
Foreign Language-Medium Instruction and Bilingualism: The Analysis of a Myth*

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Abstract: *The present study discusses the potential effects of learning and using more than one language (i.e., bilingualism) on the bilingual child in relation to the prevailing discussion on foreign language-medium instruction in Turkey. It is shown that, in contrast to popular beliefs in the society and findings obtained in the early stages of the 20th century, bilingualism does not appear to be an obstacle to the bilingual child, but may act as a facilitating trait in many respects, including the bilingual child's cognitive and linguistic development.*

Key words: *Bilingualism, Language Acquisition, Foreign Language Education, Education in a Foreign Language*

Öz: *Bu çalışmada, Türkiye'de sürmekte olan yabancı dilde eğitim tartışmalarının paralelinde, birden fazla dili öğrenmenin ve kullanmanın (ikidilliliğin/çokdilliliğin) çokdilli çocuklar üzerindeki potansiyel etkileri tartışılmaktadır. Toplumda süregelen yaygın inanışların ve 20. yüzyılın erken dönemlerinde elde edilen bulguların aksine, çokdilliliğin çocuklarda olumsuz değil, çocuğun bilişsel ve dilsel gelişimi de dahil olmak üzere, olumlu etkilere yol açabileceği gösterilmekte.*

Anahtar sözcükler: *İkidillilik, Dil Edinimi, Yabancı Dil Eğitimi, Yabancı Dilde Eğitim*

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1. INTRODUCTION

A increasingly widespread concern for many people in Turkey is the introduction of foreign language classes in pre- and primary-schools and the growing amount of secondary schools that implement education almost exclusively in a foreign language. This issue is by no means a new topic in Turkey and has been occupying much space on the agenda of researchers, professionals, politicians and parents alike, partly due to the lasting effects of a number of longstanding “myths” about bilingualism and its potential effects on the bilingual child, which are occasionally pronounced in newspapers, popular (science) books and on TV, often without being seriously questioned.

Advocates of the abandonment of foreign language classes and/or foreign language-medium curricula at early stages of the Turkish schooling-system usually make use of popular clichés and questionable assumptions, suggesting that education in a foreign language will affect children’s cognitive development negatively, that the native language (i.e., Turkish) will suffer considerably, that the balanced development of multiple language proficiency is not possible, and that the learning of (an) additional language(s) will decrease the child’s creativity in the native language, among many others. Unfortunately, these attitudes often receive strong support from authors and politicians who typically have ideological rather than scientific motives and try to shape the society’s beliefs without actually taking into consideration the accumulated knowledge of serious linguistic and educational research concerning various dimensions of the learning of additional languages.

From an educational and linguistic viewpoint, it is important to understand how the acquisition of two or more languages at an early age actually affects the child socially and psychologically, and how other capacities are affected in the process of adapting to a changing environment (Macias, 1992). Accordingly, the aim of the present study is to present a review of different approaches to bilingualism, summarise research findings concerning its effects on the bilingual child from an educational and linguistic perspective, and present the implications for the ongoing debate concerning education in a foreign language, foreign language education and bilingualism in Turkey.

2. DEFINING BILINGUALISM

In order to be able to come up with a full picture of the impacts of bilingualism, it is first necessary to define the scope of the term. In other words, the question of whom to call a bilingual and whom not needs to be clearly answered. However, this is actually much more difficult and complex than it initially appears since there appears to be no consensus in the field of linguistics (and related fields) concerning the characteristic features of a bilingual. Hence, the terms “bilingual” and “bilingualism” are used by different people in reference to a diverse set of conditions, as will be discussed below.

The definitions of bilingualism in the literature vary across a very broad spectrum. At one end of this spectrum it is possible to encounter rather narrow definitions like that by Bloomfield, who defines the bilingual as possessing “native-like control of two or more languages” (1933, p.56), whereas the other end of the spectrum is marked by rather broad definitions, which state that “bilingualism begins when the speaker of one language can produce complete meaningful utterances in the other language” (Haugen, 1953, p. 7) or

when someone can function in each language according to given needs (Grosjean, 1989). Still other definitions fall somewhere in between the qualitatively distant two ends of the continuum of definitions and approach the bilingual from a different angle, describing him/her as “someone who is taken to be one of themselves by the members of two different linguistic communities” (Thiery, 1978, p.146) or as having the capacity “to speak a second language while following the concepts and structures of that language rather than paraphrasing his or her mother tongue” (Titone, 1972, p. 11).

