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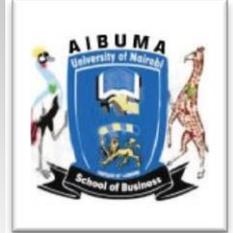
SOCIAL MEDIA USE BY THE DEAF IN BUSINESS AT NAIROBI, KENYA

Joyce Ngugi[1*], Stephen Kimotho[2], Silvia Muturi[3]

[1]Candidate, Doctor of Psychology, PsyD, Clinical Psychology, United States International University-Africa, Nairobi, Kenya
[2]Assist. Prof., School of Communication, Cinematic and Creative Arts, United States International University-Africa, Nairobi, Kenya
[3]Sign Language Interpreter Consultant, University of Nairobi, Nairobi, Kenya

ABSTRACT

Social media for business is the new frontier for deaf Kenyans, due to the information gap they often experience as they navigate a largely speaking and hearing world. This case studyon the use of social media platforms for business by the deaf in Nairobi includes a special emphasis on the convergence of their natural visual language, sign language with video technology. The research is important to boost socio economic livelihoods of deaf Kenyans for equality in development as well as integrate the Kenyan business industry with the innovation and creativity introduced by the signing 'genre' of business communication. The results of the study indicate that the dialectical gap between the deaf and hearing is significantly reduced as sign language users can informally interact and exchange ideas, information and updates on business. In addition, the general boost in vocabulary originating from deaf people' interest in on-line communication in Kenya is highlighted. It is recommended that the recent immersion of the Kenyan deaf community in the use of smartphones and dissemination of instant messaging needs to be enhanced, as it may yield answers to societal inclusion, while also highlighting deaf cultural pride proponents of the deaf business people' creativity.

KeyWords:Deaf, social media, business, Kenya

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* Corresponding Author email: joyce.w.ngugi@gmail.com

Introduction

Deaf people face communication barriers in society, including inequality of information access in business, a form of inequality and discrimination (Bauman, Simser, &Hannan, 2013). There are about 70 million Deaf people who use sign language as their first language or mother tongue, 90 percent of whom live in developing countries (World Federation of the Deaf, 2017). World Health Organization(WHO) (2017) further notes that there are about 360 million people in the world with diverse levels of hearing disability, out of whom majority are from the developing world. Deaf people are unable to capture accurate and timely information through live television or most online videos due to in access to information in audio format; therefore, necessitating closed captioning, text and access to sign language (Powell, 2016).

In this paper, the word 'Deaf' (with capitalized letter D) is used to describe people who are Deaf or hard of hearing, are members of the Deaf community thus identify with Deaf culture (WFD, 2017). Deaf culture is recognized under Article 30, paragraph 4, of the United Nations Convention on the Rights of People with Disabilities (UNCRPD), which is signed and ratified by the Kenya government (UN, 2017). Sign language is the natural, first and preferred language of the Deaf, through which meaning is communicated through hands, facial expressions and body language; it has a different grammar and structure from spoken language (Swinbourne, 2016).

Deaf people navigate several identities in the Deaf and hearing community, and posses a heterogeneous array of diversities. Ironically, in most developing countries, including Kenya, most Deaf people cannot afford the luxury of theorizing about being 'Deaf' or 'deaf'; they exist as 'know nothings" in the typical stereotypical society that directs their entire lives, therefore have little sense of self-agency and determination. Deaf people are neither 'fish nor fowl', because on the one hand, they are perceived as having a disability, on the other hand, they are able-bodied and entitled to an environment that will meet their social support needs. Social gratification need is linked to the evolution of a socially dynamic Deaf community.

Kenya, a country in East Africa, has an estimated population of 47,251,000 (UN, 2016); with about 2,300,000 Kenyans who have various forms of hearing disabilities (Ndurumo, Zanten&Meereboer, 2016). The Kenyan Constitution 2010 safeguards the rights of citizens with disabilities in Chapter 4, Section 1 (b); Article 7 (3b) of the Constitution provides that the State shall promote the development and use of indigenous languages, the Kenyan Sign Language, Braille and other communication formats accessible to people with disabilities (KLHRC, 2016). Kenyan Sign Language (KSL) is now recognized and elevated to the status of English and Kiswahili as an official and national language in Kenya (GoK, 2010). KSL was recently incorporated through the Programming Code legislation for television broadcasts of all news, emergencies, and events of national importance (CAK, 2016). Currently, there is lobbying for KSL to be a taught subject in all schools (Mativu, 2017).

