Abstract: The influence of multiple dialects on the linguistic development of bidialectal speakers is thought to be responsible for the reinforcement of certain metalinguistic abilities. The study investigated the exposure and use of Standard Modern Greek and the Greek Cypriot Dialect and their influence on young Cypriot children’s metalinguistic abilities. Bidialectal, monodialectal and bilingual kindergarten and first grade children’s performance was compared in Phonological Awareness and Arbitrariness of Language. The results showed higher levels in phonological awareness and word awareness in bidialectal Cypriot children than in monodialectal SMG-speaking children while insignificant differences were found between bidialectal and bilingual Cypriot children. The findings provide evidence that exposure to two different varieties of the same language may result in higher levels in metalinguistic abilities.

Keywords: bidialectism, bilingualism, Greek Cypriot Dialect, phonological awareness, arbitrariness of language

1. Introduction
Exposure to more than one language is thought to be responsible for the reinforcement of certain linguistic skills such as metalinguistic abilities (Bialystok 1988, 1991; Jessner 2006). Based on the main debate that bilingualism provides children with the experience of comparing and analyzing the structural aspects of language in more advanced ways in comparison to monolingual children, the present research was designed to address the question how childhood bidialectism, a phenomenon closely related to childhood bilingualism, is connected to metalinguistic abilities. A large number of studies has reported that bilingualism enhances metalinguistic abilities of bilingual speakers. Bilingual children are expected to be more privileged in the solution to certain metalinguistic problems (Cummins 1978; Cromdal 1999).

The influence of multiple dialects and varieties of the same language on the metalinguistic development of monolingual speakers has not been investigated intensively. Bilingualism and monolingualism have been the most important factors relating to children’s metalinguistic abilities. Less attention has been paid to how metalinguistic development relates to non homogeneous monolingual groups. Sociolinguistic research of varieties in contact provide evidence to argue that beyond multilingualism, linguistic communities share an even more common characteristic; the coexistence of more than one varieties of the same language makes a large number of speakers around the world to be bi- or multidialectal. Discovering multiple ways of naming the same object or describing an event differently is not exclusively associated to bilingual development since bidialectal children encounter similar experiences in their language development. Accordingly, bidialectism is described as the acquisition of a native regional variety and the learned knowledge of a standard educational variety. Bidialectism normally results when a
regional variety and the standard variety of the same language are used side by side by members of a speech community. If bilingual children, when acquiring two distinct codes, acquire concepts of metalinguistic development more easily than monolingual children do, then bidialectal children, when acquiring two distinct varieties of the same language, may also have an advantage in metalinguistic development.

How common is bidialectism as a linguistic phenomenon? Sociolinguistic research has a well established record that there is an important linguistic diversity in the data a researcher deals with while investigating a supposedly monolingual group. The existence of a standard variety presupposes its coexistence with at least one more non standard variety due to geographical, socio cultural, and/or political reasons. In Russia, Russian dialects deviate substantially from one another and Standard Russian in several levels such as syllable structure, pronunciation matters, etc. In the Netherlands, while local dialects are under pressure during the last decades, they keep their strong position in relation to Standard Dutch in the linguistic communities where they function as the mother tongue of the local people (Driessen 2005). In Germany dialect change occurs some time little and some times much between German dialects and the German Standard Variety (Auer 2005). In the United States of America, Standard African American Vernacular English is the predominant linguistic system spoken in many communities in relation to Standard American English (Sligh & Conners 2003). Literary Arabic (Modern Standard Arabic) is universally used in the Arab world for formal communication and writing. On the other hand, “varieties of colloquial unwritten Arabic are the linguistic systems which native speakers of Arabic acquire naturally and for which they develop intuitions (as native speakers of any language do with regard to their mother tongue)” (Al-Wer 1997: 254). Eviatar and Ibrahim (2000) suggested that exposure of children to spoken Arabic and literary Arabic requires the same intensive language analyses as those demanded of children exposed to languages as different as Russian and Hebrew.

