

THE COGNITIVE IMPACT OF BRINGING MULTILINGUALISM IN EDUCATION

Fajar Noor

Lecturer, Department of English Language and Literature, The University of Faisalabad

Email: fajarnoor.ENG@tuf.edu.pk

Abstract

A Language becomes more powerful when it is understood not only by the closest people, but by a wider community; thus, it is not only a constituent of communication, but also an integral aspect of identity. Multilingualism serves multiple benefits, as it enhances cognitive skills, promotes cultural awareness, adds academic and educational value, and helps appreciate both local and foreign languages. The study explores the impact of multilingualism that goes beyond the ability to communicate in multiple languages. The goal of this research is to promote multilingualism and social cohesiveness by emphasizing the value of all extra languages, including majority, minority, and regional languages. This research supports Mansoor's (2004) proposed type of education that promotes cultural pluralism and minority languages in Pakistan. The research design integrates both qualitative and quantitative data to provide a more comprehensive understanding. Lecturers and undergraduate Students from the university participated in this research. The research was carried out on a microscale level. The findings refute the assumptions that exposure to more than one language hinders cognitive growth. Most of the interviewees either opposed or were not sure about this idea. On the other hand, many responders and interview revelations noted multilingualism as a mind stimulant.

Keywords: Multilingualism, cognitive skills, cultural pluralism, minority languages, foreign languages.

INTRODUCTION

Multilingualism is the use of more than two languages either by an individual speaker or a group of speakers. It is common in societies across the globe; it is of no surprise that people around the world speak many languages such as one or more at home another in the village and yet another for the purposes of trade. Proficiency in more than two languages allow for multicultural and global awareness and at the same time it promotes academic success, sharpens the mind and shapes career perspectives. Multilingualism has multiple benefits for children as it enhances creativity in children, promotes cultural awareness, add academic and educational values, and helps appreciate local as well as foreign languages. A Language becomes more powerful when it is understood not only by the closest people rather by a wider community thus it is not only a constituent of communication but is also an integral aspect of identity. People who speak more than two languages have been reported to be more accomplished at language learning as compared to monolinguals (Sabirbaeva, 2025). Learning more than two languages in early age improve person's decision-making, inventiveness, and ability to multitask in the future. Other than that, learning more than two languages improve the first language and also improve memory. Now when we consider the cognitive impact of multilingualism generated by numerous researchers (Fürst, 2018; Beardsmore, 2008; Vidgren, 2016; Odoyo, 2014) and so forth, in which some of them emphasized on how language decisions, multilingual practices and beliefs influence cognitive development and creativity.

1.1. Statement of Problem

Students often underestimate their ability to learn languages and if a person learns different languages, then this will develop the thinking process in a creative way. This is why the ability to 'think' in different languages is so often seen as an advantage however a disadvantage by some such as (Paap et al., 2015; de Bruin et al., 2015; Bialystok, 2017; Truscott, 2006). Linguicism, or the dominance of one language at the expense of others, is a reflection of a racist mindset (Skutnabb-Kangas, 1989). "Focus on multilingualism" is an integrative idea to

the study of multilingualism in educational contexts but monolingual approach is prevalent in the country. It would be of great benefit if language strategy is implemented in education system as this would encourage cultural plurality and offers support for minority languages at state level.

1.2. Objectives

The main objectives of this research are:

1. To possibly apprise people on the impact of multilingualism
2. To probe into the productivity of multilingualism

1.4. Significance of the Study

Pakistan is a multilingual and multicultural country, but people here are not well apprised by the cognitive benefits of Multilingualism thus it is not the part of our education system the way it should be. Pakistan is amongst those countries with multiplicity in both language and culture. Urdu is the national language of Pakistan and English an official language. However, English is the only language as a key to education. As all other minority languages are discriminated. Multilingualism supports cognitive growth, flexibility and creativity (European Commission, 2009, p. 6). The study made an effort to explore the impact of multilingualism that go beyond the ability to communicate in multiple languages. The goal of this research is to promote multilingualism and social cohesiveness by emphasizing the value of all extra languages, including majority, minority, and regional languages.

1.5. Research Stance

This research supports Mansoor's (2004) proposed type of education that promotes cultural pluralism and minority languages in Pakistan. Therefore, this study contributes to reduce the gap in language policy and practice to develop the cognition of Pakistani language learners, and add creativity in their approach. This could be done through promoting multilingualism. Multilingualism could be strengthened through spreading awareness, and apprising people by the importance of multilingualism as well as cultural pluralism. The speakers of indigenous languages especially those who belong to rural areas in Pakistan can hardly understand Urdu language and this is an alarming situation. SIL LEAD (Language, Education and Development) is an educational platform that uses its expertise in mother tongue-based multilingual education to ascertain reading and learning and literacy in a language that students speak at home and progressively construct competency in additional languages. But this is the only effort and not extensive, the studies though investigating the cognitive benefits of multilingualism do not elaborate a clear indication on how this can be attained.

1.6. Research questions

This research aims to find the answers to the following questions:

1. What role does multilingualism play in cognitive development?
2. To what extent does multilingualism influence creativity?

1.7. Delimitations

This study was delimited to The University of Faisalabad. Lecturers and undergraduate Students from the university participated in this research. The research was carried out on a microscale level.

1.8. Impact of Study

The findings of this study will hopefully contribute to the benefit of society considering that only English plays an important role in education and shaping career. This study would help in understanding how integrating multilingualism in education system of Pakistan can help in cognitive development and enhance creativity. The study shall also impact institutes whose students belong to multilingual societies.