In Kenya currently there is no agreement on the number of Deaf people; a 2007 census calculated 600,000 Deaf Kenyans but this figure is quite conservative (Mweri, 2017). The latest official government statistics indicate 187, 818 people with hearing disability (KNBS, 2009). More recently, Deaf community leaders provide contrasting figures with the Chair of the Kenya National Association of the Deaf (KNAD), Mr. NicksonKakiri, estimating about 600,000 to 800,000 Deaf people (Wilson &Kakiri, 2010), whilst Deaf Aid estimates a current

population of 1 million Deaf Kenyans (Deaf Aid, 2013).

Literature Review

For many years, modern communication technologies which have been heavily dependent on auditory components have greatly perpetuated information gaps and subsequent marginalization of the Deaf community in Kenya, who are considered people with disabilities because of communication barriers they face in society. However, the emergence of new forms of communication technology, that are internet based such as social media, has breathed new hope to the prospects of Deaf community by expanding opportunities of interpersonal interaction, efficient exchange of information and opportunities of being engaged fully in both social and business engagements with mainstream society. In addition, the recent immersion of the Kenyan Deaf community in the use of smartphones and dissemination of instant messaging may yield answers to societal inclusion, while also highlighting Deaf cultural pride proponents of the Deaf business people' creativity.

The phrase social media has been defined variedly by different scholars depending on the nature of the topic being explored by them. For the purpose of this paper, the first term 'social' shall be used to refer to the instinctual needs we humans have to connect with other humans.All humans have a basic distinct need to be around and included in groups and social forums that would make them feel at home and comfortable sharing their thoughts, ideas, and experiences (Safko, 2010). The second part of that term refers to the media human beings use with which we make those connections with other humans. Safko(2010) further argues that whether such media arethe telephone, radio, television, e-mail, web sites, photographs, audio, video, mobile phones, or text messaging, media are the technologies we

use to make those connections. Therefore, socialmedia in this paper is about how Deaf people can use the contemporary online media particularly Facebook to effectively reach out and connect with other people in their communities, create a relationship, build trust, and be able to conduct business transactions.

Facebook was identified because it was one of the most subscribed to social media and one that has grown to be the most popular channel of communication among many Kenyans of different walks of life. Globally, in June, 2017, Facebook had reached 2 billion users with most day users capitalizing on the platform to connect with friends and family around the world. This was an outstanding growth since the launch of the platform in 2004 (facebook.com) ultimately making it the world's largest social media network (reuters.com). By close of 2016 there were close to 1.23 billion daily active users on the platform, which represented an increase of 18 percent compared to users in the year 2015. Kenyan Facebook users were slightly more than 7.2 million in December 2016 which represented a rise of about 21 percent in comparison to the same period in 2014. These findings provide a favourable benchmark and background for this study in the quest to establish the viability of social media use by the Deaf for business-related communication in Kenya.

As a social media platform, Facebook is an internet-based application that enhances the creation and sharing of content that is generated by its users (Haenlein& Kaplan, 2010). Currently, many organizations and business entity use Facebook as a major platform to pass messages about their products, or to pass mass information to their publics. As a network, Facebook provides favourable platform for the optimization of communication among people who are Deaf or with other members of their communities with similar

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ideologies and interest while bringing them to a common sphere despite their different geographical locations. In addition, Facebook allows for real time feedback making it a suitable communication platform.

Social media in general is therefore rapidly becoming commonplace in today's world, allowing people to connect with each other and with businesses and organizations they are interested in. Sign language users once had to meet at local Deaf clubs to have conversations and share their views; therefore, before social networking sites, many Deaf people who could not afford to commute to these social spaces were isolated (Swinbourne, 2016). Confidence to express one's thoughts in one's own language increased when mobile phones and tablets with high-resolution cameras arrived, whereby sign language users started creating their status updates in video, not text, filming themselves and their friends signing, which is much more natural (Swinbourne, 2016).

