



Computational Linguistic Features of Code-switching Amongst Native Fiji-Hindi Speakers on Facebook

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Abstract

Decade or two ago, the propensity to study code-switching has only shed light on its spoken discourse, but very few on written. Linguistically, this paper sought to explore the code-switching features amongst native Fiji-Hindi speakers on social networking site, Facebook. It will be supplemented by the functions of code-switching performed by thirty-five native Fiji-Hindi and English (L₂) bilingual speakers' during online Facebook interactions. The data pertaining to study was collated from a period of within six months based on the status updates that were posted by native Fiji-Hindi speakers on their Facebook wall. Upon collection of the data, analysis, interpretation and categorisation was completed according to the rudiments of the research questions. More imperatively, the classified functions including code-switching types were based on Gumperz's (1982) conversational strategy, which was further supplemented by Zentella (1998). The results indicate that code-switching amongst native Fiji-Hindi speakers during online Facebook interactions occurs due to the following reasons, addressee specification, message qualification, emotion indications, reiteration, clarification, emphasis and availability. Additionally, it is hoped that this study would provide an insight about the phenomenon of code-switching amongst native Fiji-Hindi speakers' in an asynchronous computer mediated communication and that it will also provide an aid for future researches in the field of socio and computational linguistics.

Keywords: code-switching, bilingualism, Facebook, computational linguistics, sociolinguistics, Fiji-Hindi

INTRODUCTION

For the past several decades, many scholars are intrigued by the significant interest and researches that are conducted in the field of socio and computational linguistics. As time elapsed, more and more radical changes were introduced in this branch of linguistics. However, decade and a half ago, what is now called the digital age, many are heavily relying on social networking sites such as Facebook, Twitter, Instagram, WhatsApp, etc to communicate with their loved ones or at professional levels. While the communication is taking place on all these social networking platforms, one thing that matters the most is the manner in which these conversations take place and what are the implications of it. People are more content with the most appropriate language that

is being used by them to be understood by others. As such, code-switching is considered as the best resort to keep the conversation rolling and make the chatting more and more engaging as much as enjoyable.

The advent of the social networking sites and the swift development in computer mediated communication have revolutionised the conventional way of communications and written expressions. These expressions are no longer written with only one target language in mind, but usually more than one. The concept of using more than one language in computer mediated communication is referred to as code-switching. Linguistically, “code-switching refers to an alteration of two languages simultaneously within a single sentence, discourse or constituent” (Malaysia, 2013). The alteration usually occurs when a speaker starts a conversation, then switches to another language in the middle or towards the end. According to Wong (2000), “Facebook is considered to the most popular asynchronous computer mediated communication, where occurrences of code-switching are really high”.

Furthermore, choosing the code during online chatting is based on personal choices. This choice is widely considered to be an adoptive strategy and as asserted by Slinker (1972), “this strategy uses reduction, simplification, transfer, omissions, substitutions, overgeneralisations and restructuring”. The linguistic behaviour behind these adaptive strategy largely depends on the common grounds of who is communicating to whom and when. In Fiji, social networking site as common as Facebook has gained colossal recognition and many are now connected with their friends, families and colleagues wherever they are. Although the site could be used in multiple languages, most of the Fijians would prefer English, Fiji-Hindi and *i-Taukei* language as the target language of communication with one another. In other words, at one time Fijian Facebook users can use either English or Fiji-Hindi or *i-Taukei* language.

Though English is the official language of Fiji Islands and is first introduced formally in the education system at primary school level, most of the users of Facebook prefer to use their first language either consciously or subconsciously, while communicating with their families, friends and colleagues online. Above everything else, the ever growing influence of online media and computer mediated communication has seen the development of bilingualism as well as multilingualism characteristics within the users of Facebook. While communicating online via Facebook, users often resort to switching codes even in real life as being offline or in different social settings. This has prompted many Fijians to switch between two or more languages, so that they are able to convey their ideologies and sentiments using the preferred language of communication. In fact, Facebook is now considered to be a “ghost friend” for many because if a person feels lonely then he/she still has someone to listen to their emotions.

To add on, the widespread use of Facebook as a means of online mediated interaction amongst Fijian users has made huge amount of data available to study computational linguistics features of code-switching. Since most of the researchers that were

conducted in yester years focused mainly on oral and written production of code-switching, scant research has been carried out on online usage of code-switching via social networking sites. In fact, this research is relatively new in the field of computational linguistics and requires rather careful interpretation of the information. In the quest towards this research, the researcher is particularly interested in determining the reasons and intentions that motivates the Fijian bilinguals and multilinguals to switch from one code to the other in e-communication writing, although sufficient time is in their favour to use the desired language before sending the message. In other words, why cannot users choose one language instead of two or more?

In brief, code-switching on social networking site such as Facebook has opened the door to study computational linguistics as an emerging phenomenon. The ever growing habit of Fijian Facebook users has seen that quite a significant number of users do code-switching for number of reasons. This has paved way for users to communicate in more than two languages and ignoring the subservient. Realistically, due to this interactive feature of Facebook, 75% of the people in the year 2017 interacted online more than they did in real life (Online Schools, 2018). As such, this paper will study the intentions of Fiji-Hindi Facebook users on the reasons of code-switching and how does it assist them to be understood by their friends, families and colleagues. Also, the study will look into the frequency and types of code-switching, including all other sentential aspects of this linguistic boon.

PURPOSE OF THE STUDY

With 2.45 billion monthly active users as of the third quarter of 2019, world's largest social networking site, Facebook has developed its own language of online communication (www.statista.com). This includes shortening of words, sentences, expressing feelings without words but using emoticons and using multiple languages. The observation that was made through this study depicts that large number of people switched between languages, which was aided by using shortening of words, sentences and using emoticons. Majority of them preferred to use second language, although the people in the online chatting had their mother tongue as Fiji Hindi. Interestingly, it was also noticed that users' tend to use types of code-switching based on their relationship, which they had online with each other. This emerging study is the prime focal point of this research, which will further be supplemented by finding the reasons; patterns and what causes the users to code switch on Facebook statuses and messages amongst Fijian Fiji-Hindi language users'.

SIGNIFICANCE OF THE STUDY

After studying the literature about users' of all types of social networking sites, Facebook was selected as the social networking site for this particular study, since it has the largest number of users in Fiji. In the last few decades, scant researches were carried out to study regarding the linguistic features of code-switching on Facebook; however, this research is the first to be based on Fijian Facebook users'. Therefore, the

findings of this paper will assist the researchers of Facebook users' in Fiji to accomplish a better insight regarding the reasons that govern code-switching on Facebook. This will further be supplemented by the relationships that users' have with other in an asynchronous setting.


