# Gender Difference in Code-Switching and Code-Mixing in Text Messages of Undergraduate Students

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## Abstract

This study analyzes the gender difference in code switching and code mixing between English and Urdu languages in text messages composed by undergraduate students. The population included 974 students of Foundation University while the sample consisted of 42 students. The sample was randomly collected. The research used the code switching and code mixing theories as tool of analysis. The data was collected directly from the students of two university colleges, i.e. Foundation University College of Liberal Arts and Sciences and Foundation University Institute of Management and Engineering Sciences.

Twenty-one female and twenty-one male undergraduate students were asked to forward three text messages and the data thus collected was analyzed using SPSS software. The messages were analyzed by finding differences between the SMS's sent by the female and male undergraduate students. The frequency of code switching and code mixing in the two genders was also examined. The mean of code switching and code mixing scores of the sample was almost normally distributed which proposed that boys and girls do not differ in code switching and code mixing scores. The study established that there was no gender difference involved in code switching and code mixing in text messages of the undergraduate students

**Key words**: code switching, code mixing, gender differences, text messaging/SMS

## Introduction

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Code-mixing can be understood as the switching of languages that occurs within sentences, usually at the level of words or idiomatic expressions. Code-mixing is a reality because these days an increasingly large number of people are bilingual, trilingual or multilingual. Chances of code switching and code mixing proliferate when people from different cultures and speaking different languages interact with each other. Code- mixing has become socially and communicatively essential and we just cannot spend a day without indulging in it. It helps us in developing and improving relationships, and also enables us to adapt to any environment we are in. Language is not just a mean of expressing or conveying meaning, it also offers a look into the culture of the speakers; therefore, it presents itself as an interesting topic to scholars.

Many of the world's bilingual communities produce discourses that involve the interchange of two or more languages. This type of discourse has been variously termed "code-switching", "code-alternation", or "language-mixing". Since the late 1970s, a number of studies have appeared in linguistics journals on such issues. The term "code-mixing" refers to mixing of two or more languages within a sentence while the term "code-switching" refers to mixing of two or more languages at the clause level in a discourse in a fully grammatical way (Poplack, 2001). Code-mixing is defined by Bhatia and Ritchie as "the mixing of various linguistic units (morphemes, words, modifiers, phrases, clauses and sentences) primarily from two participating grammatical systems within a sentence" (2004). However, it is sometimes difficult to determine whether it is a case of borrowing or code-mixing (Myers-Scotton 2002; Poplack 2001).

Studies of code mixing have generally dealt with the issues of oral language and cross-lingual mixing. Myers-Scotton (1993), in this regard, has proposed the Markedness Model and posited that code-switching is often utilized for in a social situation for negotiation purpose, and code-switching, functionally speaking, can be considered a social occurrence. Stanlaw (1987) mentions a significant reason for the use of loanwords in English is "that they provide linguistic tools that individuals can use in personal and highly creative ways." Takashi (1997) opposed Stanlaw and posited that it appears "inadequate to attribute the high number of English elements which do not fill lexical gaps to the loanword's modern connotation alone."

Samsuri (1983: 9) in his book, *Analisa Bahasa*, asserts that language is a tool that is used to express people's thoughts and feelings, their will and their behaviors; a tool that is used to influence and to be influenced, and language is a first base and the root for human society. Many people often use the English language in their conversation. Nile defines code switching as a phenomenon in which two parties converse to "signal changes in context by using alternate grammatical systems or subsystems, or codes." He further states that "the mental representation of these codes cannot be directly observed, either by analysts or by parties in interaction" (2006, p.17).

English expressions are frequently found in the conversation of Pakistani youth. Code-mixing refers to the mixing of two or more languages or language varieties in speech. Code mixing is considered to be similar to practice of pidgins; a pidgin, however, is produced across communities that do not have a shared language. Code-mixing occurs where more than two languages are shared by the members of different communities. Code switching can be defined as the use of two or more languages in the same speech context. After a lot of

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research on code switching, scholars and researchers from all over the world came out with their own definitions.

Bokamba (1987) considers code-switching to be "the mixing of words, phrases and sentences from two distinct grammatical (sub) systems across sentence boundaries within the same speech event" while he considers code-mixing to be "the embedding of various linguistic units such as affixes (bound morphemes), words (unbound morphemes), phrases and clauses from a co-operative activity where the participants, in order to infer what is intended, must reconcile what they hear with what they understand".