The importance of Facebook as an outlet for the sign language community was acknowledged at a high level when the Scottish Parliament set up a group on the site to gain supporting evidence for the groundbreaking British Sign Language (BSL) Scotland Bill, which was passed in September 2016, and aims to promote usage of BSL (Swinbourne, 2016). Research in the USA to examine how Deaf people consume and create online videos, explores how media such as blogs, books, emails and film have depended on spoken language or text, not incorporating sign language content, and how online video blogs, popularly referred to as'vlogs', make it possible for Deaf people to share incidental and informal knowledge (Hibbard, 2015). Hibbard (2015) studied 130 vlogs by Deaf vloggers and interviewed 26 Deaf people to understand the impact of vlogging on Deaf culture,

and proposed improvements and new services.

Global communication technology depicts both successes and failures in appropriate and adequate accommodations for communicating with Deaf citizens, highlighting needed improvements to live captioning systems and the integration of professional sign language interpreters. For instance, the World Federation of the Deaf (WFD) Youth Section is considering developing guidelines for Deaf information access through social media, given that Deaf fans in South Africa have shown more interest for pictures and videos in social media communication than written status updates and other written information due to language barriers (WFD, 2012). Global Accessibility News(GAC) (2011) avers that Deaf people face discrimination and equality in education leading to low educational outcomes; therefore because of poor quality of teaching of language skills to Deaf students, many sign language users learn English or any other majority language as their second language and often are not as fluent in English.

'Deaf grapevine' is a concept that means a network of personal communication by Deaf people that is loosely defined to mean a rumour, secret or private message (Stiles, 2016). Communication via peers and community members that incorporates the use of the Deaf grapevine may be particularly advantageous; among people who are Deaf or hard of hearing, this is a complex and highly efficient communication network (Gaskins, 1999). Anecdotal evidence suggests that information perceived as important is quickly relayed through this network to Deaf people all over the nation. Deaf people also use smaller, segments of the network to share information about others in the community, thus maintaining group cohesion.

Leveraging the influence of intact social media networks to engage Deaf community members in a way that increases normative attitudes, beliefs, and behaviours associated with business development is vital. A word of caution, though—the cultural and social features that make the Deaf Grapevine useful may also make it a detrimental communication channel in that as an informal source of information, therefore, it is susceptible to inaccuracy and misinformation (Bat-Chava, Martin, &Kosciw, 2005). Indeed, tailoring the Popular Opinion Model to foster the spirit of kinship where Deafness overrides other differences, while at the same time creating factual pro-truth public messaging from official Deaf community leaders is a valued approach.

In a study on tornado alerts in Massachusetts in the US, contrary to what one would expect based on Deaf cultural norms, the community 'grapevine' was not effective in alerting Deaf people to the tornado warning (NVRC, 2011). While this lack of effective messaging may be a feature of the relative isolation of Deaf people who are geographically dispersed in the rural part of the state, it definitely highlights the importance of making sure mainstreamed messages are also channelled directly and conspicuously in a manner to catch "the Deaf eye" (NVRC, 2011). Deaf people compose a population that has no systematic, institutionalized, reliable means of receiving timely and accurate public information about an unfolding disaster, therefore may require Deaf-friendly communication including use of pagers, email or text alert to cell phone, video sign mail through video relay operators, and a call-in number for updates (Swinbourne, 2016).

The importance of social media not only regarding weather news, but also emergency broadcasts about the political and business climate, cannot be underestimated (NVRC, 2011). Social media has changed the Deaf world in the last few years, with the ability to upload video clips therefore transforming communication for sign language users globally (British Sign Language [BSL] Zone, 2015). Whitworth (2016) adds that there is booming business for Deaf adults who seek to engage their Deaf as well as hearing consumers who use sign language, therefore prompting local and international coverage. The avenues are numerous with the advent of social media use for, with and by the Deaf (KSLIA, 2017; UMCD, 2013). Social media is the new wave of business creation and development for Deaf people in Kenya (Global Accessibility News, 2011).

Ruvaga (2015) states that the Uber taxi business has added features to its app to allow Kenyan Deaf drivers earn income. This creates an equal playing ground for Deaf business people to compete, in line with Kenya's development mission to promote public and private sector policies and initiatives that meet the rights and needs of the Deaf community (Ruvaga, 2015). UNFPA (2016) reports of a tech competition whereby four Deaf youth were co-winners of a business incubation prize whereby a Sexual and Reproductive Health (SRH) app was created in sign language that reached 320,000 people through social media. The web and mobile-based application enables Deaf youth users to search for specific SRH information in Kenyan Sign Language (KSL) through video and gaming content (UNFPA, 2016).