RESEARCH QUESTIONS

The following research questions stipulated below have been considered to work as guiding rudiment for the present study:

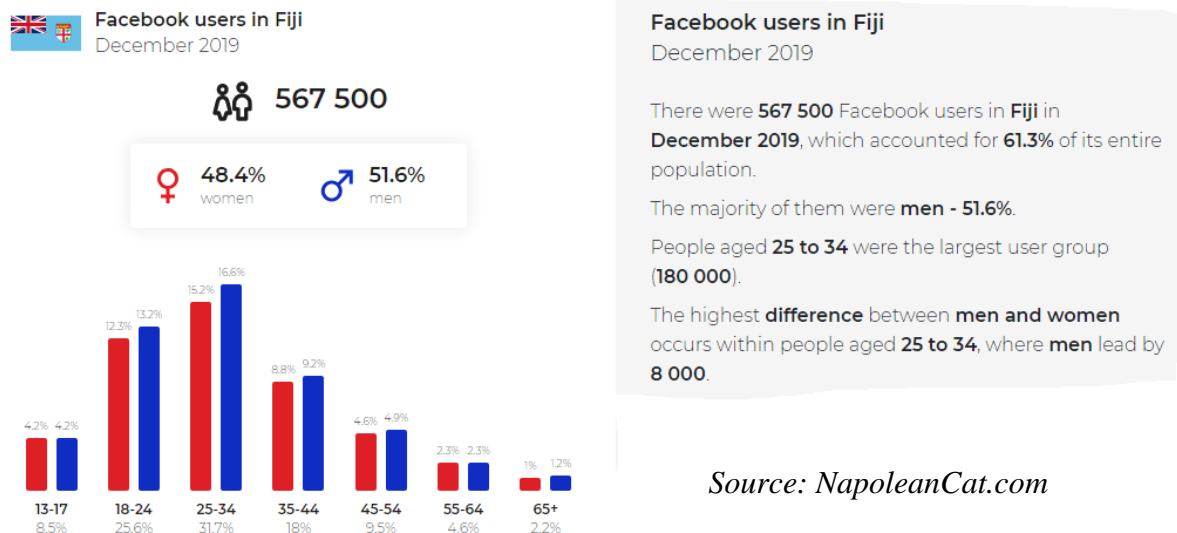
- a) Why do native Fiji-Hindi speakers prefer to switch codes, while communicating with other native Fiji-Hindi speakers on Facebook?
- b) What types of code-switching occurs mostly on statuses and its replies amongst native Fiji-Hindi speakers on Facebook?
- c) How do personal relationships invoke code-switching amongst native Fiji-Hindi speakers on Facebook?

LITERATURE REVIEW

Inception of Facebook

Created in the year 2004 by Mark Zuckerberg, Facebook is considered to be “the most widely used social networking site (SNS) to date with over 2.45 billion monthly active users' in the third quarter of 2019” (www.statista.com). Like many other social networking sites, Facebook has asynchronous messaging feature such as status updates, which resembles microblogging concept (Kobler et al., 2010). The feature tend to assist the users' to post short messages that communicates their thoughts, feelings, enquiries, situations and many other useful needs. This is further supplemented by authenticity, which allows the users' to upload their photos, videos and links. Each time a new post about the status of a user is updated on his/her wall, it will appear on their friend's news feed. This would simply allow their friends to click emoticon buttons such as,  to show their feelings regarding whatever is being posted.

Below is the data for Fijian Facebook users' from December, 2019 by *NapoleanCat.com*.



Users' tend to use the language profusely, since most of the Facebook status updates are considered to be conveying one's thoughts and feelings. Therefore, many are ignorant about formal and correct language/grammar, which is inclusive of acronyms, abbreviations, spelling mistakes and many more. Correspondingly, Herring et al., (2001, p. 617) claims that such practices are intentional due to "economising on typing effort, mimic spoken language features and expressing themselves creatively". As such, "bilingual Facebook users' have a greater propensity to use more than one language to update their status", without being conscious about errors (Herring et al., 2001, p. 617).

Computer mediated communication

Computer Mediated Communication or CMC refers to "an array of system that enables the people to communicate with each other via the means of computers and networks. This includes computer conferencing, discussion lists, electronic mails, bulletin boards, blogs, (Romiszoaski and Mason, 2004) chat rooms and social networking sites". Nowadays, almost majority of the communication has been made mediated and the vast amount usage is the online platforms, because this allows the users' to correspond with each other instantly from anywhere and everywhere. Generally, most of the research that is done in the field of computer mediated communication has talked about two types of communication. These are known as synchronous and asynchronous.

According to Beißwenger and Storrer (2008), synchronous communication takes place during instant messages or IM and chat rooms, which requires users to simultaneously react online in order to exchange messages instantly, while on the other hand, asynchronous communication requires users to access them on different occasions such as emails and online discussion groups. However, the latter does not require users to be present online all at the same time, but respond to the messages at the own convenience. More so, some types of computer mediated communication are purely synchronous and asynchronous, while others such as Facebook allow both to occur at

the same time. This study sought to focus on asynchronous form of Facebook interaction, with main focal area being status updates of the users.

Defining bilingualism and code-switching

The conceptual definition of bilingualism and code-switching is often associated with a speaker, who is able to execute more than a language to make sense. Frequently, linguists have shown efforts to portray and understand the notion of bilingualism and code-switching from various aspects, which included categories, factors and degree. A study conducted by Tsiplakou (2009) shows that, “among all other things, the degree of bilingualism influences the degree of code-switching in a conversation amongst people in an asynchronous ambience”. Linguistically, the definition of code-switching varies based upon the situation or topic of conversation and interlocutors. According to Narayan (2019), code-switching refers to a general shift from one language to another by a speaker in a conversation. Below are more varied definitions of code-switching.

Traditionally, code-switching was seen by many as a random practice of two languages that could be elucidated by interference. Nowadays, it is practiced as a rule governed performance for communicative strategy. Bloom and Gumperz (2000), referred code-switching as the “juxtaposition of the same speech exchange”, while on the other hand Zentella (1998), identifies code-switching as an ability by a speaker to interchange between the languages in their linguistic jurisdiction. However, code-switching occurrence may not be a trivial matter in a bilingual society, because it rather involves speaker’s sociocultural identity. “A number of code-switching researchers suggest that code-switching is meant to be used as an additional aid to achieve the specified interactional goals with those who are conversing,” Auer (1999); Gumperz (1982); Heller (1988); Milroy and Li (1995); Myers-Scotton (1993); Shin and Milroy (2000).

On the other hand, Bollinger (1975) asserts that bilinguals tend to resort to code-switching as a conversational tactic to assist them to lessen communication hitches that probably might arise during a conversation. Most of the studies that were conducted on code-switching have enriched literature and different sociolinguistic theoretical models have been adopted to look into various conceptual frameworks of code-switching. The literatures also show that sociolinguistic approaches has looked into the examination of languages used in contact by bilinguals and how it has assisted them to convey their feelings and ideas. Undoubtedly, the use and study of language alteration has been seen as a successful tool over the decades, which have led to the emergence of the concept of code-switching (MacSwan, 2000).

However, as claimed by Azuma (1993), the past researches on code-switching mainly focused on the pure linguistics aspects of code-switching such as, syntax, morphology and phonology. The author also states that a more structural focus needs to be looked into because construction for production models and evidence for grammatical theory has more answers to “why” people do code-switching. According to Ayeomoni (2006), the factors which encompass “code-switching are poetic creativity, intra-group identity

and expression of modernisation". This is further supplemented by Castells *et. al.* (2006); Sue (2003); Myer-Scotton (1993), who claims that other factors that allows a speaker to switch codes are; audience, environmental setting, topical discussions and picking up cues.

Moreover, as asserted by Gumperz (2004), some research findings also indicate that "one of the major factors of code-switching is that elements of the other language convey the meaning of the intended idea more accurately". Equally claimed, code-switching is also adopted as a linguistic tool to have the desire to emphasise on something or someone in a more detailed way during a conversation (Zentella, 1998). A quick switch of codes also allows the speakers to reaffirm the listener's opinion and approval on a particular subject matter. The reaffirming of listeners' opinion and approval mainly leads to form a 'tag switching' question type of code-switching by the converses. According to Auer (1999), there are eight conversation loci that would frequently allow code-switching to take place. The following paragraph below will shed light on the eight loci's.

