# Effects of Bilingualism on Personality, Cognitive and Educational Developments: A Historical Perspective 



Majid N. Al-Amri<br>Saudi Arabia<br>majid_yic@yahoo.com


#### Abstract

From the first half of the 20th century, the question of whether bilingualism affects the individual has been discussed as a topic of essential investigation. Researchers have fallen into two main directions in answering this question. Some researchers claim that bilingualism is a negative phenomenon that has detrimental effects on bilingual. Recently, a number of researchers have produced evidence on the positive side that claim that bilingualism affects cognitive, personality, and educational developments. The study discusses these two views further regarding the three main dimensions. Then the study explains why the two views are so contradictory. The paper concludes that there is no a clearcut answer for the question of the paper namely, Is bilingualism a problem? However, although a lot of studies are contradictory and each one needs firm methodological grounds recent studies with implementation of advanced research technologies and methods tip the balance in favor of bilingualism.


Keywords: Bilingualism advantages, bilingualism disadvantages, intelligence and bilingualism, education and bilingualism, personality and bilingualism.

## 1 INTRODUCTION

The answer to the question of the paper can be discussed either at the individual level (e.g. whether multilingualism affects child's intelligence positively or negatively) or at the societal level (the suspicion shown by the people and governments toward the loyalty of the bilingual citizens because they can speak another language) (McLaughlin, 1978). However, in this paper my discussion will be about the effects of bilingualism at the individual level.

From the first half of the 20th century, whether bilingualism affect at the individual level has been discussed as a topic of essential investigation. Researchers have fallen into two main directions in answering this question. Some researchers claim that bilingualism is a negative phenomenon that has detrimental effects on bilingual. Recently, a number of researchers have produced evidence on the positive side that claim that bilingualism affects creativity and intelligence.

The paper will discuss these two views further regarding three main dimensions. They are as follows: bilingualism and intelligence, bilingualism and education, and bilingualism and personality. Then I will try to explain why the two views are so contradictory.

## 2 PERIOD OF NEGATIVE EFFECTS

In the first half of the 20 the century research on bilingualism was guided by the question of whether bilingualism had a negative effective on child. (Hakuta (1986) in Romaine (1989).

Grosjean (1982) argues that until recently, many researchers agreed with the famous linguist Otto Jespersen, who expressed a negative opinion about the effect of bilingualism on the child's power of learning.

Some evidence against bilingualism was first based on personal intuition. Reynold (1928) in Saunders (1988) argued that bilingualism leads to language mixing and language confusion which in turn results in a decrease in intelligence and a reduction in the ability to think. Leo Weisgerber (1933) in Saunders (1988) also believed that bilingualism could impair the intelligence of a whole ethnic group and can be seen as something unnatural.

Then many studies have emerged to support the claims that bilingualism had negative effects on intelligence and cognitive ability. The results of such studies led the researchers to claim that bilingualism is a mental burden for bilingual children causing them uncertain and confused (McLaughlin, 1978).

Arsenian (1937) in McLaughlin (1978) noted that $60 \%$ of 32 studies carried in the United States reported evidence that bilingualism is an intellectual handicap; 30\% reported that handicap, if it exists, is a minor one; and $10 \%$ found that no ill effects of bilingualism on intelligence. Sear (1924) in Romaine (1989) studied 1,400 7-14-year-old Welsh/English bilingual children in five rural and two urban areas of Wales. He concluded that bilingualism resulted in lower intelligence because of the lower scores obtained by bilingual children in rural areas.

In Luxembourg, Carroll (1953), in Report on an International Seminar on Bilingualism in Education (1965), reported in his study that bilingualism encourages facile and superficial mental attitudes. Darcy (1946) in Grosjean (1982) found that monolingual English-speaking children are more intelligent than those of bilingual Italian-American children. Furthermore, Jones and Stewart (1951) in Grosjean (1982) found that monolingual English children are better than bilingual Welsh-English children in both verbal and non-verbal intelligence tests.