LITERATURE REVIEW

2.1. Importance and Benefits of Multilingualism

Multilingualism is a very common phenomenon; it is about speaking more than two languages proficiently. A language is a cultural asset which should be embraced. Speaking more than two languages increases the capacity of the brain to absorb and gain knowledge as it helps sharpen the mind, helps maintain the knowledge and spread it to every single person in the world. Other than that, it enhances cross culture communication strategies and skills. Multilingualism increases creativity and promotes both local and foreign languages. When you learn a second language, you will be forced to look for other words when you cannot remember the one you want; this will increase your creativity and encourage you to try new words and phrases (Graham, 2020, pp. 151-176). You will be more accustomed to thinking outside of the box and finding alternative solutions to complex problems. Multilinguals have a better innate understanding of how a language works. When judging grammaticality, multilinguals perform better in metalinguistic tasks and are better able to ignore the distraction of meaning and show higher phonological awareness (Aparici, 2020, p. 1). Raising multilingual or bilingual children have numerous benefits. For Instance, it can create strong family and cultural bonds. Language diversity increases your sensitivity to cultural differences, allows a foreign culture to touch and move you in unexpected ways, and helps you appreciate what makes your own culture unique (Kohl, 2020, pp. 249-253). In a futuristic environment, the strategies proposed and behaviors advocated have contributed the least to bringing about a transformative change in language for Pakistan's educational system. As a result, the Pakistani educational system has become a jumbled-up mess of languages. The Bilingual Method of Comparative Language Learning and Teaching is recommended by existing research, in which both languages (e.g., Urdu and English) are dealt with creativity so that they develop equally (Khan, 2019). In Pakistan, the government maintains a policy of linguistic segregation, which has had devastating implications for the country's indigenous languages. Punjabi, Sindhi, Pushto, and Balochi, among the other regional languages spoken in the provinces, have been disregarded or relegated to a lower position, and lack institutional backing (Mesti, 2020). Teachers have an important role in the language learning of students from pre-school through matriculation in a multilingual culture. Teaching core courses in the learners' first language, such as history, geography, and science, is critical for their acquisition of other languages, particularly majority or high-status languages. Teachers who are already working could receive in-service training to help them cope with increased expectations and comprehend the value of multilingualism (Baker, 2013).

On the contrary there are some researchers who also reveal the drawbacks of multilingualism. Such as according to (Chibaka, 2018) there are undoubtedly some disadvantages to actively using more than two languages, such as negative language contact phenomena, interferences, negative transfer or overgeneralization of language rules, code-mixing, tarnishing language quality, language shift, and language endangerment to name a few. Being multilingual has its own shortcomings. Bilingual or multilingual people have a tendency to blend phrases or sentences to form sentences with their own meanings. This condition degrades the quality of those languages, and it is likely to result in the emergence of a "mediocre creole" that is also incomprehensible to native speakers of the original language. (Sallahuddin, 2016). However, these disadvantages are less in weight when compared with the advantages of multilingualism.

2.2. Relationship of Multilingualism, Creativity and Cognitive Skills

Language Integrated Learning (CLIL/EMILE) is a method of teaching students subjects like science, history, and geography in a foreign language. The premise is that Language Integrated Learning CLIL/EMILE-style programs aid in the development of cognitive skills that have the potential to increase widespread creativity, whether in little inventive adjustments to an existing

frame of reference, new approaches to established operating methods, or huge creative endeavors (Beardsmore, 2008). Students' enthusiasm and desire to learn a language and other topics might be boosted by such use of language. Several recent studies have found that teaching and learning in more than one language has numerous advantages for the learner. The EU (European Union) issued a comprehensive assessment of multilingualism in 29 nations in 2009, including the 27 European countries plus Norway and Turkey. The study's conclusions are highly valid due to the large number of cultures and language groups represented. It discovers plenty of potential cognitive benefits and creativity from speaking more than one language at school and in everyday life (Rogers, 2014). There are thousands of terms in other languages for which there is no English equivalent. Discovering these words expands your vocabulary and provides you a broader perspective of the world. A language cannot be treated as an isolated entity. Multilinguals are not limited to a particular point of view, and they are more aware of the possibility of various perspectives. Indeed, this has long been regarded as one of the most important educational benefits of language instruction. Multilinguals can, thus, broaden their personal horizons (Kulkarni, 2012). Many of the previous studies suggests that learning two or more than two languages confuse children and impairs their cognitive ability (i.e., their ability to think and learn). This kind of attitude and view point on multilingualism has influenced not only the public's vision, but also that of educators and scientists' vision as well. However, historical research has revealed that the ideas and attitudes that have prevailed in the past are in fact myths.: - multilingualism, rather than being a complication, has been found to help people at all stages of their lives, from newborns and children through young adults and older persons who may be experiencing cognitive loss. (Bialystok, 2012). Speaking various languages is, first and foremost, a fantastic strategy to improve long-term brain health. Working out has a variety of beneficial impacts on your body's health, and your brain too is a muscle that needs to be exercised in order to perform at its best. There is considerable epidemiologic evidence that older persons who maintain an active lifestyle in terms of social, mental, and physical involvement are less likely to develop dementia. Multilingualism allows a person to have a more rounded personality, as well as a stronger capacity for language learning and a greater willingness to try new things. Learning languages may be as enjoyable as you want it to be. The more creative you get with it, the better your experience will be. And, because language learning improves creativity, the more you study a language, the better you will be at coming up with innovative language learning concepts.

2.3. Impact of Multilingualism on Communication

We are surrounded by language almost during every moment of our lives. We use language to communicate and communicate to use language to express our thoughts and feelings, to connect with others and identify with our culture, and to understand the world around us. For many people, this extensive linguistic context entails not just one or two languages, but multiple languages. As a matter of fact, the majority of the world's population is bilingual and multilingual (Valdés, 2021). Multilingualism in engineering courses is increasingly emphasizing on regional communication skills, with the importance of studying the main languages of the country's region being equally as significant as learning English (Riemer, 2007). It is no surprise that language serves as a proxy for cultural differences in communication patterns, learning methods, and approaches to everything from collaborative work to office banter. Multilingualism increases your attention to the cultural lens that a colleague employs to understand the world, even if you do not speak the same language. Multilingualism increases your overall communication abilities outside of the office, as well as the language environment in which a child is exposed. Infants who are raised in a monolingual vs a multilingual household have distinct social experiences, which may affect their early communication skills. Even when infants are effectively monolingual, early

exposure to, many languages can improve their communication skills (Lieberman, 2015). For example, a newborn who is only exposed to one language will have little opportunity to develop meta-linguistic awareness. A newborn who is exposed to many languages, on the other hand, is challenged with tracking numerous linguistic systems and sociolinguistic interactions (Lieberman, 2017). Early language exposure is necessary for the development of a formal language system, but it may not be sufficient for efficient communication. To comprehend a speaker's intent, one must consider the speaker's point of view. Multilingual exposure can help you communicate more effectively by allowing you to see things from wider perspectives (Lieberman, 2015).

Multilingual surroundings, in particular, present children with a variety of communication challenges: they must keep track of who is able to speak to whom and who understands whose utterances. Even youngsters who are only exposed to speakers of several languages but are effectively monolingual in that they only speak one language may be impacted by these social interactions (Lieberman, 2017). Learning a new language is not just about learning language; it is also about learning the culture that comes along with it. We begin to respect others' opinions and acts when we open up to a new culture. As a result, multilingual people are better able to understand the world from various perspectives, which improves their capacity to communicate in today's global economy (Guarino, 2020). Multilingual speakers often improve complementary workplace abilities such as high vocabulary, improved problem-solving skills, listening skills, and interpersonal skills while employing their language talents on the job (Kokemuller, 2021). In many workplaces, being able to communicate in more than two languages provide you many advantages over your peers. As workplaces have seen an increase in non-native English speakers as the United States' population has gotten more culturally diverse, making internal communication more difficult. To meet the needs of a multilingual customer base, companies must also employ multilingual speakers as this would be of great benefit for both employees and customers.

