THE IMPACT OF VLOGGING ON DEAF CULTURE, COMMUNICATION AND IDENTITY

by

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THE IMPACT OF VLOGGING ON DEAF CULTURE, COMMUNICATION AND IDENTITY Doctor of Philosophy 2015 Ellen S. Hibbard

Communications and Culture Joint Programme Ryerson University and York University

Abstract

This thesis presents a framework representing research conducted to examine the impact of website based online video technology for Deaf people, their culture, and their communication. This technology enables American Sign Language (ASL) asynchronous communication, called vlogging, for Deaf people. The thesis provides new insights and implications for Deaf culture and communication as a result of studying the practices, opinions and attitudes of vlogging. Typical asynchronous communication media such as blogs, books, emails, or movies have been dependent on use of spoken language or text, not incorporating sign language content. Online video and website technologies make it possible for Deaf people to share signed content through video blogs (vlogs), and to have a permanent record of that content. Signed content is typically 3-D, shared during face-to-face gatherings, and ephemeral in nature. Websites are typically textual and video display is 2-D, placing constraints on the spatial modulation required for ASL communication.

There have been few academic studies to date examining signed asynchronous communication use by Deaf people and the implications for Deaf culture and communication. In this research, 130 vlogs by Deaf vloggers on the mainstream website YouTube, and specialized website Deafvideo.TV were examined to discover strategies employed by Deaf users as a result of the technology's spatial limitations, and to explore similarities and differences between the two websites. Semi-structured interviews were conducted with 26 Deaf people as follow up. The main findings from this research include register of vlogging formality depending on website type, informal on Deafvideo.TV while formal on YouTube. In addition, vlogs had flaming behaviour while unexpected findings of lack of ASL literature and use of technical elements that obscured ASL content in vlogs. Questions regarding the space changes and narrative elements observed have arisen, providing avenues for additional research. This study and more research could lead to a fuller understanding the impact of vlogging and vlogging technology on Deaf culture and identify potential improvements or new services that could offered.

1 would like to dedicate this work to my most influential teachers: my most recent teacher, Deb, and my first teacher, Mom.

How to "view" this Dissertation:

This dissertation is in mixed media format to present half of the content in American Sign Language (ASL) in the form of videos held at online forums within the TerpTube website and the rest in English text in the form of .pdf, also located at the same website.

https://www.imdc.ca/projects/sls/terptube-symfony/web/login

The rationale was based on four reasons: a) to be able to present examples/data from signed vlogs, b) to provide access to my dissertation to Deaf people, c) to be able to present examples/data from signed vlogs in order to demonstrate how Deaf vloggers use the medium of video and d) to create a model for using the medium of ASL in video to create academic documents, thus enabling me to present academically in my natural language, ASL.

The videos will be captioned to provide access to non-ASL users. English text content will be presented as well. The Table of Contents will list which are in English text format and which are in ASL format.

Abstract, 'How to view this dissertation', and TOC are in a pdf called 'Dissertation front pages'. Chapters 1, 2, and 5, Methodology Justification and Bibliography are in English text in a separate pdf format in a forum on TerpTube 'English Dissertation Hibbard' while chapters 3, 4 and 6 and Acknowledgements are in ASL video format in a forum on TerpTube 'ASL Dissertation Hibbard'. The chapters will be divided into subsections. Appendix sections are in English and ASL and are in a forum on TerpTube 'Appendix Dissertation Hibbard'. Revision to methodology is in subsection called 'Methodology Justification' in the Appendix.

The forums have functions for allowing private discussion among committee members in the form of leaving video or text comments.

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Chapter 1 Introduction:

"Deaf people are people of the eye"

Veditz (1910, 1912 p. 30-)

Traditionally, Deaf culture has been communicated through American Sign Language (ASL) content, such as opinions, stories or jokes that are conveyed during face-to-face interactions between Deaf people (Padden & Humphries, 1988). In this dissertation, the word Deaf is used to describe people who are deaf or hard of hearing, who identify with Deaf culture, are members of the Deaf community and primarily use sign language to communicate (Padden & Humphries, 2006).

The Deaf community shares a strong cultural value of using ASL at face-to-face gatherings and ASL narratives such as ASL storytelling and ASL jokes. These ASL narratives have a central role in developing and fostering Deaf cultural identity (Padden & Humphries 1998, 2006; Bauman 2008). Veditz (1910, 1912, 1913) argues that technology such as film technology can be used to record, preserve and share Deaf culture content asynchronously (not face-to-face and delivered at times other than when the content was created) in ASL because the medium is visually-based and matches Deaf people; "Deaf people are people of the eye" (1910, 1912 p 30). However, historically, film technology was not accessible for most people because of the cost and training requirements.

Recently, the proliferation of high-speed computer graphics technology and increased network bandwidth has led to the development and widespread availability of online video content and applications. Deaf people have taken this opportunity to begin contributing sign language content to online video sites and this is termed *vlogging* (Molyneaux, Gibson, O'Donnell, & Singer, 2008). Vlogging occurs when people produce a video, typically with

webcam technology, and then share that video content online. This technology allows for video creation, asynchronous video transmission and sharing with other people in the form of vlogs. Video-sharing websites such as YouTube have the potential to be a non-text way to communicate asynchronously, allowing for information access by a wide range of people and cultures including people with disabilities.

Current video and web technology may offer a new opportunity to create a permanent record of sign language (e.g., ASL) content in the form of the video. ASL video could also enable people in the Deaf community to share ASL content across distance and time (e.g. video messages posted to a video forum online such as Signlink Studio (Signlink Studio 2010) or video chat such as SkypeTM) in real time. This online vlog technology is different from typical Deaf face-to-face communication in that it allows people to record, document, share and access signed content (asynchronously or in real time) with other people across time and distance in their own language. Further, this communication becomes a permanent record that can be consumed by others at some future time in the absence of a face-to-face conversation. The impact on Deaf culture of this ability to communicate anytime and anyplace through vlogs will be investigated in this dissertation.

Free video hosting websites such as YouTube or Deafvideo.TV and personal websites such as Ella's Flashlight or Joey Baer are a few of the examples in which ASL content can be found. ASL vlogs created by Deaf people are the focus of this research.

ASL stories from Deaf storytellers can also be documented and shared through video. This means Deaf people could create cultural products in the form of ASL videos containing such stories. This potential is not limited to ASL stories or to entertainment; this can include any type of discourse that exists in face-to-face communication, such as theories, research, opinions,

or civil rights. This has the potential to revolutionize the way in which sign language evolves because it can now be stored and shared asynchronously by diverse people who are not professional film-makers without the need for face-to-face, real-time situations. Vlogging could then revolutionize the way in which Deaf culture is transmitted, recognized and consumed because this is the first time that it can be made accessible to a large, non face-to-face audience. Deaf culture may be at a crossroads of moving from ephemeral tradition to one that can be documented and stored.

One possible effect of this video technology is that it may create a cultural shift in how ASL information is shared in the Deaf community. The strong cultural value of using ASL at face-to-face gatherings is a defining characteristic of the Deaf community (Padden & Humphries 1988). Another possible effect could be a new way to define the Deaf community through use of ASL that can be 'written down' now by using the medium of video to record and document ASL. A possible implication of video technology is that the Deaf community will become a video-centric culture rather than face-to-face culture, all as a result of the communication mediated by that video technology.

1.1 Dissertation Goals:

As a result of this Deaf accessible visual medium in the form of vlogs online, questions arise regarding how Deaf people use technology to contribute to online communities and how their contributions may impact Deaf culture. The goal of this dissertation is to understand and model the impact of vlogging and video-based communication on Deaf culture and communication practices – what would happen to Deaf culture, the Deaf community, the process and prominence

of ASL narrative and the evolution of the language itself if these stories could be recorded and shared using accessible technology?

Towards achieving this goal, I will examine and characterize the issues of using online video for ASL communication with existing vlogging support systems as a first phase. I will also provide an analysis of semi-structured interviews created to explore specific issues identified in the characterization phase with experienced and novice Deaf vloggers. The data collected from these two phases of my research will be used to develop a framework about video practices and cultural attitudes arising from the use of video technology for communication by people in the Deaf community. The dissertation focus is to be divided among two objectives:

- Characterize and examine current on-line video practices by the Deaf community in order to create an initial framework that outlines differences in communication practice and narrative structure between vlogging and face-to-face situations among Deaf people. Research questions for this objective are thus:
 - a. What kind of cultural information is appearing and what is happening to the narrative structure in video? In Deaf culture, topics in face-to-face tend to be structured in sequential form but details tend to be provided first. Narrative structures such as Deaf jokes have been described to contain elements that unify the community around a shared experience (Bauman, et al 2006), and to teach about Deaf cultural values such as visually-centric handshape poetry (Bahan, 2006). ASL narratives make up genres from full-length stories to anecdotes. A particular narrative may be passed on through generations in face-to-face gatherings (Bahan, 1992). Face-to-face narratives in Western cultures are viewed

as oral storytelling structures for sharing stories that exist in the memory of the community (Edwards & Sienkewicz, 1990). On-line video technology allows those narratives to be recorded and shared across time and distance, potentially reaching large numbers of viewers. This narrative structure differs from face-toface in that narratives are given to potential unknown strangers in different parts of the global community (Poster & May, 2006).

- b. What is the preferred use of technical characteristics of vlogs? For example, is the video frame similar or different from what I am using in the ASL chapters of this thesis? How are those characteristics used? There are video guidelines for creating videos with ASL content that include technical characteristics such as: frame around the signer, background, attire, lighting, and editing (Marsden, 2010; Fels, Konstantinidis, Hardman, Carey & Porch, 2004)
- c. When signed communication moves from a face-to-face context to the technologically mediated context of vlogging, what are the changes in communication behaviours? Face-to-face communication has elements such as immediate feedback used to instantly modify the content being signed, which would not be possible in vlogging. Signers often modify their stories as they are sharing them, incorporating the audience's feedback and comments (Peters, 2000). Visual cues between signers are important in face-to-face communication (Emmorey, Gertsberg, Korpics, & Wright, 2009) but will not be possible to access in vlogging. Signed communication is considered oral (Bahan, 2006; Holcomb 2013) while vlogging communication creates a permanent document that is difficult to modify, which could be called a 'print-narrative' structure. What is the

effect of website vlog type (Deaf specific or mainstream) and any limitations on vlog posting, vlogging style, content type, communication behavior, audience interaction, Deaf culture, and Deaf communication? For example, would vlogs have more Deaf culture topics on Deaf specific websites than on mainstream websites?

- 2) A second objective will be to explore the cultural attitudes and issues around video practices including the role of text (as in text replies to video posts) through semistructured interviews with Deaf people, including active vloggers. Specific research questions are then:
 - a. Is vlogging an attempt by the Deaf community to self-articulate identity in response to the (mainstream) textual nature of the web?
 - b. Are there any concerns/taboos for content shared in vlogs? Are there preferred types of content that should be shared in vlogs, (ASL literature, Deaf education, Deaf politics or local government policies)?
 - c. What are the technical and vlogging challenges (posting, creating, viewing, finding vlogs)? Is there preference for which websites to post to and view vlogs?
 - d. What does vlogging mean for Deaf people -- how does it fit with the Deaf community and Deaf culture? What opinions and attitudes do Deaf individuals have about vlog use and its impact on Deaf culture?
 - e. What is the influence of vlogging experience on a Deaf individual's opinions about vlogging?

This data will also be used to inform the framework developed in objective 1.

1.2 Considerations:

There are also some important considerations for my research: sign language is a visualspatial mode of communication and meaning is conveyed through three-dimensional (3-D) space and time. Also, sign languages have been shown to be distinct languages, independent and usually unrelated to any written language (Klima & Bellugi, 1979).

Current vlogging cannot convey all of the visual-spatial nuances that come from the 3-D aspect of sign language because vlogging cameras and display screens are only two-dimensional (2-D). Sign language content is then "flattened" by this 2-D representation (Keating & Mirus, 2003). In addition, the video frame of the video image (called the screen window) and the physical space for signing is typically smaller than would be available in a face-to-face conversation as described in Chapter 2. This brings up numerous questions regarding how sign language use changes as a result of these technology limitations on the visual-spatial aspects. I will examine the impact of video-based online technology on the modulation of visual-space that is needed to show sign language content (Siple, 1978; Klima and Bellugi, 1979). This will involve exploring some of the differences and similarities arising from the vlogging that occurs on one mainstream website, YouTube, and compare this with one specialized Deaf vlogging site, Deafvideo.TV (DVTV).

User interfaces that surround the video in mainstream websites such as YouTube or Vimeo typically remain as text. For Deaf people, accessing a mainstream video website means having to use their second language (e.g., English). The use of website text as content or interactive functions even when sign language is present (e.g., YouTube) forces Deaf users to continuously switch between their first language (sign language) and second language (English text) in order to function on these type of sites. This could be preventing equivalent access for

Deaf people who use signed language (Fels, Gerdzhev, Hibbard, Goodrum, Richards, Hardman & Thompson, 2009). Hearing people, however, typically do not require knowledge of a second language in order to interact with video sharing websites. The additional cognitive workload required to process website content, in particular to perceive and to comprehend it in two different languages, can create access barriers for Deaf users. As a result, the presence of Deaf cultural materials and Deaf users online has been typically limited or relegated to specialized Deaf websites such as Deafvideo.TV (DVTV) (Mayer, 2007).

Websites such as DVTV are tailored to the specific needs of Deaf vloggers because they allow users to post and reply in a video format. While DVTV still has some text interface components such as text menus and text titles of vlogs, the website is established to serve the Deaf community with sign language as its focus. DVTV vloggers create primarily sign language content on DVTV whereas YouTube vloggers are posting their signed content alongside hearing vloggers who post a variety of content including non-signed vlogs. Deaf people on YouTube would have to search among non-signed content to identify signed content while on DVTV the expectation is that the content is primarily signed.

The purpose of computer mediated communication is to allow people to form a virtual community in order to interact with each other without the need to be physically present in time or distance (Gibbons, Molyneaux & Gibbs 2002). Within the virtual communities space Jenkins (2006, 2014), Lange (2007), Molyneaux, Gibson, O'Donnell, and Singer (2008) and Molyneaux, O'Donnell and Milliken (2012) frame the role of new media, blogs and vlogs as a place where people engage in participatory culture involving exchange of stories and ideas. While this concept has been largely described for hearing people and scant studies have been applied to Deaf people, it is possible that it can allow these individuals to interact with each other and form

an online virtual community as well. In their study of Deaf people using text-based blogs, Shoham and Heber (2012) suggest that Deaf people can develop virtual communities. However, Deaf people use sign language and vlogging may even present a greater opportunity to form virtual communities. The possible implications and issues of vlogging video technology for the Deaf community are not fully understood or even characterized (Padden & Humphries, 2006).

A mass media theory, called the 'public sphere', is used to describe when people's opinions are collected within in one place in order to be shared, viewed, and accessed by all in order to inform policy-making leaders in government and help individuals have informed opinions and take political action (Habermas, 1962/1989). This concept has been applied to text-based mass media such as print, which would not be accessible or allow for inclusion of videos showing signed language opinions. Opportunities for Deaf people to either participate in an existing public sphere or to create their own would require the availability and acceptance of signed languages (Jankowski, 1997). The emergence of new online video technology may provide the possibility for a 'video public sphere' framework adapted from Habermas' public sphere and thus be more accessible to the Deaf community. Hogg and Lomicky (2010) report that Deaf people use computer-mediated communication, including vlogs, for political activism; however, their study did not examine the impact or implications of vlogging practices on Deaf culture or social interactions which is argued as a necessary component of a Deaf 'public sphere' (Fraser, 1990).

Another consideration for this thesis is that communication and cultural theories have not framed visual media as truly visual. Mitchell (2002, 2005) argues that visual media does not truly exist because it is a mixed media (with speech/sound elements). Emerging theories from

Deaf View Image Art (De'VIA) (Miller 1989 and Conley 2008) describe visual media as a truly visual medium for Deaf people to express themselves and show their Deaf culture.

Debord provided a theory to describe the impact of visual culture on people, 'Society of Spectacle' (Debord 1967/1994). He argued that people place a greater value on images provided for public people, such as newspapers and movies over material products e.g. cars or clothes. However, Debord was describing the impact of mass media through visual medium on people who are hearing and thus may not have similar implications for Deaf people who have been described to value the use of visual medium, e.g. use of visual to share ASL, storytelling and De'VIA.

In the context of my thesis, I suggest that visual-only (without the assumption of an audio channel) media made possible by technology through vlogging is one novel way for Deaf people to communicate across distance and time and form virtual communities. This may also have cultural ramifications for Deaf communities because the virtual world is not the same as the face-to-face world and participants in the virtual worlds may find new ways to express their presence and views. Whether vlogging sites are attracting Deaf users and promoting Deaf cultural materials online remains to be studied.

1.3 Contributions:

Several contributions have been made to the areas of Deaf communication, culture and technology by this dissertation. Here is a brief list that will be further developed in Chapter 6:

 New sign language technical practices have been documented and discussed including: use of z-axis, special effects, obscured face, and modifications to the signing frame, all of which seem to be acceptable in the vlogging context.

- New or emerging online practices that challenge Deaf cultural customs in general including: novel salutations, use of flaming/blunt comments, and informality in what are traditionally seen as formal situations.
- 3) Support and evidence that vlogs show Deaf identity, which may support theories of an emerging or changing Deaf public sphere, as defined by Habermas (1991). Identified a lack of traditional ASL literature in vlogs which is an important aspect of Deaf culture and its propagation this is a gap that could be filled with further research and/or specific attention by Deaf communities. However, there is also evidence of emerging new storytelling elements that may be introducing a new type of ASL literature.
- 4) Methodological contribution: modification of the standard thematic analysis method to be used with sign language, including identifying issues that interfere with this method by one video analysis tool.
- New areas for sign language vocabulary development; during the development of this thesis, I had to develop new signs for: statistics, academic citations, communication, and asynchronous communication. These new signs are demonstrated within Chapters 3 and 4.

1.4 Dissertation scope:

Chapter 2 will provide literature review in several areas: Deaf culture including ASL literature, Deaf communication, media and communication studies that address use and role of technology to share cultural content including mass media and visual culture perspectives, and technology studies that examine usability, human computer interaction and web design. Chapter 3 will address research examining vlogging use on two websites, YouTube and Deafvideo.TV, by Deaf people. Chapter 4 will address research exploring attitudes and opinions from Deaf people about vlogging use by Deaf people. Research findings, discussion, future research and limitations of the study will be provided for each in the particular chapters covering the specific study. Chapter 5 will provide a framework to tie together the observations from the two research studies with current theories about Deaf culture and communication. Chapter 6 will provide contributions, conclusion, limitations and suggestions for future research.

Chapter 2 Literature Review

"The moving-picture does for the Deaf what the phonograph does for the Hearing" Thomas A. Edison (p 81, quoted in Graham, 2007)

2.0 Introduction:

Media and communication scholars such as Cartwright (2002) argue that visual media made possible by technology such as film, videos, and websites, can be used to communicate through visual only mode. However, these types of visual media do not employ the visual modality alone for hearing people. Mitchell (2005) argues that visual media does not truly exist because current visual media (e.g., modern films at theatres, DVDs, or television) is usually presented along with sound or representations of sound content meaning that it is audio-visual media. The typical captioning found in mainstream film or DVD format does not convey all of the elements of spoken content or auditory cues, although hearing viewers can access all of the linguistic elements (DeLinde & Kay, 1999).

Other aspects of visual culture used to examine the role of visual media to share or communicate cultural content include theories such as Dubois (2002) and Descartes (2002) who argue using visual media to relate to self and others 'I am seen and I see that I am seen' (p.10). They also can be used to identify human cultural elements such as race (Dubois, 2002). Others suggest that visual media can identify the intersection between visual practice and cultural polities. Mirzoeff (2002) refers to the use of speech, (spoken discourse subtexts), or representations of spoken language (text) that accompanies the visual images to talk about what the images mean or to situate cultural or historical contexts of those images. Text is even used to give clues about the image (e.g. titles of painting in museums). Those theories do not

acknowledge the role of elements from the aural modality (e.g. soundtrack in movies) as mediating the communication or that sign language operates through a truly visual-only medium used by Deaf people or how Deaf people use visual medium to form their own visual culture.

The Deaf visual medium has been described as the mechanism for communicating Deaf culture and Deaf visual culture that includes Deaf culture art (called Deaf View/Image Art or De'VIA) in form of products such as art, paintings and visual images that embody the Deaf culture experience (Sonnenstrahl, 2002). However, Sonnenstrahl (2002) does not explore the use of technology that is used to create signed content that can be shared by Deaf people to form Deaf visual culture. There are emerging theories from Deaf studies on how visual media can be used to communicate and discuss Deaf culture using native sign language in a permanent form, which is now possible with technology such as video (Bahan, 2006).

Recently, the visual medium for De'VIA genres have been described to include video created by Deaf people expressing their Deaf culture & Deaf identity, and even the cultural premise of Deafhood (Durr & Christie, 2008), which suggests Deaf people can use medium of video to express their Deaf culture and identity. For Deaf people film and video are essentially a truly visual-only media and will be referred to as such in this thesis.

Deafhood is a concept that is used to describe a model of Deaf people, including Deaf ways of being able to counter the medical point of view and oppressive discourses (Ladd, 2003). Ladd (2005, 2006) describes his Deafhood concept as being used to emphasize the positive views of Deaf people, thus resulting in larger Deaf selves. Ladd (2003, 2005, and 2006) situates his Deafhood concept within oppression framework in which deaf people who are not culturally Deaf or know sign language are on a process to discover their Deaf identity and become culturally Deaf and learn sign language. Kusters and DeMeulder (2013) described the Deafhood

concept as essentialism, in which the focus is examining what it means to be deaf at the individual and collective level. They used the word deaf with lower case to include people who are not culturally Deaf. The Deafhood concept does not address how tools mediate or change sign language communication practices such as use of technology or how Deaf culture can change from use of new technologies.