Concerning educational development, many researchers found that bilingualism retards educational progress. In Jersen's (1962) review of some studies, in McLaughlin (1978), a number of studies were cited as evidence that bilingualism had a negative effect on children's education. According to researchers holding this view, bilingualism affects child negatively. In other words, children may become handicapped in studying in general and in specific subjects such as vocabulary, spelling, history, and geography.

Smith (1949) in Romaine (1989) tested Hawaiian children of Chinese ancestry in both English and Chinese. She found that their scores on vocabulary development were below the monolingual norms. In Tireman's (1955) study in Grosjean (1982), a number of SpanishEnglish bilinguals were found to have mastered only 54 percent of the words required to be in their reading vocabulary. Kelly (1936) in Grosjean (1982) found that bilinguals, in the Arizona schools, had a handicap of 2.7 years. In addition, Carrow (1957) in Appel and Muysken (1987) tested Spanish-English children and English speaking students in silent reading, oral reading accuracy and comprehension, spelling, hearing, articulatory skills, vocabulary, and arithmetic reasoning. He found that the monolingual children were better than bilinguals.

Appel and Muysken (1987) argue that the idea that bilingualism had a negative effect on linguistic skills was formulated as the balance hypothesis which claims that human beings have a certain potential capacity for language learning; knowing one language restricts the possibilities for learning the other languages. So it is expected that more proficiency in one language results in fewer skills in the other ones.

A number of researchers believed that bilingual child's interest and responsiveness may decline which result in dropping out of school early (McLaughlin, 1978). They noted that bilingual children's interest and initiative were adversely affected by bilingualism and as a result they failed to develop an adequate adjustment to education. For instance, Macnamara
(1966) in Grosjean (1982) tested some bilingual children whose language was English and whose school language was Irish, and found that they were eleven months behind when compared to monolingual children.

On the level of personality development, it is believed that speaking two languages is a negative factor in personality or identity development (Appel and Muysken, 1987). There is a number of researchers claim that bilingualism has detrimental effect on personality which leads to tension and emotional lability. It is sometimes stated that there is a conflict between the child's bilingualism and his personality and emotion. Diebold (1968) in Appel and Muysken (1987) argue that this will cause emotional liability, and even alienation or anomie.

Weinreich (1953) in Appel and Muysken (1987) cited the words of the Luxembourger Ries: "The temperament of Luxembourger is rather phlegmatic . . . we have none of German sentimentalism (Gemut), and even less of French vivacity . . . Our bilingual eclecticism presents us from consolidating our conception of the world and from becoming strong personalities." Appel and Muysken (1987) argue that this position was defended in the 1930s in Germany where Nazi ideology required the 'purity' of the nation, i.e. purity of language and a strong relation between a people and a language. One of the researchers who support this idea is Muller (1934) in Appel and Muysken (1987). He claims that the Polish German population of Upper Silesia suffered from mental inferiority because of their bilingualism.

Thus, most of the studies done before the 1960s indicated that bilingualism had a negative effect on the child's intellectual, educational, and emotional development; only a few found no effect or a positive effect. One exception of these studies is Malherbe's (1946) study in Romaine (1989). It was done on bilingual schooling in English and Afrikaans in South Africa. It included over 18,000 pupils in monolingual and bilingual schools. Malherbe compared the scholastic and linguistic achievement of pupils in bilingual and monolingual schools. He found that pupils who attended bilingual schools are better than those who attended monolingual schools. The English-speaking pupils, who were less bilingual to start with, achieved more in Afrikaans than the Afrikaans-speaking pupils did in English. In addition, there was no loss of first language skills and the highest level of bilingualism was gained by the students in the bilingual schools.