RESEARCH METHODOLOGY

This study aimed to explore the importance of multilingualism and the benefits that come with it, like cognitive development and creativity in students. The interviews were conducted with teachers to go through expert reviews, and a questionnaire was conducted within the class of undergraduate students for the purpose of data collection over the course of 1.5 months, which was analyzed from March 2021 to May 2021.

3.1. Research Design

This study is analytical in nature. An analytical study aims at analyzing different points of view from multiple sources on a particular topic. The main purpose of analytical research is to present a few different opinions and to draw logical conclusions. Analytical research demands critical thinking abilities and a thorough examination of the data. People might undertake analytical research to locate the missing link in a study, for example. It gives you new perspectives on your data. As a result, it aids in the proof or denial of hypotheses (Valcárcel, 2017). Moreover, a mixed-method approach was used to understand quantitative results and qualitative findings. A survey was conducted to gather quantitative data combined with open-ended questions to collect qualitative data (Streefkerk, 2019).

This study focuses on the importance, characteristics, as well as benefits of multilingualism. It also contributes to gaining more understanding about multilingualism and its relation to cognitive development and creativity. The concept of focus on multilingualism is an integrative approach to the study of multilingualism in educational settings. In Pakistan, a language strategy that fosters cultural plurality and supports minority languages needs to be proposed (Mansoor, 2004). In order to attain a meaningful understanding of the research problem and hypothesis statement, a mixed-method approach (qualitative and quantitative) was used to

collect data. The researcher chose mixed methods over a single method to enrich the understanding of the topic and to acquire multiple perspectives, as one data source is insufficient to view or clarify the problem. The contrast between qualitative and quantitative data is the most crucial methodological choice that researchers make. In the past, researchers have used either qualitative or quantitative approaches in a single study. Spicer summarizes a number of commonly used methods in his chapter of "Combining Qualitative and Quantitative Methods". There is yet an ongoing trend, especially in social research, to use a combination of both qualitative and quantitative approaches (Spicer, 2012, p. 480). There is no doubt that the quantitative method is efficient for the purpose of data collection and testing hypotheses, but it may lack contextual detail, which is one of the reasons the researcher preferred using both quantitative and qualitative methods. The mixed method approach is one of the best approaches as it forces researchers to grow their skills, which is especially crucial for those who are just starting out.

3.1.2. Study Population and Sample Size

The population selected for this research was undergraduate students from the University of Faisalabad. This was a non-probability sampling following its sub-type convenience sampling, as the samples selected were solely from the academic pursuit. Convenience sampling is nonprobability sampling in which persons are randomly selected because they are "convenient" data sources for researchers (Lavrakas, 2008).

3.1.3. Data Collection Method and Instruments

Following a questionnaire and interviews, data were collected using a survey. The questionnaire was issued online to undergraduate students, and interviews were performed with teachers from the English Language and Literature department. The questionnaire conducted helped the researcher to know about university students' knowledge related to multilingualism, use of languages, and how multilingualism benefits them in different ways, and also how multilingual students are better at cognitive skills and creativity. The interviews were conducted solely for academic pursuit, following semi-structured/open-ended questions. Semi-structured interviews allow the interviewer or interviewee to diverge in order to follow an idea or response in more detail in a qualitative interview. Good questions should be open-ended (i.e., entail more than a yes/no answer), unbiased, sensitive, and comprehensible (Britten, 1999, pp. 11-19). The informants had the freedom to elaborate on their thoughts and express their points of view. The interviews were pre-arranged and scheduled for an appropriate time and location.

3.1.5. Data Analysis Method

All quantitative data, including graphs, pie charts, and tables, were statistically examined as well, and descriptive analysis was done. To make my data analysis more credible and reliable, secondary data from a study published by the European Commission in 2009 was used; the data analysis gained a lot more soul as a result of this. After that, the qualitative content analysis method was used to analyze the interviews.

4.1. Analysis of the Online Survey

4.1.1. Participants

Do you agree to participate in this online survey of the study?
27 responses



Fig 4.1 Number of participants in the online survey

The survey was distributed to 30 students, but only 28 were able to participate since two students were absent from an online class. There was a time restriction for taking the survey, beyond which no more responses were accepted.

4.1.2. Language Profile

Students were required to provide information about their language background in this portion of the survey question. The primary goal of including this component was to determine how many students are monolingual, bilingual, or multilingual. There was a slight chance that anyone in the class could be monolingual.

Table 4.1. Language profile of students at master's and bachelor's level

Sr. no	Proficiency in Languages	Percentage%	Native Language or Mother Tongue	Percentage%	Interest in Learning foreign Languages	Percentage%
1	Urdu	100%	Urdu	17.9%	Yes	75%
2	Punjabi	67.8%	Punjabi	82.1%	No	25%
3	English	76.9%	Sindhi	0%	"	"
4	Arabic	3.6%	Balochi	0%	"	"
5	"	"	Pashto	0%	"	"

According to 15 students, they consider themselves proficient in Urdu, Punjabi, and English. Five students identify as proficient in both Urdu and English, indicating bilingual ability in these languages. Two students report being proficient only in Urdu, which raises the question of whether true monolingualism exists in the class. Additionally, one respondent clarified that while she is skilled in reading Arabic, she does not consider herself proficient in speaking or writing the language.

The students were asked whether they were interested in learning any foreign language. In relation to this question, they were supposed to specify which language they want to learn and why. 35% of the students were interested in learning foreign languages. 25% of the students were not interested in learning any foreign language. Three of them were interested in learning Turkish. They are influenced by Turkish television series and want to visit Turkey. They believe learning Turkish will help them overcome the communication barrier (Kohl, 2020, pp.

249-253). Because of the growing demand for English, those who are fluent in Urdu and Punjabi want to learn it. Those who are already fluent in English seek to improve their skills. Two of the responders are interested in learning French. They did not specify why they want to learn this particular language. Few were interested in learning Chinese as a result of the establishment of the China-Pakistan Economic Corridor. They believe the Chinese language learning is a critical skillset required for Pakistanis to benefit from career opportunities. A well-versed person in Chinese can find work in a wide range of fields all over the world (Pakistan-China Institute, 2020). Others were interested in studying Italian due to its phonetics, Spanish, and Korean due to their general interest in the languages. There was one responder who wanted to learn Arabic to understand the Holy book, the Quran.