United Disabled People of Kenya (2012) cite the UNCRPD Article 21 on freedom of expression and opinion and access to information as the greatest challenge facing the Deaf in Kenya; in particular, provision of low-cost software and technological devices to all people including those living in rural areas is still a major challenge. Key terms and techniques used in social media are

vocabulary words thus not known by most Deaf people, rendering them vulnerable to underutilization of social media platforms as well as falling prey as potential victims of cyber-crime (Thomas, 2017). Deaf business people can thus remain isolated without a platform for full expression to promote their service and engage with their core service users while preserving their human rights including basic dignity (Powell, 2016).

Moreover, most social media advertisement solutions are not Deaf-friendly. For instance, on popular social media sites, keyword bidding is an affordable way to advertise to specific target audiences based on their language, interests, or location. The natural, first and preferred language that targets the Deaf community, namely Sign Language, cannot be targeted on these sites, creating an economical disadvantage and yet another barrier to achieving success as a Deaf business owner; it also creates a barrier for any business who want to advertise their services to Deaf people whose primary language is Sign Language.

Theoretical Perspective

Access is a broad topic that is regularly discussed within the Deaf community (Kuenberg, et al, 2015). It is about all the possible means by which a person is able to benefit from things (Ribot&Peluso, 2009). Lack of access to information can have devastating consequences that severely impact the individuals' sense of agency and autonomy in business ventures. For full access, services must be available just as much as its users must be aware; they should also be accessible, affordable and of good quality, as summarized in the table below (Zanten, 2014). Access problems in Deaf clients seeking services seem to affect perspectives during any contact, with some clients deciding not to engage in the

services because of the extra time and effort forfeited to reach services.

For instance, most Deaf Kenyans do not have availability of a smartphone or computer device and may have to borrow family or friends. Worse still, in many rural areas of Kenya, poverty may render the absence of electricity and cybercafé ICT services to provide social media access; in addition, there is an inordinate amount of stigma and misunderstanding of the Deaf as sign language users. In the major cities like Nairobi, there poverty is a major problem for most Deaf Kenyans; costs are prohibitive for most Deaf people in business who cannot afford online services and social media use is therefore sadly still a luxury rather than a necessity. Information gaps abound in the poor awareness of the availability of business-initiation and enhancement services online, including self-taught e-business courses adapted to sign language users. Accessibility is mainly hindered by use of oral languages without timely captioning. Ultimately, the quality of social media experience suffers from availability and accuracy of information or knowledge; information is rarely offered in an understandable way.

Problem of Research

Access to information and full expression and opinion, including the ultimate will to choose with full agency and self-determination are considered fundamental human rights, although these remain an elusive goal for most Deaf Kenyans. Social media is a vehicle that could potentially bridge the information gap in society, by allowing access to Deaf Kenyans' incidental and informal sharing for business creation and growth. The research gap identified is to generate a baseline survey of Deaf Kenyans' use, opportunities and challenges, and recommendations related to social media use, and accessibility of social media

services for business creation and development in Nairobi, Kenya.

Research Focus

Results of previously published studies indicate that there is an increased rhetoric around Kenyan Sign Language with its recent integration in all national television newscasts in Kenya (Marucha, 2016; Mwangi, 2016; Nation Media Group, 2013). However, there is a paucity of literature on social media use in Kenya, with studies focusing on broader access issues still plaguing the Deaf community, such as Information and Communication Technology, (ICT) challenges (Kakiri, 2012). This justifies why the current study is of scientific interest.

The purpose of this research was to examine the influence of social media technology on business creation and development for adult Deaf people in Kenya, as well as, to determine the applicational varieties of Deaf and hard of hearing adult business people of Nairobi. The specific objectives of the study are to determine the usage of social media for business by Deaf adults in Nairobi, to explore the benefits and challenges of equitable social media use and to demonstrate the suggested solutions by Deaf Kenyans.

Methodology

General Background of Research

The investigator employs both quantitative and qualitative methods of data collection in the mixed methods survey. Principally, the qualitative design through the semi-structured interview guide will be intensely used to allow respondents to interpret their experiences and construct their own realities, through rich description of the phenomenon of social media use for business in Nairobi. The quantitative measures through descriptive design will

yield information of the types and frequency of social media usage.