## 3 PERIOD OF POSITIVE EFFECTS

Recently, a number of researchers and investigators found that bilingualism is a great help to the child. They declared that the bilingualism has positive effects that facilitate learning a new language, and they reported that in school bilingual children are more motivated and often ahead of other classmates, especially in intellectual development. (Grosjean, 1982)

On the level of intelligence development, Ellizabeth Real's and Wallace Lambert's (1962) investigations in Romaine (1989) were great impact on the field. Their investigations are considered to be a turning point in the debate. They studied the effects of bilingualism on the intellectual functioning of ten-year-old children from six French Canadian schools in Montreal. The bilingual children were compared to other French monolinguals from the same French school system in Montreal.

Peal and Lambert took a number into consideration. Firstly, they selected the children from a same social class background 'middle class'. Secondly, they distinguished between two kinds of bilingual children: 'true, balanced bilinguals', who were proficient in both languages, and 'pseudo-bilinguals', who had not attained age-appropriate abilities in the second language. Thirdly, they depended on a wider view of cognitive abilities than those on which the concept of IQ is built on. However, they found that the bilingual children are better than the monolinguals, especially in verbal and non-verbal tests which required mental manipulation and reorganisation of visual patterns.

Following Peal and Lambert, a number of researchers appeared to confirm the conclusion reached in the 1962 investigation. They claim that bilingualism can have a positive effect on intelligence and can give bilingual children certain cognitive advantages over their monolingual peers (Saunders, 1988). Let us discuss the most common studies which came to confirm these advantages.

Anita Ianco-Worrall (1972) in Saunders (1988) studies Afrikaans-English 4-9 year-old bilingual children in South Africa. He argued that bilingual children are better than monolinguals in analysing language as an abstract system. He concluded that bilingual children were capable of separating the meaning of a word from its sound at a much earlier age than their monolingual peers. Scott (1973) in Romaine (1989) found that a group of English-Canadian children who were being taught French were better than their monolingual peers in divergent thinking tasks which demand a rich imagination and a special type of cognitive flexibility. Carolyn Kessler \& Mary Quinn (1987) in Saunders (1988) also have carried out a nmber of empirical studies of the effects of bilingualism on children. They found that bilingualism has a positive effect on the cognitive creativity of children. Their research also confirmed what has been said about bilingual children's superiority in divergent thinking. A study by Carringer (1974) in Romaine (1989) of 15-year-old Spanish/English bilingual children concluded that bilingualism promoted creative ability in all aspects such as verbal and figural fluency, flexibility and originality. Sandra Ben-Zeev (1977) in Saunders (1988) found that bilingual children are more sensitive to cues than monolinguals. It means that bilingual children are more easily to be corrected and guided than monolinguals. Moreover, Liedtke \& Nelson's (1968) study in Saunders (1988) concluded that bilingual children are significantly better at concept formation than monolinguals. They explain that bilingual children can do so because they are exposed to a more complex environment (by virtue of their two languages) compared to monolingual children acquiring only one language.

On the level of educational development, the majority of studies performed after 1960 indicate that bilingual education has positive outcomes in all areas: first and second language skills, other subjects, and social and emotional aspects (Appel \& Muysken, 1987). For example, Cummins (1979) in Appel and Muysken (1987) points out that the positive results of immersion education for bilingual children speaking a high-status language in Canada and the USA. He argues that bilingualism does not have negative effects on language skills. Children should receive instruction in their mother tongue so that the acquisition of academic skills can be developed. And children from majority groups will profit from bilingualism if the second language is introduced at an early stage because the first language is developed outside school. However, these views have not yet found empirical studies support. (Appel \& Muysken, 1987)

Concerning personality development, a number of researchers argue that bilingualism does not affect personality. McLaughlin (1978), for example, mentions that the emotional and psychological conflicts that the bilingual children experience are not emerged from learning two languages but by hostile attitudes of society. He argues that it is not bilingualism that leads to negative effects on personality but socioeconomic considerations such as being in an inferior social group and having poor teachers and schools. He also argues that the difficulties that arise from conflicts of biculturalism, having to adjust to two ways of life, may produce conflicts of behaviour and the stigma of inferiority.