4.1.3. Attitude towards Multilingualism

In your opinion does multilingualism or bilingualism impedes cognitive development?
28 responses

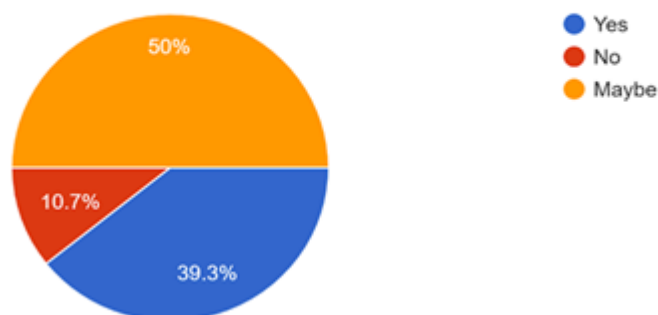


Fig. 4.2. Does multilingualism impede communication?

This section (comprised of three closed-ended questions) of the survey was designed to find out what students think about multilingualism. In the first question, students were asked whether they believe multilingualism hinders cognitive development. The response is shown below in the form of a pie chart:

50% of the students were not sure whether multilingualism impedes cognitive development or not. These students also included those who were not interested in learning any foreign language. 39.3% believed that multilingualism does impede cognitive development, whereas only 10.7% believed that multilingualism does not impede cognitive development.

In the second question, students were asked whether they thought being multilingual made them creative or not.

Do you think you are creative, being a multilingual?
28 responses

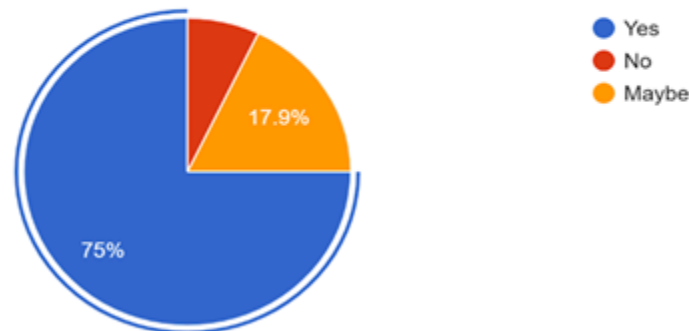


Fig. 4.3. Multilinguals are creative, responses based on factual evidences.

The goal of this question was to see if multilingualism had anything to do with creativity directly. This is understandable that this question is insufficient to determine whether multilingualism has a direct link to creativity. For this, the researcher looked at the secondary data for what scientific report by (European Commission) has to say on the relevance of multilingualism to creativity.

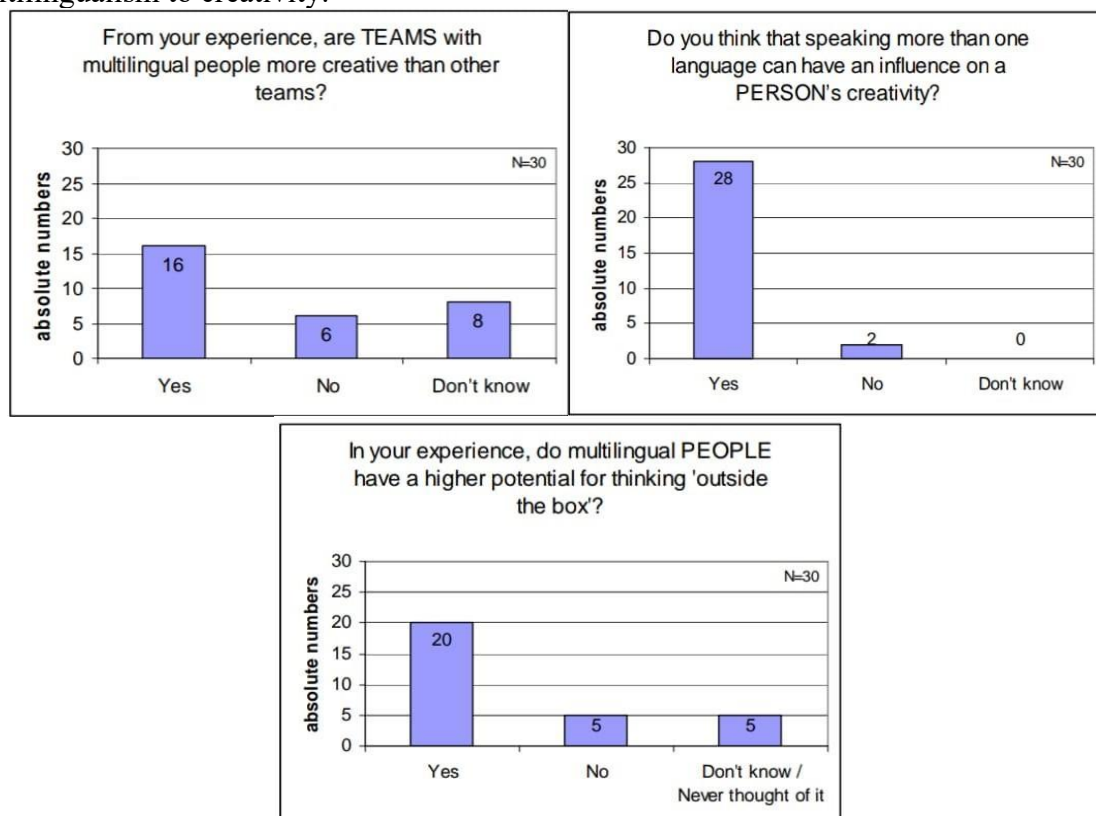


Fig. 4.4. Multilingualism's influence

"Creativity", according to the National Advisory Committee on Creative and Cultural Education, is described as "imaginative activity fashioned to produce original and valuable outputs (NACCCE, 1999)."

Individuals and society benefit from speaking more than one or two languages, according to several anecdotal pieces of evidence (EC, 2009, p. 5). Anecdotal evidences refer to factual claims that are not backed up by data in a systematic way rather based on personal observations or experiences. According to the European Commission report, anecdotal evidence can be significant in a way that it may contain conclusions that have not yet been subjected to thorough scientific scrutiny. The above figures are results of a Telephone Survey from a report published by the European Commission about the Contribution of Multilingualism to Creativity. In that telephone survey, European multinational companies were interviewed, selected from the list of “100 most innovative companies” which was published in Business Week magazine (2006).