The research on metalinguistic awareness has indicated that literacy also is strongly related to the development of metalinguistic abilities such as phonological awareness. It is interaction of metalinguistic awareness with literacy that makes the research on metalinguistic abilities essential within bidialectal linguistic communities. It is imperative to look at children’s metalinguistic behavior and use it as a tool in order to take advantage of children’s bidialectic experience instead of considering it in many occasions as an obstacle for learning the Standard Variety.

2. Linguistic reality
In this study a group of monolingual/bidialectal Greek Cypriot (GC) speakers was compared with a group of monolingual/monodialectal Standard Modern Greek (SMG) speakers and a group of bilinguals (Greek and other language). The essential difference in language experience between the Greek and the Greek Cypriot children has to do with the number of varieties of the Greek language they come in contact with, and the conscious knowledge of the variation that occurs within the Greek language. The Greek children have acquired SMG. On the other hand, the Greek Cypriot children have acquired the GCD and learned the SMG variety. The differences between SMG and GCD are found on all linguistic categories and levels; the lexical level, the phonological and morphological levels, the syntactic and pragmatic level (Newton 1972, 1983–84; Papapavlou 1994; Terkourafi 1997; Arvaniti 2002). Despite the fact that children recruited in Greece and in
Cyprus varied systematically in oral Greek language experience, orthographic experience is quite similar as soon as literacy begins.

The Greek Cypriot community on the island can be characterized as bidialectal speech community (Pavlou 1992; Papapavlou 1998, 2001; Yiakoumetti 2006; Papapavlou & Pavlou 1998; Papapavlou 2004). Greek Cypriot children consciously learn to read and write almost exclusively in SMG at schools in Cyprus. On the contrary, GCD is unconsciously acquired as their mother tongue. The dialect has been maintained for centuries on the island through oral means and does not have an official written form.

In the sphere of education, the standard variety has primacy over other dialects in most places of the world (Custred 1990). According to the curriculum of the Ministry of Education and Culture of the Republic of Cyprus, education must be conducted in SMG (in both teaching and writing). The role and use of the dialect in class has not been officially acknowledged. The actual use of SMG begins when children enter kindergarten or primary school at the age of 5 years and 6 months. However, it is mostly agreed that bidialectism affects children’s performance in the standard variety and linguistic development (in writing and speech) since the linguistic code taught to children does not correspond to the linguistic code spoken by children and adults at home. It has been noted in the literature that GCD always interferes consciously or unconsciously, especially in oral production (Iordanidou 1991; Pavlou and Papapavlou 2004; Panayiotou 1997).

3. Aims of the present study
On the basis of the theoretical framework of metalinguistic awareness, it was hypothesized that exposure to GCD and SMG, may result in higher levels in metalinguistic abilities in bidialectal Greek Cypriot children than in monodialectal SMG-speaking children living in Greece, while no significant differences were expected to be found in the metalinguistic abilities between bidialectal Cypriot and bilingual Cypriot children. The proposed hypotheses were evaluated by comparing the performance of bidialectal, monodialectal and bilingual children on metalinguistic tasks in 2 different age-groups: preliterate-kindergarten and literate-first grade children. Testing kindergartners and first graders from the 3 different language groups, in all three tasks, aimed at looking for the differential effects of language experience and age/literacy.

4. Method
4.1 Participants
One hundred and twenty-three children (58 girls & 65 boys) from 3 different language groups - 40 bidialectals, 43 monodialectals and 40 bilinguals – participated in this study. The participants were randomly selected from 2 different age groups; kindergarten children - ages 4 to 5 - and Grade 1 children - ages 5 years and 6 months to 7 - in urban, public schools in 2 major cities of Cyprus, Limassol & Nicosia and in Athens, Greece.

At present, the bilingual population is more than 50% at a large number of primary schools in Cyprus. It can be attributed to the large number of foreigners and Greeks of Diaspora who have immigrated in Cyprus due to socioeconomic changes in the island but also internationally. Most bilingual children came from mixed families and had one Greek-speaking parent. School records indicated that one parent of these children spoke a second language to their child consistently besides Greek. The languages spoken at home besides Greek were Russian, Serbian, English, German, Bulgarian, Philippine, Polish,
Ukrainian and Arabic. Teachers’ assessment showed that all bilingual subjects were as proficient in the Greek language as their monolingual counterparts. Based on teachers’ and children’s testimony, monodialectal children had no exposure to a foreign language.