Bloom and Gumperz (1972 cited in Namba, 2000) identify two types of code switching. Firstly, situational code switching where the speaker will switch their code depending on the appropriate situation at that instant and secondly, metaphorical code switching where the speakers will switch their code in order to attain a particular communicative effect.

Spolsky (1998: 45) says, "It is very common that people develop some knowledge and ability in a second language and so become bilingual. The simplest definition of a bilingual is a person who has some functional ability in a second language. This may vary from a limited ability in one or more domains, to very strong command of both languages."

Wardhaugh (1992:107) says, "Conversational code-mixing involves the deliberate mixing of two languages without an associated topic change."

Hudson (1996: 53) defines code-mixing as a case "where a fluent bilingual talking to another fluent bilingual changes language without any change at all in the situation." He also says, "To get the right effect the speakers balance the two languages against each other as a kind of linguistic cocktail."

According to Haugen (1953:280), "The strongest possible motive for language learning is the need of associating with the speakers of the language". Staneley Lieberson (1981:173) says, "The linguistic demands of the work-world are among the most important forces influencing the acquisition of a second language".

**Purpose of This Research**

The purpose of this research is to analyze the gender difference in code-switching and code-mixing among university students. Gendered differences are those that society associates with men and women and are not necessarily the outcomes of biological factors. Research reveals that males and females repeatedly do not differ in the ways specific by culture stereotypes. Males are typically larger as compared to women and have more strength than them throughout most of their lifespan. Right from birth boys are more active than girls (Eaton &Enns, 1986). In contrast, girls have less mortality rates and are less susceptible to stress and disease (Zaslow& Hayes, 1986). Research suggests differences between males and females in several areas i.e. verbal ability, cognitive, aggression, help and support, emotions, communication.

**Hypothesis**

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1. There is a high frequency of code switching and code mixing between Urdu and English languages both among male and female students.
2. Female students do more code switching and code mixing than male students in text messaging.

## Objectives of the Study

1. To measure the frequency of code switching and code-mixing between Urdu and English languages among male and female undergraduate students in text messaging/SMS.
2. To determine the gender difference in code switching and code mixing between Urdu and English in SMS of undergraduate students.

## Sample

Students of this study constituted population of Foundation University, Rawalpindi. Distribution of sample across different groups was 21 male and 21 female students which make a total of 42 students. The age range was 19-22. All the subjects were students.

## Instrument

The design of the study was descriptive. Twenty-one female and 21 male undergraduate students of Foundation University were asked to send three messages to the researcher's cell phone number so that the frequency of code switching and code mixing can be found in these messages. Code-switching and code-mixing theories were employed to analyze SMS's of male and female students. Subjects' responses were transcribed for study.

## Significance

The result of the study is helpful in finding answers to the questions that cannot be obtained through interviews and observations. It is helpful in exploring the variances among male and female students in the level of code switching and code mixing in text messaging. The results and findings will also aid the future linguistic researchers in understanding the code-switching and code-mixing phenomena in gender perspective.

## Procedure

The data collection procedure took 5 days. The male and female students were informed about the purpose and objectives of the research and their consent was taken for being part of the study. They were asked to disclose their age whereas they were told that writing their names was not mandatory. The Code Switching and Code Mixing theories were applied as tools of analysis. The data was collected directly from the students of two universities i.e. Foundation University College of Liberal Arts and Sciences and Foundation University Institute of Management and Engineering Sciences. Twenty-one female and twenty-one male undergraduate students were asked to forward three SMS each from their inbox to the researcher's cell phone. They were also told that the messages should not be forwarded/pre-typed messages. They were also told that their responses would only be used for research purposes and their cell phone numbers and names would not be revealed in the research

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process. After collection of data their responses were analyzed with the help of scoring method. Data was computed through computer software SPSS and *t* tests were applied.

**Research Questions**

1. What is the frequency of Urdu to English and English to Urdu code switching and code mixing among male and female students in SMS's sent by undergraduate students?
2. Is there any gender difference of code switching and code mixing in SMS sent by undergraduate students?

**Table 4.1**

**Frequency distribution of Code Switching**

| Class intervals | Frequency |
|---|---|
| 0 – 1 | 8 |
| 2 – 3 | 9 |
| 4 – 5 | 10 |
| 6 – 7 | 6 |
| 8 – 9 | 3 |
| 10 – 11 | 3 |
| 12 – 13 | 0 |
| 14 – 15 | 3 |

N= 42

There is one number difference between class intervals. While making the class intervals the lowest and highest scores of the sample were taken and the range of class intervals was between two digits (0-1). The number falls within the class intervals e.g. 0-1 and 8 is the frequency. According to the above table the frequency distribution scores of code switching were almost normally distributed. The above distribution is also represented in the form of line graph.