In addition to the De'VIA uses of a visual-only medium, it can be used for communication purposes (synchronous or asynchronous) of or through ASL content. Synchronous use of video media involves technologies such as Deaf videophones or webcam (Keating & Mirus, 2003, 2008) that enable real-time communication (similar to face-to-face communication) mediated through this video technology. The use of video recording and screen display technologies allow signers to see each other in real time at the same time to have synchronous communication (Keating & Mirus, 2003, 2008).

Ong (2002) describes how technology enables asynchronous communication where people can document and publish their ideas and stories to be shared and viewed by other people at later times and at different places. Asynchronous communication in which videos can be shared online, described first as video blogs, are blogs that are videos created and posted by individuals that are focused on personal themes (Nardi, Schiano, Gumbrech & Swartz, 2004). However, Nardi et al. (2004) and Ong (2002) do not address barriers of this type of communication or how print form does not allow for sharing sign language content. Posting vlogs is a form of online publishing, known as vlogging that allows everyone who can access webcam or cell phone with camera, computer and web access to create and post content online (Molyneaux, Gibson, O'Donnell, & Singer, 2008). Hearing people typically have access to share their content in other forms of online asynchronous communication such as blogs, which are text

based, email, streamed audio content, discussion boards or webpages (Ashley, 2003). Those varieties of communication mediums allow hearing people to have choices to access or share their spoken language or representations of spoken content in the form of text, but those typically exclude Deaf people who use sign language. Asynchronous communication in the Deaf community is a new concept as everyday sign language communication is typically shared faceto-face (Padden & Humphries, 1998). It was not until video-sharing websites became readily accessible that Deaf people could use this medium for asynchronous purposes and that it could be considered as asynchronous communication.

Conley (2008) suggested that Deaf visual culture can include vlogging by Deaf people. Deaf visual culture is not limited to sharing Deaf cultural elements such as De'VIA art, signed content that convey elements of Deaf culture such as stories sharing Deaf experience, using visual imagery along with sign or historical stories in videos (Durr, 2006) and vlogs online (Conley, 2008). Deaf visual media scholars, Conley (2008), Durr (2006) and Bahan (2006) describe how signed content generated by Deaf people creates visual media to represent visual culture for Deaf people. Bahan (2006) uses examples of signed poems as being a form of visual media shared by Deaf people. The concepts described by Conley (2008), Durr (2006) and Bahan (2006) have been situated within visual culture and do not address implications, such as differences between different communication modes, synchronous and asynchronous communication for Deaf people or what it means for Deaf culture or Deaf communication to be able to expand communication options to include asynchronous communication.

There are various mass media, communication and Deaf culture theories discussing how people communicate with each other and what media is used in order to communicate. An overview of those theories and research within Deaf culture, communication and use of

communication technology by Deaf people will be provided in this literature review to situate vlogging for Deaf people. I will be examining literature from mainstream and Deaf studies on visual media, computer-mediated communication, technology, public sphere framework, participatory framework, Deaf culture/communication and 'people of the eye framework'.

2.1 Deaf Culture:

Culture has been defined many different ways. Two main concepts from scholarly theories on culture will be used to frame this dissertation: cultural language use and cultural products. Useem, Useem & Donoghue (1963, p.169) defines culture as a "learned and shared behaviour of a community of interacting human beings". Krober & Kluckhohn (1952, paper 47) describes that culture is made up of explicit and implicit patterns and ideas from and for behaviour learned and shared by symbols.

"Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, and on the other as conditioning elements of further action."

Deaf culture has been defined and described by Padden and Humphries (1988) to be shared by a community, consisting of members that are Deaf, use sign language and identify with Deaf culture. There are many distinct sign languages used by different Deaf communities globally (e.g., American Sign Language (ASL), Langue des Signes Québécois (LSQ)). Deaf identity has been described as one forming around the socio-linguistic minority, or users of sign language (Gesser, 2007; Padden & Humphries, 1988, 2005; Reagan, 1995; Shakespeare, Gillespie-Sells, & Davies, 1996).

Deaf culture is an oral culture with a face-to-face tradition, (Bahan, 2006; Padden & Humphries, 1988, 2006; Holcomb, 2013) in which ASL content is shared between people in live events and in the same physical location. Deaf culture content in American Sign Language includes ASL literature in the form of stories and poems that are shared and passed down to the next generation in face-to-face transmission (Christie & Wilkins, 1997; Bauman, 2006). ASL literature is used to support the collective remembering of Deaf culture and maintain language usage (Padden, 1990). Sign language use is culturally valued over use of spoken languages (Padden, 1991). Not only is the language valued, but there are behaviours and rules that are expected to be followed by Deaf people that identify them as part of the Deaf community. Those include cultural rules that influence how sign language is employed and practiced.

Sharing ASL content between signers requires active participation of the receiver/audience. Peters (2000) describes audience participation as being active. He emphasizes that participants inject comments, sharing information to add to the story, and storytellers often modify their stories as they are sharing them, incorporating the audience's feedback. The signer depends on simultaneous feedback from the audience member, whether in one-on-one informal events or in one-to-many formal events such as lectures or storytelling events. Emmorey, Gertsberg, Korpics & Wright (2009) describe the role of visual cues for feedback between signers. The audience member provides feedback in the form of visual cues such as facial expressions, head nods and movements of handshape 'y' used in sign language. This use of feedback is a tacit Deaf culture rule. If my friend is signing to me and I do not provide visual

cues, my friend will stop and ask me if I understood. This also occurs at formal events. Peters (2000) describes how a storyteller will stop in mid-story if no visual cues are provided and check in with audience members, then after receiving feedback will proceed with the storytelling.

Another of the Deaf culture values is sharing detailed information and being informed on what is going on in one's environment (Mindess, 2014). Deaf people are considered blunt and more direct than hearing people (Mindess, 2014; Hall 1983). Hall (1983) describes typical face-to-face interactions that occur at a Deaf club involving people addressing their friends in a very straightforward manner. She explains this approach is considered acceptable in Deaf culture while a similar approach would be considered rude among hearing people. Secrets are not tolerated in the Deaf community. There are expectations of lack of privacy in Deaf culture; at public functions if signers want privacy, they need to move out of the line-of-sight of other people (Hall, 1983).

The Deaf community is typically relatively small and most people know each other and have interests or experiences in common, such as having attended the same school. Meeting new Deaf people is a novel experience for Deaf people and long detailed introductions are important in those interactions. When Deaf people give introductions, they usually try to find common ground such as their educational background (Mindess, 2014). Mindess (2014) suggests that detailed information is important for establishing connections and belonging within the Deaf community.

American Sign Language narratives such as ASL storytelling and ASL jokes have played a central role in developing and fostering Deaf cultural identity (Bauman, 2008; Padden & Humphries, 1998, 2006). Padden and Humphries (1998, 2006) also describe how ASL stories are highly valued in Deaf culture. Deaf events are held in venues that provide cultural spaces in

which ASL stories are shared and classical ASL literature, such as legends about Deaf leaders from 19th century (e.g., Clerc), are re-told (Gaillard & Buchanan 2002; Peters 2000). Skilled ASL storytellers are valued in the Deaf community and are often called upon to narrate ASL literature at those face-to-face gatherings (Christie & Wilkins 1997; Padden & Humphries 1998, 2006).

Deaf clubs and organizations that provide face-to-face gatherings are valued in the Deaf community as described by Padden & Humphries, (1998, 2006). Ninety percent of Deaf people are born to hearing parents who may not know sign language (Mitchell & Karchmer 2004; Snoddon 2009) and as such do not have easy access to gather in common spaces in which they can communicate with each other (Taylor-DiLeva, 2010). Thus, Deaf people use specialized venues to which they **do** have access to use their native language, e.g., American Sign Language, and share it amongst other ASL users. Padden and Humphries (1998, 2006) explains that Deaf clubs are venues in which Deaf adults can socialize with each other using sign language that would not have been possible elsewhere.

A typical Deaf person depends on live events to participate in Deaf culture and, in turn, the propagation and evolution of Deaf culture depends on these live events. However, live events are ephemeral and there is no way of sharing what is discussed at them with others who are unable to attend (e.g., Deaf children who are not of age cannot attend licensed events). Accessible discourse that employs use of sign language would be limited outside of those events.

2.2 ASL literature:

ASL literature is often shared across generations and in Deaf settings such as Deaf social events or in Deaf residential schools (Byrne, 2013; Suppala & Bahan, 1996). ASL literature can be observed to be shared collectively among many people at Deaf events or be recorded by a single signer in videotape form for ASL instruction (Smith, Lentz & Mikos, 1988), use for discussion of ASL, or Deaf visual culture (Durr & Christie, 2008). Two filmed examples are "Signing the body poetic" by Bauman, Nelson & Rose, (2006) and "HeART of Deaf Culture" DVD (Durr & Christie 2012). However, neither Bryne, (2013) nor Durr & Christie (2008) address how the use of online video technology for sharing ASL content fits with or impacts communication that has been described as oral and face-to-face. This challenge will be explored in this dissertation.

One of the hypotheses of this dissertation is that Deaf vloggers would use vlogs to share ASL literature in the form of poetry or any type of fictional content that has been described as part of ASL literature, which is often shared across generations, and in Deaf settings such as Deaf social events (Byrne 2013, Bahan, 2006, Suppalla & Bahan 1996).

There are various ways to define ASL literature and there is on-going research and discussion within Deaf and academic communities on this topic. Byrne (2013) describes ASL literature as including stories and poem and having a set structure including use of rhyme as illustrated in Bahan's work *Bird of a Different Feather* (Suppalla & Bahan, 1996). Bryne (2013) suggests that ASL literature is categorized into several genres including poetry, legends and humour (e.g., jokes). This also can include stories that describe experiences around being Deaf, expressions of Deaf identity and Deaf culture (Bahan, 2012 personal communication). Bahan

(2012) also describes that ASL literature can have other genres such as news about Deaf clubs/organizations and sports as those are important to the Deaf community. ASL literature can include sign play such as original poetry, which uses elements of play with handshapes and rhyme (Christie & Wilkins, 1997). It is not limited to poems; other types can be stories in fictional or non-fictional structure including humour (e.g., jokes), personal anecdotes, monologues, and legends (Bahan, 2006; Byrne, 1997, 2012; Suppalla & Bahan 1996; Valli & Lucas 1995). For the purpose of this thesis, I will refer to ASL structured literature, (e.g. poems and stories shared face-to-face and shared across generations) that reflects Deaf culture elements such as those described by Bauman, et al. (2006) and rhyme elements as per Christie & Wilkins (1997). Such ASL literature is the focus here, not the other types as described in the literature review. Structured literature has rules, has rhyme, is typically fictional in nature and includes handshape poetry, number stories, and ABC poetry.

Deaf ASL folklore often contains anecdotes illustrating how important light is to Deaf culture and communication (Padden, 1990). Deaf people have shared with me anecdotes that can range from use of visual alert signals such as flashing fire alarms, to describing that the kitchen is the best place to socialize due to the light there being ideal for seeing signed conversation. This anecdote is layered with meaning and complexity as this is not just a story about use of light but is also an example of humor (Paales, 2004). Here is a variant of the motel joke that has been shared with me from a member of Deaf community, similar to described by Paales, (2004):

Deaf newlyweds are on their honeymoon. They are traveling late at night and they find lodging for the night. They stop at a motel and check in. The newlyweds are given a room. They go to their room and start to relax for the night. The husband signs to his wife, "I have a headache, can you get me medicine for my head?" The woman goes to get the medicine while the man stays behind alone in the room. The woman returns and realizes she doesn't remember where the room is. She comes up with an idea. She goes to their car and leans on the car horn. All the motel windows light up and people open their curtains, looking out except for one. The woman realizes her husband must be there and thus finds their room. (Paales, 2004, p. 61)

2.3 American Sign Language:

American Sign Language is a visual-spatial language that employs the use of three dimensional (3-D) space. Klima and Bellugi (1979) describe one key element of ASL: meaning of signs is not just inferred from making the handshape or movement but also the location of the sign in space. Siple (1978) and Klima and Bellugi (1979) describe those locations in space as spatial modulations, which are typical structures that inform the grammars of signed languages. Typically, signs used in face-to-face communication are produced in 3-D space around the individual's body and face but in reality a majority of the signs are moved in x and y directions centred on the signer's torso. (see Figure 2.0). The location in front of the chest and outward (*zaxis*) is described as neutral space (Senghas & Coppola, 2001) and is normally the origin of the signing axis rather than used as specific sign space. The terms x, y, and z-axis will be used in this thesis to refer to the spatial modulations. Signing space, which has been defined as the area where signs are produced in a very specific body region - in front of the signer's body from the waist to the head (Stokoe, 1975) and within bent arms' reach (Klima and Bellugi, 1979) - is considered to occupy a 3-D visual space (see Figure 2.0).

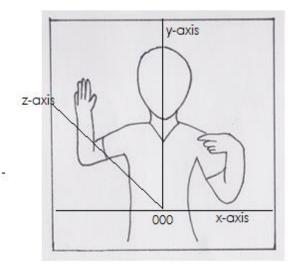


Figure 2.0: Illustration of signing space

Established sign languages such as ASL use spatial modulations for various language tasks such as indicating person, temporal based information, or grammar relationships (e.g., which is object or subject) (Senghas & Coppola, 2001).

They describe measuring production rate as a typical indicator of fluency in how a signer uses spatial modulation. Their production rate analysis involves calculating overall signing rate for the signer. The smallest meaningful units, morphemes, which can be produced on the hands, are measured per minute as Deaf participants retell a story. Their analysis is focused on Deaf children learning Nicaraguan Sign Language, which is considered a distinct signing language separate from ASL. Similar sign production calculations are conducted by Mayberry (1993) and Klima and Bellugi (1979).

The sign rate in signs per second was reported by Mayberry (1993) in a study on the impact of age for learning ASL. For Deaf people who learned ASL in infancy, mean sign rate was 0.74 (*SD* = 0.10), and for Deaf children between 5 to 8 years mean sign rate was 0.83 (*SD* =

0.11). Mayberry (1993) argued that the differences in signing rate are the result of when sign language was learned; children that learned sign later signed slower and were not as fluent as children who learned sign in infancy. In a comparison study between speaking rate and signing rate, Klima and Bellugi (1979) reported mean signs per second for three individuals as 2.3, 2.3 and 2.5 signs per second respectively. Mayberry (1993) and Klima and Bellugi (1979) focused on measuring sign rate when the signs were being produced in response to a request to retell a sentence or recall a story of long and complex sentences from videotaped ASL content (Mayberry, 1993) or to retell a familiar story (Klima and Bellugi, 1979). It is possible that signing rate for spontaneously telling a story is different but this was not addressed or explored in their research. There is scant research on signing rate for when ASL signers are spontaneously telling a story (e.g. such as face-to-face interactions at Deaf clubs or in vlogs). In addition, there is little research exploring under what circumstances sign rate may change. For example, sign rate may be slower in specific situations and faster is others.

Sign language instruction books have discussed how Deaf signers and sign language interpreters employ a technique known as 'line-of-sight', in which they position their eyes, hands, and bodies for optimal expression and viewing of sign language content. Siple (1978) also describes one of the constraints for sign language as having a clear 'line-of-sight' between signers. Clear 'line-of-sight' to access visual content is also stressed in universal design guidelines (Burgstahler, 2011) in order to facilitate inclusion of Deaf individuals. We could say, therefore, that having a clear view of the 3-D space circumscribed by a signer's head/waist and bent-arm reach is critical for transmitting and understanding sign language (see Figure 2.0).

The 'line-of-sight' is also important for feedback from an audience in order for the twoway aspect of communication between Deaf signers to be successful. This is why it is important

to consider the implications of feedback and line-of-sight for communication between Deaf signers when the communication medium changes from face-to-face to solitary and asynchronous communication, including one-to-many. The 'line-of-sight' is important not just for having access to the signed content but also for having access to visual cues from the audience, thus line-of-sight is a two-way element of communication between Deaf signers.

2.3.1 Constraints on signing and video cameras:

Video guidelines also describe similar guidelines for having clear ASL signing (Fels, Konstantinidis, Hardman, Carey & Porch, 2004; Marsden 2010). However, the technical constraints of video cameras on the signing space means the signer needs to be aware of what is or is not being captured of the signing space. Spatial modulation movements may also be constrained by the 2-D limitations of video camera technology. There is little research on the impact from technical constraints on the line-of-sight or *viewability* or if this results in changes in the spatial modality of signing.

Wann, Mon-Williams (1996), Greenfield, Brannon & Lohr (1994), Page, Moreno, Candelas, & Belmar (2008) suggest that some of the technical limitations of typical screen monitors, keyboard, mouse and computer interface, (2-D interface) include:

- a) level of detail that occupy 3-D space are not portrayed by typical screen monitors as they portray 2-D space and cannot show 3-D
- b) screen monitors, keyboard and computer interfaces do not allow for changing views of one image to include motion in depth (z-axis)

- c) people can change their viewpoint to observe perspective changes in real time in physical settings, e.g. by moving their head sideways to examine depth along zaxis but this does not occur when looking at a 2-D display
- d) 2-D interfaces lack feedback cues to advise users in their spatial positioning with the interface and the task they want to accomplish, e.g., an author using analogue would be looking at the text in a word doc on a computer screen and seeing a typo in the text -- using the mouse/keyboard to go to the correct location on the text to correct for the mistake requires familiarity with how much to move the mouse around on the desktop to get the equivalent movement on the screen. This can be applied to signers adjusting their spatial positioning to have their signs appear within the video field of the camera represented on the monitor as they record their signing.
- e) time and skills are needed for users to interact with 2-D interface
- f) Users need to interpret dynamic images of 2-D video into 3-D meaning
- g) 2-D interfaces require cognitive processing to mentally manipulate, transform and relate changing and dynamic images of the video
- h) low-cost optics such as webcams can create distortion in the image and projected image will not be accurate
- i) movements are best recorded when the camera lens is parallel to the movements being made.

The use of signed space is critical for ASL storytelling, including poetry, as the visual elements are controlled by its space (Valli & Lucas, 2000). The camera lens can only capture so

much of any one space and has a limited field of vision (Norris, Schadelbach & Qiu, 2012). Keating and Mirus (2003) describe that a webcam restricts sign language communicative space due to the focal range of the webcam. The signing space in webcam interactions is reduced in width and height with a loss of depth dimension (z-axis) resulting in reduced size of signing space (Keating and Mirus, 2003). This poses a challenge because the technical constraints of the camera lens/screen are not as obvious as they are in the actual physical signing space, which can be modified in face to face (e.g., moving the obscuring object) and must be reviewed after-thefact in order to see what that camera has actually captured.

Keating and Mirus (2003) and Keating, Edwards, and Mirus (2008) described their main findings which revealed the production of video sign language and its use of video space altered due to the spatial modality of sign language and the adjustment required to accommodate the two-dimensions of the on-screen. Deaf people changed their body positions to accommodate the narrow signing window, due to the webcam's field-of-view constraints, compared with the space available in face-to-face communication. Signers changed to optimize the display of their bodies, face, and hands. It is not known if this also occurs in vlogs or whether there are other changes that occur due to the constraints of the capture (camera) and display hardware.

Meaning in ASL comes not only from the use of the hands to produce signs, but also from the non-manual elements, such as facial expressions, head tilts, body leans and use of physical space around the body (Klima and Bellugi, 1979; Wilbur & Patschke, 1998). Nonmanual facial elements are important aspects of ASL grammar (Bettger, Emmorey, McCullough & Bellugi, 1997) as well. The combination of hands, body, and face and spatial modulation are essential in conveying meaning in American Sign Language.

The use of non-manual elements and the use of physical space represented in the visual sense requires careful consideration by signers and their audience, including whether people can see the signer's expression and signs clearly in order to get the signed content and meaning. When the space is not optimal for sharing the signed content, problems can arise for comprehension of the signed message. For example, if the view of the signer is obscured by a tall flower arrangement on the table between signers at a restaurant, full comprehension is compromised. If head tilts or body leans are obscured, ASL grammar could be lost. There is lack of research in how Deaf signers mediate technical constraints such as obscured views to convey ASL, including grammar elements such as head tilts or body leans in vlogs.

2.4 Visual Media and Deaf people:

There is a paucity of visual culture theories or visual media literature that addresses the role of the visual elements of Deaf culture, how visual elements are used to communicate a visual based perception of the world or use of visual-spatial language to share Deaf culture and how this fits in modern visual culture or visual media theories. The lack of literature in this area could be because visual media is usually expressed and shared between hearing people who typically use aural-spoken language. Recently there have been emerging theories described by Deaf scholars and Deaf artists in ASL that suggest that De'VIA describes how Deaf people share and communicate their Deaf culture through visual media (Sonnenstrahl, 2002; Durr & Christie, 2008), including vlogs (Conley, 2008). The De'VIA theory was originated in the medium of an ASL discourse over a four-day workshop (Durr, 2006). This theory includes that Deaf people use visual media to share their Deaf culture experiences as resistance or affirming action. Thus,

visual media that is created by Deaf people in the form of ASL video could be considered to truly exist for Deaf people through a visual sense.

Durr (2006) describes how cultural products in the form of visual media by Deaf people have been overlooked or under-researched in academic studies. She suggests that exploring visual media, such as De'VIA produced by Deaf people, can contribute enlightenment to hearing and Deaf observers. She describes that Deaf people use this kind of visual culture in two areas: resistance (political struggles, oppression, issues of identify formation), and affirmation (validation of culture, celebration of culture). The political struggles that are described include language rights and educational policies. While the medium of videos has been described to be part of this, neither Conley (2008) nor Durr and Christie (2008) have examined whether sign language in visual media can contain resistance or affirming meaning or how the De'VIA elements can be constructed in video. Conley (2008) has described that vlogging fits within a De'VIA framework but is limited to a theoretical framework that addresses how the role of technology impacts the transmission of Deaf cultural elements such as visual media. Empirical evidence such as interviews or detailed analysis is needed to confirm if people use vlogs for validation of culture, discuss political oppression or affirm cultural identity. Miller (1989) argues that the visual medium can be used to strengthen a Deaf observer's sense of identity within Deaf culture.