The eight conversational loci are enumerated as follows: reported speech, change of participation constellation, side comments or parenthesis, reiterations, change of activity or mode or role shift, shifting of topic, puns and topicalisation or commenting structure. From the earlier literatures, these eight factors will influence the bilinguals towards switching codes. However, it also does not mean that all these factors will be actively present in a conversation, while code-switching will take place between the users'. In fact, different factors will influence bilinguals during different times. Now, the next few sentences will introduce types of code-switching that arises due to the eight factors stipulated above. A well "balanced bilingual" is expected to display noticeable preference for a particular type of code-switching ("more complex or intimate"), while a "non-balanced bilingual" will portray a rather "emblematic" code-switching, i.e., tag switches.

Types of code-switching

Researchers "have come up with a typological framework that surrounds the phenomenon of code-switching" in the field of applied linguistics (Narayan, 2019). As claimed by Abdely and Heeti (2016), there are two ways in which code-switching could be noticed and they are metaphorical and situational. However, having a disparated perspective, Poplack (1980) has mentioned in her works three dissimilar types of code-switching which are extra-sentential or tag switching, inter-sentential and intra-sentential. This research will look upon the studies of Poplack (1980). Extra sentential switching or also known as tag switching is phrased by Romaine (1989, p.112) as inserting or adding words anywhere within a sentence, without violation of grammatical rules of a sentence. The tag is usually in another language. For example, "*tumma dimaag mei acha se koi baat ghuste nai hai janaaye, right?*" (Seems like nothing is getting inside your head, right?). The switch that is done in inter-sentential involves

“a switch that takes place at clausal or sentence level”. For example, “*hum aaj nai magta jaaye, what about you?*” (I don’t want to go today, what about you?). Adding a word or just a phrase from another language into L1 is known as intra-sentential code-switching (Yletyinen, 2004, p.15). The author also stated that, when different languages are used in a particular sentence, reasonable amount of competency is needed to avoid any errors. For example, “*hum aaj filam dekhe jaayega*” (I am going to watch a film today)

Code-switching in computer mediated communication

Facebook, the world’s largest social networking site of online mediated communication allows many to connect and share information, which is considered as an electronic media and where code-switching is undeniably evident. To supplement code-switching, non-verbal communication also provides the bilingual users’ with varied conditions of code-switching. The hybridisation features of computer mediated communication stimulate the creativity in the use of online languages, particularly for bilingual users’ as this is due to the availability of more languages to communicate. Naturally, code-switching behaviour is integrated into users’ language interface in the cyber world. With wider bilingual communities throughout the world, English language is considered to be the lingua franca used in diverse context including, education, politics, law and order, air speak, sea speak etc and most of the users’, who are educated bilingually are often bound to switch codes with English being one of the many languages online.

According to UNESCO (2003, p.11), it is suggested that ‘new media’ includes broadcasting media and internet is considered to serve only towards the expansion of “the scope and power of dominant language at the expenses of endangered languages”. Although Fiji Hindi is not classified under endangered languages’, the high influence of social networking site is slowly affecting the language to a reasonable extent. As stated by Morris (2007); Riaga et al. (2008) and Wei (2000), nowadays social networks are considered to be a norm and the networking sites are developed to suit the languages of the users, which in return assist them to communicate online without any major glitches. Though extensive research has been conducted to elucidate the linguistic phenomena about verbal communication, scant research has been done on code-switching in computer mediated communication, which has not fully touched on the social networking sites in the recent years.

As mentioned in one of the paragraphs above, communication via internet is known as computer mediated computer. This is further defined by Herring (1996), as “communication that takes place between human beings with the instrumentality of computers”. This is further supported by Hine (2000) and Murray (1995), who mentions that computer mediated communication, can be divided into audio-visual, text based and both. Discourse analysis in computer mediated communication is now recognised as exhibiting some unique manners of communication, thus encompassing all kinds of inter and intra personal communication to take place with the assistance of

computers. Facebook is just one perfect example, which allows the users' to share their feelings and emotions via computer mediated communication.

Furthermore, Boyed and Ellison (2007) defines social networking sites as a web-based service that allows the users' to create public or private profiles, together with a list of friends and view their status by commenting as well. Generally, electronic media is meant to be informal or semi-formal in their nature of usage and that it also encourages the use of global language, English. This is due to two reasons namely, English language provides the sense of acceptance and safety and secondly, it gives the space to people where they can interact not only with friends, but with people from all around the world (Dabrowska, 2013, p.64). Additionally, social media, such as Twitter, YouTube, Instagram, Google+ and Facebook, where users' do not find difficulty in making friends in particular someone, who has good knowledge about English and this has made English a distinctive marker of computer mediated communication (Baron, 2008; Seidlhofer et al., 2006 and Trousdale, 2010).

To add on, certain sociolinguistic features has contributed towards the appealing features amongst bilinguals to select a meticulous type of language to communicate online. As such, code-switching is considered as an option to communicate in more than one language with friends and families. It has its own linguistic features, which are normally unique in terms of grammatical structures and are considered to be the contributing factors on the patterns of code-switching. A study was conducted by Warschauer and Zohry (2002) in which English and Arabic language was used to communicate via email to a group of professionals. Towards the completion of the study, "it was found that randomised Arabic language was most frequently used in informal email messages and online chats, but English for formal communications". The study also revealed how situational code-switching functions in computer mediated communication (Backus, 2010, p.15).

Additionally, Goldberg (2009, p.3) did a study on Spanish- English code-switching in email correspondences, which had five Latin American participants and found that English was used for most of the professional work-related matter, while Spanish was seen as a 'minority' language for other situations. Another study that was conducted by Durham (2003) who looked into the corpus examination of 996 emails that were collected from 1999-2000 in order to look into choices of language for some students of medical in Switzerland. According to the results of the study, most of the directions were given in German, but number of respondents used English in their responses for the fact that English worked "as a non-native means of communication" for most students. Therefore, it could be contemplated that while doing code-switching on computer mediated communication, users' would still prefer to stick to one language only and prefer to use that all throughout the communication. On the other hand, many would still prefer to use more than one language to communicate, since it allows them to get along with their ideas and feelings seamlessly as well as flawlessly.

Moreover, Huang (2009) investigated language choices by studying emails during a communication, which was interpersonal and that involved 8 Chinese-English bilingual speakers in Taiwan. As per Goldbarg's findings (2009, p3), Huang also noticed that Chinese used their L1 to express their personal feelings, while English was used for identity purposes only. On the other hand, Ho (2007) did an investigation of 21 tertiary students in a Hong Kong university based on code-switching via instant messaging using computer. The outcome of the result was in line with Goldbarg and Huang, where English was used for formal correspondence, while Chinese for traditional context. However, one important thing which Ho found out after conducting the research was that, using of two languages simultaneously paves way for the young users' to express their ideas and emotions freely. As per the data stated above most of the Fijian Facebook users' are young people with age range from 24 to 34.