Public schools in Greece and Cyprus follow a similar curriculum. Especially in language (mother tongue) instruction, the instructional materials (textbooks, etc.) used in both countries are basically the same. While children attending kindergarten had no or little exposure to reading and writing, children in Grade 1 had at least five months of exposure to reading and writing prior to being tested. According to teachers’ judgments both monodialectal and bidialectal Grade 1 groups selected for testing had no reading and writing problems. Only children without known disabilities in all three groups were selected for the study and all come from middle class families.

4.2 Material

Two metalinguistic tasks were designed in Greek to explore the relationship between bidialectal children’s performance on metalinguistic judgment tasks: (i) phonological awareness, (ii) arbitrariness of language. It was intended to investigate whether bidialectal/monolingual, as well as bilingual children may also benefit from their knowledge of sound systems of the different varieties in order to enhance phonological awareness, and they may also grasp the arbitrary relationship between a word and the object better or earlier than monodialectal/monolingual children. The vocabulary chosen for the present study had been considered as linguistically neutral suggesting that it could be equally used in both linguistic communities of Greece and Cyprus. Two female examiners administered the tasks; one Greek Cypriot and one Greek. The Greek examiner spoke only SMG, while the GC examiner was proficient at code switching between GCD and SMG.

4.2.1 Phonological Awareness Task

The comparison between the phonological awareness of bilingual and monolingual children has supported the claim that young children who were exposed to more than one language, perform better than their monolingual peers on phonological awareness tasks (Bruck & Genesee 1995; Campbell & Sais 1995). A central question in this study is whether bidialectism contributes in a different way to phonological development as compared to monolingual/monodialectal environments. The task examined children’s ability to isolate sounds from given words. It was based on previous studies conducted in English and other languages (Bentin et al. 1991). In particular, it examined participants’ following abilities: (a) to detect the initial phoneme from a spoken word, (b) to detect the initial phoneme, delete it and identify the sound left, (c) to identify the last syllable/s of the word by deleting the initial syllable/s, and (d) to identify the initial syllable/s of the word by deleting the final syllable/s. Di- and tri-syllabic words were included.

4.2.2 Arbitrariness of Language Task

Bilingual children realize the arbitrary relationship between a word and an object earlier than monolingual children. Ben-Zeev (1977) stated that symbol substitution depends on the metalinguistic awareness that the structure of a language is different from the phonological representations and meaningful words in which it is embodied and that it is arbitrary and subject to change. Similar results have been reported in Bialystok (1988), Cummins (1978), Ricciardelli (1992). The present task examined participants’ awareness
of the symbolic function of words (Bialystok 2001). The children were instructed as follows: “We are going to play a game in which we change the usual way we are used to naming things that surround us. Then, you will be asked a question and you will have to answer with the exchanged word”.

4.3 Procedures
The 3 groups of participants belonging to the 3 different language groups were tested individually in a quiet room at school during class time, in the months of February and March 2007. The metalinguistic tasks were presented in Greek in one session and in the following order: (a) phonological awareness, (b) arbitrariness of language. Each task was preceded by practice trials to verify that the child understood the task. During trials children were given feedback. The completion of all tasks lasted approximately 25 minutes for kindergarten children and 20 minutes for Grade 1 children.