What these definitions clearly imply is that bilingualism is a relative and ambiguous term in the literature, involving both dichotomous (i.e., somebody either has native-like control of a language or not) and developmental views of the bilingual and his/her competence in the languages involved. However, a significant problem with dichotomous definitions as the one proposed by Bloomfield (1933) is that they are prone to lead to conceptual dead-ends since it is practically impossible to define “native-like control of a language” in an absolute way (Hakuta, 1986; Appel & Muysken, 1987). Hence, depending on the view employed concerning what constitutes native-like control of a language, the term “bilingual” as defined by Bloomfield may include radically different groups of people and may exclude some varieties of languages that are spoken by a considerable number of people in a given context (e.g., the German variety spoken by guestworkers in Germany).

Traditionally, “bilingualism” has been equated with contexts in which the target language is the dominant or only language in the society (i.e., English in the UK or the USA, German in Germany, French in France as “Second Languages”) and thus often excludes cases of the acquisition of a target language predominantly used in classroom-environments and to a lesser extent in natural settings (i.e., what is often referred to as a “Foreign Language” context) such as English in Turkey, Spanish in Greece, Arabic in Hungary etc. The basic reason for maintaining such a division is the fact that there happen to be a number of qualitative and quantitative differences which have been found to affect the acquisition of an additional language in the mentioned contexts differently, such as the amount of exposure to the target language and culture, the amount of contact to native speakers of the target language, the (un)availability of knowledge about how the target language processes concepts on the basis of metaphorical structuring (i.e., “conceptual fluency”, Danesi, 1992) etc. However, the observance of this context-restrictive use of the term “bilingualism” in the literature is anything but consistent and even relatively strong supporters of the usefulness of the second/foreign language dichotomy like Kecskes and Papp (2000), who underscore the “crucial differences” (p. 4) between the two modes of language learning, tend to use “bilingual(ism)” as a cover term for both foreign and second language users and environments, possibly because it has become almost impossible to talk about “sterile” second or foreign language contexts nowadays (Kecskes & Papp, 2000).

Thus, maintaining a developmental, context-independent approach to the definition of bilingualism might be more appropriate since this brings the entire process of second language acquisition within the scope of the study of bilingualism (Romaine, 1989) and embraces the whole variety of possible degrees of bilingualism. This latter view is also supported by Stern (1983), who claims that *any* proficiency level in more than one language, whether naturally acquired or learned as a foreign language, can be referred to as bilingualism. From this perspective, it may be most appropriate to say that the practice of alternatively using two or more languages, no matter what the relative proficiency level

in each language and no matter in which settings the languages are used, shall be called bilingualism, and the persons involved bilinguals.

3. THE TURKISH CONTEXT

The Turkish educational context is marked by a noteworthy controversy between the ever-increasing demand for schools providing foreign language-medium instruction (Mainly Anatolian High Schools (Anadolu Lisesi) and private schools.), which refers to the teaching of science-related subjects (e.g., physics, chemistry) and mathematics in a foreign language, on the one hand, and a growing concern about the effects of such instruction on children attending foreign language medium instruction schools on the other. According to the statistics published by the Turkish Ministry of Education concerning the academic year 2002/2003 (Milli Eğitim Bakanlığı, 2003), 579 out of the 2559 secondary schools in the country (23%) offer instruction in a foreign language (predominantly in English), which means that approximately 12% of all secondary school students in Turkey are exposed to a foreign language at least as the medium of instruction for a considerable amount of time on a regular basis (Tarhan, 2003). Considering the fact that less than two decades ago, in 1988, the number of foreign language-medium instruction schools in Turkey was only 221 (Demircan, 1988), it becomes evident that the demand for instruction in a foreign language is undeniably on the increase.

However, the obvious increase in the demand for instruction in a foreign language coexists with a strong disapproval of this trend, especially pronounced by a number of politicians and educators, which has even led to a draft proposal by a member of the Turkish parliament in 2001 to ban foreign language-medium instruction in the country for the reason that it constitutes a threat to the Turkish language. Görgülü (1995, in Tarhan, 2003) summarises a number of representative counterarguments put forward against foreign language-medium instruction, which (among many other things) blame foreign language-medium instruction for

- Negatively affecting students' concept formation in Turkish negatively
- impoverishing the Turkish language
- leading to a loss of the creative power of Turkish due to the creation of a mixture of two languages in which the rules of the foreign language spread into Turkish
- adversely affecting thought processes in children
- posing a barrier to learning.