The frameworks of code-switching

The various questions pertaining to the patterns of code-switching that are attested in computer mediated communication cannot be looked into autonomously of the frameworks in which code-switching is studied. Generally, there are four points that characterizes the state of art:

- Researchers tend to adopt number of dissimilar avenues and not just sole framework for code-switching analysis.
- There are no accepted methodologies that have been developed yet, which specifically looks into account of code-switching on computer mediated communication, however “researchers draw on frameworks that was originally developed for analysis of spoken discourse, despite criticisms gained for its adequacy” (Hinrichs 2006, p.28-30; Leppanen and Peuronen, 2012).
- Predominantly, the language choices are analysed from pragmatics and sociolinguistics perception instead of grammar and linguistics. While structural descriptions are not entirely missing from the existing literature, the sole aim has been to fathom social purposes, pragmatic functions and in communication dynamics of code-switching online.
- The final contested issue is the online written correspondence of code-switching to the offline spoken users' way of responding to the messages.

Also, the literature looked into the “three most influential contributors to theory in the sociolinguistic branch of code-switching studies” (Hinrichs, 2006, p. 28). Firstly, the markedness model by Carol Myers-Scotton (1993), marked code-switching as unexpected and unconventional or expected choice. Secondly, numbers of terminologies were introduced by John. J, Gumperz (1982), such as “the distinction between metaphorical and situational code-switching”. The final model which the researchers draw on the conversational-analytic framework for the studies in bilingual education is by Peter Auer (1995, 1998, 1999, 2000), whose works are developed from Gumperz.

METHODOLOGY

The study sought to adopt a mixed method approach and this section of the paper is going to discuss about the descriptions of data collection process, participants and the analytical procedures.

Research Design

With all due ethical considerations, researchers tend to conduct a research by basing it on a natural setting, where the answers are sought from the society and the community in which one resides. All the data pertaining to the research is collected carefully, which are based on observations and in-depth interviews. The sole purpose for all these collections is to learn and analyse the aspects of societal viewpoints and acquaint ourselves from the novel understandings out of it. The collected data helped to achieve all these.

For this particular research, selection has been made for qualitative research approach simply because all the data, which has been collected is subjective and which is derived through individual's understanding of circumstances, thus data is collected by careful observations. On the other hand, quantitative research deals with systematic empirical study of the social phenomena, which uses statistical data mathematically or computationally. This particular method was used to present the data and to preserve the accuracy and for easier understanding, numbers were converted to percentages.

Data collection instruments

The researcher collected data through questionnaire and observation for this study. After seeking approval from the respondents, Facebook statuses and replies were observed by the researcher. All the statuses and replies which had evidence of code-switching only were collected as the data samples. In this method, a total of one hundred and ten wall posts were observed. A total of four statuses from each user were recorded. For a clear insight and analysis of the data, the researcher used four posts to evaluate the code-switching corpora of which there were two with family members, two with friends and two with work colleagues. For ethical reasons, the actual wall posting was suppressed.

Also, apart from the abovementioned tools, the research questionnaire had two sections to it: the primary section consisted of surveying details, while the second section was based open and closed ended questions. In totality, eight questions were multiple choice based and three open-ended questions. The questions were carefully designed to relate high relevancy of code-switching and elicit answers of that on social networking sites. The open-ended questions were selected by the researcher, so that respondents can write down other views freely and also give suggestive feedbacks based on their use of code-switching on social networking site, Facebook.

Participants

For sampling purpose, the research studied thirty-five active Fijian Facebook users. All the users were native speakers of Fiji-Hindi and were Fijian citizens. For ethical reasons, the real names of the respondents were replaced by fictitious names to suppress their true identity. Also, prior consent was sought from all the respondents before making them part of this research. A withdrawal from the research was also highlighted to all. Table 1 below demonstrates the survey questionnaire details of all the participants. It only contains the particularities of thirty active Facebook respondents and not the details of those, who responded or replied to the comments written by these participants on their walls.

Table 1. Demographic details of the participants

Count	Names	Ages	Gender	Education	Level of Study	Profession	L ₁	L _{2/3}
1	Rahul	24	M	Secondary	Year 13	Credit Clerk	FH	EN/ITK
2	Priya	27	F	Tertiary	PG	Customer Rep	FH	EN
3	Nisha	40	F	Tertiary	UG	Teacher	FH	EN
4	Sanjeet	32	M	Tertiary	PG	Teacher	FH	EN
5	Krishan	35	M	Tertiary	PG	Teacher	FH	EN/ITK
6	Mahira	23	F	Secondary	Year 12	Sales Rep	FH	EN
7	Samaira	25	F	Secondary	Year 13	Announcer	FH	EN
8	Christine	26	F	Tertiary	UG	Lab Tech	FH	EN/ITK
9	Ronald	31	M	Secondary	Year 12	Sales Rep	FH	EN/ITK
10	Ashneel	35	M	Secondary	Year 13	Conductor	FH	EN/ITK
11	Monty	30	M	Tertiary	UG	Surveyor	FH	EN/ITK
12	Ronvic	25	M	Secondary	Year 11	Delivery Boy	FH	EN
13	Divya	23	F	Secondary	Year 12	Sales Girl	FH	EN
14	Rimisha	24	F	Tertiary	UG	Teacher	FH	EN
15	Kajol	28	F	Secondary	Year 13	Law Clerk	FH	EN
16	Kunjan	32	M	Secondary	Year 12	Packer	FH	EN/ITK
17	Isabel	29	F	Tertiary	PG	Nurse	FH	EN/ITK
18	Shreya	28	F	Secondary	Year 11	Sales Girl	FH	EN
19	Vedanshi	22	F	Secondary	Year 10	Sales Girl	FH	EN
20	Saachi	25	F	Tertiary	UG	Teacher	FH	EN
21	Prachi	24	F	Secondary	Year 13	Admin Officer	FH	EN
22	Vyas	29	M	Secondary	Year 12	Packer	FH	EN/ITK
23	Isaac	33	M	Tertiary	UG	Doctor	FH	EN/ITK
24	Vrinda	30	F	Secondary	Year 12	Sales Girl	FH	EN
25	Fazleen	27	F	Secondary	Year 13	Cashier	FH	EN
26	Imraz	28	M	Tertiary	PG	Banker	FH	EN/ITK
27	Mayuri	26	F	Secondary	Year 11	Sales Girl	FH	EN
28	Preeta	33	F	Tertiary	UG	Accountant	FH	EN
29	Kirtan	30	M	Secondary	Year 13	Supervisor	FH	EN/ITK
30	Ranjini	34	F	Tertiary	PG	Doctor	FH	EN
31	Jaishree	36	F	Secondary	Year 13	Chef	FH	EN
32	Afraaz	37	M	Tertiary	UG	Architect	FH	EN
33	Pranav	25	M	Secondary	Year 11	Sales Boy	FH	EN
34	Arohi	32	F	Tertiary	PG	Nurse	FH	EN
35	Saakshi	28	F	Tertiary	UG	Pharmacist	FH	EN

Note: UG-Undergraduate, PG-Postgraduate, FH-Fiji Hindi, EN-English, ITK-itaukei Language

Procedures


The study only observed the statuses, which had the code-switching only being done by the participants and replies to that post. A total of one hundred and ten status updates were studied, which contained code switched languages. Out of that, four statuses per participant were collected by the researcher towards this study. Accompanying the status were the replies to that status by respondents cousins, siblings, colleagues and friends. To avoid any form of uncertainties, the corpora's are presented on "as is where is" basis, which has included grammatical flaws such as, misspelt words, shortened words/sentences, smiley, emoticons, acronyms and other grammatical errors. The researcher did not alter any statuses and has also used some screenshots to supplement the elucidations of this study. For a precise distinction of code switched language discourses, all the Fiji-Hindi words are italicised and where possible translated into English.