2.5 Technology and Real-time Deaf Communication:

Scholarly researchers (e.g., Power and Power, 2004) have examined forms, other than face-to-face, of signed or print-based synchronous (or real-time) communication such as the use

of signing through videophones or text use through mobile phones between people who are Deaf/hard of hearing and hearing people. Power and Power's (2004) study of deaf communication using short message service (SMS), which is a text based way of sending messages through mobile phones, showed that deaf people use this to connect to each other. It is not known if those deaf people that Power and Power (2004) describe are identified as culturally Deaf, so the usage of <u>deaf</u> is employed here. They described that deaf people adopt communication technology to make connections and have interpersonal relationships with each other through this communication medium. They suggest that SMS via mobile phones, rather than voice, is more inclusive of deaf people as it allows everyone to communicate using the same means that each can "understand"; the assumption being that all interlocutors have an equal ability to produce and comprehend written text (even in SMS form).

Power and Power (2004) contend that the role of SMS is to be the first communication technology to reduce barriers between hearing and deaf people. They also suggest that deaf people's use of this communication medium have contributed to new forms of English writing such as abbreviations and change in grammar such as minimal tense use. The authors describe that new rules emerged such as the expectation to reply to SMS immediately as opposed to emails, which can be replied to at a later time. The problem with this is that their contention is focused on hearing and deaf, or equating deaf with hearing people in use of SMS. The use of SMS is dependent on a written language, which is not the native language for most Deaf people and cannot be used to share signed content such as ASL literature. Furthermore, the use of SMS can occur in real-time or almost simultaneously with rapid back and forth messages even though Power and Power (2004) describe that deaf people save the messages for later viewing. Their

study did not include exploration of how deaf people would use communication between deaf-todeaf rather than between deaf and hearing people.

There has been limited research on investigating and documenting the impact that video communication used in real time (e.g., video phone) has on sign language or Deaf culture (e.g. are real time video communications used to share Deaf cultural elements such as ASL literature). In addition, there has been minimal research on the impact of 2-D space or 2-D interface of video technologies on the understanding and development of sign language (e.g., issues of lack of line-of-sight and active participation of viewer on sharing ASL content). Keating and Mirus (2003) have begun to address the impact and identify some of the challenges with use of video mediated communication on sign language use between Deaf people in real time. They described the visual medium provided by video as a new technology that creates a new relationship in how Deaf people narrate their content with their digital selves.

Keating and Mirus (2003) observed four Deaf families over two years in a study to investigate how these families used webcam and computer technology to communicate with each other. A webcam is a video camera designed for web interfaces and requires participants to adjust their body positions to see and be seen (Keating & Mirus, 2003; Keating, Edwards, & Mirus, 2008). Their main findings revealed that the production of video sign language and its use of video space altered the spatial dimension of sign language from the 3-D nature of face-to-face communication (explained in section 2.3.1) to two-dimensions (2-D) of the video display screen. Deaf people changed their body positions to accommodate the narrow signing window caused by the webcam's field-of-view constraints and the dimensions of the display screen. Signers changed to optimize the display of their bodies, face, and hands. Keating, Edwards, and Mirus (2008) confirmed this in their study of Deaf people using videophones and used one example in

which a participant changed how a sign was produced visually; the participant's sign for 'two' was modified to use higher contrast with light background by placing fingers above the participant's head.

Videophones are video based phone technologies originally introduced into the Deaf American community in 1995 and 1996 to call hearing people (Keating, 2000). From 2002 to 2004, two American companies, Sorenson Media and Sprint, released videophone technologies in which a television set instead of a computer was used to show videos (Keating et al., 2008).

Keating and Mirus (2003) also reported that members of the Deaf community expressed privacy concerns about using webcams, generally related to being visually available and that they needed to be properly dressed and groomed before using the technology. This suggests that Deaf people using webcam technology were concerned about their appearance, which is not found for other means of technology mediated synchronous communication such as SMS or telephones (for hearing people). This may appear to be a topic of interest when examining vlogging use by Deaf people.

Keating and Mirus (2003) observed that feedback from the webcam was more limited than in face-to-face interactions. They explained that the participants tended to depend on feedback from their conversational partner in real time rather than from watching their 'virtual' selves on their self-view on-screen window. Participants worked together to establish optimal viewing for communication by discussing what they saw of each other through the webcam and screen display of their images.

Participants were also found to sign slower in order to produce distinct and visible signing and to repeat signs to accommodate for the flattening effect of their signs from the technology. Participants sometimes held their final signs in their final signing position instead of

returning to resting position when completing their turn in conversation. Keating and Mirus (2003) suggest this may be a result of uncertainty regarding whether a viewer has clear video or not. The repetition of signed phrases and concepts was attributed to uncertainty about transmission quality. What impact this type of sign production had on signers and audience, sign understanding, and innovation in signing was not studied in this study.

Keating and Mirus (2003) argue that webcam technology (consisting of a webcam and display screen) changed the relationship between the signer's body, face and hands and also created a new visual relationship between the signer and the camera/display. A new narrative framework was thereby developed in which the visual relationship between hands and the signer's body mediated by the webcam and the relationship between signers and the webcam became important.

Keating et al. (2008) further described how Deaf people use webcam and videophones as a new communication technology. The 2008 paper by Keating et al. included communication through videophones while the earlier 2003 study by Keating and Mirus focused only on webcam. Keating et al. (2008) showed similar phenomena observed for signing space being modified by use of webcam for videophones as well. They described how Deaf people developed innovations to mediate the technical constraints on signing space. Videophones showed a reduction of signing space as the signing space represented in the image was reduced in size, (both in width and height) and the depth (z-axis space) was eliminated. Keating and Mirus (2003) and Keating et al. (2008) reported that a new understanding of the camera's visual field resulted in a new sense of relationship between signers' hands and the camera in sign language communication between Deaf people. This was different from the typical relationship between

signers' hands and bodies in real time and real space and, in turn, allowed for new ways to give feedback to be developed (Keating & Mirus, 2003; Keating et al., 2008).

Keating and Mirus (2003) and Keating et al. (2008) described that the internet is shaping language practices and creating new communication practices in the Deaf community because Deaf people are able to communicate across distance and time, not just face-to-face. Their studies were limited to real-time communication mediated by video technology, and it is not known if participants in their studies saved their video conversations to become a permanent record. The impact on Deaf culture of this ability to communicate anytime and anyplace using webcams alone or videophones has yet to be investigated. Also, their research is focused on interactions between a few individuals, e.g., one-to-one conversations or up to two participants on each side of the conversation, which could differ from one-to-many interactions that take place in on-line mass media such as use of video websites (e.g., YouTube).

Muir and Richardson (2005) suggest that video technologies used by Deaf people, such as videophones, require specific requirements on technical elements (e.g., quality, speed, and reliability). They expressed concern that current video technologies are not up to the demands of sign language that is detailed and rapid. They recommend that the technical quality of video technologies must be improved and modified in order to include Deaf users of this technology.

The studies described by Keating and Mirus (2003), Keating et al. (2008) and Muir and Richardson (2005) were limited to conversations that occur in real-time, which are different from those that occur asynchronously where there is no opportunity for real-time feedback (e.g., signed monologues that could exist in vlogs on YouTube). It is not yet fully understood what the impact of this communication type has on signers, sign practices, or Deaf culture.

2.6 Technology and Asynchronous Deaf Communication:

Muir and Richardson (2005) examined what Deaf signers focus on when they watch signed videos. They noticed that in real-time, Deaf signers see and attend to the facial and body region of the video signer. They suggested that Deaf signers require high spatial resolution in the facial area and temporal resolution over the whole video in order to see the fine details of signs near the face as well as facial expressions. They also recommend that video-based technologies that provide a view of the signed content provide options in which people can view both fine details such as facial grammar and the larger movements of sign created when signs are employed in a larger space. Muir and Richardson (2005) outlined that the problem with typical video-based technologies is that they only provide one view at a time; close ups of face to show fine details of grammar or larger view to show larger movements. Therefore, people who view signed content cannot simultaneously access both views because they are not able to be employed simultaneously. However, the videos for this study were limited to videos generated by Deaf people who are from the same geographical area as the participants. It is not known if the Deaf signers knew the person generating the signed content or if the content was from a stranger. The impact of watching videos from an unknown person is not determined and does not address the lack of opportunities for feedback, possible changes in signing due to technical constraints, or role of connections or interactions between Deaf people.

A more recent study by Hooper, Miller, Rose and Veletsianos (2007) suggest that a viewer's perception of ASL content is impacted by video speed and frame rate; specifically, that lower frame rates such as 6 fps negatively affect sign recognition. However, their study is limited to hearing learners of ASL and did not include Deaf participants who are fluent in ASL. It is

possible similar challenges described by Hooper et al. (2007) and Muir and Richardson (2005) could have implications for vlogging and for Deaf people participating in vlogging or viewing signed vlogs.

The impact of online communication among Deaf people has been examined by Fels, Richards, Hardman, & Lee, (2006), Hamill (2009), and Shoham and Heber (2012). Fels et al. (2006) suggest that internet-based technology has changed the way people manage their interactions. However, their analyses are primarily focused on use of blogs or navigation issues such as how to link signed content online.

Shoham and Heber (2012) examined messages on an online forum used by Deaf, deaf and hard of hearing people in Israel for behaviour and interactions. As it was not known if the participants are culturally Deaf and use sign language however researchers participants as on deaf and hard of hearing people, thus the participants in their study are denoted as Deaf/deaf and hard of hearing. They were interested in whether Deaf/deaf and hard of hearing people would form a virtual community and provide social support and what their main topics of discussion would be. They concluded that the forum in the study functioned primarily as a support group. Most of the topics were found to be about rights (Deaf/deaf and hard of hearing), employment, technical aspects of being deaf and social activities. However, their study was limited to one specific forum and the samples were of deaf, Deaf, and hard of hearing individuals but included a few hearing individuals as well.

Shoham and Heber (2012) argue that the Internet is an effective tool for communicating about Deaf culture and working towards equality in the hearing world, but in their study none of the messages they analyzed demonstrated a call for action. They also suggest that online participation by Deaf and hard of hearing people generates a virtual community for them.

However, most of the members of the forum interacted in real life as well. It is not known how many forum users in the study were strangers to each other. Their analysis shows that, overall, the social interaction online was positive with only 2% of interaction described as negative and 256 messages out of 2,050 messages contained criticism (users were critical of other people's messages or behaviour on the forum). While the participation and activity on the forum included video, the forum was mainly text based and their analysis focused on the text messages. They did not examine how this virtual community was situated within Deaf culture or if the participants used sign language.

Hamill and Stein (2011) examined how Deaf people use blogs online. Blogs are webpages containing text posts, photos or other multimedia content (Nardi, et al., 2004). Hamill and Stein (2011) described a blog site, DeafRead, which is a Deaf specific site where blogs created by Deaf people can be placed for other Deaf viewers to read. Other blogs that are Deafrelated are also posted there. They reported that Deaf people used blogs to address Deaf culture topics including use of language and cultural identity. Also, they found that bloggers stressed the importance of socializing and interacting with other Deaf people, use of humour, and use of stories to share information and foster empowerment for the community. Forty out of 416 blogs showed evidence of activism that they suggested could lead to change for the Deaf community. However, this research was based on a low level of participation (only nine active bloggers generating 416 blogs were studied), which could be because of the text-based nature of blogging. In addition, the coding structure they used was based on research with hearing people with no attempt to have specific terminology and concepts. In addition, their research was framed on the concept of the Deaf community as a marginalized community, which may have introduced bias

on their interpretation of the findings - their concept was centralized on Deaf people who express and mediate their views and values within the dominant text-oriented social communication.

During a national address by Veditz in 1913, he said that the only effective method of passing and saving signed content was through the medium of film. He explained that "Deaf people are people of the eye" (Veditz, 1913) and film is the media through which Deaf people can communicate across time and distance, save and share their stories and various elements of Deaf culture. At the time of Veditz, over 100 years ago, few Deaf people had access to this film technology to communicate signed content. However, now, video technology along with internet technologies is widely accessible, which enables more people to be able to communicate signed content.

The recent surge and availability of high bandwidth public networks such as the internet, along with the low cost of owning multimedia technology and internet connectivity, has changed the landscape of possibilities for using and sharing visual media. Online technologies such as web video blogs, or vlogs in ASL, may offer a way for Deaf people to interact online (Fels, Gerdzhev, Hibbard, Goodrum, Richards, Hardman & Thompson, 2009). Also, these video technologies may make it possible for Deaf people to have signed content in a permanent form.

While Veditz saw video as an opportunity for signed content to be saved and archived, his concept did not consider the issues created by moving communication from 3-D representation in a face-to-face environment to a 2-D space that occurs on screen (film or computer). Veditz's 'people of the eye' framework also does not include the issues that arise when communication moves from traditional face-to-face narration to video narration, as the case would be for videos on websites.

There are formal guidelines which have been established for people who use video to produce ASL content (e.g., background that is not too visually noisy, good lighting, visual access to view of not only face, hands and body but also ensure signing space is visible around head and torso, and wear clothing that contrasts with skin without lettering or stripes) (Fels, et al., 2004; Marsden, 2010) as well as ASL instruction materials (Smith, Lentz & Mikos, 1988). Background or clothing that is visually noisy is considered a distraction from viewing the signed content similar to external audio content appearing along with spoken content (e.g., a noisy fan). Some ASL interpreter training programs and Deaf programs where ASL is taught in post-secondary education may address filming techniques to capture signed content, including lighting, frame, clothing and background. Editing, however, is not often mentioned or discussed in those programs. Typical video filming guidelines (Ascher & Pincus, 1999) do address use of postproduction techniques, such as editing, to portray content. However, those guidelines are targeted for mixed-media users where audio and use of video that does not provide visible view of the person providing content thus those guidelines are considered not optimal for working with signed content.

There are conventions for Deaf people who give formal face-to-face presentations about dressing in a specific way, with special attention to patterns on clothing, physical background of the presenter, lighting and line-of-sight between audience and presenter. However, most of the studies involving video technology and ASL to date have focused on controlled lab situations or on real-time communication across distances mediated by webcam technology and do not include any asynchronous communication in the form of vlogs. There may also be some similarities with mainstream vlogging codes of behaviour that could provide insight into possible differences between real-time communication and asynchronous vlogging. However, this is

considered not relevant for this dissertation as vlogging is considered another option for hearing people to have asynchronous communication and thus the impact of this on communication (such as differences between face-to-face and asynchronous communication) among hearing people cannot be fully realized. In addition, the impact of using technologies to document communication content on oral culture cannot be fully examined due to the presence and influence of print culture in mainstream society (Ong, 1982).

2.7 Blogging as a mainstream asynchronous communication system:

A typical mainstream, text-centric form of web-based communication is blogging. Nardi et al., (2004) suggest that blogs are more than on-line journals; they are considered a social activity in which people express emotional tensions, think out loud by writing, seek feedback, articulate opinions to influence other people and post activity updates. People typically use blogging as a way to interact with others, despite its limitations (e.g., limited access to responses and lack of comments received on individual posts) (Herring, Scheidt, Bonus, and Wright, 2004). Preece (2000, 2001) suggests that people can use online communication to form support groups. Online users of those groups participate to share and validate their experiences especially for medical support groups. However, the text-centric nature of blogging is considered a barrier for typical Deaf users.

Molyneaux, Gibson, O'Donnell, & Singer (2008) suggest examining videos on line because they are becoming important for understanding contemporary culture. In addition, Hamill and Stein (2011) suggest that the medium of video online, as used by Deaf people, may

be a better venue of exploring how Deaf people can use it to share cultural content with each other.

Video sharing websites allow users to post videos created with a connected webcam, cell phone camera or video camera. A webcam is a lower quality, small video camera technically designed specifically for web interfaces and is often integrated into laptop or tablet computers and smartphones. Posting videos as online video blogs has been described as vlogging (Lange, 2007). There has been considerably less research on vlogging as a form of interactive communication, although it is recognized as a different form of user-generated content (Molyneaux, O'Donnell, Gibson, & Singer 2008).

Vlogging is considered as a communication activity that is more than keeping a personal journal. Haridakis & Hanson (2009) found that vlogging is more than just the creating and posting of vlogs; it is a social activity among the vloggers. Lange (2007) examined vlogging on a mainstream site, YouTube, to determine whether users use it to maintain social relationships through video. He suggests that vlogging is a form of social communication, which performs the function of maintaining connections between physically distanced friends and family. It is possible that sharing videos as vlogs allows Deaf people to have a form of social networking for the Deaf community and hearing people.

Lange (2007) suggested that the use of visual in the videos does not always reduce antagonism such as the use of negative comments or negative behaviour. After examining issues of public versus private communication, her study found that vloggers attempted to maintain privacy by limiting video tagging and/or not socializing with other vloggers in real time (offline). A few of the vloggers in Lange's study (2007) were observed to hide their faces by obscuring their physical identity through use of masks, wearing a hat or sunglasses. Lange's

(2007) analysis did not show how often vloggers hid their faces or when vlogs were created with the vloggers out of frame, or if those vlogs were made with antagonistic behaviour. Biel and Gatica-Perez (2010) described 40% of vlogs found in YouTube contain a view of the vlogger in the vlog in their studies of vlogging behaviour. They expanded more in their analysis and found that when vloggers are visible, they are looking directly at the camera (Biel and Gatica-Perez, 2011 and 2013). However, Biel and Gatica-Perez (2010, 2011, 2013) did not address how much of the vlogger was visible in the frame. It is not possible for Deaf people to hide their faces or block the view of their bodies in videos without disrupting the comprehension of ASL. Since ASL uses facial grammar elements, doing so would seem less likely.

Molyneaux, Gibson, O'Donnell, & Singer (2008) argued that videos empower those who create their own videos and foster identity formation among vloggers. They did a content analysis study of 60 YouTube vlogs to examine how people communicate using vlogs and the reactions to them. The content was found to be personal, public (hearing news or politics), entertainment, YouTube (vloggers discussing vlogs on YouTube), and technology. Molyneaux et al. (2008) reported that there were differences between men and women in how they create vlogs and post comments. Women tended to post more personal comments and men were more likely to post comments and videos about public, technology or entertainment. (Molyneaux et al., 2008). However, these researchers showed that women were more likely to participate and communicate with the vlogging community. Their study did not examine issues arising from creating of those vlogs or implications for the field of visual media.

Signed communication in the form of vlogs and sharing Deaf culture online by Deaf people has received little attention in academic literature. The lack of Deaf cultural artefacts such as signed content products created by Deaf people means research is limited in the study of Deaf

communication and Deaf culture (e.g., quantitative studies). However, of the Deaf cultural products that have been studied, the studies have been focused on accessibility (Durr, 2006). Now, vlogs provide a means to access Deaf cultural artefacts by everyday people in documented formats such as vlogs created by Deaf people and posted to video sharing websites. Examples of video sharing websites include YouTube and DeafVideo.TV where Deaf vlogs can be observed. Much of the on-going discourse regarding Deaf culture and vlogging within the Deaf community can be observed online through vlogs. An example of that is a discussion of a Deaf cultural theory, Deafhood, which can be observed in this vlog,

https://www.youtube.com/watch?v=5xGbDEtTMp4. In this vlog, Donald Grushkin (2010) describes in ASL, the Deafhood theory; this includes how Deaf/deaf people are historically and typically oppressed and viewed from a negative medical point of view, which describes Deaf/deaf as not able to accomplish things e.g. can't write. A different view is provided by Deafhood in which Deaf/deaf people can be viewed in a positive way (e.g., Deaf/deaf can read and use sign language). Deafhood provides a perspective to understand Deaf/deaf people, which also can be used by Deaf/deaf people themselves to understand oppression to mediate oppression. Furthermore, websites by Deaf organizations have been emerging in recent years to display signed content; such examples are the Deaf Culture Centre's website http://www.deafculturecentre.ca/Public/index.aspx or the Deaf Ontario Association's website http://www.deafontario.ca/. However, the videos on those websites are created at the organization level, not individual level, as are those found on YouTube or Deafvideo.TV sites. Other websites also have been generated by Deaf community members to host links to blogs and vlogs created by the Deaf community, DeafRead (Hamill and Stein, 2011).

Deafvideo.TV (DVTV) was established in 2007 by a Deaf man, Tayler Mayer, to create a place online for Deaf vloggers to share their vlogs in ASL (http://www.deafvideo.tv/). However, DVTV was created with WordPressTM, a mainstream website development application, which requires some text interface components such as a text menu and text titles of vlogs to be implemented for navigation and searchability. In YouTube, vloggers have more options to search for topics that are not included in the title, while searching for specific content in DVTV is much more limited. Text tags that have been added by the vlogger can also be used to search YouTube vlogs or replies/comments while DVTV search does not employ user-generated tags, but rather is restricted to searching for the vlogger name or vlog title through text. Deaf users are required to navigate online using second language instead of using their primary language to access signed content. The impact of this on signed communication between Deaf people is unknown. It is also unknown if type of website (mainstream or Deaf specific) will impact how Deaf people share content or impact their communication behaviour. The differences, if any, on how content is shared or in communication behaviour (e.g. narrative elements or changes in signing due to technical constraints) between YouTube and Deafvideo.TV will be addressed in this thesis.