Also, Appel and Muysken (1987) argue that bilingualism has negative effects on personality development, but only when social conditions are unfavourable. They mentioned that the psychosomatic illnesses which the adults suffer from are not caused by their bilingualism, but by the social and cultural conflicts they experience as members of a discriminated-against ethnic minority, whose language and cultural values are not
appreciated. They also argue that the same goes for children with psychological and emotional problems in school.

However, we can find a number of literature confirm the last views towards bilingualism on personality development. For instance, Appel Everts and Teunissen (1986) in Appel and Muysken (1987) found that Turkish and Moroccan children in bilingual programme in the Netherlands had fewer social and emotional problems than a comparable group of children in monolingual Dutch schools. Also, Dolson's (1985) study in Appel and Muysken (1987) concluded that bilingualism does not seem to have negative effects on the children's personality.

As we enter the new millennium, more research studies are conducted to examine developmental abilities of bilingual children such as language acquisition, metalingusitic ability, literacy, and problem solving. Most of the findings are in favour of bilingualism. For example, research by Bialystok and her colleagues has shown that the studies which used various types of methodology found that bilingualism has a significant impact on children's ability to selectively attend to relevant information on tasks that require control of attention but not to tasks requiring control over competing responses (response inhibition). It was also found that such advantages of bilingualism persist across the lifespan and are related to the positive effects of bilingualism on not only personality and cognitive development but also educational development. (Bialystok, 2001; Bialystok, Craik, Klein, and Viswanathan, 2004; Bialystok, Craik and Ryan, 2006; Martin-rhee \& Bialystok, 2008; Bialystok; 2010)

## 4 REASONS BEHIND THE TWO CONTRADICTORY VIEWS

More recently, researchers have tried to understand the reasons behind the two contradictory views. They have attempted to investigate why the studies that appeared before 1960 are negative and why the studies that have come out since then are positive. In literature, there are a number of researchers who have tried to present some reasons behind the previous contradictory studies.

McLaughlin (1978), for example, explains that the main cause of the early difficulty for many children may not be bilingualism but it may be the fact that they are forced to learn a second language in the school. He also argues that there is no evidence that children are behind when they have equal exposure to the two languages. Skutnabb-Kangas and Toukmaa (1976) in Grosjean (1982) argues that if the first language is poorly developed, the exposure to $s$ second language may lead to negative effect on the development of skills in the first language.
Concerning educational development, McLaughlin (1978) in Grosjean (1982) points out that the command of second language is considered to be a critical factor. He argues that poor performance is predicted if bilingual child has not mastered the language well. He writes: 'As the child's command improves, so will academic performance in subjects taught in that language'. He adds that many factors also should be taken into account such as poor home environment, the parent's low socioeconomic status, negative attitudes of the majority group, conflicts in culture, and so on. Lambert (1977) in Grosjean (1982) writes: 'In general, the researchers in the early period expected to find all sorts of problems, and they usually did: bilingual children, relative to monolinguals, were behind in school, retarded in measured intelligence, and socially drift. One trouble with most of the early studies was that little care was taken to check out the essentials before comparing monolingual and bilingual subjects.'

However, in spite of the recent studies have taken greater care to control factors such as age, socioeconomic status and degree of bilingualism, they still fail to define what they are measuring and how their monolingual and bilingual subjects differ in educational background. Furthermore, matching monolingual to bilingual groups in these studies is to be one of the most difficult problems which they face. (Grosjean, 1982)

Barik amd Swain (1976) in Grosjean (1982) tested two groups of students. One group attended an immersion programme and the other attended a regular programme. However, they used the Otis-Lennon Mental Ability Test at regular intervals over a five-year periods. They did not find any differences between the two groups and they concluded: 'These findings do not support the general trend of studies by other investigators who have found positive effects of bilingualism on cognitive growth'. MacNab (1979) in Grosjean (1982) argues that Peal and Lambert obtained positive results just because their bilingual students were brighter from the start. Cummins (1978, 1980) in Grosjean (1982) argues that a 'threshold hypothesis' can only explain the contradictory results of the many cognitive studies undertaken on bilingual children. 'The threshold hypothesis assumes that those aspects of bilingualism which might positively influence cognitive growth are unlikely to come into effect until the child has attained a certain minimum or threshold level of proficiency in the second language. Similarly, if bilingual children attain only a very low level of proficiency in one or both of their languages, their interaction with the environment through these languages, both in terms of input and output, is likely to be impoverished.' (in Grosjean, 1982, p. 226)