Data analysis

The organisation and bringing the meaning to a mass collected data is regarded as the data analysis procedure. Generally, the procedure consumes a lot of time and is full of challenges, but creative and captivating (Rallies and Rossman, 2007). While doing the qualitative research, collection of data and interpretation come concurrently. For this particular study, the researcher first gathered the statuses, where code-switching was evident together with the associated replies to it. To further supplement the procedures, survey questionnaire and open/closed ended questions were also analysed. All the data were converted to percentages for easier understanding of the results outcome and to relate it to the research questions.

RESULTS AND DISCUSSION

Analysis of post statuses

Soon after analysing the data, it was evident that all the three main types of code-switching, that is, inter-sentential, intra-sentential and extra-sentential were done by Fiji-Hindi speakers user's on Facebook. These were mainly done by participant's friends, families, siblings and colleagues. The discourse finding on the Facebook walls mainly demonstrates strong spoken form elicitation than a written one. Spoken form that took place amid families and friends were rather very informal, since there is a high solidarity amongst the relationship. The participant's way of responding to the posts demonstrates the language discourse replies by their families and friends such as, shortening of texts, (*i'll b lt8, i wana c da muvi 2, y r u nt cummg?, wat dd u eat?, wea r u goin?, hv u finshed doin da hwrk?, i wil slip at 1a.m! kip chatg, wat tym r we mitg 2morw?, c ya!*) and using excessive number of emoticons .

. The uses of excessive number of emoticons have surprisingly replaced the written messages. A conversation which takes place between

participant's friends and families can actually go without typing any word or letter, but converse only using emoticons to understand each other. For example, 🙄 + ? + 🍲 + 👍 + 🍊 🍎 🍰 🎂 🍧 🍦 = 😍. Now, below are the actual conversations.

For example:

i. Conversation between two friends:

- Kajol: office *ke* environment *ketna disguuuusting hai!*
- Preeta: *sache ke!* People *log ketna bari* smoking *karke aawe yaha.*
- Kajol: no! Like seriously, you know!
- Preeta: *sache ke! kuch to kare ke padi, naitoh saas nai le paayega, right?*

The above example shows that the respondent, Kajol started the conversation in an informal way. In response to her message, Preeta also used informal language. In both of the responses there is an evident of intra-sentential code-switching. The manner in which the messages are typed rather shows verbal communication more than written one. Kajol initiated the conversation in Fiji-Hindi and switched to English in between by emphasising the word “disguuuusting”. Preeta also used Fiji-Hindi throughout her conversation and code switched by using the English word “people” and “smoking”. In the last sentence Preeta used an extra sentential switching “right” to ask for Kajol's view.

ii. Conversation Monty and his cousin:

- Monty: 2day's mayyy b'day, wish *karo humme!* 😊😊😊
- Isabel: Oh happi bday *mama*, where is the *blackforesssssst!!!* 😂😂😂
- Monty: *Pehele bataaw konchi gift dega humme!* 😂😂
- Isabel: *Areee mama hum konchi dai tumme, hahahha*
- Monty: *hum magta ek nawa laa fone!*
- Isabel: *acha, pahele hamme blackforest do tab hum fone dega, WHAT SAY?* 😂😂

In the first sentence, it can be seen that informal English was used to kick start the conversation and Fiji-Hindi was added towards the end making it an inter-sentential code-switching. Isabel emphasised on the word by stressing “blackforesssssst!!!” to show how dreadfully she craves for a cake, with emoticons complimenting her feelings. Monty continued to use Fiji-Hindi to keep the conversation rolling, with using “gift” in the third sentence, since there is no highly common word used to replace the word in Fiji-Hindi making it an intra-sentential switching. The same was done for the fifth sentence, where there are no immediate substitute for the word “fone” in Fiji-Hindi; hence it is again an intra-sentential code-switching. In the last sentence said by Isabel, she asks for the opinion by capitalising the words “WHAT SAY” making it an extra-sentential code-switching.

iii. Conversation between Jaishree and her friend Nisha:

- Jaishree: *aaj janaaye dher guest log rahi hotel mei!*
- Nisha: *haa! have to ask main chef ki konchi konchi menu rahi lunch mei!*
- Jaishree: *nai! chef aaj kaam pe nai aaise hai, his sick!*
- Nisha: *aree bhaiya! iske kaa hoyege aaj?*
- Jaishree: Monday morning sickness, you know! 😊😊

The conversation above shows intra-sentential code-switching in all the sentences except for the last one, which Jaishree says it in English. It is clearly evident that L1 is dominating mainly the thoughts of the participants, since it allows them to think in their mother tongue first. All the conversations are having either intra-sentential, inter-sentential or extra-sentential code-switching highly evident.

iv. Conversation between sisters:

- Saachi: i dd nt gt da white ferry dres frm papa, 2day! 😞😞😞
- Praachi: gud u dserve it! *tum bahut bhari labar labar karta raha* 😊😊
- Saachi: *Tum pagli hai!* I was onli chosing wat I wantd.
- Praachi: 😊😊😊😊😊😊

Saachi updated her status with some sad emoticons, but without any code-switching. Her sister Praachi used emoticon 😊😊 and said “*tum bahut bhari labar labar karta raha*”, which is precisely indicating an inter-sentential code-switching. After seeing the responses of Praachi, Saachi kept the messages rolling in Fiji-Hindi with use of inter-sentential code-switching, while Praachi summed up the conversation without using any words, but emoticons.

v. Conversation between colleagues:

- Sanjeet: wat a day! It’s Monday. Back to business!
- Kunjan: yeah! tell me all about it!
- Sanjeet: *yahi rooj week ke hamme sabse kharaab lage hai* 😊😊
- Kunjan: *wahi toh! hamme to dil nai kare khatiya mei se utro.* 😊😊😊
- Sanjeet: u know wich dy I alwaz look 4ward to, ryt?
- Kunjan: Yesh! 😊😊😊😊
- Sanjeet: Friyaaayyyy!!!!

The above conversation shows code-switching only taking place in the middle of the third sentence, where Sanjeet inserted “time” amidst the Fiji-Hindi conversation. It is also noticed that, while Sanjeet continued the conversation in English, Kunjan responded to him in English, however, when he responded in Fiji-Hindi, Kunjan also responded to him in Fiji-Hindi. The third sentence in this conversation only saw intra-sentential code-switching taking place.

vi. Conversation between colleagues:

- Imraz: Hello Ronvic, hope you got the email which I sent you?
- Ronvic: Yes, thank you.
- Imraz: Never mind, don't mention it. *mouka milli tab aayega?*
- Ronvic: No, sorry. *bihaan hama nao baje class hai.*
- Imraz: *acha tab*, whatever happens in the meeting, I'll let you know, take care.

Unlike, Kajol and Preeta including Monty and Isabel, Imraz and Ronvic did not use any code-switching. In fact, both Imraz and Ronvic finished one sentence in Fiji-Hindi and then used English for the next. An inter-sentential code-switching was evident in their conversation. However, in the last conversation done by Imraz, extra-sentential code-switching prevailed. Formal language was also used through the conversation.