2.8 Visual Media/Communication theories:

In addition to vlogging being a virtual community experience, it is also a participatory activity in which Deaf individuals can share their ASL content with other people for discussion. Jenkins (2006, 2014) and Haridakis & Hanson (2009) suggest that people can use tools of new media, such as YouTube, to form a participatory culture and create mass media. Participants are building their own relationships with each other, in which an identity is provided through a virtual community as described by Stone (1991). Jenkins (2006) describes virtual community as that in which participants develop connections and establish a sense of belonging by participating in exchanges with each other. Online communities have been described to be virtual communities when individuals form bonds with each other and create them (Chen & Lin, 2014).

However, these arguments are based on hearing users and constructs, and do not examine signed vlogs, signed media use, creation of signed media by Deaf people or accessible mass media for Deaf people. A review of current theories along with an interpretation of a communication theory applied to Deaf people's use is given in section 2.9.

2.9 Public sphere:

A model of how people interact with each other through media to develop a public opinion is provided by Habermas and is called a 'public sphere' (Habermas, 1962/1989). Habermas described that a 'public sphere' forms when opinions by individuals are shared among many people at one time and many people have access to those opinions. Public opinion is considered a part of social life where people participate in group gatherings that can exist in the same place or participate through a communication medium to share their opinions about their life and state policies. The model describes a system in which public opinion can be formed, maintained and shared by individuals through the mediums of newspapers and television. Habermas' theory is concerned with how political action can be taken through discussions.

Habermas is concerned with applying the model to government and authority, in which legal proceedings are made public and public opinion is formed based on how those proceedings are disseminated and accessed by the "public." The public sphere is to be treated as an

institution dependent on participation by individuals. This model includes communicative behaviour and accessibility, in which the sharing of public opinion can be guaranteed. This sharing process creates a communicative space where people carry out discourse about different public matters and their opinions can influence government authority over their lives. The assumptions of the model are that there is equal participation and optimum functionality; individuals in government, organizations and "the public" apply and support access to their opinions in their interactions with each other in their organizations and with the government. However, Habermas' model of public sphere did not consider issues such as the modality of the print-centric nature of newspapers or visual elements with speech elements producing mixed modality of television which may systemically include or exclude participation by specific populations (e.g., Deaf people) due to the accessibility of the medium. This model also lacked consideration of how governments would have access to individuals' opinions if shared in different language modalities; for example, the Canadian government's official languages are English and French, which are spoken languages and language modalities such as visual-spatial languages of ASL and LSQ are excluded.

2.9.1 Digital public sphere:

A digital version of public sphere has been proposed. Barton (2005) argues that the internet creates a digital public sphere through use of online discussion boards, blogs and wikis. He proposes that those online discussion boards encourage debate that was described by Habermas as being needed for the formation of a public sphere. Barton (2005) contends that the tools such as threads found in discussion boards in which different individuals can comment

and/or respond to someone's comment form a community in which there are critical debates taking place. Blogs also include commentary but not to the extent that forums do (Barton, 2005). He continues to describe how blogs, while they are personal, allow individuals to develop subjectivity and critical thinking needed for debates, thus contributing to a digital online sphere. Barton (2005) contends that boards that exist online can be found by anyone with access to the internet supporting Habermas' theory of accessible public sphere. However, this overlooks the barriers of text for people with disabilities to access digital public sphere.

2.9.2 Fraser's critique of Habermas:

Fraser (1990) argues that a public sphere as described by Habermas is lacking and does not fully describe or is inapplicable to modern times. She describes that open access to debate and discussion of opinions has not been made possible due to the class struggle and divisions in society. In particular, she suggests that the gender imbalance between men and women prevents them from having equal access to expressing their opinions. In addition, she supports the concept that the public sphere is not limited to the formation of public opinions; it is also formation of social identities. Those identities inform cultural spaces in which their expression is filtered out through cultural lenses and they may not be able to accept opinions from other cultures. Fraser (1990) suggests that in order to apply Habermas' public sphere, a multi-cultural view is needed to include all the opinions from a range of individuals that can have debates that affect everyone and everyone can participate. However, another option would be for a variety of public spheres that support diversity. This would allow everyone to participate in their preferred public sphere.

This type of diversity could provide support for many public spheres to be formed by subaltern communities (e.g., feminists or gay people).

2.9.3 Valtysson's critique of Habermas:

Valtysson (2010) applies Habermas' public sphere model to describe vlog and blog activities as a communication process in society. He argues that the public sphere framework is dependent on cultural participation mediated by social networking sites such as YouTube. Issues of how cultural content is produced and consumed (viewed online) are complex and the social interaction online affects cultural policy concepts such as authorship and identity. Valtysson (2010) claims that Habermas' framework is not accurate in describing on-line communication. He suggests that on-line communication of cultural concepts creates multiple public spheres, where content is moving from one place to the next place. The on-line content is networked between spheres and is a product of a networked society. In addition, Valtysson (2010) uses Castells' (2004) view that the current network society has a culture that is a result of communication protocol between all cultures in the world and has a common belief in communicative networking. This assumes, however, that this networked society can interact with all the cultures in the world. It does not allow for cross-cultural understanding or accessibility of the on-line content. Valtysson's (2010) critiques may have not taken into consideration communication issues that can arise when cultural content that is typically shared face-to-face can now be transmitted in video form across distance.

The framework proposed by Valtysson (2010) was adapted from Habermas' public sphere and Castell's view of a networked society to describe digital communication. He

describes this communication as a user driven one, in which participants contribute content that is viewed or consumed. It is possible that video activity on-line in the Deaf community could be described this way. This dissertation research will develop a characterization of how Deaf people interact with each other on-line to produce cultural content for the Deaf community.

2.9.4 Public Sphere and Deaf people:

Jankowski (1997) suggested that when Deaf people can have access to develop their own self-identity where their identity as a Deaf person is valued and the issues of oppression of Deaf people have been resolved, Deaf people can have full and equal participation in a public sphere. While Deaf organizations host events for debate and discussion, from Deaf politics to state policy, these discussions take place at Deaf clubs, in face-to-face communication (Padden & Humphries 1988). Literature describing how Deaf people come together to share or use an asynchronous communication medium to share their opinions and form a shared and informed opinion is scant. Computer communication has been described as an accessible means for political action within the Deaf community (Hogg & Lomicky, 2010). These same researchers have demonstrated that Deaf people have used computer-mediated communication, including vlogs, for political activism (Hogg & Lomicky, 2010).

However, Hogg and Lomicky's (2010) study did not determine which was the main source of communication (signed content in vlogs or English content in text messages and blogs), as they included both in their study.

Hogg and Lomicky's (2010) study involved asking Deaf and hard of hearing people to complete a survey on their experience using computer-mediated communication including blogs,

vlogs, email and text messages on mobile phones to participate in political activism around a specific conflict in 2006 at Gallaudet University. Hogg & Lomicky (2010) conducted a content analysis and follow-up text-based survey of Deaf people who were members of Gallaudet University and others outside of the university about a 2006 conflict at Gallaudet. In 2006, there was a social protest about the selection of the University president that shut down the Gallaudet campus for three days. Hogg & Lomicky (2010) showed that the internet was actively used among Deaf people in the protest by the sharing of information about the conflict and that a few people started protesting as a result of their participation in the online discussion. They showed that Deaf people preferred the use of blogs over traditional media (e.g., news on TV produced by hearing people or newspaper) and the use of computer-mediated communication played an important role in the 2006 protest (Hogg & Lomicky, 2010). Their study found that Deaf people preferred to use that over mainstream news to be informed about the conflict as they trusted information from Deaf/deaf people that they know. When researchers followed up about why participants did not prefer to use traditional media, participants reported that they thought the media reported inaccurate information, showed favouritism toward the University administration, or the coverage was lacking in depth. Hogg & Lomicky (2010) were not able to confirm if the media did show favoritism toward the University administration. Another consideration that was not addressed by this study was that traditional media was typically generated by hearing people and it was possible that Deaf people did not trust sources from hearing people. Jankowski (1997) described how the modality of speech separates Deaf people from society and fosters hearing people's control over Deaf people in communicating and sharing information. Hogg & Lomicky (2010) also did not explore the use of non-text-based

mediums such as sign language vlogs that may have provided other insights due to the Deaffriendly nature of vlogs.

Hogg & Lomicky (2010) also found that the use of the internet was not limited to social activism. It also fostered interpersonal connections among people and encouraged development of collective identity. However, they reported that users of online communication preferred to get information from their friends or people they knew online. Participants suggested that they trusted the information coming from a friend or someone they knew while they did not trust unknown sources. The public sphere described by Habermas and other analysis of public sphere does not describe support for interpersonal connections between friends and trusted or known people. Hogg & Lomicky (2010) also showed that participants still depended on face-to-face interaction for exchange of information.

Hogg & Lomicky (2010) suggested that the public sphere can also be used to influence government or for political action because by participating in the public sphere, the needs of society can inform government authority rather than only influence individuals, the claim being that it was a form of participatory democracy. However, their study was limited to a text-based survey of Deaf people who are members of Gallaudet University and others interested in that particular conflict and may not be generalizable to the Deaf community at large. In addition, text-based media used for this study may have been inaccessible for some Deaf people and may have excluded people who participated in social activism using signed vlogs.

2.10 Participatory culture online:

YouTube has been described as a site for participatory culture (Burgess & Green 2013). Burgess and Green (2013) argue that the nature of YouTube encourages people to not only post user generated content but to discuss it amongst each other, creating a community among YouTube vloggers. They studied over 4,000 vlogs collected in 6 months. Burgess and Green (2013) were primarily concerned with challenging a view attributed to YouTube of recycling or reposting other people's work or as a primarily commercial venue. They showed that individuals created original and unique content that was commented on the most. Individuals who contribute to YouTube are considered participants who are creating culture online (Burgess & Green, 2013). They showed that individuals also drove the participatory culture of YouTube as the main content was generated by individuals, not by business or commercial companies. However, they did not examine how individuals used vlogs in YouTube to communicate with each other.

2.11 The formation of virtual communities:

Jenkins (2006) describes a virtual community in which participants develop connections and establish a sense of belonging by participating in exchanges with each other. He illustrated how participants would create their own interpretation of Star Wars stories and post them online to the community. People participated in re-telling a familiar story and shared appreciation for each other's work. Jenkins (2006) argued that the virtual community fosters participatory culture among users of computer mediated communication. This concept of virtual community fostering participatory culture has been reinforced by Harley and Fitzpatrick (2009) who described a case study of online participation in YouTube in which people of a variety of ages commented on and exchanged stories to support each other.

2.12 Technology impact on culture and communication:

McLuhan (1964) argues that visual media such as movies and TV cause a shift in how stories are collected and shared online, from within human memory. He contends that communication technologies, video-based or writing based, function in the role as a memory aid and thus are to be treated as an 'extension of man'. People do not need to memorize all the stories, but instead could look them up online in video or text form. This echoes Ong's (2002) argument that technology provides that role for people as a memory aid to store their stories.

Heidegger (1982) explores the role of technology and the relationship between technology and people. He argues that to examine or understand how people use technology, people need to consider what they think about it and what they imagine technology does for them (e.g., its functionality). Heidegger's (1982) premise is that people are stuck, chained to technology because they do not consider what they think or feel about technology. He suggests that people consider technology as a means to an end, an instrument, and that technology is a function of human activity. He implies that technology is more a process, mediated by our experiences and use with technology.

2.12.1 Print Culture:

Ong (1982) suggests that when oral-based storytelling moved from a face-to-face method of transmission to a print/text method, more vocabulary emerged in language, formalized structures were put in place, and new forms of storytelling elements arose where a greater variety of words can be used to tell a story while standardizing the story telling style. The culture changed from an oral tradition to a print-based culture for society at large (Ong, 1982). The printing press was invented to facilitate the distribution of information quickly and be more efficient at making large numbers of copies than writing by hand (Fischer, 2003). Written language (produced on paper) also enabled cultural ideas to spread out and travel to culturally different communities (Fischer 2004). The printing press allowed for the propagation of ideas that resulted in knowledge and cultural movements that were far harder to destroy (Eisenstein 1968). For example, between 1770 and 1775 an American newspaper printer, Isaiah Thomas, used the printing press to publish criticism and opinions on cultural concepts such as American individual freedoms or opinions about government (Warner, 2005). Even Thomas (1874) provided an account of the role of the printing press to affirm American freedoms in response to British policies that Americans thought were unfair during British rule 1770's. He described how Americans used the printing press to organize a protest and affirm American freedoms in response to British policies that Americans thought were unfair during British rule 1770's. Printing presses were used to create printed news that would be distributed out among many individuals to read and keep them informed about the political activism and current opinions about British policies (Thomas, 1874). Narrative structure has moved from face-to-face, that

draws on context remembered in social memory to storytelling and the sharing of opinions supported by technology for hearing people.

The function of extension of memory may be one way to explain a possible role of video technology for the Deaf community to function as a memory aid to remember the Deaf cultural stories that are essential to the identity of Deaf culture. As "everyday" Deaf culture can be "remembered" using video technology, the impact on the storytelling process, the quantity and quality of stories and the evolution of the culture may be significant.

2.12.2 Meaning of visual media:

McLuhan (1964) discusses visual media not only as an extension of memory for communication purposes, but he also argues that it is the medium of visual media that impacts how people understand the information rather than the specific content expressed through that medium. He suggests considering visual media as an extension of print-based communication. McLuhan (1964) suggests that use of technology impacts communication and becomes part of the message. A classical example would be use of a microphone for a person who is soft spoken. Without the microphone, the soft spoken person may experience misunderstanding because some words may not be heard by listeners, but with the microphone, every word could be transmitted clearly to the listener. The use of a microphone changes the dynamics of communication. He suggests that the use of the visual medium, in itself, may contain meaning that must be interpreted by authors and audiences such as use of visual images on the movie screen. A possible interpretation of his theory is that the medium **is** content, not just the means for expressing content.

Media and Communication scholars such as Mirzoeff (2006) and Mitchell (2002, 2005) contend that visual media is the medium for communicating through the visual mode. However, Mitchell (2002, 2005) argues that visual media does not truly exist because there is usually sound presented with current visual media (e.g., modern film). Currently, films are typically shown with sound at movie theatres, on DVDs or on television. In reality then, visual media is a mixed modality media rather than a single media. For Deaf people, film is essentially a visual-only media and communicating content entirely depends on the visual modality. My dissertation may provide possible new insights into issues around communicating through a visual medium only by examining how vlogs mediate that communication for a group of people who are visually centred, such as Deaf people.

Heim's article (1992, 1998) takes the approach of existential criticism on exploring issues of technology and communication. He includes McLuhan (1964), Heidegger's (1982) and Ong's (1982) arguments about technology. Heim (1998) suggests that McLuhan provides a view that agrees with Heidegger's ideas about typical North American culture moving from print culture to one of electronic culture. The author draws from Ong's argument that culture shifted from oral to print and then to electronic media culture. He also suggests that a participatory framework can be used to explain what happens with communication mediated by technology. People use technology to create new stories from old stories by mixing content and sharing their efforts online with each other. He describes the process by how people are active participants in using digital technology to create stories and share their content. People are not passive (Heim, 1998). Heim (1998) is echoing Burgess and Green's (2013) description of how people use online technologies to have a participatory culture. Heim (1992, 1998) does point out that visual media found online and on TV still relies on print and is print centric at heart. However, this critique

does not include what happens when people interact with each other through a video-centric technology or from a visual medium source of communication only. A study is needed to examine the issues of video-centric mediated communication from the visual-spatial medium (such as vlogs) on interactions between people through the visual sense of visual medium. Participatory culture and virtual communities described here by media and communication theories are situated within mixed media communication and, therefore, do not have analysis of communication through visual medium without the use of spoken language or text.

2.13 Society of Spectacle:

Debord's theory (1967/1994), 'Society of Spectacle' described in addition to visual images being valued over materialistic things, a change in social life for people; people interact with each other through visual medium that exists through mass media, movies, photos, and imagery in advertisements found in newspapers and magazines. Through the visual medium, people such as celebrities establish roles and characters that are based on representations through the visual medium (e.g., famous movie actors/actress have a relationship with their fans through photographs of said actor/actress that portrays a specific appearance that is used to market their appeal).

Debord argued that mass media is the spectacle. However, he also claimed that the spectacle is the relationship between people through the images in visual media, not a collection of images (Debord, 1967/1994). He used examples from advertising from the tobacco industry to illustrate the spectacle (relationship via images); characters were portrayed to be women smoking cigarettes in public. The particular visual appearance of women smokers in the images

was used to capture people's attention. He argued that as result of the use of visual images, people were told what they needed to have and thus must have it; in this example, they would go out and buy cigarettes. He described people living in a modern society that is divided between being a producer of spectacle (mass media) and being a consumer of spectacle and in turn, controlled by the images. Debord warned that people were becoming passive and not active thinkers about the visual images in mass media. Mass media created a society of people that are primarily consumers of visual media. He suggests that observers of the spectacle are passive individuals and cannot control or take part in the process of creating the images that they consume by watching. However, the theory of spectacle does not take into account the role of individuals who can generate their own visual media content, such as YouTube vloggers. His theory does not address when people use visual-spatial language to communicate through the visual medium, (e.g., ASL) as his theory is focused on images used for marketing.

2.14 Access/Usability:

Text creates a barrier for Deaf people navigating online. Websites, such as YouTube, typically have text-based content and text-based interactive functions (mostly in the English language) that cannot be decoupled from the other media content available, such as video. These websites pose barriers for Deaf people in English speaking societies since the English literacy level of the majority of the Deaf population in the US and Canada is approximately at a 4th grade level (Traxler, 2000). With this in mind, when a Deaf user creating video on YouTube is required to provide text-based information as the only way to describe and tag their content (Lange, 2007), further barriers are present. Users consuming content are also bombarded with text-based information requirements, as they are only able to search for videos using text descriptors in multiple fields such as YouTube usernames, video tags and video descriptions.

The use of website text as content and interactive functions force Deaf users to alternate between their primary and secondary languages (e.g., from ASL to English text), thereby preventing Deaf users from having equivalent access to content as non-Deaf users (Fels et al., 2009). The possible challenges of using a text driven interface in vlogging to share Deaf culture content may create new communication strategies. As a result, understanding the impact of online video-mediated communication on Deaf culture and communication practices must be mediated by the imposition of textual interface and content structures.

Usability researchers argue that having more options or flexibility is one of the key components for supporting usability and is one of the use factors (Rogers, Sharp, & Preece, 2011). Ease of use is another use factor. When working through the process of posting a vlog, vloggers must determine the steps, such as: *"Which buttons do I click on to be successful? Which video file should be selected and how do I do that? and What should I call the video?"*. An example of possible steps for YouTube is where users must click on a text box first and then several others buttons before she can proceed with recording a video, while for DVTV the user can select the video recording button first -- there is no need to access text.

The two other factors in standard usability analysis are ease of learning and pleasurable (Rogers et al., 2011). Ease of learning refers to how easy is it for users to learn how to accomplish basic tasks the first time they encounter the design (website). Pleasurable refers to how pleasant is it for users to use the design (website).

When an interface is difficult to use, learn and/or requires additional steps to accomplish simple tasks there is the potential to increase user error, which may, in turn, lead to frustration and delays (Chen, 2007), as well as abandonment or disuse.

Recent literature has described that Deaf people may also be overwhelmed when encountering text dominant environments, which can result in difficulty searching for and finding vlogs and an increased cognitive load (Hibbard & Fels, 2011). This means that the usability of the interface is not well-suited to a Deaf user. This would suggest that the interface of YouTube may post challenges for Deaf vloggers. The technical frustrations vloggers report about their vlogging experience will be examined in this dissertation. Furthermore, Rogers, et al., (2011) nor other usability researchers have not described what the ideal usability factors would be for Deaf people (who use sign language) to use computers to share signed content. It is possible the use factors described by Rogers, et al. (2011) can be used to interpret Deaf people's experiences with vlogging.

2.15 Summary:

Communication through computers is a new communication context for Deaf people. People can be influenced through this communication process because they are able to experience how others throughout the world use sign languages to express ideas and concepts. Keating and Mirus (2003) proposed a different participatory framework to describe how information is exchanged between signers and the view of their images in video. They suggest that Deaf people work together and discuss together to mediate between their "actual self" and "virtual self" via computer communication. Participants draw from a context of mutual

conceptions of the social world in face-to-face interactions (Schutz, 1972). Keating and Mirus suggest that in computer actions, people can draw on/from a shared perspective in real time because the perspective is technology mediated and shared in real time.

This literature review supports how the visual medium of film or online video is used to express cultural content across distance and time for the Deaf community through the visual modality alone. However, visual media does not always communicate cultural content through visual modality alone for everyone in society at large. Mainstream scholars draw on a context of mixed modality when developing frameworks for visual media and on-line communication. For Deaf people, content in video is entirely dependent on visual content. It is possible that the visual aspect of video media could have a greater communicative role and have a different narrative structure for Deaf people than examined in mainstream studies.

To date there has been little scholarly research that explores sign language communication mediated by technology (e.g. computers), in which the primary focus is the use of signed language between Deaf people. This could be because the field of Deaf culture is fairly new; Stokoe, Casterline, and Croneberg defined the concept of Deaf culture in 1976. The focus of this dissertation is on Deaf communication between Deaf people using their native sign language -- for this dissertation it is American Sign Language. One focus is how the change from face-to-face to online media affects Deaf culture/communication. Ong (1982) suggests that when oral-based storytelling moves from a face-to-face method of transmission to a print/text method and asynchronous communication, the result is increased vocabulary, formalized structures, and new storytelling elements. Whether or not this result applies to Deaf culture will be examined in this thesis.

As indicated in the literature, it is important to consider the implications of space constraints, feedback and line-of-sight for communication and culture between Deaf signers when communication medium changes from face-to-face to video format. Changes in communication patterns that occur in the online world may have a considered impact on Deaf culture introducing new communication methods or strategies to the Deaf people.