This is justified by the fact that both data types in the triangulation approach yield useful information in terms of numerical categorization and computation in the cross-sectional analysis, as well as anecdotal evidence of subjective concerns in the collective case study approach. This will provide numerical data for correlation analyses of social media usage vis-à-vis social-demographic characteristics, and in-depth, rich and detailed description of Deaf adults' qualitative concerns, respectively.

The Researcher's Role

In line with qualitative methodology guidelines, the researcher's role is of paramount importance; the Principal Investigator is a hearing member of the Deaf community. In addition, the specific Deaf community research considerations will be followed, as per the recommendation for Community-Based Participatory Research (CBPR), whereby culture and community involvement is consciously considered in research methods.

Sample of Research

The target research sample was 25Deaf Kenyans, 12 (48 percent) female and 13 (52 percent) male. Out of the total group, 10 (40 percent) of them were below 35 years old therefore considered in the youth bracket as per the Constitution of Kenya, while 15 (60 percent) were above 35 years old. The sub-pattern of the youthful age group of 10 Deaf adults consisted 8 (32 percent) male and 2 (8 percent) female, who were below 35 years old.

Instrument and Procedures

The customers perspective on social media usage in the Deaf business industry

initially created at Arizona State University in the USA measures the usefulness of various technological apps to Deaf business customers. It was adapted to the Kenyan setting because it was specially created for the Deaf. The adapted scale consists of 12 questions in simple English which is amenable to the Deaf respondents, with the first 9 offering answering options and the last 3 as open-ended in-depth interview schedule (See appendix).

Prior to the study, the principal investigator sent a text message to all Deaf adults currently active on her social media database to request research participation; this is justified by the already-established rapport that is recommended prior to interviewing Deaf people. The technique of purposive sampling was used, which was justified by the need to conveniently select those Deaf who were readily available. Upon completion of literature review and consultation with Deaf community leaders who edited the tool to increase readability of the survey. There was a signed informed consent agreement for each participant, whereby the investigator informed about purpose and uses of the study. Also, participants were contacted separately from one another in a short span of time of one week, to avoid copying the answers. Interviews were conducted individually face-to-face for about 20-30 minutes at a convenient place and time for each Deaf adult, with questions extensively explained by the researcher to allow for familiarization with the items. All Deaf participants were guided through the questions by the researchers who informed of any clarifications via Kenyan Sign Language.

Ethical Considerations

Informed consent was sought and given for the anonymous survey. Informed consent, confidentiality, standard of care, autonomy, participants' vulnerability, and procedures are not universal, especially when working with signed language communities (Hochgesang, 2015). This is in line with Landsberger, et al (2013) assertion that culturally sensitive evaluation of individuals in Deaf populations involves a thorough assessment of language modality and language fluency, Deafness/audiological history, and cultural identification.

The researcher ensured modifications to the standard protocol included using a visual-spatial language (Kenyan Sign Language) rather than a spoken language (English), as well as coding and procedural variations from the standardized protocol to fully accommodate Deaf culture. The Principal Investigator, who is the first author of the study, was also responsible to do her own self-work through reflection on how her hearing status, female gender, and communication style may impact the research relationship.

Data Analysis

The results were processed by descriptive statistics for quantitative data, and content analyses for qualitative data. Content analytical approach was used to better capture and represent the information gathered from the responses, as analyzed outlined by Braun and Clarke (2006). This approach was chosen for its applicability to a diverse set of epistemological and theoretical approaches. Its exploratory nature allows for the investigation of a broad research question and emphasizes assimilating and accommodating new themes as they emerge and develop.

In content analysis, the verbatim responses were transcribed and coded for key words, upon which decision trees were created to categorize and synthesize the data. Analyses involved identification and understanding of the participants' perspectives on social media use present in their responses. Since qualitative data analysis is an iterative process, double-

checking of original responses with the new categories created was conducted to check for meaning and so as to enhance credibility.

Results of Research

Out of an identified target sample of 26, 9 did not respond and 3 declined, yielding 15 participants who freely consented and completed the study. On the socio-demographic characteristics of participants, 8 were male and 7 were female; out of this, only 2 males and 1 female were above the age of 35 years. All were either Deaf or Hard of Hearing, had a technical college or university education and were in business entrepreneurships, with 2 participants also having a job in addition to being business people. All (100 percent) owned smartphones, while only 40 percent owned computers. All (100 percent) were users of WhatsApp; most (80 percent) were active users of Facebook, Twitter, and Instagram; only a few (30 percent) were active users of LinkedIn and YouTube channel.