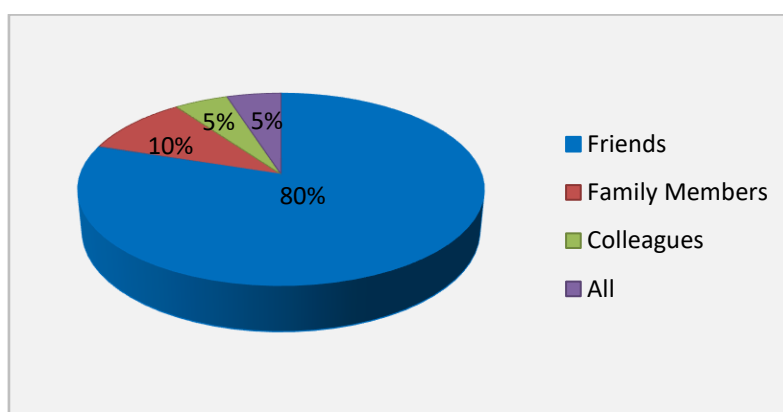
Analysis of questionnaire

Firstly, in the questionnaire section the demographic details of the respondents were collected, which is tabulated under research participants of this study. Next were the eight survey questions, which comprised of multiple choices (in some questions more than one response was acceptable); while on the other hand, there were three open-ended questions.

Outcomes of the survey questionnaire:

1. While being on Facebook, whom do you chat with most?

- a) Friends b) Family members c) Colleagues d) All

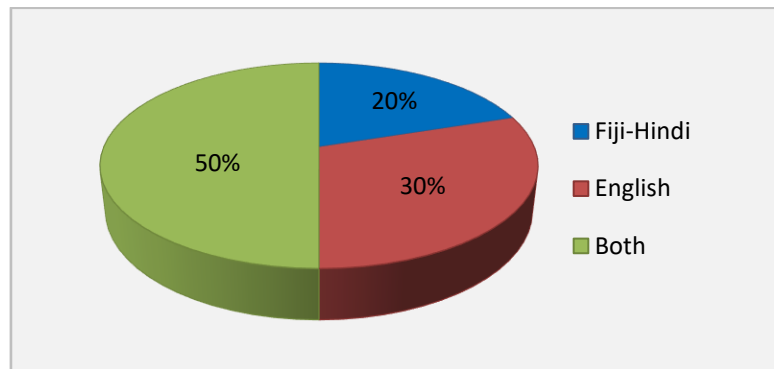


The pie chart above shows the most liked online chatting, whom the respondents preferred to do on Facebook. According to the data that was collected, 80% of the respondents preferred to chat with their friends the most, while 10% opted with family members and the other 5% preferred to message their colleagues. The remaining 5% preferred to chat with everyone online.

2. Which language would you prefer to use most on Facebook?

- a) Fiji-Hindi b) English c) Both

Figure 2: Most used language on Facebook

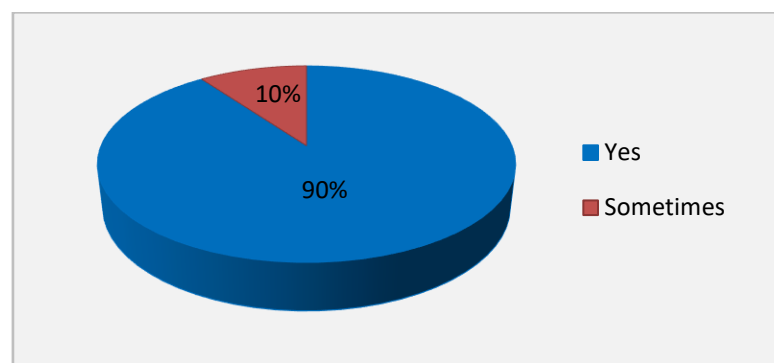


The pie chart above shows the most used language, which the respondents preferred to use online on Facebook. As per the data, 50% of the respondents claimed that they used both the languages that is, Fiji-Hindi and English. While 30% mentioned that they mainly used English only, 20% stated that they were better off with their L1, while communicating online.

3. Would you be switching languages other than on Facebook?

- a) Yes b) No c) Sometimes

Figure 3: Code-switching outside Facebook

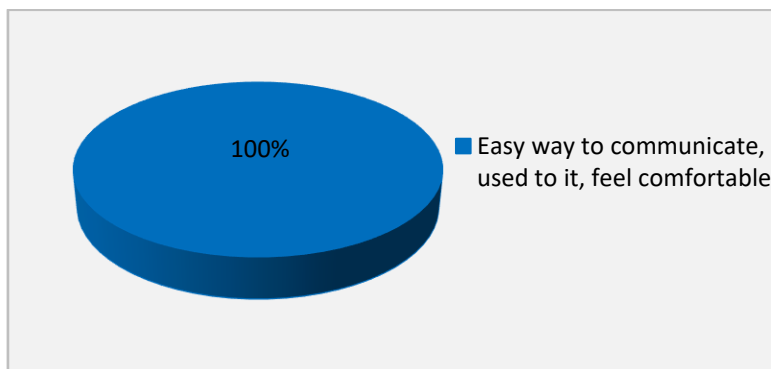


As the literature proves, 90% of the respondents stated that they tend to code switch apart from Facebook. This is highly evident, when people are having casual conversations around the table during their leisure time and also during other suited times. 10% of the respondents claimed that they rarely did code-switching and mainly preferred to use one language only, that is either Fiji-Hindi or English or third language.

4. Why do you switch codes (May choose more than one option)

- a) Easy way to communicate b) Naturally used to it c) feels comfortable

Figure 4: Reasons for code-switching

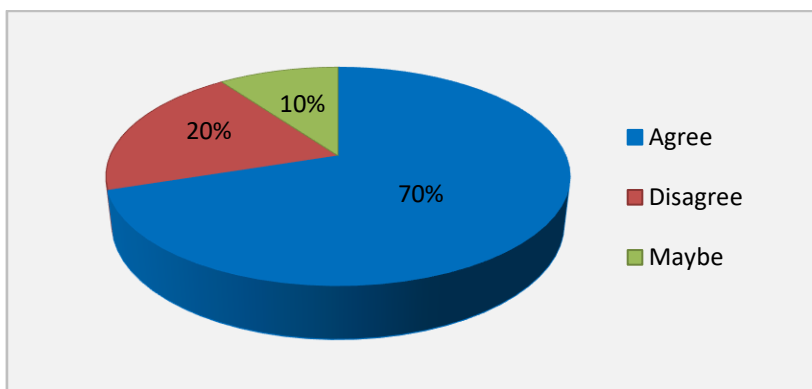


The pie chart above shows that all the respondents mainly did code-switching for the reasons that were asked to them in the options. It works as an aid to communicate easily, most are used to it and they will comfortable to use more than one language. As the literatures suggest, code-switching helps the people to come out with their feelings and emotions to others, so that they are heard and understood. It also creates a sense of belongingness and paves way for mutual understanding and respect. As asserted by Gumperz (1982), “code-switching is used as a conversational strategy to express social meanings, addressee specification, reiteration and message qualification”.

5. "It's hard to find an equivalent for both Fiji-Hindi and English words" would you...?