In other words, the arguments against immersion in a foreign language in Turkey to an important extent rest upon the belief that the particular type of "bilingualism" created by foreign language-medium instruction, adopting the broader definition of bilingualism, poses a threat to the linguistic and cognitive development of children who are exposed to this educational practice. However, as mentioned before, the proposed arguments usually remain at the level of "beliefs" and are hardly ever based upon findings from studies that have investigated the effects of bilingualism empirically.

Unfortunately, empirical studies focusing on this issue are very limited and have mostly focused on the attitudes and perceptions of different groups of the Turkish public concerning foreign language-medium instruction in secondary schools (e.g., Aksu & Akarsu, 1985; Erdem, 1990; Tarhan, 2003) rather than trying to measure the exact impact of foreign language-medium instruction on given linguistic and/or cognitive traits. Therefore, the following sections will present an overview of findings obtained from studies investigating the effects of bilingualism on the linguistic and cognitive development of bilingual children in second language contexts in the hope that the results of these may have important implications for the ongoing debate in the Turkish context as well. Although the findings to be discussed thus mostly come from studies conducted in linguistic contexts in which the bilingual child usually has plenty of access to both languages in natural as well as instructional settings, in contrast to the situation in Turkey where access to one language is predominantly restricted to school-settings, it is believed that the very psycholinguistic nature of both contexts is very similar since in both cases the emerging state is basically the coexistence of two (or more) developing linguistic systems in the child's mind, however diverse the acquisitional settings may be. Hence, the rich literature on bilingualism in second language contexts may provide invaluable insights to the discussion at hand with the reservation that the implications of the reported results may not be directly translated into the Turkish context and, thus, need to be treated with caution.

4. THE EFFECTS OF BILINGUALISM

How, then, does bilingualism affect the bilingual child? The literature on bilingualism is far from having reached commonly agreed-upon results and reports both positive and negative effects of bilingualism on psychological, cognitive, linguistic and other constructs. While negative findings were mainly obtained during the period between the beginning of the 20th century and the 1960's, the later part of the century was marked by positive findings related to bilingualism (Grosjean, 1982; Hakuta, 1986; Edwards, 1995).

4.1 Negative Findings

Until the 1960's, many researchers appeared to concur with Jespersen, who wrote in 1922 that a child "hardly learns either of the two languages as perfectly as he would have done if he had limited himself to one" and that "the brain effort required to master two languages...diminishes the child's power of learning other things" (p. 148). Thus, it was believed that bilingualism was an obstacle to both linguistic and cognitive development.

This view was supported by research studies which found that on the level of language development many problems were observed, such as restricted vocabularies, limited grammatical structures, unusual word order, errors in morphology, hesitations, stuttering, etc. (Grosjean, 1982). Kelly (1936), for example, reported that the bilinguals she analysed had a handicap of 2.7 years in terms of their reading abilities and, in the same vein, Tireman (1954) found that Spanish-English bilinguals mastered only 54 percent of the words supposed to be in their reading vocabulary.

A study often cited in the relevant literature is Carrow (1957) on Spanish-English children in Texas primary schools who were compared with a group of monolingual English

speaking students. Both groups were tested in silent reading, oral reading accuracy and comprehension, spelling, hearing, articulatory skills, vocabulary, and arithmetic reasoning. It was found that monolingual children clearly outperformed the bilingual subjects, though not significantly in all instances.

On the basis of the above mentioned and similar studies in the same period, Macnamara (1966) formulated the *balance hypothesis*, which postulated that bilingualism has a detrimental effect on linguistic skills. The hypothesis claimed that human beings have a certain potential, or perhaps neural and physiological capacity, for language learning. If an individual learns more than one language, knowing one language restricts the possibilities for learning other languages and more proficiency in one language implies fewer skills in the other ones (Appel & Muysken, 1987).

However, the apparent problem with these studies was mainly methodological in nature. A re-analysis clearly shows that the bilingual subjects chosen for these studies were often not comparable with the monolingual controls in terms of socio-economic background or proficiency in the language of testing and that the notion of bilingualism was not adequately defined in these studies. Moreover, the tests were often administered in the subjects' weaker languages, which put the bilingual subjects in a disadvantageous position from the outset (Hamers & Blanc, 1989).