5. Results
The performance of the children on the 2 metalinguistic awareness tasks is reported separately and according to the age/ literacy and language effect. Statistical analysis was conducted by using SPSS software. The number of correct responses on the total score of each task was analyzed using a 2X3 between-subject ANOVA. The independent variables were age (kindergarten ≠ Grade 1) and language status (bilinguals ≠ bidialectals ≠ monodialectals). The means and standard deviations of the obtained scores of all tasks by participants in the two age groups for the three groups are presented on Tables 1 and 2.

| Table 1: Phonological Awareness Tasks - Mean (M) and Standard Deviation (SD) |
|-----------------------------------|----------------|----------------|----------------|----------------|
| Age | Language Group | M | SD | M | SD | M | SD | M | SD |
| Preschool Children | Monodialectals | 38.39 | 13.73 | 17.43 | 9.46 | 5.09 | 2.64 | 16.57 | 5.61 |
| | Bilinguals | 44.90 | 9.26 | 20.55 | 7.65 | 6.00 | 1.72 | 19.30 | 1.34 |
| | Bidialectals | 45.65 | 10.42 | 21.80 | 9.46 | 5.40 | 2.04 | 18.95 | 2.04 |
| Grade 1 Children | Monodialectals | 55.10 | 10.55 | 29.05 | 7.85 | 6.60 | 2.82 | 19.45 | 1.10 |
| | Bilinguals | 60.35 | 4.42 | 33.25 | 2.05 | 7.85 | 3.02 | 19.85 | 0.49 |
| | Bidialectals | 59.90 | 3.93 | 32.65 | 1.90 | 7.35 | 2.87 | 19.15 | 1.46 |

| Table 2: Arbitrariness of Language Tasks - Mean (M) and Standard Deviation (SD) |
|-------------------------------------|----------------|----------------|
| Age | Language Group | M | SD |
| Preschool Children | Monodialectals | 10.89 | 3.33 |
| | Bilinguals | 11.40 | 2.69 |
| | Bidialectals | 13.02 | 1.89 |
| Grade 1 Children | Monodialectals | 12.85 | 1.29 |
| | Bilinguals | 14.03 | 1.91 |
| | Bidialectals | 13.88 | 1.25 |
5.1 Phonological awareness

5.1.1 Total task results (Graph 1)
The Grade 1 children produced a significantly greater number of successful answers (p= 0.001) with mean score 58.46, than kindergartners’ mean score 42.98. There was also a main effect of language experience (p= 0.003) with bidialectals and bilinguals achieving the highest scores, M= 52.77 and M= 52.62 respectively, and monodialectals achieving the lowest score (M= 46.75). Multiple comparisons revealed that the scores of bilingual and bidialectal children did not differ from each other (p= 0.99), and that the scores of both groups differed significantly from the scores of monodialectals: bilinguals ≠ monodialectals (p= 0.007); bidialectals ≠ monodialectals (p= 0.006). The interaction between age and language status was not significant (p= 0.84).

5.1.2 Initial Phoneme Detection (Graph 2)
Age had a highly significant effect (p= 0.001) with first graders achieving higher scores (M= 31.65) than kindergartners (M= 19.99). Language experience was significant (p<0.05) with bidialectals and bilinguals achieving the highest scores, M= 27.22 and M= 26.90 respectively, and monodialectals achieving the lowest score (M= 23.24). The interaction of age and language experience was not significant (p= 0.96). Planned comparisons revealed that monodialectals had significantly lower scores than bilinguals (p= .03) and bidialectals (p= 0.01). Bidialectals and bilinguals did not differ significantly (p= 0.77).
5.1.3 Initial Phoneme Deletion (Graph 3)
Age effect was highly significant (p = 0.0001), with first graders achieving higher scores (M = 7.27) than kindergartners (M = 5.50). Language experience was not significant (p = 0.16). Planned comparisons revealed no significant differences between the three groups. Nevertheless bilinguals and bidialectals achieved the highest scores, M = 6.92 and M = 6.37 respectively. Monodialectals achieved the lowest score (M = 5.84). Also, the effect of age and language experience was not significant (p = 0.92).

5.1.4 Syllable Completion (Graph 4)
This analysis revealed a main effect of age (p = 0.02) with first graders achieving higher scores (M = 19.48) than kindergartners (M = 18.27). Language experience effect was significant (p = 0.03) with bilinguals achieving the highest scores, M = 19.57, monodialectals achieving the lowest score (M = 18.00) and bidialectals in between M = 19.05. The interaction of age and language experience was just significant (p = 0.05). Planned comparisons revealed that monodialectals had significantly lower scores than bilinguals (p = .02) but not in comparison to bidialectals (p = 0.14). Bidialectals and bilinguals did not differ significantly (p = 0.67).