Most Deaf respondents mentioned social media benefits of the transmission of video and photo images that eased communication in sign language and pictorial format:-

"I enjoy sharing information in a group chat with hearing people at the same time for discussion quickly"

"If need know something now (immediately)*, for example if there is problem in town, I ask my team and we postpone meeting"*

"It is good for colors and expression fully; also I learn new English words"

"I'm good at Kiswahili"

"Meet new friends and social(ize)*"*

"I can teach KSL to hearing people"

"Fun avoid boredom"

Key challenge was audio formats, and suggestions were to have Deaf-friendly adverts and videos with captioned interpreters and subtitles.

"In Nairobi, I use only English when writing"

"Kiswahili is main obstacles"

"Video with captions/subtitles"

"Some Deaf have low education so cannot understand all public information"

"Problem no interpreter or sentences at bottom of screen, so I must ignore nice movies I like"

"If media adopt new channel for KSL then it will be better. Most Deaf will use them"

"I hate person use Kiswahili always to communicate"

"They not know person Deaf cannot Kiswahili"

"Translate professional English to simple English in public messages; add sign language option in the menu bar for making all clearly understand the instructions or default settings"

Discussion

The study examined how the Deaf community is utilizing various forms of social media to engage in productive business ventures in Kenya. Utilizing in-depth interviews, this qualitative case study described lived experience of respondents from the Deaf community on the use of social media platforms in business ventures in Nairobi, Kenya. The study also explored the challenges that they encounter during such business related interactions and the perceived opportunities. The research yielded

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important information on how socioeconomic livelihoods of Deaf Kenyans could be improved and how they could be integrated in the mainstream business models through the use of the emerging innovative and creative communication technologies like social media.

On the first objective on use of social media for the Deaf, it is clear that there is an advantage of social media sites, which offer pictorial flexibility over the conventional Short Messaging Service (SMS) platforms. Particularly, the use of pictorial and video formats, such as GIFs, short videos, photography and real-time communication seem to exponentially boost English vocabulary of Deaf people in Nairobi, Kenya. Deaf adults in Nairobi who were interviewed owned a smart phone, which indicates the urban-rural divide. The signing environment meets the communication needs of most Deaf people, and that environment therefore defines the primary population for social interactions. Deaf people in cities enjoy better lighting and more accessibility through technological access, given the mushrooming of Deaf organizations that enhance community interaction.

On the second objective on benefits of social media, most participants commented on the ability to send visual information as the greatest incentive to use social media apps as compared to SMS. This confirms the literature review on Deaf people's self-determination to engage in business communication through visual forms. The field survey revealed that Deaf participants enjoyed and greatly benefited from socialization and inclusion in the dominantly hearing business society of Nairobi, Kenya. In addition, the study documents the unprecedented emergence of new vocabularies originating from Deaf people's interest in online communication and the subsequent use of such vocabularies during business transactions.

The third objective revealed a number of challenges, such as the use of oral languages without sign language captioning or written sub-titles, as well as the use of Kiswahili. Shackleton contends that Kiswahili is a compulsory subject in schools, while it is not well taught in Deaf schools. Deaf people learn sign language as their first language and often are not fluent in English and Kiswahili, which are second and third languages. An interesting finding was the Deaf participants' desire to choose their self-determined options of interesting information online, alongside the inaccessibility of the same. This seems to greatly reduce the choices and leads to discrimination of Deaf users of social media.

On the fourth objective of specific recommendations for improvement, participants provided important insights on how the convergence of sign language with video technology could be used on emerging communication technologies such as social media to improve quantity and quality of business related communication process, amongst the members of Deaf community and with the rest of the community. The use of captioned sign language interpreters and subtitling of written English could greatly contribute to bridging information gaps, which will directly increase business success.