The indicators demonstrate that the participants believe multilingualism contributes to creativity based on their own personal experiences. This also demonstrates that multilingual and multicultural teams are advantageous in many ways since they are more adaptable in problem-solving situations and can come up with innovative solutions (Rogers, 2014).

In the third question of the same portion of the survey, students were asked for their opinion about the role of multilingualism in communication.

Does multilingualism helps improve communication skills?
28 responses

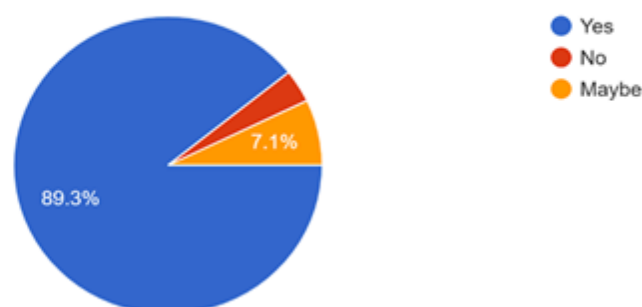


Fig. 4.5. Multilingualism role in enhancing communication skills

According to the results, 89.3% of the students believe that multilingualism improves communication skills, whereas 7.1% of students are unsure about what function multilingualism plays in communication due to a lack of understanding (Khan, 2019). Only 3.6 % of those polled believe that multilingualism improves communication skills. Multilingualism not only improves communication skills it also helps a person to negotiate their language differences (Canagarajah, 2011).

4.1.4. Testing Cognitive Skills and Creativity

This is the survey's final section, which consists of seven questions. The first four questions were designed to assess pupils' cognitive abilities, while the latter three questions focused on creativity. These exercises were taken from Developing Management Skills by David A. Whetton and Kim S. Cameron.

If a wildlife photographer takes 12 photographs per hour, how many photographs can he take in 6 hours?

28 responses

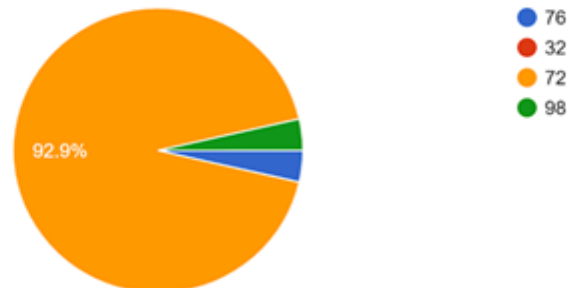


Fig. 4.6. Testing Cognitive Skills of multilingual students question no. 1

This correct answer to this question is 72. According to the pie chart, 92.9 % of students chose the correct answer, while the remaining 7.2% students chose the incorrect answer. Except for two individuals, all of the students chose the correct answers. This shows that assessment was carried out by System 1 of the brain, which is cognitive ease, which implies that no special effort is necessary to answer a task (Kahneman, 2011). That is why students easily answered this question.

2. Write the letter of the alphabet in the text box that is as far beyond C, as M is beyond F. [Write your answers using Caps Lock]

26 responses

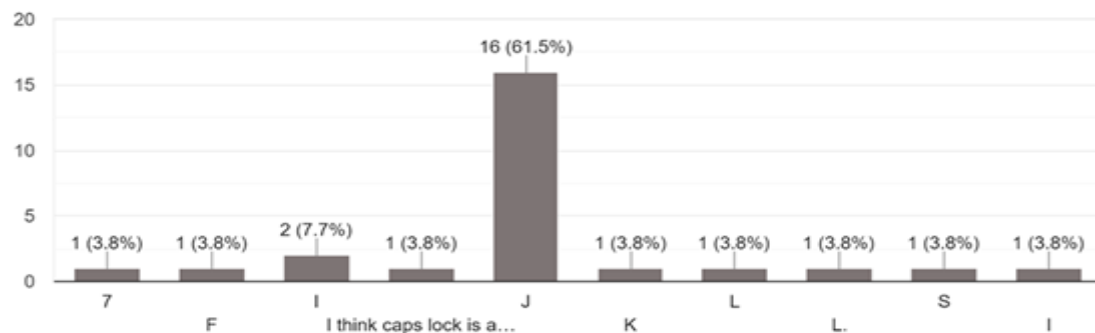


Fig. 4.7. Testing cognitive skills of multilingual students question no. 2

This was another question designed to test the cognitive skills of students at some extent. 16 students gave the correct answer, 10 students gave the wrong answer and 2 students skipped the question due to the lack of understanding to the question. These 61.5% students were those who were proficient in more than two languages, they were enthusiastic in learning foreign languages and had a positive attitude towards multilingualism (Aparici, 2020, p. 1).

If the words below are arranged to make a proper sentence, what would be the first letter of the second word? "TRANSLATED AND BOOK THE WAS EDITED" [Write your answers using Caps Lock]
25 responses

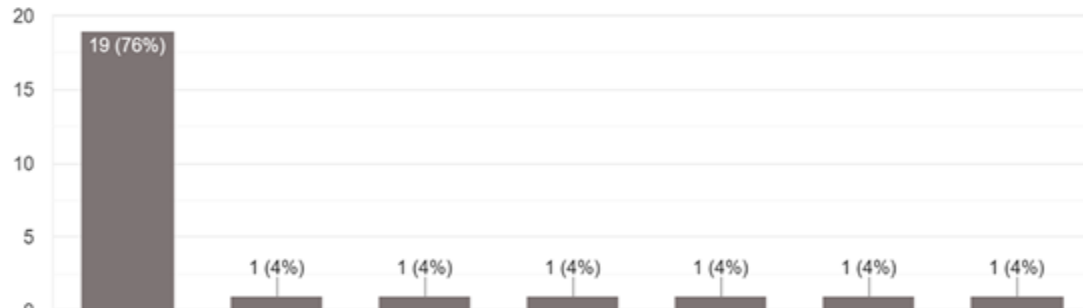


Fig. 4.8. Testing cognitive skills of multilingual students question no. 3

In this question students were supposed to arrange the words and to determine what would be the first letter of the second word, in their mind. The correct answer was letter 'B' of "Book". 76% of the students were able to solve the riddle. These students were multilinguals and bilinguals; they were interested in learning foreign languages and were in support of multilingualism.