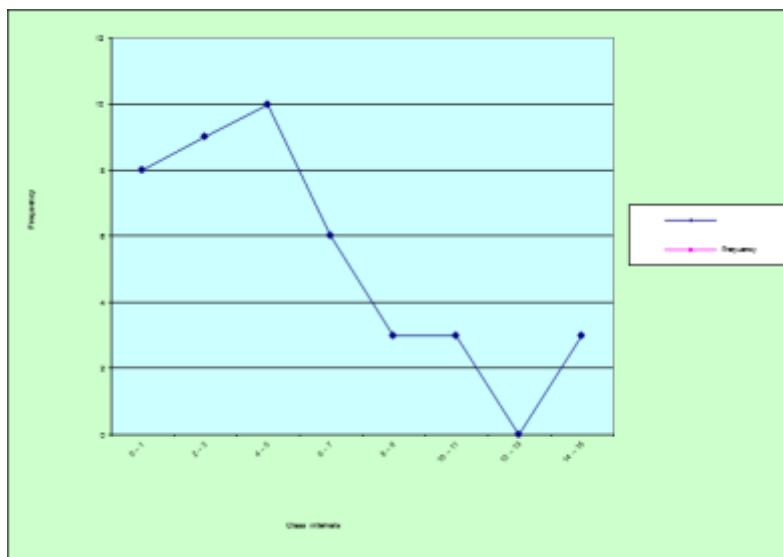Language in India www.languageinindia.com
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**Fig. 1 Graph Representing Frequency distribution of Code Switching**

**Table 4.2**

**Frequency distribution of Code Mixing**

| Class intervals | Frequency |
|---|---|
| 0 – 1 | 14 |
| 2 – 3 | 14 |
| 4 – 5 | 6 |
| 6 – 7 | 2 |
| 8 – 9 | 2 |
| 10 – 11 | 4 |

N= 42

There is one number difference between class intervals.The illustration indicates that the frequency scores of the code mixing sores were not normally distributed.The number falls within the class intervals e.g. 0-1. The highest frequency in code switching and code mixing is14. So, the code mixing has a higher frequency. The above distribution is also represented in the form of line graph.

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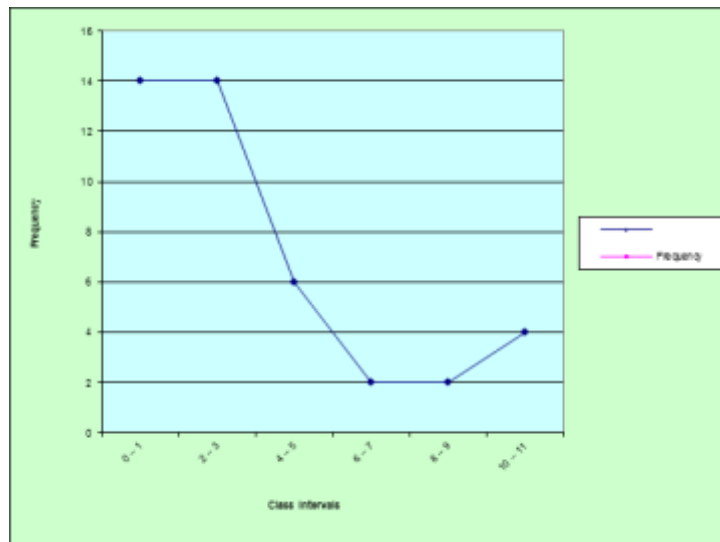Students                                                                    351

**Fig. 2 Graph Representing Frequency distribution of Code Mixing**

**Table 4.3**

**Significance of Mean, Standard Deviation between Girls and Boys on Code Switching**

| Group | N | Mean | Standard Deviation | SE Diff | t. Test | P |
|-------|---|------|--------------------|---------|---------|---|
| **Male** | 21 | 5.6667 | 4.09 | | | |
| | | | | 1.25 | 1.009 | .o5 |
| **Female** | 21 | 4.2875 | 4.00 | | | |

df= 19                                                            t $_{.05}$ = 2.09

The t value of 2.09 could not reach the critical *t* value at .05 level of significance. Therefore, there is no significant difference between mean code switching scores of male and female students. So, our hypothesis was rejected.