Conclusions

The results of the study indicate that through use of social media, the dialectical gap between the Deaf and hearing is significantly reduced as sign language users can informally interact and exchange ideas, information and updates on business. Secondly, the general boost in vocabulary originating from Deaf people' interest in online communication in Kenya, especially in the relatively more accessible urban environment of Nairobi, is highlighted. A key challenge is that many Deaf facets of communication are rarely

researched and seem to not inform policies in Kenya, prompting the marginalization, often inadvertently, of Deaf adults in business. This, coupled with inadequate rights awareness of Deaf people, results in a perpetual cycle of poverty and despair for most Deaf adults in Nairobi, Kenya. It is concluded that affirmative action to improve social media access through sign language mainstreaming will ease information access and boost business for Deaf adults in Nairobi, Kenya.

Implications for Further Study

Businesses in Kenya need to take on responsible social media uses their main means of communicating to their Deaf customers. The Deaf often post valid complaints on social media to complain about how they were mistreated when services were offered or raw deal on products purchased, these comments often do not reach the targeted establishment. Businesses need to strategize on how to manage this bad PR, and ensure that their services and products are Deaf-friendly.

Many establishments blame bad business experience with Deaf adults on the miscommunication and wonder why the Deaf person did not come with an interpreter in the first place; with negative attitudes such as the Deaf are indecisive, time wasters: inconvenience, move aside and have low literacy. Societal marginalization results in poverty, hence inadequate, low quality and unaffordable interpretation. Businesses need to modify their attitudes to accommodate the Deaf community in Kenya. Being more inclusive and empathetic could be demonstrated by proactive mind-set, including investing in development of apps, which are currently expensive.
Fake sign language interpreters engaged in the media, or live/offline is rife, largely because of lack of national certification standards and regulation of the sign language interpretation services. The Deaf rarely get to access and understand about

promotions and offers, for instance Uber is offering 20 percent discounts, they are not aware because most adverts are in audio format.

Recommendations

Everyone should have equal opportunity to grow their business by relevant information directly tailored to them (Whitworth, 2016). Therefore, this study recommends greater access to advertise and transact business in sign language on online social media platforms, which includes access to the technology devices, training and networking of sign language users (Kakiri, 2012). The user profile languages sections need to allow one to select "sign language" with the requisite fluency level on all social media sites, since Deaf and Hard of Hearing consumers want to be able to communicate with Deaf-friendly businesses in their native language with businesses' employees and owners (Swinbourne, 2016). Social media sites, ad networks, and online marketing services will therefore benefit from introducing a new, largely untapped and underserved audience to their advertisers, affiliates, and other marketing customers (Whitworth, 2016).

It is recommended that the recent immersion of the Kenyan Deaf community in the use of smart phones and dissemination of instant messaging needs to be enhanced, as it may yield answers to societal inclusion, while also highlighting Deaf cultural pride proponents of the Deaf business people' creativity.

Acknowledgements

References

Ruvaga, L. (2015, August12). Kenya Deafcabbies use Uber app to compete. *VOA News.* https://www.voanews.com/a/kenya-deaf-

cabbies-use-uber-app-to-compete/2915246.html

Arizona State University (2017). *Customers' Perspective on Social Media Usage in the Deaf Business Industry.* https://www.surveymonkey.com/r/ASU_DSM_Customers

Bauman, H. L., Simser, S.,&Hannan, G. (2013). Beyond ableism and audism: Achieving human rights for Deaf and Hard of Hearing citizens. https://www.chs.ca/sites/default/files/uploads/beyond_ableism_and_audism_2013july.pdf

BSL Zone (2015). *Deaf world: Social media impacts Deaf community.* http://www.bslzone.co.uk/watch/Deaf-world-social-medias-impact-Deaf-community/

CAK (2016). *Programming code comes into effect.* http://ca.go.ke/index.php/component/content/category/94-news

CBM (2015). *Nairobi declaration: Inclusive post 2015 development agenda for People with disabilities in Africa.* CBM. http://www.cbm.org/article/downloads/82788/NAIROBI_DECLARATION_INCLUSIVE_POST_2015_8march2014.pdf

Mwangi, P. (2016). Law maker applauds TV stations for introducing sign language.*Citizen TV.* https://citizentv.co.ke/news/law-maker-applauds-tv-stations-for-introducing-sign-language-133301/

DBS (2017). Providing a written Bible to a Deaf person is not likely to introduce them to the gospel. *Deaf Bible Society.* Albuquerque: New Mexico. https://connect.Deafbible.com/welcome-3/