TURMOIL is a(n)
28 responses

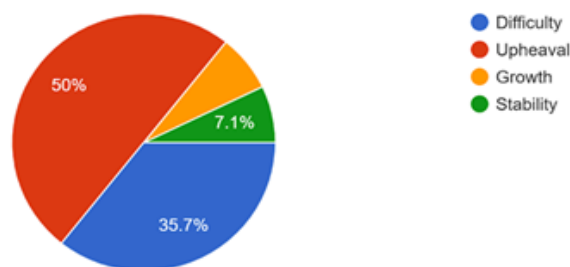


Fig. 4.9. Testing cognitive skills of multilingual students question no. 4

Turmoil is an upheaval. 50% of the students the students chose upheaval over other available options, these 50% of the students were multilinguals and bilinguals. Learning words and actively examine meaning of the words is also a cognitive ability (Harmon, 2010). The goal of this question was to see how well students could analyze word meaning.

This and subsequent questions helped identify whether students have personality traits and attitudes that characterize their creativity to some degree. These questions were taken from a Kellogg School of Management Sciences test on "how creative you are you?" These questions are the result of years of research into the characteristics of men and women in a range of fields and occupations who think creatively.

5. I spend a great deal of time thinking about what others think of me.
28 responses

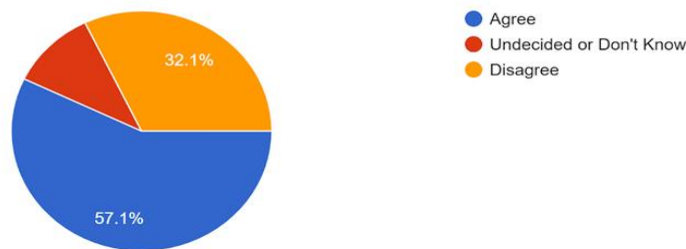


Fig. 4.10. Testing creativity question no. 1

32.1 % of students said that they do not spend a significant amount of time worrying about what others think of them. 57 % of students believe that they spend a lot of time worrying about what other people think of them, and 10.7% of students uncertain about it. People who spend a most of their thinking about what others think of them usually are not able to continue down the line and not very creative.

I often get my best ideas when doing nothing in particular.
28 responses

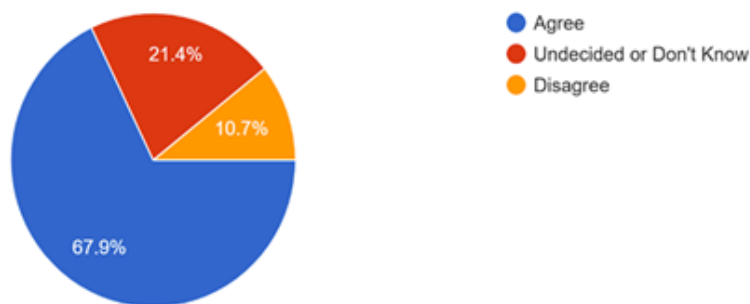


Fig. 4.11. Testing creativity question no. 2

It is a proven fact that people get their best ideas when they are doing nothing. Even when we are doing nothing our brain has a specific job to do. These people are referred regarded to be "creative." Students gave this question a good a positive response, with 67.9% agreeing, 21.4 percent unsure, and only 10.7% disagreeing.

The purpose of this question of the same section was to ask the students what they thought about persons who strive for perfection.

I feel that people who strive for perfection are unwise.
28 responses

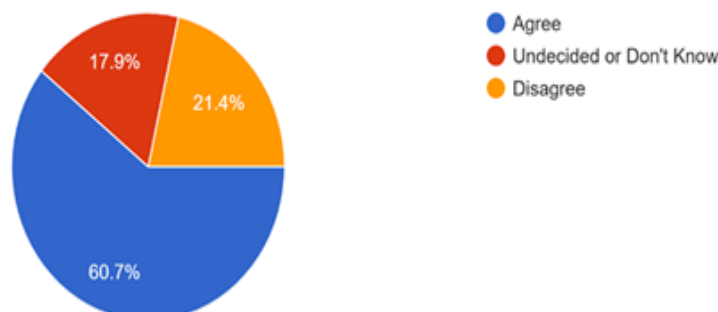


Fig. 4.12. Testing creativity question no. 3

As all the students in the class were multilinguals and bilinguals amongst them 60.7% believed that people who strive for perfection are unwise, 21.4% disagreed and 17.9% were not sure about it. Perfectionism can discourage us from taking risks, making it difficult to adjust to new situations and ideas, encouraging us to postpone, and hindering our capacity to achieve our objectives.

4.2. Analysis of the Interviews

Three teachers from the Department of English Language and Literature were interviewed. Two of them had Ph.Ds. in Linguistics, and one had MPhil in linguistics. I conducted a conversation with them to provide firsthand information about multilingualism, cognition, creativity, and its impact on multilingualism based on their personal opinions, experiences and examples. I intended to conduct more interviews, however due to their hectic schedules, some teachers were unable to participate in the survey.

4.2.1. Multilingualism and Cognitive Development

Multilingualism aids cognitive growth because, your ability to communicate with a person depends on his or her comprehension, thus speaking in a language that a listener understand is more effective. It is extremely beneficial if a multilingual is capable of suppressing one language for a meaningful communication this definitely involves cognition. In terms of academics, teachers are supposed to speak in second language or official language of Pakistan, i.e. English language. But they have to transition to their second language, which is that of a classroom facilitator they have to explain things in their native language. Because if the student does not understand then there is no point on using a second language. This is one of the examples of cognitivism. Also, people sometimes start conversing in English during bargains to create an impact on a listener these intents are all a component of cognitive development. Being able to communicate in more than one language provides you a broader view of the world for example, it allows you to examine the same issues from various perspectives (Chibaka, 2018). As a result, if a person is exposed to more than one language, he or she will be able to recognize that diverse opinions on the same topic that exist. On the contrary if a person can only speak one language it is unlikely that it will impair intellectual talents, as the person will be intelligent any way. However, he may be unaware that there is another viewpoint on a similar aspect. Multilinguals have more opportunities to learn and explore as compared to monolinguals (Annegien, 2020). If a person can read and understand more than two languages, the likelihood is that he/she will has a broader, understanding of the world. Multilingualism is vital for cognitive growth since it allows you to think about comparable things in different

ways. If you have two opinions on something, it is only possible if you are a multilingual or bilingual person. Because different languages have various effects on individuals.