On the level of cognitive development and intelligence, similar negative findings were obtained in the mentioned time-period. Saer (1923), for example, found that Welsh-English bilingual children in rural areas had lower IQ scores than monolingual children. Darcy (1946) found that the mental ages of monolingual English-speaking children surpassed those of bilingual Italian-American children. Brigham (1923) and Goodenough (1926) found similar negative relationships between bilingualism and intelligence and cognitive development.

However, similar to studies indicating a negative relationship between bilingualism and linguistic skills, studies pointing to a negative relation between bilingualism, cognitive development and intelligence are also criticised for the lack of validity and reliability in their designs and findings. Important variables such as socio-economic status, sex, degree of bilingualism, age and the actual tests used, which play crucial roles in the analyses of the test results, were often not or only insufficiently controlled for. Bilingual children from lower socio-economic classes, for example, "scored lower on the tests than monolingual children from higher socio-economic classes, not necessarily because of their bilingualism" (Appel & Muysken, 1987, p. 109); furthermore, it should not be forgotten that tests measuring intelligence and cognitive ability measured subjects only in the second or non-dominant language, again creating an unequal and unreliable testing-environment in favour of the monolingual children (Romaine, 1995).

4.2. Positive Findings

More recently, it has been found that bilingualism is, after all, a great asset to the child. It has been noted that the bilingual child has a better awareness of language differences, is better at learning new languages, and possesses important advantages in intelligence and cognitive growth (Murray & Kouritzin, 1997; Grosjean, 1982; Roseberry-McKibbin & Brice, 2000; Hawson, 1997; Gonzales & Yawkey, 1994). Thus, in contrast to studies

conducted in earlier periods, the later period of the 20th century was marked by overwhelmingly positive findings of the analysis of the relationship between bilingualism, intelligence, cognitive abilities and linguistic development.

Probably the turning-point came in the early 1960's, when findings showing a positive relationship between intelligence and bilingualism began to emerge together with the appearance of methodologically sound investigations. Peal and Lambert's 1962 study, for example, gave particular care to variables which had either been ignored or not carefully controlled in earlier studies, such as choosing bilingual and monolingual children from the same socio-economic background, using only bilinguals who were equally good in both languages (balanced bilinguals) and not viewing cognitive abilities solely on the basis of the IQ concept. They found that bilingual children performed better than the monolinguals on both verbal and non-verbal intelligence and that bilinguals were especially good on certain sub-tests which required mental manipulation and reorganisation of visual patterns (Romaine, 1995; Edwards, 1995). Based on their findings, Peal and Lambert reached the conclusion that the bilingual child had "mental flexibility, a superiority in concept formation and a more diversified set of mental abilities" but added that "it is not possible to state from the present study whether the more intelligent child became bilingual or whether bilingualism aided his intellectual development" (1962, p.20).

Following Peal and Lambert's (1962) study, many others have come up with findings supporting a positive relationship between bilingualism and intelligence or cognitive development. Balkan (1970) found a greater ability in bilinguals in reconstructing perceptual situations, Scott (1973) reported that bilinguals showed a greater degree of divergent thinking, and Cummins & Gulutsan (1974) obtained superior results for bilinguals on verbal and non-verbal intelligence, verbal originality and verbal divergence tests. Some more recent studies also point into the same direction: Powers & Lopez (1985) observed that 4-year-old bilinguals outperform monolinguals not only in following complex instruction but also in perceptual-motor coordination and Okoh (1980) found that bilinguals generally scored higher on measures of divergent thinking and verbal creativity.

Similar findings have been obtained for the relationship between bilingualism and (meta)linguistic ability in the native language. Several researchers have demonstrated that even when bilinguals and monolinguals are equated for cognitive functioning, the former may possess better verbal abilities in the L1. A number of studies report bilinguals as being superior in a variety of verbal tasks like analytic processing of verbal input; verbal creativity; awareness of the arbitrariness of language and of the relation between words, referent and meaning; and perception of linguistic ambiguity (Hamers & Blanc, 1989). Furthermore, bilingual children are reported to achieve better results than their monolingual counterparts in tests of complex syntactic structure, in mother-tongue composition (Swain & Lapkin, 1982) and in mother-tongue syntax (Tremaine, 1975).