While vlogging is a more common experience for hearing people and the impact on mainstream culture is perhaps incremental, the impact on Deaf culture may be a breakthrough, similar in magnitude, perhaps, to what printing press technology had on hearing cultures. A study of vlogging techniques and behaviours, including those on Deaf specific websites employed by Deaf people, may provide some insight into the evolution of Deaf culture as a result of vlogging technology. In addition, such technology allows Deaf people to create and share a permanent record of communication without relying on face-to-face communication exclusively.

Media and Culture scholarship from Mirzoeff (2002, 2006), Mitchell (2002, 2005) and McLuhan (1964) has been centred on communicating between groups of people that are culturally different due to differences in language, 'ways of life', belief systems, shared geographic area, and even shared experience. Also, McLuhan (1964) suggests that sensory experience in visual media has a role but he seems to be arguing for experience as a physical sense in the abstract, not as a cultural experience; he contends the content of writing is speech but people do not pay attention to the role of their senses or how their senses are involved in visual media communication. Theories from McLuhan (1964) and Mitchell (2002, 2005), as well as other media and communication theories mentioned in this chapter do not provide an in-depth analysis on cultural perception centred on sensory experience or cultural experience influenced

by visual-spatial perceptions as described by Deaf scholarship such as Durr (2006). Lakoff and Johnson (1999) suggest that the perception of the world through the senses influences a person's ability to express and understand information. For example, for a Deaf person who does not use the sense of hearing to process information, the visual modality of a film showing ASL literature has taken on a greater value than for a person who uses the sense of hearing along with the sense of seeing.

The role of the visual modality in visual media has a different meaning for Deaf than hearing people. I suggest that narration through Deaf visual media is not just a media experience that revolves around a sensory perception of the world, but also one that embodies the values of a culture of people who are Deaf. The emerging discourse from Deaf visual media suggests that careful and alternative analyses regarding narration presented through visual media is required.

While Keating and Mirus (2003) examined changes in language due to use of technology during interactions between people taking place in real time, they did not address communication practices or cultural attitudes (regarding Deaf culture or technology use) resulting from these processes. The practices and attitudes will be explored in this dissertation as Heidegger (1982) suggested by including inquiry into how and what Deaf people view technology use. In addition, visual media, such as film, for society at large is another means to communicate content in addition to print, while for the Deaf community it is a new way to communicate content. The newness of being able to communicate across time and distance has not been explored until today, when video technology enabled a new way for a community, specifically the Deaf community, to communicate. The concept model to be developed in this dissertation will include what kind of content is shared by vlogging among Deaf people.

Chapter 5 Discussion:

"New tools mediate and influence human behavior"

-Vygotsky (2011, p 386)

5.0 Introduction:

The primary focus of this dissertation was to understand how Deaf people use vlogs to transmit and share ASL content, and their opinions and attitudes towards use of vlogging, as well as its impact on Deaf culture. Two of the most important findings from both user studies were the amount of flaming and the lack of structured ASL literature and the discrepancies between vloggers' behaviours and attitudes towards these two issues. In Chapter 4, it was noted that participants said that they did not like flaming and thought there should be some rules governing it. They also said ASL literature should be part of vlogging and that it was a good and positive place for it. However, in chapter 3 there was ample evidence of flaming behaviour that seemed to be acceptable, and there was very little evidence of ASL literature in existing vlogs. Not only were there differences in people's opinion and their actual behaviour but there were also important differences between vlogging and face-to-face behaviour. These discrepancies will be explored in detail in this chapter.

A conceptual framework is presented to describe the similarities and differences found between vlogging behaviour and attitudes and face-to-face behaviour in order to visually represent the issues and their connections (see Figure 5.0).

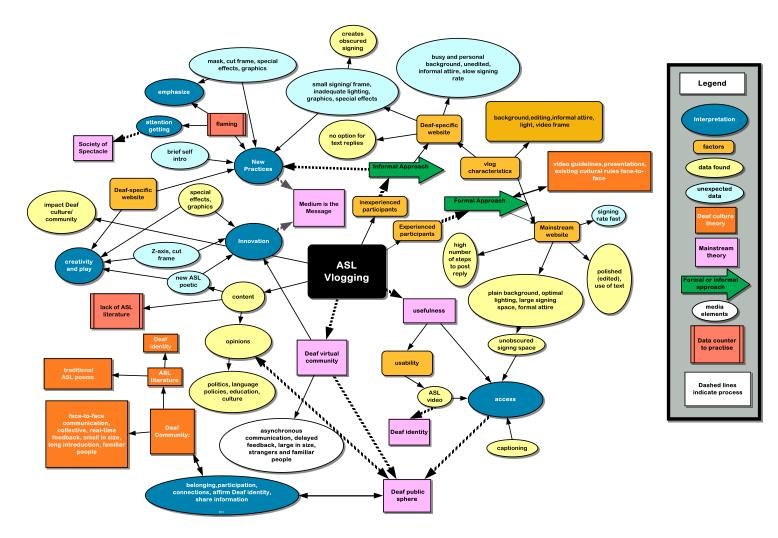


Figure 5.0: Conceptual framework of vlogging behaviour and attitudes

The dark blue ovals with white text represent interpretations of data and theories. The gold rectangles with rounded edges represent factors analyzed for vlogs and opinions. The yellow ovals are data and the light blue ovals are unexpected data. The dark orange rectangles represent Deaf culture theory and elements. The green arrows represent vlogging behaviour and attitude in formal/informal approach by participants. The purple squares represent a new concept derived from the combination of Deaf culture elements and visual media theories. Arrows are used to indicate the property of having, showing, or by. Dashed arrows indicate process (e.g. application of theory).

Figure 5.0: Conceptual framework of vlogging behaviour and attitudes

The conceptual framework in Figure 5.0 illustrates ASL vlogging behaviour and attitudes towards vlogging by Deaf people. Website type have different register, informal for Deaf website, Deafvideo.TV, while formal for mainstream website, YouTube. This register is shown by technical characteristics that differ between the two as shown in the dark blue rectangles. Experienced participants employ informal register while inexperienced participants do not. The informality of Deaf website encourages creativity, play and innovation as observed by; use of zspace, cut frame and special effects for emphasis. The pattern of increased and extended participation with more number of video comments on Deafvideo.TV suggests Deaf public sphere exists there as indicated by arrows leading to the heptagon from the dark blue rectangle on left. The usability factors of presence of video replies and less steps to post video replies on Deaf website is shown by arrows leading to the dark blue plus sign from the dark blue rectangle on left. The pink diamond are data collected from interviews that reflect attitudes towards vlogging. The unexpected finding of lack of ASL literature and presence of flaming is represented by red rectangle and red arrows that point to both sides to indicate both websites have lack of ASL literature and presence of flaming.

5.1 Conceptual Framework:

The level of formality on websites seems to impact vloggers' behaviour and attitudes about vlogging. This can be seen in many factors and observations from interviews. Vloggers are creating new practices and rules that differ from typical Deaf culture practice and rules in face-

to-face settings. Evidence of these new practices and rules can be seen in the Deaf specific website, Deafvideo.TV, but not in the mainstream website YouTube. These new practices include:

- flaming which is an individual's negative behaviour online, often directed or targeted at another individual
- salutations including use of brief self-introductions (introductions are more brief than expected, including sign name but lacking details of education background) and closures such as blowing kisses, okay sign, or the "ILY" handshape to show appreciation to viewers
- 3. manipulation of visual elements such as the use of facial obstructions (e.g., a mask which blocks facial expressions), cut frames (elements are cropped out to show a view of only hands or face), small frames (smaller signing space), use of graphics or special effects (that obscure some of the signing which is counter for rules for signing space that is unobscured) and inadequate lighting
- use of z-axis (signs are produced more along z-axis than on typical use of x or yaxis)
- 5. new poetic elements vloggers used a combination of cut frame, z-axis signing, variety in proximity to the webcam with face, body and/or hands

The mainstream website, YouTube, was perceived to be more formal and vloggers created vlogs in which these formal elements were observed: large video frame, optimal lighting, monochrome background, monochrome and professional attire (long sleeve), editing (to appear polished and use of text) and greetings that addressed people in general ("Hello everyone"). However, the Deafvideo.TV was perceived to be more informal and informal elements were more often observed on that website. For example, use of small video frame, inadequate lighting, busy background, patterned and casual attire (short sleeve), and no editing were more commonly observed than for YouTube. In addition, special effects and graphics were employed more often on Deafvideo.TV than YouTube. The formality/informality of websites seems to impact people's attitude and behaviour and can be seen in other factors as well. Slower sign rate, use of informal closures "ILY" handshape, and new practices (mask, flaming, cut frame, personalized greetings "Hello friends" followed by brief self intro) and innovation (special effects, graphics, z-axis, cut frame, new ASL poetic elements) appeared on the Deaf specific website which reinforces the informality view of the Deaf specific website (as shown in Figure 5). Also, those innovative elements appear in situations where the environment is perceived to be relaxed, casual and informal.

Experience also plays an expected role in attitudes and vlogging practices. People who have experience with both websites, posting and viewing vlogs, have different attitudes towards vlogging than people who have little experience. Experienced vloggers say existing cultural rules for face-to-face, ASL video guidelines and formal rules for ASL presentations do not necessarily apply for vlogs. It is more acceptable for vloggers to use informal and intimate styles; such as use of informal attire (patterned and casual attire), busy and personal backgrounds (a messy bookshelf, bedroom with view of the bed), and unedited content (unpracticed, has mistakes in the signed content) in the Deaf specialized website than for YouTube. Some attitude differences were observed as participants described that vlogging behaviour needs to take into consideration

that the audience in YouTube includes hearing viewers and thus a level of formality (being polished, signing clear and having manners for sharing opinions). New vloggers are applying existing cultural rules for face-to-face, ASL video guidelines and formal rules for ASL presentations. Those formal rules include editing content to be polished, attire that is long sleeved, professional attire, monochromatic colour, not patterned, use of large signing space with unobscured view of the signing (e.g. no mask, small space, nor use of elements that would block or obscure signing), and use of plain, monochromatic backgrounds. New vloggers tend to use formal style as seen in those situations. Furthermore, website type also impacts the style employed by vloggers. Furthermore, website type also impacts the style. Vloggers on the mainstream website use formal style while intimate and informal style tends to be used on the Deaf specific website.

Vlogging is also identified in my studies as being useful in the context of Deaf culture and communication. It provides an accessible medium for Deaf people in which signed languages can be used/accessed in their native forms without translation, interpretation or accommodation. As a result, virtual communities that revolve around Deaf cultural practices, the use of signed languages and norms are forming (exemplified by DVTV). These communities can record and share their information, stories, opinions and contributions as mass permanent, publically accessible records; a first in the history of Deaf culture. Along with usefulness, vlogging is exerting influences on the evolution of Deaf culture and introducing new practices as well as new conflicts with, or contraventions of, accepted conventions.

5.2 New practices:

New practices that have been identified from my studies and that evolved as a result of the affordances or limitations of the technology include:

1) use of the z-axis to convey meaning

2) modification of signs to use less physical space

3) use of captioning to provide access to hearing or international viewers

4) use of sub-optimal lighting

5) use of graphics to convey meaning or attention getting

6) use of personal environment in (background of vlogs) to convey sense of informality and intimacy

7) use of informal attire to convey sense of informality and intimacy

8) use of special effects for attention getting and to convey meaning or emphasis

9) use of mask

Whether these innovations become integrated into Deaf culture as a whole or remain only in the virtual world has yet to be determined. However, similar to how English is evolving as a result of new words and short forms developed because of technical limitations of keyboards on mobile devices (Grinter & Eldridge 2001), I suggest that there will be an evolution in ASL (and other signed languages) as a result of the technical limitations and affordances offered by vlogging.

5.3 Discrepancies:

Discrepancies between vloggers' actions and their opinions also provided sources of potential evolutionary and cultural pressures for Deaf culture. An important difference worthy of some attention was about structured ASL literature in vlogs. Vloggers interviewed unanimously agreed that vlogging would be an excellent way to capture ASL literature and make it available to a wide audience. However, in the 130 (randomly selected) vlogs surveyed for this thesis, there was only one example of traditional ASL literature.

ASL literature plays a valued and essential role in Deaf culture and it is a common element of Deaf social events (Christie & Wilkins 1997; Padden & Humphries 1988). It is one of the mechanisms for conveying Deaf cultural values and practices to the community, particularly newcomers (e.g., children). Vlogging has the potential to record and save this literature in a way that can be considered more permanent, accessible and sharable with a wider audience, expanding the potential opportunities for influence and knowledge building among Deaf community members. The question is why then, given the importance of structured ASL literature, is it missing from vlogs? The vloggers interviewed in this thesis were unable to explain this discrepancy and could not reflect on their own practices for reasons. Examining how ASL literature is conveyed in a face-to-face setting provides some potential insights. ASL literature occurs in an informal, social face-to-face setting when there is an invitation by someone to another person at the event to perform an ASL story, poem, joke, etc. The person then usually arranges him/herself somewhere that is higher than the other people at the event (by standing on a chair, a table, etc.) and then performs (see Figure 5.1).



Figure 5.1: Photo taken at Deaf social event.

One person is standing on a table, and next to this person, a second person is standing on a chair in upper right corner of photo image to provide improved visibility of signing while others watch. (photograph taken by author and permission is granted to include photo)

Storytellers who are not invited will ask permission to share (e.g., making eye contact with audience/viewers before proceeding, asking "I have a story/poem I would like to share"). There are also formal events such as art/film community workshops hosted by Deaf people, some theatre and storytelling_workshops/conferences/events where Deaf people can watch storytellers perform their ASL stories on stage. Another example is of workshops for parents with Deaf infants and children where they are exposed to and have opportunities to learn ASL literature (e.g. Mother Goose program from the teacher/instructor who performs or demonstrates (Snodden, 2009). The performance of ASL literature then is a formal occurrence even if it is in an informal context. The informal and solitary/asynchronous nature of vlogging does not seem to invite or encourage the expression of ASL literature. It could also be that people who are considered "typical ASL storytellers" do not participate in vlogging.

Another consideration is that people who view the medium of film may think it is required to include several people to create and show ASL literature as the examples of ASL literature are typically performed face-to-face by one person or two, while the film can have more than several individuals. People may not have seen examples of one person sharing ASL literature in film as typically several people are shown in those ASL films at festivals. There are some ASL literature examples showing a single person performing the ASL content that can be found in sign language instruction texts such as <u>Signing Naturally</u> by Smith, Lentz and Mikos (1988). However, those are typically used for teaching ASL to hearing people and thus not many Deaf people could have seen those examples. A few vlogs that contained more than one person were excluded from the study and it is possible those had ASL literature. A third possibility is that people are concerned about flaming/negative comments and are unwilling to expose themselves or their version of structured ASL literature to this type of feedback.

An additional consideration for the lack is that ASL literature could be a desire to shield Deaf cultural artefacts from hearing people. For example, ASL specific stories including ASL poetry is shared among Deaf people in residential dorms or areas where there were no hearing people present. For some Deaf people, ASL literature was taught and shared only in Deaf-spaces and not in the public view including in the presence of hearing people. This has to do, in part, with lack of access to language for Deaf people as described in Chapter 2. While vloggers may value traditional structured ASL literature and consider vlogging an ideal way to share such content, they may also feel that vlogging is too public or in hearing space, not Deaf space. During my interviews, when participants described vlogging as public, they also referred to the hearing nature of the public space, by using the same sign for 'hearing' as for 'public', reinforcing the concept of current vlogging as public and hearing.

Given the importance that ASL literature holds in Deaf culture and the agreement by Deaf people on the potential to convey it through vlogging, there are many opportunities for future work. For example, developing specialized forums dedicated to ASL literature where the invitation to perform ASL literature is explicit or holding synchronous events online specifically for the performance of ASL literature may provide that more formalized environment.

Other discrepancies occurred for the topics of attire, obscuring signing, background, signing space and acceptability of flaming. While Deaf vloggers said that attire should not obscure or make signs difficult to read, in practice Deaf vloggers wore clothing of all types, some of which contravened either common guidelines or conventions for face-to-face or formal video communication. The clarity of signing including: wearing of contrasting clothing (contrast with skin and background), use of monochromatic background, use of a sufficient signing space/frame so all signs are visible, and not obscuring signs, was said to be important by people interviewed and was often part of guidelines for making high quality, formal signed video. However, all of these conventions were challenged by vlogs in chapter 3 and a majority of vlogs did not follow them. In addition, viewers of vlogs did not seem to complain that these differences were problematic. As seen in Figure 5.0, it would appear that informality is a common thread that underlies these issues. Lange (2007) and Molyneaux, et al. (2008) describes that vloggers employ informality in their vlogs to support their social network because vloggers perceive vlogging as a social networking behaviour due to elements such as tagging, comments, and adding followers/fans. Traditional video or presentations in which formal monologues can be observed do not allow for comments. Molyneaux, et al. (2008) suggest that the informal nature of vlogging encourages hearing vloggers to break conventions of formal video production or presentations. Molyneaux et al. (2008) did not address why vloggers break those conventions of

formal video production. The informal nature of vlogs may also encourage Deaf vloggers to be more informal in how they approach the presentation of their content and challenge face-to-face communication conventions.

A final area of discrepancy that has some important ramifications for Deaf culture is the appearance and practice of flaming. Flaming is individual negative behaviour observed online. Vlogs and comments in my research showed ample evidence of this behaviour; signed content shared that include "you" language, personally insulting comments, attacking another person's reputation, belittling ("you're a crybaby"), use of term "blunt", putting down of another person, making oppressive comments that can be considered homophobic ("you faggot") or discriminatory, towards another that may be viewed as anti-collectivism, or a threat to the Deaf community's nature of collectivism (Mindess 2014).

5.3.1 Flaming:

On one hand there was a strong negative reaction from interviewed vloggers to flaming that was occurring in vlogs and vlog comments, so much so that it has been blamed for people's withdrawal from vlogging activities. On the other hand, flaming was frequently seen in vlogs and vlog comments.

There is not enough evidence for why flaming occurs in vlogs contrary to collectivism but here are few possible reasons. Vloggers may be:

• in a bad mood and want to rant without checking in with viewers/watchers, thus prolong the rant, while in face-to-face, if a person rants or vents it is customary to follow up

immediately or receive immediate response, then, as a result, reduce their rants and apologize. In this study, vloggers who flamed did not express regret or apologize for their flaming behaviour.

- using flaming as an attention getting device; if this was done in face-to-face, the person doing the flaming behaviour would be asked to leave or desist from the behaviour, thus will lose attention.
- to emphasize content or prolong discussion; in face-to-face this may be tolerated briefly but will not be allowed to continue for a length of time and this can occur at meetings like board meetings or political rallies and those comments are not personalized or targeted to specific individuals
- may not care; vloggers may think they are interacting with strangers and thus the rules from face-to-face for moderating flaming behaviour or following up with an apology may not apply to vlogging
- feel vlogging creates a sense of distance between self and viewer, thus have a sense of disconnect or lack of empathy.

The permanent nature of flaming creates a visible record of disagreement and may result in a barrier to agreement for vloggers if people:

- become disinterested in the topic
- ignore the flamer or the target of the flamer
- were to meet the vlogger in person, may not want to approach or be hesitant with the vlogger

- perceive the flamer as being two-faced or dishonest, especially if they meet the vlogger in person (participant commented "vloggers who flame are nicer in person than in vlog, it's confusing", "people ostracized the vlogger when the vlogger showed up at an event in real time",
- who post flaming content may change their behaviour in face-to-face interactions,
 (participant commented, "I knew one flamer who lived near me, before he posted his flaming vlogs, he would be out in the community, now he hides because he posts flaming vlogs".

Additional new practices would need to evolve to either mediate the flaming to an agreeable level or to allow for individualism to exist in the Deaf community. Participants asserted that vloggers can post any content they want because they believe in freedom of speech and this should apply to vlogging. However, there was a conflict between this assertion by the participants and their reluctance to accept flaming behaviour online. Because the Deaf community is small in size and people know each other and typically depend on face-to-face interactions to share content, Deaf people are often unified when it comes to having opinions and sharing opinions. Deaf people want to have the same opinions in order to be accepted as part of the community. Having a different opinion makes one stand out, separate from the group. In addition, Deaf people do not tolerate different opinions or individual expression because they may view them as a threat to the community that would be weakened by any reduction of membership. This can be reflected when Deaf people exchange information in presentations/workshops among each other. They prefer to do it in groups or with a few individuals working together to share the content. The presentation is typically offered in a way

to allow for audience members to participate by commenting or asking questions. There are anecdotes within the Deaf community that refer to this approach to information exchange and how it differs from the mainstream approach of an individual approach to presenting content or differed opinions. Collectivism can also be seen in how ASL literature is shared. Often when folklore or stories are re-shared, there are no individuals credited, unless it's to a well-respected storyteller's work. Typically, the storyteller will preface a story with "this story I learned …" and provide further details about where and when, but not names of individuals who contributed the story.

It is also possible that individualism is not desired because the Deaf community may view the person as being separate and isolated from the Deaf community and Deaf culture. The interviewed participants may be contributing these attributes to vloggers who flame. Freedom of speech is valued in Deaf culture as it allows for the sharing of information, having access to information and being informed. Participants described vlogging as having potential to foster and increase information exchange in the Deaf community. In face-to-face events, when Deaf people discuss other Deaf people who have differing opinions or new opinions, they engage in lengthy debate including inquiries for more information on why their opinion differs and on what it is based. Those face-to-face interactions do involve harsh criticism; Deaf people have tendencies to offer criticism of each other instead of sharing positive constructive feedback (Ladd 2003). However, Ladd (2003) does not review how Deaf people resolve those harsh criticisms.