5.2 Arbitrariness of Language (Graph 5)
The analysis revealed a significant effect of age, F (1, 117) = 17.67, p = .0002, with first graders (M = 13.63) achieving higher scores than kindergartners (M = 12.02). There was also a main effect of language experience, F (2, 117) = 6.72, p = .002, with bidialectals achieving the highest score (M = 13.45), bilinguals achieving mean score 13.09 and monodialectals achieving the lowest score (M = 11.87). Multiple comparisons revealed that the scores of both bilingual and bidialectal groups carried out greater number of correct answers as compared to monodialectal group. Bidialectals and bilinguals did not differ significantly from each other (p = 0.71). The scores of both groups differed significantly from the scores of monodialectals: bilinguals ≠ monodialectals p =
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0.015; bidialectals ≠ monodialectals p= 0.003. The interaction between age and language status was not significant (p= 0.4).

6. Discussion
The overall division of the participants to pre literate and literate children indicated that the effects of age / literacy on metalinguistic performance are apparent in almost all measures of metalinguistic tasks for all groups. The metalinguistic tasks did not examine literacy effects in detail; however first graders’ higher performance is explained as a result of literacy. Previous researches have revealed that phonological awareness is mainly the result of reading and writing instruction which demands awareness of speech sounds. As children learn to read and write, knowledge of the orthographic representation facilitates phonological awareness. The findings of the present study support this hypothesis since performance in all three Grade 1 groups were significantly higher than those of kindergarten children in phonological tasks. As indicated by previous results, kindergarten children were reasonably aware of larger units. This pattern was replicated by the syllable completion task of the present study, where no significant differences were found between the two age groups. However, the kindergarten group had lesser awareness of smaller units such as the phonemes in comparison to Grade 1 group. This behavior replicates the claim that phoneme awareness is most influenced by the introduction of literacy skills.

Are metalinguistic abilities of bidialectal children similar to that of bilingual children and higher than that of monodialectal children? The most interesting pattern concerns the finding that exposure to 2 different varieties of the same language, and in particular exposure to the GCD and to oral and literary SMG, may require the same intensive language analysis as accomplished by children exposed to two different languages. Such an interpretation is supported by the close relationship between the results of the tasks since both groups’ performances equalled. In particular bidialectal GC children’s behaviour was similar to bilingual children while GC children appeared to have more advanced metalinguistic performance than monodialectal SMG-speaking children at the phonological awareness task and the arbitrariness of language task. These differentiations can be attributed to GC children’s early daily exposure to the two different varieties of Greek, the oral GCD and the (mainly) written SMG variety.

It is of interest to point out that on the test of the arbitrariness of language, bidialectal children had higher scores than monodialectals in Grade 1 but equal scores to bilinguals. Previous studies have shown that awareness of the subjective relationship between an object and its name is related to bilingualism. It may be argued that language arbitrariness is not related principally to age or to exposure to literary SMG since performance comparisons in both ages revealed no significant differences. It would seem reasonable to consider that the linguistic knowledge starts earlier in bidialectals than in monodialectals. Specifically, it could be argued that, in the course of their daily communications, bidialectal children are “forced” to create various hypotheses about language structure and language variation thus continuously elaborating on their linguistic knowledge.

The approach taken in explaining bidialectism as a factor related to metalinguistic abilities presents a challenge for future research. To understand bidialectal influences, it is necessary to take into account who is being studied and what the task is. It requires a complete description of the nature of the child's bidialectism and the teaching methodologies in bidialectal settings; it is crucial to calculate and determine the dialect
usage. Further systematic investigation of the effects of different degrees of bidialectism as a result of social and geographical factors on certain metalinguistic abilities is required. Methodological task improvements and new items are possibly needed while reading comprehension and reading recognition must be also compared to metalinguistic behaviour. Before definite statements are made about bidialectism effects on the linguistic development of children who are exposed to different varieties of a language, we need to include detailed descriptions addressing the variance on each of these dimensions.

References