The reported superiority of bilingual children on a number of different cognitive and (meta)linguistic measures have been attributed to a number of different factors. Appel & Muysken (1987) state that this observed superiority is due to the fact that bilingual children are confronted with two systems of linguistic rules. They note that bilinguals probably develop a more analytical view of language, and must therefore have a greater awareness of language than monolinguals. Peal and Lambert (1962) claim that bilingual children may show cognitive advantages because they are better able to dissociate

concepts from the words with which they are verbalized. This can make the mind free and will foster “intellectual emancipation” (Segalowitz, 1977, p. 131), which will be closely related to cognitive flexibility. In the same vein, Harley et al. (1986) state that bilingual children have an advantage over monolingual children because bilinguals are more aware of the dichotomy between form and meaning in language, and/or because they develop an earlier syntactic orientation to language.

5. PROBLEMS IN REACHING A CONCLUSION

Do these findings suggest that earlier findings indicating a negative relationship between bilingualism and cognitive and linguistic traits should be disregarded and that it may now be concluded that bilingualism will not impede cognitive and linguistic development and will even affect certain aspects positively? Appel & Muysken (1987) and Edwards (1995) state that such a conclusion would certainly be too simplistic and present the pitfalls and difficulties of reaching such a conclusion in the form of four questions (in Edwards, 1995), which have been slightly revised here:

1. How do we adequately define bilingualism itself; do we require perfectly balanced bilinguals for the ‘best’ contrast with monolinguals, and how do we measure bilingualism?
2. How do we define intelligence [and other cognitive abilities] and linguistic proficiency; relatedly, how do we know that tests adequately assess these quantities?
3. How do we ensure comparability between groups of bilinguals and monolinguals; controlling for age, sex and some other variables may not be difficult, but what about socio-economic status?
4. How do we interpret any relationship found between bilingualism and cognitive and linguistic abilities? Is it a causal one, and, if so, in which direction? Does bilingualism lead to increased IQ, for example, or does a higher IQ increase the likelihood of functional bilingualism?

In other words, strong conclusions about bilingualism and certain cognitive and linguistic traits are not defensible at this point. Therefore, it may be safer for now to propose that bilingualism as such has no explicitly proven major positive or negative effect on the cognitive and intellectual development of children in general (Grosjean, 1982; Hakuta, 1986) - a proposition which McLaughlin (1978, p. 206) summarises clearly:

In short, almost no general statements are warranted by research on the effects of bilingualism. It has not been demonstrated that bilingualism has positive or negative consequences for intelligence, linguistic skills, educational attainment, emotional adjustment, or cognitive functioning. In almost every case, the findings of research are either contradicted by other research or can be questioned on methodological grounds.

6. CONCLUSION AND IMPLICATIONS

In conclusion, it appears that neither the definition of bilingualism nor the cognitive and (meta) linguistic effects of bilingualism on the bilingual individual are easily definable. Thus, much more and better controlled research into the effects of bilingualism is definitely necessary to arrive at results that can be extended cross-linguistically and cross-contextually.

From this perspective, it may well be said that the concerns of many people in the Turkish context with regard to the negative effects of language immersion-like educational programs and bilingualism are not based on scientifically solid ground, since although the literature does not necessarily agree upon solely positive effects of bilingualism, conclusions pointing to negative effects of bilingualism have not been proven either. Thus, the abandonment of programs fostering the acquisition of a foreign language at very young ages due to supposedly negative effects on the cognitive development and linguistic abilities of the students involved will simply have ideological, rather than pedagogy or linguistic-grounded motives.

As has been pointed out before, the reported findings need to be treated with caution and may not be directly applied to the Turkish context since there appear to be qualitative and quantitative differences in the acquisitional settings. Therefore, the very best step to take for both advocates and opponents of foreign language-medium instruction in Turkey is probably to initiate local research into the effects of bilingualism and foreign language education, which has not really been the case so far. In other words, seriously conducted and well-designed large-scale studies comparing the academic achievements, psychological traits, linguistic developments and social attitudes of monolingual and bilingual individuals should be conducted in order to come up with solid arguments and to be able to plan (language) education in the country based on scientific evidence rather than partly xenophobic ideological ideas or “superstitions” as put by Alptekin (2004).

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