Global Accessibility News (2011). *Deaf people need equal access to education in Kenya.* http://globalaccessibilitynews.com/2011/09/20/Deaf-people-need-equal-access-to-education-in-kenya-knchr/

Hibbard, E. S. (2015). The impact of vlogging on Deaf culture, communication and identity. NY: University of Rochester. digital.library.ryerson.ca/islandora/object/RULA percent3A4464/datastream/OBJ/download/T he_impact_of_vlogging_on_Deaf_culture__communication_and_identity.pdf

Kakiri, N. (2012, May 10-11). Challenges facing Deaf in accessing ICT. *E-accessibility workshop for people with disabilities.* Nairobi: Laico Regency Hotel. http://slideplayer.com/slide/7701007/

KLHRC (2016). *Constitution of Kenya.* Retrieved October 31, 2016 from http://www.klrc.go.ke/index.php/constitution-of-kenya/113-chapter-four-the-bill-of-rights/part-3-specific-application-of-rights/220-54-people-with-disabilities

KSLIA (2015). Kenya Sign Language Interpreters Association Constitution. Retrieved July 28, 2016 from https://www.kslia.blogspot.co.ke

Marucha, A. N. (2016). Media integration of Kenyan Sign Language during television newscasts in Kenya. *erepository.uonbi.ac.ke/handle/11295/99428*

Ndurumo, M. M., Zanten, M. V., &Meereboer, K. (2016). Effects of a Deaf role models documentary on parents' attitudes toward educational opportunities of their children: A case of Kenya. http://docplayer.net/38715043-Effects-of-a-Deaf-role-models-documentary-film-on-attitudes-of-parents-towards-educational-opportunities-of-their-children-a-case-of-kenya.html

Nation Media Group (2013). The Deaf demand sign language interpretation in TV. *Nation.*http://www.nation.co.ke/news/1056-1686688-133uqs6z/index.html

NVRC (2011). Tornadoes and the Deaf community: Are you reaching all of your citizens? *Idisaster Blog Page.* https://idisaster.wordpress.com/2011/10/14/tornados-and-the-Deaf-community-are-you-reaching-all-of-your-citizens/

Powell, S. (2016). *The power of Facebook within the Deaf community.* https://www.signhealth.org.uk/the-importance-of-facebook-for-bsl-healthy-minds/

Ruvaga, L. (2015, August 12). *Kenya's Deaf cabbies use Uber app to compete.*https://www.voanews.com/a/kenya

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-Deaf-cabbies-use-uber-app-to-compete/2915246.html

Safko, L. (2010). *The social media bible: tactics, tools, and strategies for business success*. John Wiley & Sons.

Swinbourne, C. (2016, January 21). *Why Facebook has become so important to the sign language community*.http://www.bbc.com/news/disability-35103292

Thomas, D. (2017). *Signs for social media:Deaf Business Academy UK*. http://www.Deafbusinessacademy.co.uk/wp-content/uploads/2014/03/Signs-for-social-media.pdf

UMCD (2013). *3rd Global Methodist Missions Conference of the Deaf Kenya: Videos.* from https://www.umcd.org/wfdm/video.html

UNFPA (2016, August 24). *Deaf youth are co-winners of iAccelerator*.http://esaro.unfpa.org/en/news/Deaf-youth-are-co-winners-iaccelerator?page=0 percent2C4

United Disabled People of Kenya (2017). *National plan of action.*

http://www.udpkenya.or.ke/publications/national-plan-of-action.pdf

UN (2017). *United Nations Convention on the Rights of People with Disabilities.*http://www.un.org/disabilities/convention/conventionfull.shtml

Whitworth, E. (2016, July 26). *Facebook, Twitter, Etc: Make Your Ad Management Deaf-Friendly!* http://www.Deaffriendly.com/articles/facebook-twitter-etc-make-your-ad-management-Deaf-friendly/

World Health Organization (2012). *Disabling hearing loss.*Author. www.who.int/mediacentre/factsheets/fs300/en/

World Health Organization (2017, February).*WHO Fact sheet: Deafness and hearing loss.*Author. http://www.who.int/mediacentre/factsheets/fs300/en/

World Federation of the Deaf Youth Section (2012). *Minutes 20th WFDYS board meeting.* http://www.wfdys.org/wp-content/uploads/2017/02/20th-WFDYS-Board-Meeting-Kenya-2012.pdf

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