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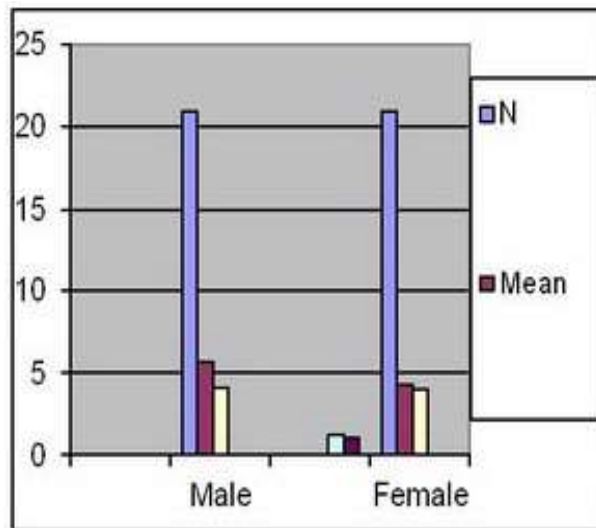
**Fig. 3 Significance difference between code switching of boys and girls**

**Table 4.4**

**Significance Difference between Girls Code Mixing**

| Group | N | Mean | Standard Deviation | SE Diff | t. Test | P |
|---|---|---|---|---|---|---|
| **Male** | 21 | 3.5238 | 3.40028 | | | |
| | | | | 1 | .125 | .o5 |
| **Female** | 21 | 3.6667 | 3.00555 | | | |

df = 19                                                                 t $_{.05}$ = 2.09

There is no significant difference between mean code mixing scores of male and female students because the t value 2.09 could not reach the .05 level of significance. So, our hypothesis was rejected.
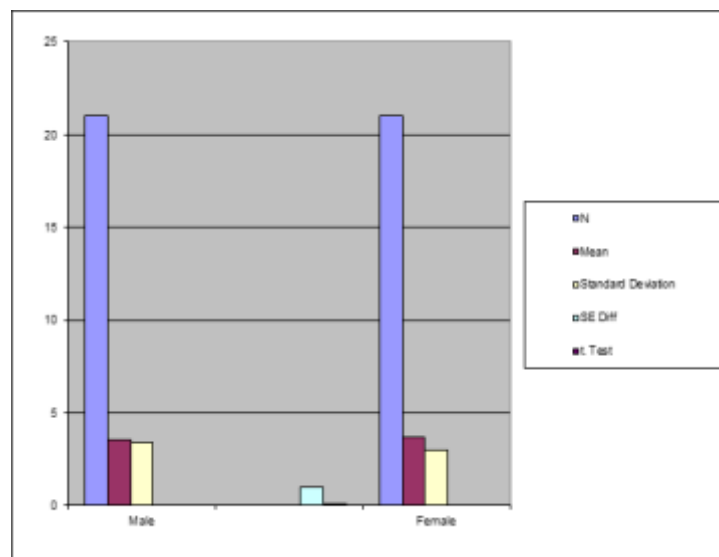
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**Fig. 4 Significance difference between code mixing of boys and girls**

**Findings**

The findings of the study were:

1. The frequency distribution of code switching scores was 8, 9, 10, 6, 3,3,0,3 = 42 this shows that the frequency scores of code switching were almost normally distributed. (Table no.1)
2. The frequency distribution of the code mixing was 14,14,6,2,2,4 = 42, which depicts that the frequency distribution of the code mixing was not normally distributed. (Table no.2)
3. The mean value of code switching scores of boys was 5.66 and of girls was 4.28, standard deviation value of boys was 4.09 and of girls was 4.00, and the standard error of difference was 1.25. The t value of 1.009 could not reach the critical t value of .05, level of significance. Therefore there is no significant difference between mean of the boys and girls code switching scores. (Table no.3)
4. The mean value of code mixing scores of boys was 3.52 and of girls was 3.66, standard deviation value of boys was 3.40 and of girls was 3.00. The standard error of the difference was 1 and the t value calculated was.125, which is non-significant at the t value of .05 level of significance. Therefore there is no significant difference between the mean of the boys and girls code mixing scores of sample. (Table no.4)

**Conclusion**

Code switching and code mixing between Urdu and English languages frequently takes place in SMS messages among university students. The code switching scores of the sample were, almost, normally distributed which means that boys and girls did not diverge in code switching scores. There is no difference between code mixing scores of boys and girls. This means that the second hypothesis was rejected. Finally, the advent of new modes of communication like SMS over the past two decades has resulted in increased indulgence in

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code-switching and code mixing throughout Pakistan which also suggests that extensive code-switching and code mixing may lead to entirely novel linguistic varieties.

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