New or different opinions require more time and information to be assimilated or accepted within the Deaf community. Different and new opinions can exist in the Deaf community but it requires the collective effort and detailed information before being accepted. There are two explanations that are, perhaps, more plausible. The first is that experienced vloggers may

recognize the technical and communication limitations of the medium (e.g., small screen frame/sign box, poor lighting, time constraints, etc.) and are using new practices and innovations in order to compensate for these limitations. For example, a vlogger might sign further onto the z-axis for emphasis, which in face-to-face communication is done by signing outside the typical sign box. The second explanation is that the new innovations are not connected to the limitations and are simply an expression of creativity. Vloggers may be using the new practices and innovation (use of the z-axis, cut frame, special effects) as a means to express themselves in new and creative ways. The creativity can result in expanding the vlogging medium to enrich the content being shared.

5.3.2 Innovations and new meaning:

Another consideration; vloggers may think these innovations and new practices provide additional meaning to the ASL content shared as described by McLuhan (1964). McLuhan argues that media can be an extension of person (1964). Vloggers may be using these additional practices and innovations in order to support meaning or fill in gaps where content is missing due to the limitations that may obscure signs. This concept also can be applied to support the idea that vlogging shows and extends Deaf identity. By the same premise, vlogging can also extend Deaf culture.

5.4 Summary:

The medium of vlogs is not only the creation of a new option to create and share ASL content; it also opens up a new communication medium in which the website environment impacts communication practices for formality. Typical communication using ASL has only had the option of real-time communication through face-to-face or through video calls. Vlogging is opening a new medium that could be freeing and thus creating a sense of empowerment among vloggers. Both inexperienced and experienced vloggers commented about how vlogging is a tool for collaboration between isolated Deaf individuals to share ASL content. The usefulness of vlogging may overcome the negative access and usability factors. This sense of empowerment or belonging may be why experienced vloggers are forgoing the use of technical elements that obscure signs. Good lighting and ensuring a complete sign space/sign box are not as important as the sense of empowerment or belonging they receive from vlogging.

Also, usefulness comes from other aspects of social, culture, communication and community that are provided through the virtual community for Deaf people. The virtual community is made up of experienced and new vloggers that maintain the virtual community. The virtual community creates connections, empowerment, and affirms Deaf identity and sense of belonging and intimacy among many people, both strangers and known acquaintances alike. The viewing and sharing of Deaf identity through vlogs reinforces the sense of belonging among Deaf vloggers. The sense of connection is further reinforced by the increased proximity and small signing frame that perhaps encourages increased interaction with viewers/other vloggers. One vlogger suggested he felt as though he could almost touch the other vloggers through the screen.

Appendices

Appendix A: Tables, Figures, Framework Concept Map

Tables:

Chapter 3 Tables

HTA STEPS	YouTube	Deafvideo.TV
Post vlog	12	12
Post video response/comment	20	5
Post text response/ comment	10	N/A
To find ASL vlog	3	1

Table 1.0: HTA steps to post, find vlog

	YouTube video page	Deafvideo.TV video page
Menu	menu bars (3 total)	menu bars (2 total)
	left menu contains 14 items	top menu contains 9 items
Video	video sections (2 total)	video sections (4 total)
Fixed Word Count	215 words	50 words
Percentage Text	28%	22 %
Percentage video	22%	40%
Replies	mostly text format few video format	video format only

Table 2.0: Amount of text and video for YouTube and DVTV videopage

Website	Mean	SD	
	signs/sec		
YouTube	1.1	0.17	
DVTV	0.87	0.18	

Table 3.0: YouTube and DVTV vlog sign rate

Website	Mean	SD
	counts	
YouTube	7.58	11.4
DVTV	18.5	20.4

Table 4.0: Counts of total comments for YouTube and Deafvideo.TV

Website	Backdrop	Office	Living	Personal	Outside	Wall
YouTube	9	26	19	1	4	6
DeafVideo.TV	1	10	30	8	5	11
Total Count	10	36	49	9	9	17

Table 5.0: Counts of categories for background YouTube and Deafvideo.TV

Website	Pro Long	Pro Short	Non-Prof Long	Non-Prof Short	Tank
YouTube	5	0	25	32	3
DeafVideo.TV	2	6	16	37	4
Total Count	7	6	41	69	7

Table 6.0: Counts categories for clothing YouTube and Deafvideo.TV

Website	None	Text	Spliced	Graphics	Spliced & Text	Spliced & Graphics	All & Special Effects
YouTube	36	11	9	2	2	0	5
DeafVideo.TV	53	0	1	4	0	5	2
Total Count	89	11	10	6	2	5	7

Table 7.0: Counts categories for editing YouTube and Deafvideo.TV

Website	Large	Medium	Small	Very Small	Cut	Obscured
YouTube	9	39	17	0	0	0
DeafVideo.TV	4	21	28	10	1	1
Total Count	13	60	45	10	1	1

Table 8.0: Counts categories for video frame YouTube and Deafvideo.TV

Website	Optimal	Good	Inadequate	Obscured
YouTube	31	26	6	2
DeafVideo.TV	34	10	12	9
Total Count	65	36	18	11

Table 9.0: Counts categories for light YouTube and Deafvideo.TV

1						
Website	Gov't	News	Culture	Technology	Sports	Personal
YouTube	2	6	29	9	0	46
DeafVIDEO.TV	0	0	14	2	3	51

Table 10.0: Vlog counts topic categories

	Gives name	Hello	Bye	"ILY"	Thumbs up	Thank you	"kisses"
YouTube	1	11	1	2	4	1	2
Deafvideo.TV	3	9	3	13	3	1	1

Table 11: Vlogger counts salutations categories

Chapter 4 Tables

	df	Ν	χ^2	Cramer's	median	p
				ν		
Posting	2	23	9.26	0.635	3	0.025
preference						
Attire	2	23	10.4	0.637	2	0.015

4.1 Table 12 Cross tab analysis forced choice answers

Experience	YouTube	DVTV	Any	None
participants				
Experienced	4	2	6	0
Inexperienced	0	0	8	3

4.2 Table 13 Counts of website posting preference

Experience	No patterned	Contrast	Any	Depend
Experienced	5	1	6	0
Inexperienced	2	6	1	2

4.3 Table 14 Counts of attire preference

	df	N	χ^2	p	median
Website	5	23	72.74	0.00	
viewing					
preference					
Forbidden	5	23	64.91	0.00	
topics					
Topic type	5	23	51.35	0.00	
Vlog	5	23	38.83	0.00	
background					
Sleeve length	5	23	25.78	0.00	
Attire	5	23	19.52	0.00	
Vlog frame	5	23	43.52	0.00	
Like	5	23	65.96	0.00	
YouTube					
Leave Reply	5	23	65.96	0.00	
Changes in	5	23	10.13	0.00	
Signing					
CC in Vlogs	5	23	103.5	0.00	
Vlogs have	5	23	44.56	0.00	
worse					
manners?					

4.4 Table 15 Chi square values difference between questions and chance

Figures:

Chapter 2 Figures:

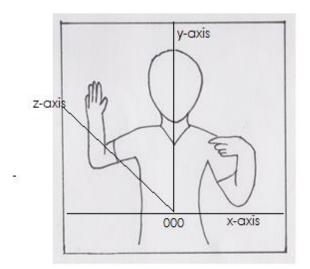


Figure 2.0: Illustration of signing space

Chapter 3 Figures:



Figure 3.0: Veditz

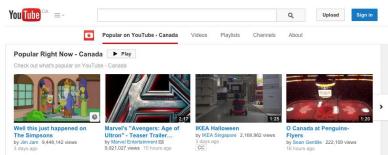


Figure 3.1: Screengrab YouTube Website



Figure 3.2 Screengrab Deafvideo.TV Website



Figure 3.3: Screengrab YouTube categories



Figure 3.4: Screengrab YouTube language selection



Figure 3.5: Illustration HTA example

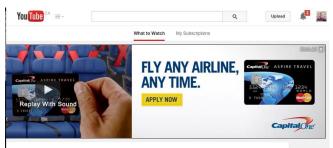


Figure 3.6: Screengrab YouTube upload step

Monetize your videos a Become a YouTube Par	nd grow your audiense. Iner today!	Get started
	PROCESSING 68%	1 minute remaining. X Done
o	Click "Done" to confirm, Basic info Advanced settings	All charges say
Upload status: Processing your video. Your video will be the at. http://youb.ab/bpidb2gbYro	3.2 RQ	Private
	Description	+ Add names, circles, or email addresses
		+ Add to playlist
	Tags (e.g., albert einstein, flying pig, mashup)	
	Suggested tags: + Respiratory Quotient	Text boxes

Figure 3.7: Screengrab YouTube text boxes

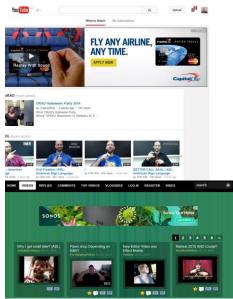


Figure 3.8: YouTube and DVTV videopages



Figure 3.9: Screengrab YouTube videopage illustrate layout & whitespace



Figure 3.10: Screengrab fixed and nonfixed text DVTV videopage



Figure 3.11: YouTube and DVTV pages divided by a grid

Figures 3.12 to 3.36 are vlog clips shown in 3.2.4 Chapter 3 Analyze Vlog

Figures 3.37 to 3.38 are vlog clips shown in 3.2.5 Chapter 3 Analyze Narrative Elements

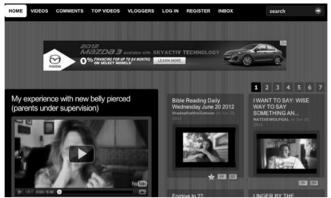


Figure 3.39: Screengrab top half Deafvideo.TV webppage

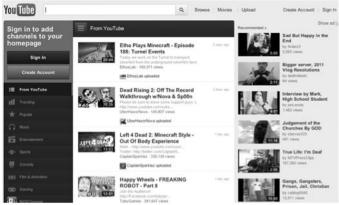


Figure 3.40: Screengrab top half YouTube.TV webpage



Figure 3.41: Screengrab DVTV and YouTube.TV webpages

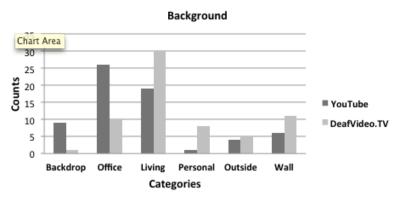


Figure 3.42: Background categories

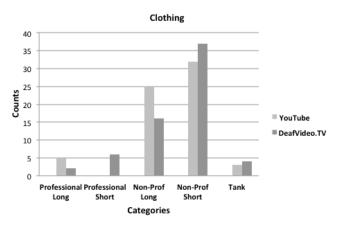


Figure 3.43: Bargraph counts categories for clothing on YouTube and Deafvideo.TV

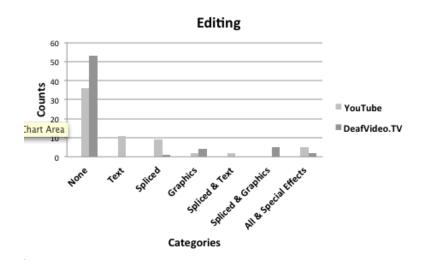


Figure 3.44: Bargraph counts categories for editing on YouTube and Deafvideo.TV

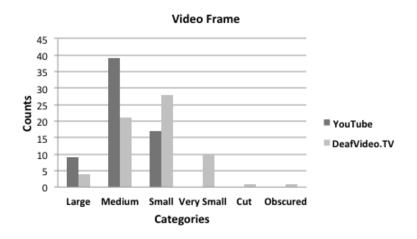


Figure 3.45: Bargraph counts categories for video frame on YouTube and Deafvideo.TV

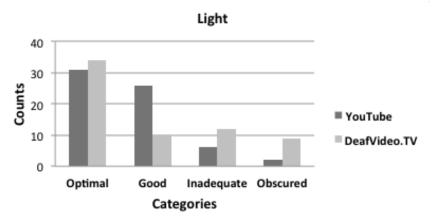


Figure 3.46: Bargraph counts categories for light on YouTube and Deafvideo.TV

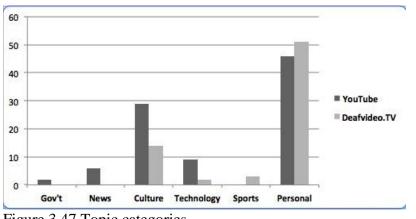


Figure 3.47 Topic categories

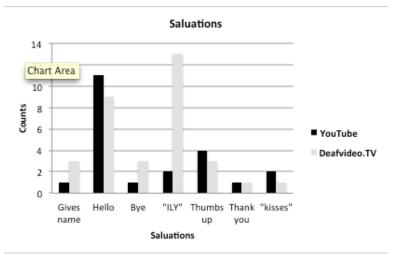


Figure 3.48: Salutations categories

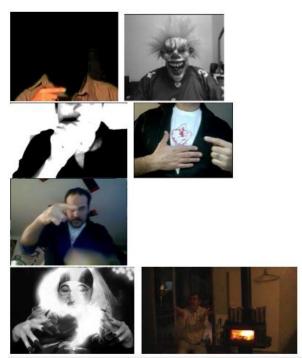


Figure 3.49: Deafvideo.TV vloggers atypical narrative elements



Figure 3.50: Vlogger face cut out frame



Figure 3.51: Vlogger masked face



Figure 3.452: Vlogger stand over camera



Figure 3.53: Vlogger's face obscured by special effects



Figure 3.54: Vlogger's face obscured by shadows

Chapter 4 Figures



4.0 Figure 4.0: Skype interview example



4.1 Figure 4.1: Interview set up example with camera on participant



4.2 Figure 4.2: Sony Handycam HD Camera set up on tripod



4.4 Figure 4.4: Negative example of theme



4.3 Figure 4.3: Positive example of theme

Chapter 5 Figures

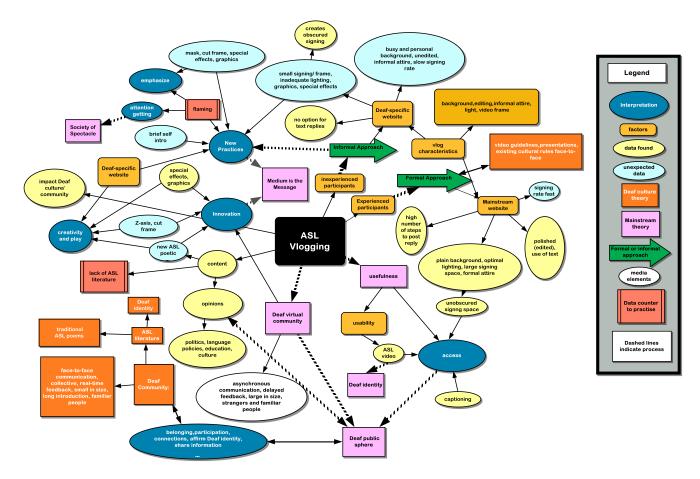


Figure 5.0: Conceptual framework of vlogging behaviour and attitudes

The dark blue ovals with white text represent interpretations of data and theories. The gold rectangles with rounded edges represent factors analyzed for vlogs and opinions. The yellow ovals are data and the light blue ovals are unexpected data. The dark orange rectangles represent Deaf culture theory and elements. The green arrows represent vlogging behaviour and attitude in formal/informal approach by participants. The purple squares represent a new concept derived from the combination of Deaf culture elements and visual media theories. Arrows are used to indicate the property of having, showing, or by. Dashed arrows indicate process (e.g. application of theory



Figure 5.1: Photo taken at Deaf social event.

One person is standing on a table, and next to this person, a second person is standing on a chair in upper right corner of photo image to provide improved visibility of signing while others watch. (photograph taken by author and permission is granted to include photo).

Appendix B:

RYERSON UNIVERSITY RESEARCH ETHICS BOARD

To: Ellen Hibbard

Centre of Learning Technologies

Re: REB 2011-124: Vlogging Survey: Characterize communication, cultural attitudes and motivation in Deaf people toward vlogging. Date: May 6, 2011

Dear Ellen Hibbard,

The review of your protocol REB File REB 2011-124 is now complete. The project has been approved for a one year period. Please note that before proceeding with your project, compliance with other required University approvals/certifications, institutional requirements, or governmental authorizations may be required.

This approval may be extended after one year upon request. Please be advised that if the project is not renewed, approval will expire and no more research involving humans may take place. If this is a funded project, access to research funds may also be affected.

Please note that REB approval policies require that you adhere strictly to the protocol as last reviewed by the REB and that any modifications must be approved by the Board before they can be implemented. Adverse or unexpected events must be reported to the REB as soon as possible with an indication from the Principal Investigator as to how, in the view of the Principal Investigator, these events affect the continuation of the protocol.

Finally, if research subjects are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and approvals of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research.

Please quote your REB file number (REB 2011-124) on future correspondence. Congratulations and best of luck in conducting your research.

hang

Nancy Walton, Ph.D. Chair, Research Ethics Board

Vlogging Study Consent Form

(English Translation of American Sign Language) Spring/Summer 2011 Vlogging Interview/Questionnaire Study by Ellen Hibbard PhD Candidate from Centre of Learning Technologies at Ryerson University

Video: This is video that explains how you give consent to participate in the vlogging interview/questionnaire study. By giving consent you agree to participate in the interview/questionnaire study and have your answers videotaped. Information from your answers will be collected for research purposes. This consent also gives permission for your answers to be videotaped. Some images from the videotaped answers will be used in research papers and ASL video research paper for giving examples.

The risks associated with the study are minimal. You might feel uncomfortable or fatigued while responding to the questions. If you feel tired or uncomfortable, you may take a break to rest or discontinue participation in the study either temporarily or permanently. You may also feel uncomfortable being videotaped. We will turn on the camera when the study starts but after consent so that you can become use to it being on. If that does not help, then we will stop the study.

Benefits: It is not foreseen that you will personally benefit from participation in this study other than talking about your interest in vlogging. However, the results from this research will contribute to the development of a new way to thinking about how vlogging affects to deaf culture.

Confidentiality: All data will remain confidential; will be secured at the Centre for Learning Technologies at Ryerson University and destroyed after five years. Data will only be presented in summary form and no one individual will be identified. Number codes will be used to link data with personal information. We will also be recording the study on video. We will not use this footage in any public setting without your permission, and the footage will be stored on our password protected lab servers.

<u>Voluntary Nature of Participation</u>: Participation in this study is voluntary. Your choice of whether or not to participate will not influence your future relations with Ryerson University. If you decide to participate, you are free to withdraw your consent and to stop your participation at any time without penalty or loss of benefits to which you are allowed. At any particular point in the study, you may refuse to answer any particular question or stop participation altogether.

Questions about the Study:

We sincerely appreciate your co-operation. If you have any questions or concerns, please do not hesitate to contact Ellen Hibbard at <u>ehibbard@ryerson.ca</u> or Deborah Fels at dfels@ryerson.ca. In addition to the student researchers and their supervisor, The Research Ethics Board may also be contacted should there be any complaints or concerns about the project, c/o Office of the Vice President, Research and Innovation, Ryerson University, 350 Victoria St., Toronto, ON M5B 2K3.

If you do give consent to participate in the study, please sign (to the video camera) that you give consent. If you do not want images from your videotaped answers to be put in research papers or ASL video paper please indicate that.

Any questions, please ask.

Vlogging Interview Questions

Feb 8 2011 (English translation)

- 1. Do you watch vlogs, if so how often?
- 2. Do you post vlogs, if so how often?
- 3. Where do you post vlogs? Do you have a preference, why?
- 4. Do you have a preference as for which website to watch vlogs?
- 5. How long do you think vlogs should be?
- 6. What kind of topics do you think are best for vlogging? Why?
- 7. Do you think any topics should be forbidden or taboo from vlogging?
- 8. What do you think is the best background in back (wall colour), office, as well clothing to wear, long sleeve, short sleeve, etc?
- 9. Can you demonstrate and show how much of the space should the vlogger show in the video? And Why?
- 10. Tell me about your frustrations in watching vlogs.
- 11. Tell me about your frustrations in posting vlogs.
- 12. Do you reply to vlogs, in English or ASL? Why?
- 13. Do you think vlogs should be captioned? Why?
- 14. How do you find vlogs? Eg. Youtube, email, etc
- 15. Do you think signing is different in vlogs, video than in person?
- 16. Do you think your signs are different in film than in person, different production or stytle? Why?
- 17. Sometimes some people in video online sign closer to the webcam than in typical observed in person, why do you think that happens?
- 18. How do you think websites show Deaf culture online, and if so , what would and how deaf identity is shown?
- 19. How does a website look 'hearing' as vs deaf?
- 20. Do you think vlogging impacts deaf community?
- 21. Do you think vlogging impacts deaf culture
- 22. Would you be interested in a Deaf centric designed website that includes visual navigation cues e.g. my work, signlink studio.
- 23. Do you think there is increased use of 'blunt', backstabbing in online videos than in person at Deaf clubs/deaf events?
- 24. Do you think vlogging is a good way to share ASL stories?
- 25. Last do you have any thoughts or comments you would like to share with me about vlogging and ASL in Deaf community?

Thank you. If any questions or concerns, email me at <u>ehibbard@ryerson.ca</u> Also if you're interested in participating in future research studies, let me know! Thank you!