- a) Agree b) Disagree c) Maybe

Figure 5: Word equivalence for Fiji-Hindi and English

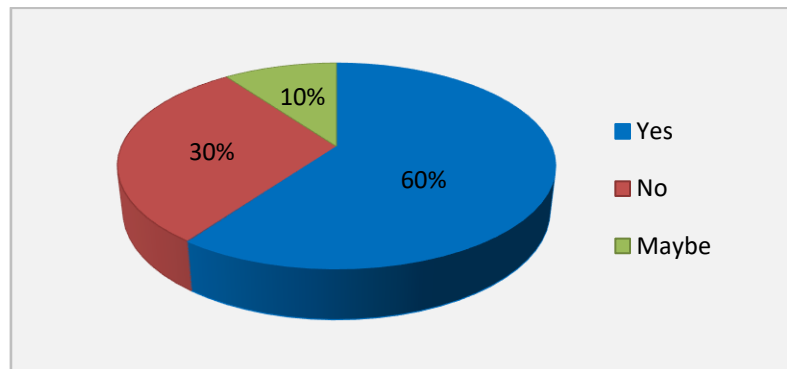


Based on the data that was collected for this particular question, 70% of the respondents have stated that it is difficult for them to use words that can perfectly match for a particular conversation, though most of the words of Fiji-Hindi are borrowed from standard Hindi. While 20% have disagreed, the remaining 10% have said that they might find an equivalent word for both. This would be a rare case, since most of the words are already borrowed.

6. Does code-switching have negative impact on your mother tongue?

- a) Yes b) No c) Maybe

Figure 6: Negative impact of code-switching

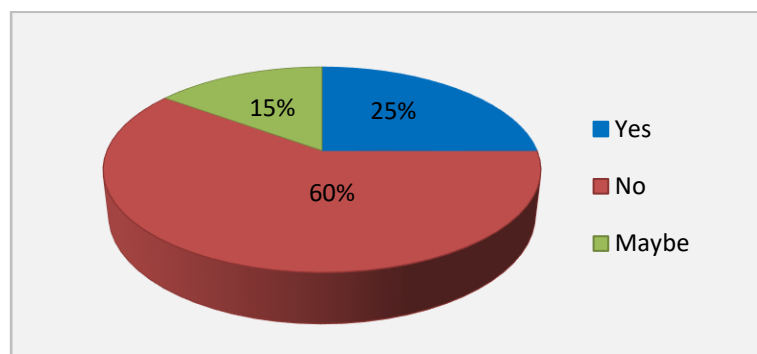


According to the question stipulated above, 60% of the respondents have said that code-switching does have a negative impact on their mother tongue. Naturally, too much relying and usage of a L2 will surely supersede L1 and will lead to a disastrous impact of the user. 30% of the respondents mentioned that code-switching does not have any impact on their L1, while the remaining 10% were doubtful.

7. Do you think simultaneously using languages has created a new way to communicate?

- a) Yes b) No c) Maybe

Figure 7: New way of communication

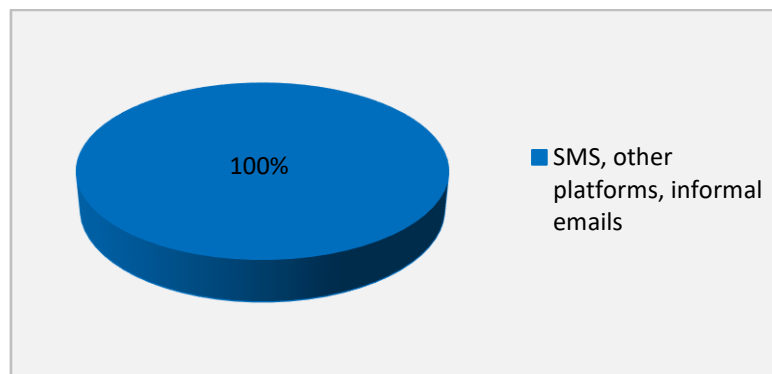


According to the data that was collected, 60% of the respondents have mentioned that simultaneously using languages has not proved to create new way to communicate, but it has aided the existing communication either using Fiji-Hindi or English only. On the other hand, 25% have claimed that using two languages simultaneously has certainly created new way to communicate, while the remaining 15% are unsure.

8. Where else do you switch codes other than posting on Facebook? (May chose more than one option)

- a) SMS b) Other online platforms c) Informal emails d) All

Figure 8: Code-switching other than on Facebook



The final question required the respondents to state, where else do they code switch other than Facebook, therefore as per the data that was collected, it can be seen that code-switching is done by respondents, while sending SMS, when they are online on other platforms and when they are sending informal emails. In brief, it could be said that code-switching happens spontaneously and one cannot avoid that from taking place, if a person is bilingual or multilingual.

Outcome of open-ended questions:

1. *Being a native speaker of Fiji-Hindi, why do you prefer to code switch?*

29 respondents out of 35 have mentioned that switching codes has become rather a habit and spontaneous. While they are communicating offline or even on other social networking sites, they are bound to switch codes and when being on Facebook, they do not hold back themselves from using more than one language. In fact, this helps them to express themselves better to others. Krishan states, *"I have studied MBA in a university and the medium of instruction was English, the lecturer was Indian and if I had any questions to ask him, he would kindly explain to me in both the languages, Fiji-Hindi and English. While the class would finish and there is casual talking with the lecturer, he would also prefer to communicate to me in Fiji-Hindi rather than English. So you know....it is solely on the speakers, which language they would prefer to communicate with, as long as we are able to make absolute sense to each other. We don't need to be experts in a language to be understood by our lecturers 😊😊. I, myself am not that good in English, but as long as I am able to convey my messages clearly, that's all it matters to me. Besides, we need to be understood and not corrected, while being engaged in casual conversations"*.

Ronvic writes, *"My English is terrible, so if I have to talk to someone, I just use Fiji-Hindi. Most of my friends and families on Facebook are Fiji Indians, so when I chat with them using Fiji-Hindi, it makes me happy and I also feel that, I am being understood well by*

them. *Aur sabse bada baat toh hai ki hum Hindustani hai, tab hum kahe englis mei baat kari.* 😊😊😊😊

Suhani says, *“I switch from Fiji-Hindi to English only when I am not able to find a quick replacement of Fiji-Hindi words and to keep the online conversation rolling with my friends and cousins.*

Samaira mentioned, *“Facebook makes me write something, which allows me to sound like that I am really talking to someone! And to make that “talking” possible, I need to use Fiji-Hindi and English to be loved by my friends!....I expect to sound rather natural. Facebook is indeed a book for me. I can write my feelings and emotions, even if no one is there to hear me....*

2. *Which languages do you mostly prefer to use on Facebook? Why? Explain, please.*

All the 35 respondents said Fiji-Hindi and English; however there were some who stated that at times they also use *i-taukei* language. *I-Taukei* language is the L1 for the natives of Fiji. 25 respondents stated that the use of languages also vary depending on the topics of a conversation. For example, Mahira writes, *“when I am updating my status regarding movies, music’s, food and hanging around with my friends, I tend to switch from Fiji-Hindi to English a lot, because this is how I communicate to my friends. However, if there are some social issues, which I need to comment upon, then I only use English to write my thoughts on the wall”.*

3. *Does relationship matter to you, while switching codes on Facebook?*

Most of the respondents explained that they would mind their language, while communicating to their elders and those, whom they respect the most in their life. Here, they make sure that they use formal language as much as possible and avoid using techno words. Divya mentioned, *“I feel that if I am going to do code-switching at professional level, my colleagues might question my professionalism and may feel that my English is not that good, so I would always make sure that, I reply to all my colleagues in English, however, with those colleagues who are almost in the same age range as me, I use both Fiji-Hindi as well as English.*

Vedanshi writes, *“I follow normally my own language etiquettes, while I message my friends and senior core workers. For me, professionalism and personalism are two different concepts, but I see them as one. This helps me to uphold the standard of using formal English all the time, by not resorting to technological words, thus giving me extra couching to use and improve my formal English.*

Out of 35 respondents, 19 have agreed that they use formal English, while communicating with their senior colleagues and those whom they look up to. They tend to complete one sentence in one language and begin the next sentence with a new

language. 16 participants stated that they switched Fiji-Hindi to English, only when the need aroused with their friends. Samaira writes, *"While communicating, I know that I am communicating to a friend, I really don't give too much attention to my word choices and sentences...whether it is Fiji-Hindi or English...honestly speaking, I don't even notice that I have switched"*!