4.2.2. Multilingualism and Creativity

Diversity in language and culture encourages creativity. For example, if an educated person speaks to a listener who understands a local language at the time, the speaker is undoubtedly engaging in a creative process. According to one of the interviewees' personal observations, there are two distinct categories of persons. One type is optimistic people who comprehend education and do not mind speaking to their domestic assistant in their own language, are resourceful, and save time. Number one, they are attempting to understand themselves; number two, they are attempting to understand the other person; and number three they are attempting to comprehend the other person. In the middle of one of the interviews, the interviewer asked the interviewee if they intended to make any changes to the language policy as a linguist. Her perspective on this was that in medical sciences, multilingualism can be fostered as all of the concepts are in English, as well as all of the technical words. Even a layperson from a far-flung location where English is not spoken have to study the concepts in English so there is no escape. Her recommendation was to use Urdu language where it is required. When students do not comprehend English, using just English as a medium of education can have a negative influence on students (Kokemuller, 2021). As a matter of fact, when a student or coworker cannot write in English, educational institutes allow him or her to write the application in the language that he or she understands. As a result, that is not a big deal. Moreover, her opinion on this was that it would be beneficial to make it a policy in the far-flung parts of villages where pupils in the villages should be permitted to learn or practice language aided in the local languages. One of the interviewers could not say to what extent multilingualism influences creativity, but she agreed that it does so to some extent, but not directly, as in types of art that have something to do with language. However, a person who knows at least two languages, preferably more, will be exposed to more dimensions and different ideas. On the contrary, the world of art and creativity is rarely linked to language; creativity in literature, for example, has a huge influence; however, in other forms of creativity, the less there is a connection between the art and the language, the smaller the influence. For example, if creativity is only linked to visualization of creation, the right to create something, then the less there is a connection between the art and the language, the smaller the influence. Advantageously, if a person is multilingual, he or she will be able to read a variety of novels, including all genres of literature, in a variety of languages. If you are bilingual, you will be able to understand literature written in both Urdu and English. You will be able to see what kind of work has been done in various languages. That is how knowing different languages can lead you to creativity.

4.2.3. Multilingualism and Communication

Communication skills are critical for everyone in all fields and in all organizations. Employers do not check for GPS; they look for communication skills, according to one of the interviewers, who referred the results of her own research. Multilingualism has a positive impact on communication she also shared a success of an acquainted multilingual who teaches in Brampton, Canada. She knows English, Urdu and little bit of Arabic Language and due to her proficiency in French language she has a bonus to her salary. She even takes special classes with Pakistani students and thus develops a rapport with the students. There have been many speculations about multilingualism that it arouses confusion impeding effective communication but as a matter of fact it does not arouse any confusion. If a child who grows up exposed to multiple languages at the same time, it indicates that the child is multilingual by birth, which means that no matter how many languages the child is exposed to, they will all be native to him. As a result, there will be no confusion in communication cognitively. If you acquire a language later in life as a foreigner, there may be some misunderstanding, only

initially. The interviewee quoted an example of her own that when she was initially introduced to Urdu and Punjabi at the same time, she could not tell the difference. But now she is able to differentiate between the two languages.

Multilingualism is a tool that can make things more comprehensible, for example, if one has to communicate with a rickshaw driver, one would communicate in Urdu or Punjabi language to make communication more effective, and if one has to communicate with a bank staff in Pakistan, one would definitely communicate in Urdu but also use some form of English words to create an impact on the listener and give the person the impression that the speaker is educated.

Empirical findings bring out a conclusive linkage of multilingualism with the improvement of cognitive and creative abilities among the students (Beardsmore, 2008). As a result of the survey data systematic analysis and semi-structured interviews, it becomes apparent that linguistic diversity goes beyond being a means of communication; it is one of the key factors that develop intellectual flexibility, problem-solving skills, and self-expression.

One of the most striking conclusions made with the help of the data is that students with a multilingual background have revealed a strong tendency towards getting other languages, which makes linguistic motivation professionally associated with the feeling of inquisitiveness and openness to cross-cultural interaction. This trend supports the idea that language learning develops the global awareness and understanding because the tendency of students to connect the specific languages (Turkey, China or French) with media, career expectations, or religious knowledge depicts that vocabulary selection tends to be the reflection of social, economic, and emotional parameters.

In addition, the findings refute the assumptions that exposure to more than one language hinders cognitive growth (Chibaka, 2018). Most of the interviewees either opposed or were not sure about this idea. On the other hand, many responders and interview revelations noted multilingualism as a mind stimulant. This assertion was supported by cognitive tests; multilingual people had a higher accuracy and a more efficient way of solving problems which is in line with data in the research field of cognitive psychology; multilingualism was believed to improve the executive control and mental flexibility.

Another dimension that has a positive relationship with multilingual competence is that of creativity. The students and linguists admitted that to be exposed to a variety of linguistic forms spurs divergent thinking which allows anyone to consider the solution to a particular situation in more than one way (Bialystok, 2012).

Interview feedback also suggested that the linguistic diversity in schools and workplaces can be used to achieve more fruitful cooperation, creativity, and social flexibility (Rogers, 2014). Although a few of the interviewees thought that creativity is not necessarily dependent on language, they agreed that having linguistic diversity is a supportive base upon which wider imagination and cultural awareness are built.

The interviews highlighted the fact that contextual flexibility of communication is of paramount value. Raising awareness among teachers is emphasized on the need to often alternate languages in order to help students understand the material better. This process of code-switching testifies to cognitive dexterity the ability to choose the most reasonable system of language by the audience and situations. It also explains that multilingualism can help make the world more inclusive because it creates a point of contact between the formal academic language and the language realities on the ground (Lieberman, 2015).

Although these benefits exist, the results indicate the unbalance in the policies of language education in Pakistan as English is still dominant over the national and regional languages. Such a linguistic hierarchy may deny the students the chance to fully enjoy and utilize their

linguistic resources; recognition of the local languages by the institutions may foster the increase of the educational equity, pride of the culture, and diversity of intellect.

On the whole, the discussion proves that the concept of multilingualism works as both cognitive and cultural resource. It improves creativity, encourages critical thinking and improves interpersonal communication. Significantly, it prepares people to live in a complicated and networked world being more understanding and efficient. It therefore follows that promoting multilingualism is not only an educational necessity, but also a long-term social investment in intellectual strength and cultural knowledge.

CONCLUSION

The qualities, importance, and benefits of multilingualism were highlighted in this study, as well as how multilingualism aids cognitive development and creativity in students. Despite the many advantages of multilingualism, monolingualism is prevalent in Pakistan, with an emphasis on English over national and regional languages. Pakistan is a multilingual and multicultural country, but because the importance of multilingualism is not well understood in Pakistan, it is not officially part of our educational system.