Ellen Hibbard PHD Candidate Centre of Learning Technologies Ryerson University Toronto

Appendix C: Data analysis results from Chapter 3 and 4

Repeated Measures

GET FILE='\\Client\C\$\Desktop\Marrch5.sav'. DATASET NAME DataSet2 WINDOW=FRONT. SAVE OUTFILE='\\Client\C\$\Desktop\April4.sav' /COMPRESSED. SAVE OUTFILE='\\Client\C\$\Desktop\April4.sav' /COMPRESSED. GLM sec length 1 sec length 2 sec length 3 sec length 4 sec length 5 sign rate 1 sign rate 2 sign rate 3 sign_rate_4 sign_rate_5 unique_replies_1 unique_replies_2 unique_replies_3 unique_replies_4 unique_replies_5 total_replies_1 total_replies_2 total_replies_3 total_replies_4 total_replies_5 view_1 view_2 view_3 view_4 view_5 BY website /WSFACTOR=vlog 5 Polynomial /MEASURE=vlog_length sign_rate unique_replies total_replies total_views /METHOD=SSTYPE(3) /PLOT=PROFILE(website vlog) /PRINT=DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=vlog /DESIGN=website.

Notes		
Output Created		04-Apr-2012 12:09:05
Comments		
Input	Data	\\Client\C\$\Desktop\April4.sav
	Active Dataset	DataSet2
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	24
	File	24
Missing Value Handling	Definition of Missing	User-defined missing values are treated
		as missing.
	Cases Used	Statistics are based on all cases with
		valid data for all variables in the model.
Syntax		GLM sec_length_1 sec_length_2
		sec_length_3 sec_length_4
		<pre>sec_length_5 sign_rate_1 sign_rate_2</pre>
		sign_rate_3 sign_rate_4 sign_rate_5
		unique_replies_1 unique_replies_2
		unique_replies_3 unique_replies_4
		unique_replies_5 total_replies_1
1		total_replies_2

General Linear Model Notes

		total_replies_3 total_replies_4 total_replies_5 view_1 view_2 view_3 view_4 view_5 BY website /WSFACTOR=vlog 5 Polynomial /MEASURE=vlog_length sign_rate unique_replies total_replies total_views /METHOD=SSTYPE(3) /PLOT=PROFILE(website vlog) /PRINT=DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=vlog
Decement	Des second Time	/DESIGN=website.
Resources	Processor Time Elapsed Time	00 00:00:03.359 00 00:00:05.063

 $[DataSet2] \label{eq:linear} \label{eq:linear} [DataSet2] \label{eq:linear} \label{eq:linear} \label{eq:linear} \label{eq:linear} \end{tabular}$

Warnings

Box's Test of Equality of Covariance Matrices is not computed because there are fewer than two nonsingular cell covariance matrices.

Within-Subjects Factors

	-	Dependent
Measure	vlog	Variable
vlog_length	1	sec_length_1
	2	sec_length_2
	3	sec_length_3
	4	sec_length_4
	5	sec_length_5
sign_rate	1	sign_rate_1
	2	sign_rate_2
	3	sign_rate_3
	4	sign_rate_4
	5	sign_rate_5
unique_replies	1	unique_replies_1
	2	unique_replies_2
	3	unique_replies_3
	4	unique_replies_4
	5	unique_replies_5
total_replies	1	total_replies_1
	2	total_replies_2
	3	total_replies_3
	4	total_replies_4
	5	total_replies_5
total_views	1	view_1
	2	view_2
	3	view_3
	_4	view_4

Between-Subjects Factors

		Ν	
website	1	11	
	2	13	

Descriptive Statistics

	website	Mean	Std. Deviation	Ν
sec_length_1	1	290.254545	165.3995911	11
	2	289.307692	178.9421436	13
	Total	289.741667	169.1177977	24
sec_length_2	1	291.672727	188.9267429	11
_ C _	2	229.723077	186.0203311	13
	Total	258.116667	185.9222083	24
sec_length_3	1	331.218182	226.4719401	11
	2	349.384615	257.8720026	13
	Total	341.058333	238.9139738	24
sec_length_4	1	348.581818	235.3767270	11
	2	176.830769	165.9041259	13
	Total	255.550000	214.6861835	24
sec_length_5	1	414.527273	269.9944484	11
	2	309.000000	249.4998464	13
	Total	357.366667	258.9547663	24
sign_rate_1	1	1.138384	.2198267	11
	2	.888535	.1954817	13
	Total	1.003049	.2389961	24
sign_rate_2	1	1.054293	.1533945	11
	2	.904701	.1975395	13
	Total	.973264	.1907531	24
sign_rate_3	1	1.128030	.1507105	11
	2	.879744	.1970169	13
	Total	.993542	.2147024	24
sign_rate_4	1	1.095707	.1616245	11
	2	.854853	.1776873	13
	Total	.965245	.2070227	24
sign_rate_5	1	1.159949	.1709759	11
	2	.830175	.1649350	13
	Total	.981321	.2346827	24
unique_replies_1	1	6.73	6.695	11
	2	10.23	10.568	13
	Total	8.63	8.997	24
unique_replies_2	1	4.82	5.759	11
	2	7.69	5.574	13
	Total	6.38	5.724	24
unique_replies_3	1	2.64	1.859	11
	2	5.46	5.425	13
	Total	4.17	4.351	24
unique_replies_4	_1	3.00	3.688	11

	2	9.46	8.089	13
	Total	6.50	7.132	24
unique_replies_5	1	3.09	3.081	11
	2	9.46	10.541	13
	Total	6.54	8.521	24
total_replies_1	1	11.73	16.764	11
	2	18.23	16.218	13
	Total	15.25	16.443	24
total_replies_2	1	11.64	18.424	11
	2	16.08	16.735	13
	Total	14.04	17.287	24
total_replies_3	1	4.64	3.722	11
	2	8.38	9.870	13
	Total	6.67	7.778	24
total_replies_4	1	4.45	5.592	11
	2	17.85	16.955	13
	Total	11.71	14.493	24
total_replies_5	1	4.73	4.962	11
	2	31.92	31.232	13
	Total	19.46	26.669	24
view_1	1	1396.91	2187.089	11
	2	1298.15	681.509	13
	Total	1343.42	1524.655	24
view_2	1	839.64	950.581	11
	2	1210.08	966.298	13
	Total	1040.29	956.862	24
view_3	1	966.27	1415.542	11
	2	650.23	519.367	13
	Total	795.08	1018.729	24
view_4	1	988.73	1821.809	11
	2	883.62	557.327	13
	Total	931.79	1268.054	24
view_5	1	730.73	1230.054	11
	2	1211.77	1020.126	13
	Total	991.29	1122.826	24

Multivariate Tests^b

Effect			Value	F	Hypothesis df
Between Subjects	s Intercept Pillai's Trace .		.984	225.619ª	5.000
		Wilks' Lambda	.016	225.619ª	5.000
		Hotelling's Trace	62.672	225.619ª	5.000
		Roy's Largest Root	62.672	225.619ª	5.000
	website	Pillai's Trace	.648	6.622 ^a	5.000

		Wilks' Lambda	.352	6.622ª	5.000
		Hotelling's Trace	1.839	6.622 ^a	5.000
		Roy's Largest Root	1.839	6.622 ^a	5.000
Within Subjects	vlog	Pillai's Trace	.913	1.581ª	20.000
		Wilks' Lambda	.087	1.581ª	20.000
		Hotelling's Trace	10.540	1.581ª	20.000
		Roy's Largest Root	10.540	1.581 ^a	20.000
	vlog * website	Pillai's Trace	.889	1.204 ^a	20.000
		Wilks' Lambda	.111	1.204 ^a	20.000
		Hotelling's Trace	8.025	1.204 ^a	20.000
		Roy's Largest Root	8.025	1.204 ^a	20.000

Multivariate Tests^b

Effect			Error df	Sig.	Partial Eta Squared
Between Subjects	Intercept	Pillai's Trace	18.000	.000	.984
5	Ĩ	Wilks' Lambda	18.000	.000	.984
		Hotelling's Trace	18.000	.000	.984
		Roy's Largest Root	18.000	.000	.984
	website	Pillai's Trace	18.000	.001	.648
		Wilks' Lambda	18.000	.001	.648
		Hotelling's Trace	18.000	.001	.648
		Roy's Largest Root	18.000	.001	.648
Within Subjects	vlog	Pillai's Trace	3.000	.397	.913
		Wilks' Lambda	3.000	.397	.913
		Hotelling's Trace	3.000	.397	.913
		Roy's Largest Root	3.000	.397	.913
	vlog * website	Pillai's Trace	3.000	.507	.889
		Wilks' Lambda	3.000	.507	.889
		Hotelling's Trace	3.000	.507	.889
		Roy's Largest Root	3.000	.507	.889

a. Exact statistic

b. Design: Intercept + website Within Subjects Design: vlog

Mauchly's Test of Sphericity^b

Within Subjects Effect	Measure	Mauchly's W	Approx. Chi- Square	df	Sig.
vlog	vlog_length	.418	17.823	9	.038
	sign_rate	.522	13.283	9	.151
	unique_replies	.412	18.127	9	.034
	total_replies	.302	24.469	9	.004
	total_views	.205	32.385	9	.000

Mauchly's Test of Sphericity^b

	-	Epsilon ^a			
Within Subjects Effect		Greenhouse- Geisser	Huynh-Feldt	Lower-bound	
vlog	vlog_length	.702	.852	.250	
	sign_rate	.734	.897	.250	
	unique_replies	.704	.854	.250	
	total_replies	.721	.879	.250	
	total_views	.567	.664	.250	

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

b. Design: Intercept + website

Within Subjects Design: vlog

Tests of Within-Subjects Effects

Multivariate^{b,c}

Within Subjects Effect		Value	F	Hypothesis df	Error df
vlog	Pillai's Trace	.362	1.730	20.000	348.000
	Wilks' Lambda	.678	1.739	20.000	279.546
	Hotelling's Trace	.419	1.730	20.000	330.000
	Roy's Largest Root	.205	3.566 ^a	5.000	87.000
vlog * website	Pillai's Trace	.339	1.611	20.000	348.000
	Wilks' Lambda	.691	1.645	20.000	279.546
	Hotelling's Trace	.404	1.665	20.000	330.000
	Roy's Largest Root	.265	4.618ª	5.000	87.000

Multivariate^{b,c}

Within Subjects	Effect	Sig.	Partial Eta Squared
vlog			.090
-	Wilks' Lambda	.027	.093
	Hotelling's Trace	.028	.095
	Roy's Largest Root	.006	.170
vlog * website	Pillai's Trace	.048	.085
	Wilks' Lambda	.042	.088
	Hotelling's Trace	.038	.092
	Roy's Largest Root	.001	.210

a. The statistic is an upper bound on F that yields a lower bound on the significance level.

b. Design: Intercept + website

Within Subjects Design: vlog

c. Tests are based on averaged variables.

			Type III			[
			Sum of		Mean			Partial Eta
Source	Measure		Squares	df	Square	F	Sig.	Squared
log	vlog_length	Sphericity	200970.671	4	50242.668	2.000	.101	.083
108	10 <u>8</u> _101.8tm	Assumed	2007701071					
		Greenhouse-	200970.671	2.810	71526.575	2.000	.127	.083
		Geisser						
		Huynh-Feldt	200970.671	3.410	58940.349	2.000	.113	.083
		Lower-bound	200970.671	1.000	200970.671	2.000	.171	.083
	sign_rate	Sphericity	.025	4	.006	.338	.852	.015
		Assumed						
		Greenhouse-	.025	2.934	.008	.338	.794	.015
		Geisser						
		Huynh-Feldt	.025	3.588	.007	.338	.832	.015
		Lower-bound	.025	1.000	.025	.338	.567	.015
	unique_replie	Sphericity Assumed	233.898	4	58.475	3.046	.021	.122
	S		222.909	0.014	92.106	2.046	029	100
		Greenhouse- Geisser	233.898	2.814	83.106	3.046	.038	.122
		Huynh-Feldt	233.898	3.416	68.462	3.046	.028	.122
		Lower-bound	233.898	1.000	233.898	3.046	.028	.122
	total_replies	Sphericity	1871.785	4	467.946	3.272	.015	.122
	total_replies	Assumed	10/1./05	-	+07.9+0	5.272	.015	.12)
		Greenhouse-	1871.785	2.885	648.908	3.272	.028	.129
		Geisser						
		Huynh-Feldt	1871.785	3.517	532.217	3.272	.020	.129
		Lower-bound	1871.785	1.000	1871.785	3.272	.084	.129
	total_views	Sphericity	3849398.784	4	962349.696	1.547	.196	.066
		Assumed						
		Greenhouse- Geisser	3849398.784	2.267	1698103.32	1.547	.221	.066
			2840208 784	0 656	1 1449488.05	1 5 47	216	066
		Huynh-Feldt	3849398.784	2.030	1449488.05 0	1.347	.216	.066
		Lower-bound	3849398.784	1 000	0 3849398.78	1 547	.227	.066
		Lower bound	507550.704	1.000	4	1.547		.000
vlog *	vlog_length	Sphericity	143388.616	4	35847.154	1.427	.232	.061
website		Assumed						
		Greenhouse-	143388.616	2.810	51032.803	1.427	.245	.061
		Geisser				1 10-		0.51
		Huynh-Feldt		3.410	42052.778	1.427	.238	.061
		Lower-bound	143388.616	1.000		1.427	.245	.061
	sign_rate	Sphericity Assumed	.097	4	.024	1.330	.265	.057
		Greenhouse-	.097	2.934	.033	1.330	.272	.057
		Geisser	.071	2.754	.055	1.550	.212	.057
		Huynh-Feldt	.097	3.588	.027	1.330	.268	.057

		Lower-bound	.097	1.000	.097	1.330	.261	.057
	unique_replie	Sphericity	81.898	4	20.475	1.066	.378	.046
	s i i i i	Assumed						
		Greenhouse-	81.898	2.814	29.099	1.066	.367	.046
		Geisser	a					
		Huynh-Feldt		3.416	23.971	1.066	.374	.046
		Lower-bound	81.898	1.000	81.898	1.066	.313	.046
	total_replies	Sphericity Assumed	2287.052	4	571.763	3.998	.005	.154
		Greenhouse- Geisser	2287.052	2.885	792.872	3.998	.012	.154
		Huynh-Feldt	2287.052	3.517	650.293	3.998	.007	.154
		Lower-bound	2287.052	1.000	2287.052	3.998	.058	.154
	total_views	Sphericity Assumed	2784466.284	4	696116.571	1.119	.353	.048
		Greenhouse- Geisser	2784466.284	2.267	1228324.65 8	1.119	.340	.048
		Huynh-Feldt	2784466.284	2.656	1048488.56 4	1.119	.345	.048
		Lower-bound	2784466.284	1.000	2784466.28 4	1.119	.302	.048
Error(vlog)	vlog_length	Sphericity Assumed	2210842.317	88	25123.208			
		Greenhouse- Geisser	2210842.317	61.814	35765.956			
		Huynh-Feldt	2210842.317	75.014	29472.373			
		Lower-bound	2210842.317	22.000	100492.833			
	sign_rate	Sphericity Assumed	1.609	88	.018			
		Greenhouse- Geisser	1.609	64.549	.025			
		Huynh-Feldt	1.609	78.945	.020			
		Lower-bound	1.609	22.000	.073			
	unique_replie	Sphericity Assumed	1689.452	88	19.198			
	-	Greenhouse- Geisser	1689.452	61.918	27.285			
		Huynh-Feldt	1689.452	75.163	22.477			
		Lower-bound	1689.452	22.000	76.793			
	total_replies	Sphericity Assumed	12584.931	88	143.011			
		Greenhouse- Geisser	12584.931	63.459	198.315			
		Huynh-Feldt	12584.931	77.373	162.653			
		Lower-bound	12584.931	22.000	572.042			
	total_views	Sphericity Assumed	54727303.13 3		621901.172			
		Greenhouse- Geisser	5 54727303.13 3	49.871	1097368.71 1			

Huynh-Feldt	54727303.1358.425 3	936705.566	
Lower-bound	54727303.1322.000 3	2487604.68 8	

Tests of Within-Subjects Contrasts

	tillii-Subjects C		Type III Sum					Partial Eta
Source	Measure	vlog	of Squares	df	Mean Square	F	Sig.	Squared
vlog	vlog_length	Linear	50784.642	1	50784.642	2.598	.121	.106
-		Quadratic	16712.862	1	16712.862	1.009	.326	.044
		Cubic	11009.429	1	11009.429	.331	.571	.015
		Order 4	122463.738	1	122463.738	3.935	.060	.152
	sign_rate	Linear	.004	1	.004	.124	.728	.006
	0 =	Quadratic	.005	1	.005	.417	.525	.019
		Cubic	.000	1	.000	.022	.884	.001
		Order 4	.015	1	.015	.863	.363	.038
	unique_replie		46.774	1	46.774	2.529	.126	.103
	s	Quadratic	135.652	1	135.652	4.593	.043	.103
		Cubic	11.056	1	11.056	.736	.400	.032
		Order 4	40.416	1	40.416	.730 2.942	.400	.032
	total mambias	Linear	40.410 37.867	1	40.410 37.867	.166	.687	.007
	total_replies			1		.100 7.995	.087	.007 .267
		Quadratic	1390.574	1	1390.574	l		
		Cubic	182.839	1	182.839	1.497	.234	.064
		Order 4	260.506	1	260.506	5.422	.029	.198
	total_views	Linear	1686695.734	1	1686695.734	5.618	.027	.203
		Quadratic	1912896.192	1	1912896.192	2.183	.154	.090
		Cubic	94299.485	1	94299.485	.164	.690	.007
		Order 4	155507.373	1	155507.373	.211	.650	.010
vlog *	vlog_length	Linear	60618.242	1	60618.242	3.101	.092	.124
website		Quadratic	103.313	1	103.313	.006	.938	.000
		Cubic	7882.963	1	7882.963	.237	.631	.011
	· .	Order 4	74784.099	1	74784.099	2.403	.135	.098
	sign_rate	Linear	.038	1	.038	1.166	.292	.050
		Quadratic Cubic	.032 .006	1	.032 .006	2.600 .573	.121 .457	.106 .025
		Order 4	.008 .022	1	.006 .022	.575 1.228	.437 .280	.025 .053
	unique_replie		.022 51.774	1	.022 51.774	2.799	.108	.033
	s		9.652	1 1	9.652	.327	.108	.015
	5	Cubic	11.056	1	11.056	.736	.400	.013
		Order 4	9.416	1	9.416	.685	.417	.032
	total_replies	Linear	1509.650	1	1509.650	6.624	.017	.231
		Quadratic	753.252	1	753.252	4.331	.049	.164
		Cubic	4.639	1	4.639	.038	.847	.002
		Order 4	19.511	1	19.511	.406	.531	.018
	total_views	Linear	278798.401	1	278798.401	.929	.346	.041
		Quadratic	544721.287	1	544721.287	.622	.439	.027
		Cubic	1396431.485	1	1396431.485	2.426	.134	.099

		Order 4	564515.111	1	564515.111	.768	.390	.034
Error(vlog)	vlog_length	Linear	430103.302	22	19550.150			
		Quadratic	364425.891	22	16564.813			
		Cubic	731667.853	22	33257.630			
		Order 4	684645.271	22	31120.240			
	sign_rate	Linear	.709	22	.032			
		Quadratic	.267	22	.012			
		Cubic	.241	22	.011			
		Order 4	.393	22	.018			
	unique_replie	Linear	406.922	22	18.496			
	S	Quadratic	649.821	22	29.537			
		Cubic	330.477	22	15.022			
		Order 4	302.232	22	13.738			
	total_replies	Linear	5013.933	22	227.906			
		Quadratic	3826.557	22	173.934			
		Cubic	2687.424	22	122.156			
		Order 4	1057.017	22	48.046			
te	total_views	Linear	6604785.449	22	300217.520			
		Quadratic	19281999.808	22	876454.537			
		Cubic	12660944.978	22	575497.499			
		Order 4	16179572.898	22	735435.132			

Levene's Test of Equality of Error Variances^a

	F	df1	df2	Sig.
sec_length_1	.353	1	22	.559
sec_length_2	.000	1	22	.985
sec_length_3	.442	1	22	.513
sec_length_4	3.857	1	22	.062
sec_length_5	.002	1	22	.965
sign_rate_1	.015	1	22	.903
sign_rate_2	.267	1	22	.610
sign_rate_3	.649	1	22	.429
sign_rate_4	.085	1	22	.773
sign_rate_5	.492	1	22	.491
unique_replies_1	1.369	1	22	.255
unique_replies_2	.113	1	22	.740
unique_replies_3	15.821	1	22	.001
unique_replies_4	10.034	1	22	.004
unique_replies_5	19.155	1	22	.000
total_replies_1	1.787	1	22	.195
total_replies_2	.029	1	22	.866
total_replies_3	3.570	1	22	.072
total_replies_4	7.079	1	22	.014
total_replies_5	33.939	1	22	.000
view_1	3.966	1	22	.059
view_2	.003	1	22	.958
view_3	3.799	1	22	.064
view_4	1.752	1	22 22	.199
view_5	.355	1	22	.557

Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept + website Within Subjects Design: vlog

Tests of Between-Subjects Effects Transformed Variable:Average

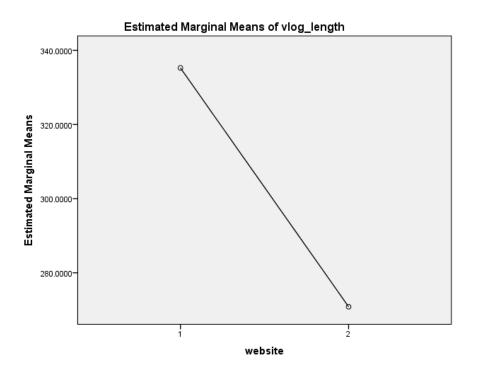
		Type III Sum of			
Source	Measure	Squares	df	Mean Square	F
Intercept	vlog_length	10944188.599	1	10944188.599	83.303
	sign_rate	117.608	1	117.608	1301.490
	unique_replies	4666.935	1	4666.935	28.999
	total_replies	20028.818	1	20028.818	25.681
	total_views	1.234E8	1	1.234E8	25.436
website	vlog_length	123563.207	1	123563.207	.941
	sign_rate	1.769	1	1.769	19.575
	unique_replies	578.601	1	578.601	3.595
	total_replies	3641.552	1	3641.552	4.669
	total_views	131012.950	1	131012.950	.027
Error	vlog_length	2890302.644	22	131377.393	
	sign_rate	1.988	22	.090	
	unique_replies	3540.590	22	160.936	
	total_replies	17158.173	22	779.917	
	total_views	1.067E8	22	4851386.144	