26 respondents out of 35 stated that if their colleagues are someone, who is close to their age or is mostly friendly in all the cases; they tend to code switch within sentences and at clausal level. To justify, Shreya mentioned, *"There are few workers, where I work and with them I am down to earth. I don't see them as my co-workers, but my family. Therefore, we use Fiji-Hindi to create a sense of belonging and togetherness most of the time, when we communicate online and as well as offline."*

DISCUSSION

This section of the study will discuss the synopsis of all the research outcomes of this research, which is supplemented by comments from the reviewed literatures. Decades ago, code-switching being done in a conversation was considered to be an interference that would make a conversation flow full (as cited in Duran, 1994, p.4); however, findings suggest that it is a communicative strategy. A strategy which is used globally by Fiji-Hindi speakers is neither to be considered a language hindrance nor intrusion. In fact, it allows keeping the stability, flowlessness and fluency in communication. The education background and workplace has created a spontaneous ambience for the bilinguals to code switch and which is happening concurrently. Respondents have regarded them as a natural occurrence; however the application on types of switching depends on whom one is communicating with.

As a result of communication, the respondents are using intra-sentential switching, while messaging their families and friends and mainly inter-sentential switching during situations of formal communications, for example, while being at work. Most of them are adhering to the rules of code-switching by cautioning themselves, whom to switch codes with and whom not to. Therefore, it can be said that code-switching should not be considered as something, which could be practiced randomly but a rule that governs the communication strategy. It is a strategy which connects people with their loved ones and all of them are able to express their emotions and feelings through choosing the most desired language.

Fiji-Hindi users of Facebook employ switching codes as a communicative strategy instrument in order to develop one's cyber communication. The findings of the literature and the collected data clearly show that Fiji-Hindi Facebook users tend to use languages that could be considered as a "new generation of communication". Almost all the respondents have acquired bilingual distinctiveness, which allows them to manipulatively use both Fiji-Hindi and English to accomplish their communicative intentions. The computer mediated communication has given an indistinctive notion in

regards to the irrelativeness between written and spoken form of the language about Facebook users because the language type that is used by the users is colloquial.

People are feeling that by doing code-switching, they are creating their own world and Facebook is their sole space for interaction with families and friends. The main reason behind this is that “electronic media itself is informal in nature”, thus it encourages code-switching to take place autonomously, due to the feelings of acceptance and being heard (Dabrowska, 2013, p.64). According to Zentella (1998), claims are being made about code-switching that it is mainly used to stress imperative particulars, while a conversation takes place. Mainly, switching is done to confirm what the sender initiates and also to get the receiver’s opinion or approval. This kind of switching is called extra-sentential, which is mainly used for checking approvals and opinions.

Moreover, according to some of the respondents sometimes they tend to face difficulty in remembering a word of English in Fiji-Hindi or they simply do not know it, therefore they prefer to use their L1 to update their status or to comments. As stated by Bakrin, Christopher and Inuwa (2014, p.44), bilinguals resort to switching codes simply to use it as a tactic of conversation in order to minimise the communication difficulties. It was also noticed from the collected data that in order to keep the messages rolling, participants used synonym of a word from another language. This concept can be very clearly related to a theory in code-switching, which states that individuals resort to switch codes in order to gain linguistic competence and filling the linguistic gap.

According to the “environmental setting, audience, topic and picking up cues”, which Benitze (2008) stated, it is quite evident that two of the factors are highly related to Fiji-Hindi Facebook users. These are topics and cues. It was observed that respondents have used switching rather in a relaxed manner, particularly intra-sentential code-switching, while commenting on food, amusement, music, relaxation times, etc. on their statuses. Some of the respondents also wish to be responsive the way they have been responded. However, when writing on hardcore subject matters, most of them prefer not to switch codes and just use formal English language to show the seriousness of the subject.

In addition, this study also found out that respondents also wrote in a different way to their colleagues and elders, whom they respected and gave utmost value. These groups of people usually do not expect intra-sentential code-switching, but rather prefer to be messaged by using inter-sentential by the respondents. Or in most of the cases, just simply use the code which has been initiated by the seniors and elders. Therefore, an intriguing factor that has been highlighted by (Benitze, 2008) is that code-switching also depends on the audience, whom one is communicating with and how well he or she is known by the user.

The use of Fiji-Hindi and English simultaneously on social networking sites, particularly amongst Fijian users on Facebook has undoubtedly created a “new communicative strategy”. Altogether, it has given users a new form of identity. As stated by Chen (2006), “when someone selects one or more languages, a person reveal his or her social

relation with others and establish individual identity.” In the same line as above, Kroskrity (1993), Nishimura (1995) and Woolard (1989) stated that, “code-switching in a specific language amongst bilingual discourse signals ethnic identity”. It was also mentioned in one of the paragraphs above that balanced bilinguals choose rather more complex code-switching than those unbalanced, who prefer “emblematic” switching, for example extra-sentential switching. However, the findings of the paper revealed that those participants, who used extra-sentential code-switching, are not unbalanced. They are typing everything in English and adding Fiji-Hindi extra-sentential switching at the end of a sentence, for example, *hai na? Kaise baat!*

CONCLUSION AND RECOMMENDATION

Computational linguistics through computer mediated communication has indeed added a repertoire of corpus towards social networking sites, such as Facebook that has allowed people to communicate by using more than one language. This study has demonstrated the use of Fiji-Hindi that is employed by Fijians to be considered as a communicative means to effectively interact on Facebook. This communicative strategy has also been used in sociolinguistic context on other online platforms, which has allowed people to express their feeling and emotions aided by emoticons. The type of code-switching varies amongst the social context and more imperatively the reasons behind these contexts play a pivotal role. The users’ need to make sure that different social context is adhered by to avoid excessive or below par code-switching skills, so that ambiguous situations are not encountered by the online users during messaging.

The user’s way of manoeuvring Fiji-Hindi and English has served them to an admirable level in order to achieve their online interactivity and stylistic objectives. Therefore, wherever the respondents have switched codes based on the aforementioned functions in the literature, they are suggesting their competence level in using both Fiji-Hindi and English. More so, switching of codes is not just to be called a natural phenomenon of online mediated communication, but it also takes place in bilingual’s offline context. As mentioned above in the body of this particular study, Fiji-Hindi is unique in her own ways and regards should be given to her to be perceived as a communicative or functional sociolinguistic tool, because she has aided towards code-switching on Facebook amongst Fiji-Hindi users. For future researches, it is recommended to apply the code-switching tactics amongst *i-taukei* language Facebook users and see how and what transpires them to switch codes.

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