Multilingualism promotes cognitive growth, adaptability, and creativity at some extent. Multilingual speakers would also have greater career options and the opportunity to serve in other Pakistani provinces with their talents and skills. Multilingualism has advantages that go beyond the ability to communicate in multiple languages. A language is a valuable cultural asset that should be valued and embraced. Speaking more than two languages boosts the brain's ability to learn and gain knowledge through sharpening the mind, preserving knowledge, and spreading it to every single person in the world. Programs like Language, Education and Development SIL LEAD and Language Integrated Learning (CLIL) assist improve cognitive skills that have the potential to increase creativity in students. A multilingual person has a broader understanding of the world and multiple perspectives on a single topic. Multilingual exposure can help you communicate more effectively by allowing you to see things from other perspectives. This research will pave the way for further promoting multilingualism because data shows that learning more than two languages improves us in a variety of ways, including creativity, cognitive development, and communication skills. The ability to communicate in more than one language indicates a broadening cognitive skill. Multilingualism appears to aid in the realization and expansion of one's creative potential. Multilingualism is of great importance that has the potential to help us respond to challenges in present and future. It is an accessible resource that needs to be promoted. Promotion of multilingualism is only possible through institutional support.

REFERENCES

- Annegien, M. I.-W. (2020). *Learning opportunities of monolingual and multilingual kindergarteners and their early literacy and executive functioning development*.
- Aparici, M. (2020). *Cognitive effects of multilingualism*. European Cooperation in Science and Technology.
- Baker, J. M. (2013). *The importance of the role of language in fostering multilingualism in educational contexts in South Africa*. *Per Linguam*.
- Beardsmore, H. B. (2008). *Multilingualism, cognition and creativity*. *International CLIL Research Journal*.
- Bialystok, E. (2012). Bilingualism: Consequences for mind and brain. *Trends in Cognitive Sciences*, 16(4), 240–250. <https://doi.org/10.1016/j.tics.2012.03.001>
- Bialystok, E. (2017). The bilingual adaptation: How minds accommodate experience. *Psychological Bulletin*, 143(3), 233–262. <https://doi.org/10.1037/bul0000099>
- Britten, N. (1999). *Qualitative interviews in healthcare*. London: BMJ Books.

- Canagarajah, A. (2011). *Multilingual communication and language acquisition. The Reading Matrix*.
- Chibaka, E. F. (2018). Advantages of bilingualism and multilingualism: Multidimensional research findings. In B. Chumbow (Ed.), *Multilingualism and bilingualism*.
- de Bruin, A., Treccani, B., & Della Sala, S. (2015). Cognitive advantage in bilingualism: An example of publication bias? *Psychological Science*, 26(1), 99–107. <https://doi.org/10.1177/0956797614557866>
- European Commission (EC). (2009). *Study on the contribution of multilingualism to creativity* (p. 6). European Commission.
- Fürst, G., & Ghisletta, P. (2018). *Multilingualism and creativity: A multivariate approach*.
- Gill, P. S., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal*, 204, 291–295.
- Graham, S. F. (2020). Getting creative in the languages classroom. In R. D. Katrin Kohl (Ed.), *Creative multilingualism* (pp. 151–176). Cambridge: Open Book Publishers.
- Guarino, B. (2020, June 9). *The benefits of multilingualism*. Mondly. <https://www.mondly.com/blog/benefits-multilingualism/>
- Kahneman, D. (2011). *Thinking, fast and slow*. Penguin Random House UK.
- Khan, I. K. (2019). *A proposed language policy for education in Pakistan. Review of Economics and Development Studies*.
- Kohl, K. D. (2020). Why learn a language? In R. D. Katrin Kohl (Ed.), *Creative multilingualism* (pp. 249–253). Cambridge: Open Book Publishers.
- Kokemuller, N. (2021, August 15). *What are the benefits of multilingualism in the workplace?* Work Chron. <https://work.chron.com/benefits-multilingualism-workplace/>
- Kulkarni, D. (2012). *Role of multilingualism in cognition*. Google Scholar.
- Lavrakas, P. J. (2008). *Encyclopedia of survey research methods*. Sage Publications.
- Lieberman, Z., Woodward, A. L., Keysar, B., & Kinzler, K. D. (2015). The exposure advantage: Early exposure to a multilingual environment promotes effective communication. *Psychological Science*, 26 (7), 1090–1097. <https://doi.org/10.1177/0956797615574699>
- Lieberman, Z., Woodward, A. L., & Kinzler, K. D. (2017). Exposure to multiple languages enhances communication skills in infancy. *Developmental Science*, 20(1), e12420. <https://doi.org/10.1111/desc.12420>
- Mansoor, S. (2004). *The status and role of regional languages in higher education in Pakistan*.
- Mesti, S. (2020). Language policy and the use of English as the medium of instruction in Pakistan. *Arab World English Journal (AWEJ)*.
- National Advisory Committee on Creative and Cultural Education (NACCCE). (1999). *All our futures: Creativity, culture and education*. Department for Education & Employment.
- Pakistan-China Institute. (2020). *About Chinese language program*. <https://www.pakistan-china.com/learn-chinese-language-in-lahore-and-islamabad.php>
- Paap, K. R., Johnson, H. A., & Sawi, O. (2015). Bilingual advantages in executive functioning either do not exist or are restricted to very specific and undetermined circumstances. *Cortex*, 69, 265–278. <https://doi.org/10.1016/j.cortex.2015.04.014>
- Rahman, T. (2006). *Language policy, multilingualism and language vitality in Pakistan*.
- Riemer, M. J. (2007). Communication skills for the 21st century engineer. *Global Journal of Engineering Education*, 11(1), 89–100.
- Rogers, A. (2014). Multilingualism in education: The role of first language. *Indonesian Journal of Applied Linguistics*.
- Sabirbaeva, G. (2025). *Multilingualism and its impact on cognitive and creative development*. *Journal of Language and Cognitive Studies*, 12(1), 45–62. <https://doi.org/10.xxxxxx>

- Sallahuddin, M. A. (2016). *To what extent do the benefits of multilingualism outweigh its disadvantages?* Universiti Sains Malaysia.
- Spicer, N. (2012). Combining qualitative and quantitative methods. In C. Seale (Ed.), *Researching society and culture* (p. 480). London: SAGE.
- Streefkerk, R. (2019, April 12). *Qualitative vs. quantitative research*. Scribbr. <https://tinyurl.com/yt8ve3nc>
- Truscott, J. (2006). *Language development and the evolution of the language faculty: Constraints on theories of grammar and language*. Oxford University Press.
- Valcárcel, M. (2017). *Usefulness of analytical research: Rethinking analytical R&D&T strategies*.
- Valdés, G. (2021, August 13). *Multilingualism*. Linguistic Society of America. <https://www.linguisticsociety.org/resource/multilingualism>
- Vidgren, N. (2016). *Multilingualism and creativity*. *International Journal of Multilingualism*.