Also, doctrines such as prescriptivism and semilingualism are recently attacked as they are closely aligned with the view that a given race is biologically superior to others. It is argued that racial prejudice has been replaced with linguistic prejudice (Macedo, 2000; Portes, 2005; Gibson, 2002; Bejarano, 2005). In addition to this argument, a number of researchers argue that such doctrines are based on ill-conceived theoretical framework in the absence of relevant evidence. (MacSwan (2000)

## 5 CONCLUSION

In conclusion, there is no a clear-cut answer for the question of the paper: Is bilingualism a problem? The answer of this question is actually not easy, especially when it is related to complicated mental and psychological aspects. However, although a lot of studies are contradictory and each one needs firm methodological grounds recent studies with implementation of advanced research technologies tip the balance in favor of bilingualism.

## References

Appel, R. \& Muysken, P. (1987). Language contact and bilingualism. London:Edward Arnold.
Bejarano, C. L. (2005). ¿Qué onda?: Urban youth cultures and border identity. Tucson, AZ: The University of Arizona Press.

Bialystok, E. (2001). Bilingualism in development: Language, literacy, and cognition. New York: Cambridge University Press.
Bialystok, E., Craik, F. I. M., Klein, R. \& Viswanathan, M. (2004). Bilingualism, aging, and cognitive control: Evidence from the Simon task. Psychology \& Aging, 1990-303.
Bialystok, E., Craik, F. I. M., \& Ryan, J. (2006). Executive control in a modified antisaccade task: Effects of aging and bilingualism. Journal of
Experimental Psychology: Learning, Memory, and Cognition, 32, 1341-1354.
Martin-Rhee, M.M., \& Bialystok, E. (2008). The development of two types of inhibitory control in monolingual and bilingual children. Bilingualism: Language and Cognition, 11, 81-93.
Bialystok, E. (2010). Global-local and trail-making tasks by monolingual and bilingual children: Beyond inhibition. Developmental Psychology, 46, 93-105.

Gibson, M. A. (2002). The new Latino diaspora and educational policy. In S.
Wortham, E. G. Murillo Jr., \& E. T. Hamann (Eds), Education in the new Latino diaspora: Policy and the politics of identity (pp. 241-252).
Westport, CT: Ablex Publishing.
Grosjean, F. (1982). Life with two languages: An introduction to bilingualism. London: Harvard University Press.

Macedo, D. (April, 2000). The colonialism of the English only movement. Educational Researcher, 29(3), 15-24. Retrieved August 15, 2006, from JSTOR database.
MacSwan, J. (February, 2000). The threshold hypothesis, semilingualism, and other contributions to a deficit view of linguistic minorities. Hispanic Journal of Behavioral Science, 22(1), 3-45.

McLaughlin, B. (1978). Second-language acquisition in childhood. Hillsdale, N.J.: Erlbaum.
Portes, A. (2005). English-only triumphs, but the costs are high. In H. S. Shapiro D. E. Purpel (Eds), Critical social issues in American education:

Democracy and meaning in a globalizing world (pp. 211-217). New Jersey: Lawrence Earlbaum ssociates, Publishers. Report on an International Seminar on Bilingualism in Education. (1965). London: Her Majesty's Stationary Office.
Romaine, S. (1989). Bilingualism. Oxford: Blackwell.
Saunders, G. (1988). Bilingualism children: From birth to teens. Clevedon: Multilingual LLL Matters LTD.

