

DIFFERENCES IN SYNTACTIC DEVELOPMENT IN ADOLESCENCE**Georgia Andreou**Department of Special Education
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GREECE**ABSTRACT**

The aim of the present study is twofold, firstly to investigate whether adolescents reach the linguistic level corresponding to their age and secondly to compare their syntactic abilities in written narrative and non narrative texts. Syntactic development in adolescence refers to the development of syntax under normal circumstances during the period of adolescence, namely between the age of eleven or twelve and early adulthood. During this period, adolescents in secondary schools learn to produce narrative and non narrative texts. Narrative texts are those that reflect specific, mostly past experiences and put an emphasis on humans' actions and experiences. On the other hand, non narrative texts focus on a broad field of description or on the development of concepts, beliefs, arguments and information without relying on narration, things which make them more demanding than the narrative type of texts. Given the above, we carried out a large-scale survey in order to investigate the syntactic abilities of Greek adolescents. In particular, 2 groups of 300 adolescents (14.5 and 16.6 mean years of age respectively) were asked to produce two texts, one narrative and one not narrative on a current topic. Our results showed that older adolescents exhibited better syntactic abilities compared to early ones. However, an unexpected high performance in non narrative texts was produced by early adolescents. This finding shows that the production of complex texts may be related to unexpected language performance.

Keywords: Syntax, adolescence, narrative texts, non narrative texts.

INTRODUCTION

Language development is a multifaceted and ongoing process. In general, it starts from birth and continues to years between eleven or twelve years old and early adulthood. At this age milestone, children can argue more effectively, they become more critical, individualistic and better at everyday planning and reasoning. Given that the central focus of our study is adolescents with typical language development, it is essential to clarify this term. Hence, by this term we refer to the language skills an individual acquires under typical conditions during the period of adolescence (i.e. the period between the age of 11 or 12 until early adulthood) (Hoff, 2009; Nippold, 2007; Paul, 2001).

To be successful in school, adolescents should read and write a variety of genres. Written language does not consist of a single genre. Rather it is a combination of various genres and interrelated features. Typical language development in adolescence is characterized by a growing command of different genres, particularly in the area of monologic text production. Students are required to distinguish among narratives, descriptive texts and an increasing range of expository genres, including explanation and persuasion among others (Beers & Nagy, 2009, 2011; Berman & Nir, 2010).

Although there are various genres' classifications (Beers & Nagy, 2011; Berman, 2008; Berman & Nir-Sagiv, 2007; Berman & Nir, 2010; Nippold & Scott, 2010). Georgakopoulou & Goutsos (1999) introduced a straightforward distinction between narrative and non narrative texts. In their words, "the fragmentation of speech into unrelated categories without clear boundaries" (p. 68) can be avoided. Under this perspective, narrative texts are those that reflect specific, mostly past experiences and put an emphasis on humans' actions and experiences. On the other hand, non narrative texts focus on a broad field of description or on the development of concepts, beliefs, arguments and information without relying on narration, things which make them more demanding than the narrative type of texts (Georgakopoulou & Goutsos, 1999).

The ability to write differently across various discourse modes can itself be seen as an important developmental feature. Essential writing skills require, among many other things, the effective use of syntactic structure. It is interesting to note that syntactic complexity, in both early and late adolescents, varies in relation to genre and age. Children with typical language development in adolescence not only acquire a large number of words, but also, through writing, adolescents have the opportunity to practice using newly syntactic structures (Nippold, 2007). Nippold (2004) argued that teenagers use more complex syntactic features when writing persuasive texts exhibiting arguments. This is evident in the increased use of subordinate clauses (nominal, adverbial and relatives). We took as a more reliable and well-specified unit of analysis the clause, defined as "a unified predicate describing a single situation" (Berman & Slobin, 1994: 660).

PURPOSE OF THE STUDY

Given the above mentioned analysis, the major goal of our study was to investigate whether adolescents reach the language level that corresponds to their age and to compare their syntactic abilities in producing non narrative texts. More specifically, the present study was designed in order to investigate whether adolescents have the ability to produce the subordinate clauses (nominal, adverbial, relatives) corresponding to their age. In particular, our research questions were as follows: First, late adolescents would produce more subordinate clauses compared to early ones. Second, and keeping in mind the difficulty of non narrative texts, it was also hypothesized that both groups would use more subordinate clauses in narrative than in non narrative texts.

