	Önde	İçine	**INTERJECTIONS**
Ütület	Bu hafta	Önündeki	İçini	Aferin
Üzme	Burada	Önüne	İle	Ah
Var	Buraya	Sabaha kadar	Kadar	Anne!
Ver	Canlı canlı	Sabahlayın	La	Çok yaşa!
Vur	Çok	Sabırsızlıkla	-le	Diye
Yakala	Daima	Sert sert	Önünde	Evet
Yalvar	Elindeki	Sık sık	Önüne	Günaydın
Yap	Epeyce	Sonra	Sonra	Haydi
Yapıl	Erkenden	Tarafında	Üzeri	Hoş geldin
Yapıl	Etrafında	Taraftan	Üzerinde	Hoş gördük
Yaptır	Etraftan	Tatlı tatlı	Üzerine	Meee
Yat	Evde	Tekrar	Üzerine	Ne olur
Ye	Güzel güzel	Ucundan	Yanına	Peki
Yemek ye	Havada	Uzakta	**CONJUNCTIONS**	Sağol
Yıka	Hep	Uzaktan	--a…-a	Sevgili
Yıkan	Hepsi	Üstünden	-acak	
Yıkat	Her gün	Üstüne	Ama	
Yor	Her hafta	Üzeri	--arak	
Yorul	Her taraf	Üzerinde	Da	
Yorulma	Her yer	Üzerindeki	-dan itibaren	
Yuvarlan	Herkes	Üzerinden	-dan önce	
Yürü	Hızlı hızlı	Üzerine	-dan sonra	
Yürüt	Hızlıca	Var	-dık	
Yüz	Hiç	Yalnız	-dik için	
Zıpla	Hoşça	Yanına	-dik kadar	
ADVERBS	İçinden	Yanında	-dik zaman	
Acele	İyice	Yarın	-diktan sonra	
Akşam	Kenardaki	Yazın	-erek	
Akşamları	Kenarında	Yere	-Hem…hem de	
Altına	Kenarından	Yine	Her.. dan.. önce	
Andını	Nasıl	Zamanda	-inca	
Ara sıra	Nereye	**PREPOSITIONS**	-ip	
Arka arkaya	Neşeli neşeli	-a	-ken	
Arkasından	Orada	Aşağı	--madan	
Aşağı	Oradan	-da	-madan önce	
Bahçede	Oraya	--dan	-mak için	
Bazen	Ortada	Gibi	Meğer	
Beraber	Ortadaki	İçin	-mi	
Birden	Ortadan	İçinde	Onun için	
Bol bol	Önce	İçinden	Ve	