METHODOLOGY

Participants

Our research took place in public, urban high schools in Greece. Our sample consisted of two groups of 300 typically developed adolescents (N=300). The average age of the first group was 14.5 (N= 150 early adolescents) and of the second group was 16.6 (N=150 late adolescents).

Procedure

A text on the topic of racism was distributed to the students in order to be read. This topic had been discussed with their teachers in previous classes. Then, the students were asked to write two different texts, one narrative and one non narrative, following the instructions given, which were the same for both groups of high-school students. In total, we analyzed 600 written texts, half of them being narrative and half non-narrative.

Analysis

As it has already been mentioned above, we analyzed 600 written texts, half of them being narrative and half of them being non narrative. The Mann-Whitney U Test was used to compare differences between early and late adolescents. It is the nonparametric alternative to the independent t-test. The Wilcoxon Signed-Rank Test was used to compare two sets of scores between narratives and non narratives texts that were written by the same participant. It is the nonparametric test equivalent to the dependent t-test. SPSS 15 was used for our statistical analysis and Monte Carlo simulation methods were used to obtain the p-value. When the p-value is less than the significance level α ($\alpha = 0.05$), the result is said to be statistically significant.

RESULTS

The texts written by our participants were selected and subjected to the above mentioned statistical analyses. The results are shown in the following tables and figures.

More specifically, the statistical analysis of Mann-Whitney (cf. Table 1 & 2) showed that there is a statistically significant difference between the two groups of adolescents in non-narrative texts in terms of:

- a) total clauses per text and
- b) adverbial clauses

Table 1: Mean Percentage of Subordinate Clauses (nominal, adverbial, relative) Out of Total Clauses by Age Group (Early vs Late adolescents) in Narrative Texts (S: Significant - NS: Non Significant)

Type of Adolescents	Total Clauses of Text	Subordinate clauses		
		Nominal	Adverbial	Relatives
Early adolescents	22	5.6	3.2	2.7
Late adolescents	21.8	5.7	3.4	2.8
<i>p-value</i>	<i>p= 0.689 (NS)</i>	<i>p= 0.441 (NS)</i>	<i>p=0.361 (NS)</i>	<i>p=0.353 (NS)</i>

Table 2: Mean percentage of Subordinate Clauses (nominal, adverbial, relative) Out of Total Clauses by Age Group (Early vs Late adolescents) in Non-Narrative Texts (S: Significant - NS: Non Significant)

Type of Adolescents	Total clauses of text	Subordinate clauses		
		Nominal	Adverbial	Relatives
Early adolescents	21.8	5.1	3.5	4
Late adolescents	18.6	4.6	2.6	3.8
<i>p-value</i>	<i>p= 0.001 (S)</i>	<i>p= 0.192 (NS)</i>	<i>p=0.001(S)</i>	<i>p=0.462 (NS)</i>

The statistical analysis of Wilcoxon (cf. Figures 1 & 2) showed a statistically significant difference between the two genres (narrative vs non narrative) in the:

- a) nominal clauses of late adolescents,
- b) adverbial clauses of late adolescents and
- c) relative clauses of both early and late adolescents.

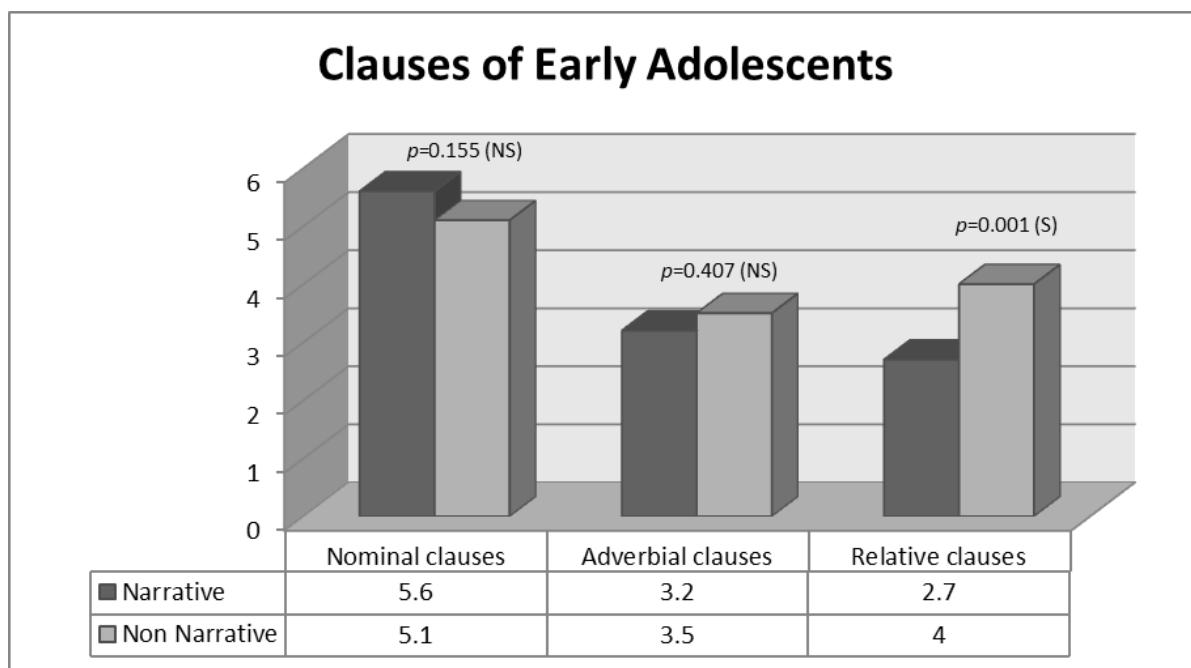


Figure 1: Mean proportion of subordinate clauses (nominal, adverbial, relative) out of total clauses by genre (Narrative vs Non Narrative) in early adolescents’ texts (S: Significant - NS: Non Significant)

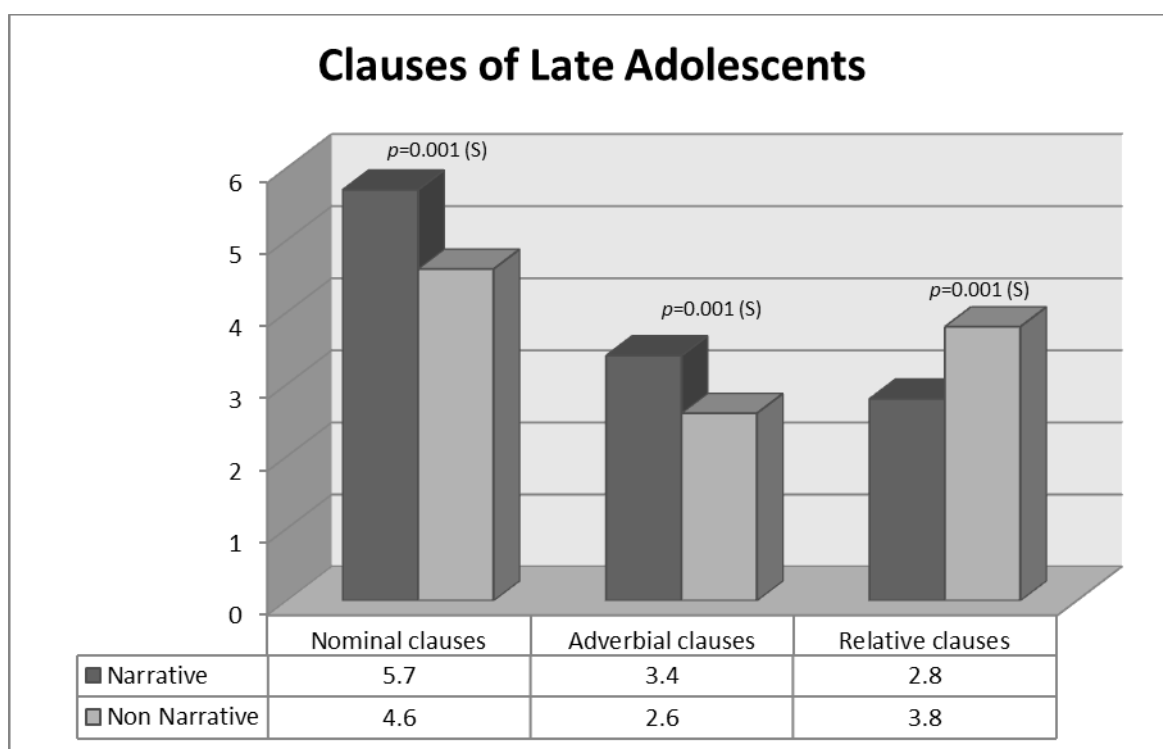


Figure 2: Mean proportion of subordinate clauses (nominal, adverbial, relative) out of total clauses by genre (Narrative vs Non Narrative) in late adolescents’ texts (S: Significant - NS: Non Significant)

DISCUSSION-CONCLUSIONS

The results of our analyses were consistent with our hypotheses. However, our results showed that, in non narrative texts, the older the students were the more advanced linguistic level they had developed, exhibiting considerable syntactical skills. In other words, early adolescents performed better in terms of language development than late adolescents when the use of all the subordinate clauses was to be examined. Therefore, our results showed that some students performed lower when considering their age, whereas other reached an advanced linguistic level exhibiting complex skills in syntax.

Moreover, our results showed that subordinate clause production is age-dependent for adolescent writers, but this relationship is also related to text's genre. Specifically, an unexpected development was observed in the younger age group in non narrative texts, showing that the production of complex texts may lead to unexpected linguistic levels. Consequently, an unexpected cognitive and linguistic development was observed, both in terms of age and the two types of texts examined.

Previous findings have shown that growth in syntax continues during adolescent years. Researchers have also found that syntactic development can vary across the different genres (Beers & Nagy, 2011; Nippold, 2007; Nippold, Hesketh, Duthie, Mansfield, 2005a; Nippold, Ward-Lonergan & Fanning, 2005b). These findings partially confirmed our initial hypotheses and are partly in line with the above research findings (i.e. the use of subordinate clauses is in line with age progression). Nevertheless there are researchers, who have found a higher occurrence of nominal and adverbial clauses in younger age groups and argue that the efficient use of subordinate clauses is mainly achieved if they are taught in smaller groups and students have the opportunities to practice them in relevant communicative contexts (Nippold et al., 2005a, b).

One more finding of our study was that relative clauses occur far more in non-narrative than in narrative texts in both age groups. This finding is in line with other studies where relative and adverbial clauses exhibit a higher frequency in non-narrative than in narrative texts (Scott, 2004). In general, earlier studies showed more complex skills in syntax in other areas of non-narrative versus narrative texts as well. Syntactic complexity increases during adolescence and it is especially marked by a growth in the use of different types of subordinate clauses (Beers & Nagy, 2011; Berman & Nir-Sagiv, 2007; Nippold, 2007; Nippold et al., 2005a; Nippold et al., 2005b; Verhoeven L., Aparici M., Cahana-Amitay D., Van Hell J., Kriz S. & Viguié-Simon A., 2002).

Another finding is that typical language development of adolescents keeps up with their age. However, in some tasks, late adolescents performed lower than early adolescents. Moreover, after comparing narrative and non-narrative texts, a higher performance on written production was observed in non-narrative texts, both by early and late adolescents. Therefore, it was shown that when students are asked to write a more complex text, they probably make a higher effort to accomplish this task. Thus, an unexpected level of linguistic development of the adolescents was observed in our sample, both in terms of age and texts' genres.

Finally, future research should focus on the comparison among texts written in various languages (e.g. Berman, 2008; Berman & Nir-Sagiv, 2007; Jisa et al., 2002) and further distinguish non narrative texts in essays, articles, reports, arguments, persuasive texts.

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