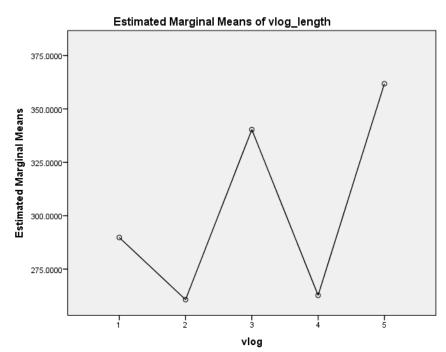
Tests of Between-Subjects Effects Transformed Variable:Average

			Partial Eta
Source	Measure	Sig.	Squared
Intercept	vlog_length	.000	.791
	sign_rate	.000	.983
	unique_replies	.000	.569
	total_replies	.000	.539
	total_views	.000	.536
website	vlog_length	.343	.041
	sign_rate	.000	.471
	unique_replies	.071	.140
	total_replies	.042	.175
	total_views	.871	.001

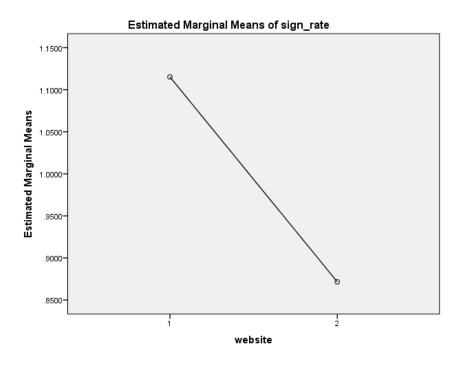
Profile Plots

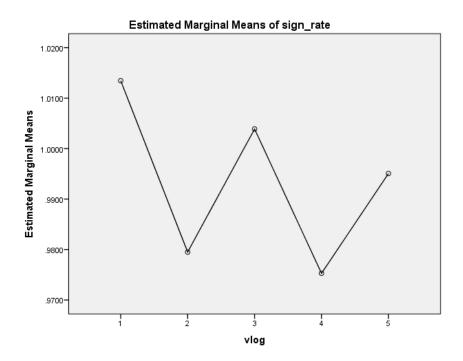
vlog_length



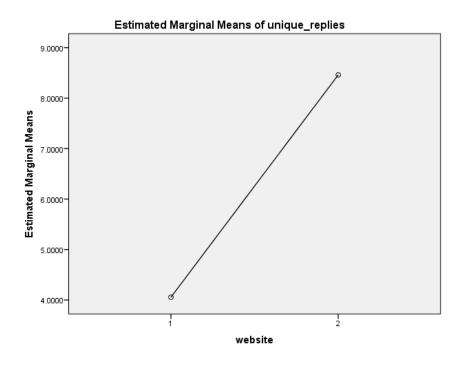


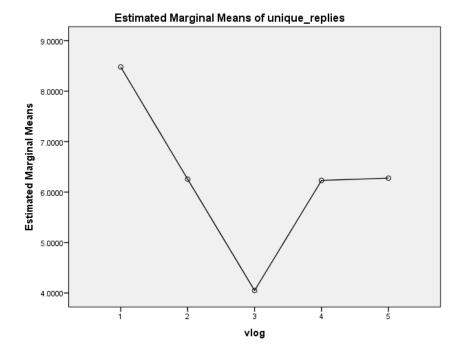
sign_rate



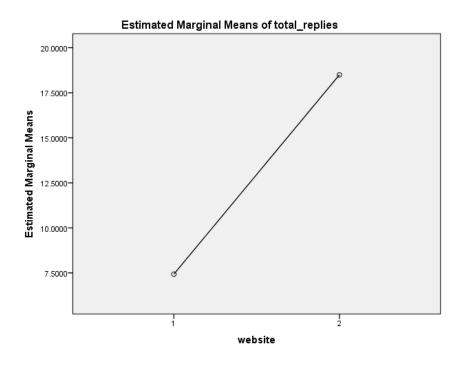


unique_replies

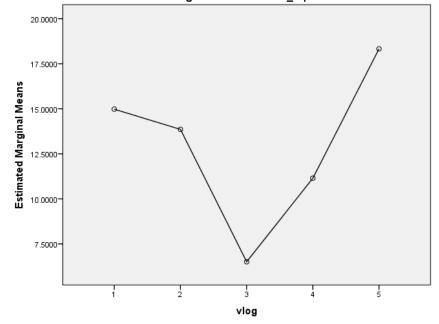




total_replies

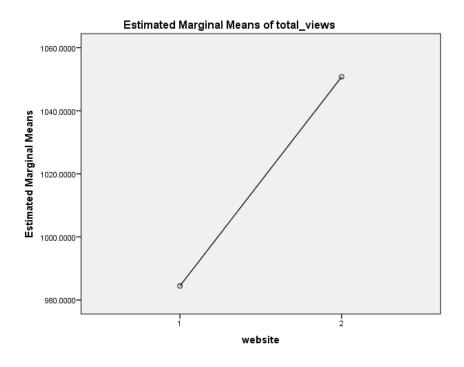


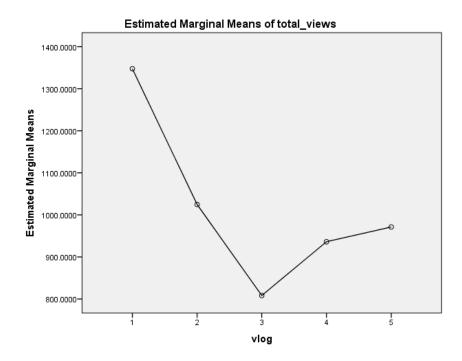
Estimated Marginal Means of total_replies



117

total_views





SAVE OUTFILE='\\Client\C\$\Desktop\April4.sav' /COMPRESSED. GET FILE='\\Client\C\$\Desktop\Marrch5.sav'. DATASET NAME DataSet3 WINDOW=FRONT. SAVE OUTFILE='\\Client\C\$\Desktop\Marrch5.sav' /COMPRESSED. SAVE OUTFILE='\\Client\C\$\Desktop\Marrch5.sav' /COMPRESSED.

SAVE OUTFILE='\\Client\C\$\Desktop\April4_deletedviewsonly.sav' /COMPRESSED. GLM sec_length_1 sec_length_2 sec_length_3 sec_length_4 sec_length_5 sign_rate_1 sign_rate_2 sign_rate_3 sign_rate_4 sign_rate_5 unique_replies_1 unique_replies_2 unique_replies_3 unique_replies_4 unique_replies_5 total_replies_1 total_replies_2 total_replies_3 total_replies_4 total_replies_5 BY website /WSFACTOR=vlog 5 Polynomial /MEASURE=vlog_length sign_rate unique_replies total_replies /METHOD=SSTYPE(3) /PLOT=PROFILE(vlog website) /PRINT=DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=vlog /DESIGN=website.

General Linear Model

Notes		-
Output Created		04-Apr-2012 12:45:48
Comments		
Input	Data	\\Client\C\$\Desktop\April4_deletedview
		sonly.sav
	Active Dataset	DataSet3
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	26
Missing Value Handling	Definition of Missing	User-defined missing values are treated
		as missing.
	Cases Used	Statistics are based on all cases with
		valid data for all variables in the model.
Syntax		GLM sec_length_1 sec_length_2
		<pre>sec_length_3 sec_length_4</pre>
		<pre>sec_length_5 sign_rate_1 sign_rate_2</pre>
		<pre>sign_rate_3 sign_rate_4 sign_rate_5</pre>
		unique_replies_1 unique_replies_2
		unique_replies_3 unique_replies_4
		unique_replies_5 total_replies_1
		total_replies_2
		total_replies_3 total_replies_4
		total_replies_5 BY website
		/WSFACTOR=vlog 5 Polynomial
	1	10

		/MEASURE=vlog_length sign_rate unique_replies total_replies /METHOD=SSTYPE(3) /PLOT=PROFILE(vlog website) /PRINT=DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=vlog /DESIGN=website.
Resources	Processor Time	00 00:00:01.641
	Elapsed Time	00 00:00:01.954

Warnings

Box's Test of Equality of Covariance Matrices is not computed because there are fewer than two nonsingular cell covariance matrices.

Within-Subjects Factors

	-	Dependent
Measure	vlog	Variable
vlog_length	1	sec_length_1
	2	sec_length_2
	3	sec_length_3
	4	sec_length_4
	5	sec_length_5
sign_rate	1	sign_rate_1
	2	sign_rate_2
	3	sign_rate_3
	4	sign_rate_4
	5	sign_rate_5
unique_replies	1	unique_replies_1
	2	unique_replies_2
	3	unique_replies_3
	4	unique_replies_4
	5	unique_replies_5
total_replies	1	total_replies_1
	2	total_replies_2
	3	total_replies_3
	4	total_replies_4
	5	total_replies_5

Between-Subjects Factors

		Ν	
website	1	13	
	2	13	

Descriptive Statistics

website	Mean	Std. Deviation	N
	120		

	-		-	
sec_length_1	1	278.446154	154.0401929	13
	2	289.307692	178.9421436	13
	Total	283.876923	163.6766185	26
sec_length_2	1	294.723077	175.6509140	13
	2	229.723077	186.0203311	13
	Total	262.223077	180.3268351	26
sec_length_3	1	304.723077	218.9474296	13
	2	349.384615	257.8720026	13
	Total	327.053846	235.4737017	26
sec_length_4	1	321.876923	224.5421941	13
	2	176.830769	165.9041259	13
	Total	249.353846	207.0816288	26
sec_length_5	1	415.753846	277.7351995	13
	2	309.000000	249.4998464	13
	Total	362.376923	264.3271205	26
sign_rate_1	1	1.132479	.2123846	13
	2	.888535	.1954817	13
	Total	1.010507	.2355121	26
sign_rate_2	1	1.060043	.1475169	13
0	2	.904701	.1975395	13
	Total	.982372	.1882816	26
sign_rate_3	1	1.101923	.1534806	13
0	2	.879744	.1970169	13
	Total	.990833	.2068166	26
sign_rate_4	1	1.087393	.1574317	13
<i>c</i> – –	2	.854853	.1776873	13
	Total	.971123	.2027585	26
sign_rate_5	1	1.148162	.1600160	13
<i>c</i> – –	2	.830175	.1649350	13
	Total	.989169	.2272408	26
unique_replies_1	1	6.92	6.601	13
	2	10.23	10.568	13
	Total	8.58	8.796	26
unique_replies_2	1	4.77	5.294	13
	2	7.69	5.574	13
	Total	6.23	5.530	26
unique_replies_3	1	4.15	5.097	13
	2	5.46	5.425	13
	Total	4.81	5.200	26
unique_replies_4	1	3.54	4.054	13
	2	9.46	8.089	13
	Total	6.50	6.958	26
unique_replies_5	1	2.92	2.871	13
	2	9.46	10.541	13
	Total	6.19	8.271	26
total_replies_1	1	12.00	16.021	13
· -	2	18.23	16.218	13
	Total	15.12	16.110	26
total_replies_2	1	10.62	17.022	13
<u> </u>	-	-	•	•

	2	16.08	16.735	13
	Total	13.35	16.771	26
total_replies_3	1	6.15	6.349	13
	2	8.38	9.870	13
	Total	7.27	8.210	26
total_replies_4	1	4.77	5.480	13
	2	17.85	16.955	13
	Total	11.31	14.031	26
total_replies_5	1	4.38	4.646	13
	2	31.92	31.232	13
	Total	18.15	25.995	26

Multivariate Tests^b

Effect			Value	F	Hypothesis df
Between Subjects	Intercept	Pillai's Trace	.985	352.421ª	4.000
		Wilks' Lambda	.015	352.421ª	4.000
		Hotelling's Trace	67.128	352.421ª	4.000
		Roy's Largest Root	67.128	352.421ª	4.000
	website	Pillai's Trace	.640	9.326ª	4.000
		Wilks' Lambda	.360	9.326ª	4.000
		Hotelling's Trace	1.776	9.326ª	4.000
		Roy's Largest Root	1.776	9.326 ^a	4.000
Within Subjects	vlog	Pillai's Trace	.789	2.108 ^a	16.000
		Wilks' Lambda	.211	2.108 ^a	16.000
		Hotelling's Trace	3.748	2.108 ^a	16.000
		Roy's Largest Root	3.748	2.108 ^a	16.000
	vlog * website	Pillai's Trace	.812	2.432 ^a	16.000
		Wilks' Lambda	.188	2.432ª	16.000
		Hotelling's Trace	4.323	2.432ª	16.000
		Roy's Largest Root	4.323	2.432ª	16.000

Multivariate Tests^b

Effect.			Ennen 16	C: -	Partial Eta
Effect		-	Error df	Sig.	Squared
Between Subjects	Intercept	Pillai's Trace	21.000	.000	.985
		Wilks' Lambda	21.000	.000	.985
		Hotelling's Trace	21.000	.000	.985
		Roy's Largest Root	21.000	.000	.985
	website	Pillai's Trace	21.000	.000	.640
		Wilks' Lambda	21.000	.000	.640
		Hotelling's Trace	21.000	.000	.640
		Roy's Largest Root	21.000	.000	.640
Within Subjects	vlog	Pillai's Trace	9.000	.129	.789
		Wilks' Lambda	9.000	.129	.789
		Hotelling's Trace	9.000	.129	.789
		Roy's Largest Root	9.000	.129	.789
	vlog * website	Pillai's Trace	9.000	.089	.812

Wilks' Lambda	9.000	.089	.812
Hotelling's Trace	9.000	.089	.812
Roy's Largest Root	9.000	.089	.812

a. Exact statistic

b. Design: Intercept + website

Within Subjects Design: vlog

Mauchly's Test of Sphericity^b

Within Subjects Effect	Measure	Mauchly's W	Approx. Chi- Square	df	Sig.
vlog	vlog_length	.578	12.304	9	.198
	sign_rate	.630	10.340	9	.325
	unique_replies	.500	15.551	9	.078
	total_replies	.327	25.074	9	.003

Mauchly's Test of Sphericity^b

	-	Epsilon ^a		
Within Subjects Effect	Measure	Greenhouse- Geisser	Huynh-Feldt	Lower-bound
vlog	vlog_length	.763	.923	.250
	sign_rate	.793	.966	.250
	unique_replies	.766	.928	.250
	total_replies	.733	.881	.250

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

b. Design: Intercept + website

Within Subjects Design: vlog

Tests of Within-Subjects Effects Multivariate^{b,c}

Within Subjects	Effect	Value	F	Hypothesis df	Error df
vlog	Pillai's Trace	.320	2.088	16.000	384.000
	Wilks' Lambda	.710	2.114	16.000	284.757
	Hotelling's Trace	.368	2.106	16.000	366.000
	Roy's Largest Root	.202	4.853ª	4.000	96.000
vlog * website	Pillai's Trace	.292	1.888	16.000	384.000
	Wilks' Lambda	.725	1.976	16.000	284.757
	Hotelling's Trace	.357	2.039	16.000	366.000
	Roy's Largest Root	.280	6.713ª	4.000	96.000

Multivariate^{b,c}

			Partial Eta
Within Subjects Effect		Sig.	Squared
vlog	Pillai's Trace	.008	.080

	Wilks' Lambda	.008	.082
	Hotelling's Trace	.008	.084
	Roy's Largest Root	.001	.168
vlog * website	Pillai's Trace	.020	.073
	Wilks' Lambda	.015	.077
	Hotelling's Trace	.010	.082
	Roy's Largest Root	.000	.219

a. The statistic is an upper bound on F that yields a lower bound on the significance level.

b. Design: Intercept + website Within Subjects Design: vlog

c. Tests are based on averaged variables.

Univariate Tests

	-		Type III Sum of			
Source	Measure		Squares	df	Mean Square	F
vlog	vlog_length	Sphericity Assumed	229558.643	4	57389.661	2.253
		Greenhouse-Geisser	229558.643	3.053	75192.250	2.253
		Huynh-Feldt	229558.643	3.694	62144.870	2.253
		Lower-bound	229558.643	1.000	229558.643	2.253
	sign_rate	Sphericity Assumed	.022	4	.005	.298
		Greenhouse-Geisser	.022	3.171	.007	.298
		Huynh-Feldt	.022	3.862	.006	.298
		Lower-bound	.022	1.000	.022	.298
	unique_replies	Sphericity Assumed	190.769	4	47.692	2.430
		Greenhouse-Geisser	190.769	3.065	62.238	2.430
		Huynh-Feldt	190.769	3.711	51.403	2.430
		Lower-bound	190.769	1.000	190.769	2.430
	total_replies	Sphericity Assumed	1738.231	4	434.558	3.209
		Greenhouse-Geisser	1738.231	2.931	593.042	3.209
		Huynh-Feldt	1738.231	3.522	493.520	3.209
		Lower-bound	1738.231	1.000	1738.231	3.209
vlog * website	vlog_length	Sphericity Assumed	163275.257	4	40818.814	1.602
		Greenhouse-Geisser	163275.257	3.053	53481.035	1.602
		Huynh-Feldt	163275.257	3.694	44200.992	1.602
		Lower-bound	163275.257	1.000	163275.257	1.602
	sign_rate	Sphericity Assumed	.088	4	.022	1.212
		Greenhouse-Geisser	.088	3.171	.028	1.212
		Huynh-Feldt	.088	3.862	.023	1.212
		Lower-bound	.088	1.000	.088	1.212
	unique_replies	Sphericity Assumed	123.692	4	30.923	1.576
		Greenhouse-Geisser	123.692	3.065	40.354	1.576
		Huynh-Feldt	123.692	3.711	33.329	1.576
		Lower-bound	123.692	1.000	123.692	1.576
	total_replies	Sphericity Assumed	2652.723	4	663.181	4.898
		Greenhouse-Geisser	2652.723	2.931	905.044	4.898
		Huynh-Feldt	2652.723	3.522	753.164	4.898

		Lower-bound	2652.723	1.000	2652.723	4.898
Error(vlog)	vlog_length	Sphericity Assumed	2445693.796	96	25475.977	
		Greenhouse-Geisser	2445693.796	73.271	33378.766	
		Huynh-Feldt	2445693.796	88.654	27586.873	
		Lower-bound	2445693.796	24.000	101903.908	
	sign_rate	Sphericity Assumed	1.735	96	.018	
		Greenhouse-Geisser	1.735	76.102	.023	
		Huynh-Feldt	1.735	92.690	.019	
		Lower-bound	1.735	24.000	.072	
	unique_replies	Sphericity Assumed	1883.938	96	19.624	
		Greenhouse-Geisser	1883.938	73.564	25.609	
		Huynh-Feldt	1883.938	89.070	21.151	
		Lower-bound	1883.938	24.000	78.497	
	total_replies	Sphericity Assumed	12998.646	96	135.403	
		Greenhouse-Geisser	12998.646	70.345	184.784	
		Huynh-Feldt	12998.646	84.531	153.775	
		Lower-bound	12998.646	24.000	541.610	

Univariate Tests

	-			Partial Eta
Source	Measure		Sig.	Squared
vlog	vlog_length	Sphericity Assumed	.069	.086
		Greenhouse-Geisser	.088	.086
		Huynh-Feldt	.075	.086
		Lower-bound	.146	.086
	sign_rate	Sphericity Assumed	.878	.012
		Greenhouse-Geisser	.837	.012
		Huynh-Feldt	.873	.012
		Lower-bound	.590	.012
	unique_replies	Sphericity Assumed	.053	.092
		Greenhouse-Geisser	.071	.092
		Huynh-Feldt	.058	.092
		Lower-bound	.132	.092
	total_replies	Sphericity Assumed	.016	.118
		Greenhouse-Geisser	.029	.118
		Huynh-Feldt	.021	.118
		Lower-bound	.086	.118
vlog * website	vlog_length	Sphericity Assumed	.180	.063
		Greenhouse-Geisser	.195	.063
		Huynh-Feldt	.185	.063
		Lower-bound	.218	.063
	sign_rate	Sphericity Assumed	.311	.048
		Greenhouse-Geisser	.312	.048
		Huynh-Feldt	.311	.048
		Lower-bound	.282	.048
	unique_replies	Sphericity Assumed	.187	.062
		Greenhouse-Geisser	.202	.062

		Huynh-Feldt	.191	.062
		Lower-bound	.221	.062
	total_replies	Sphericity Assumed	.001	.169
		Greenhouse-Geisser	.004	.169
		Huynh-Feldt	.002	.169
		Lower-bound	.037	.169
Error(vlog)	vlog_length	Sphericity Assumed		
		Greenhouse-Geisser		
		Huynh-Feldt		
		Lower-bound		
	sign_rate	Sphericity Assumed		
		Greenhouse-Geisser		
		Huynh-Feldt		
		Lower-bound		
	unique_replies	Sphericity Assumed		
		Greenhouse-Geisser		
		Huynh-Feldt		
		Lower-bound		
	total_replies	Sphericity Assumed		
	-	Greenhouse-Geisser		
		Huynh-Feldt		
		Lower-bound		

Tests of Within-Subjects Contrasts

Source	Measure	vlog	Type III Sum of Squares	df	Mean Square	F		Partial Eta Squared
vlog	vlog_length	Linear	54011.564	1	54011.564	2.698	.114	.101
		Quadratic	29870.458	1	29870.458	1.557	.224	.061
		Cubic	28250.708	1	28250.708	.839	.369	.034
		Order 4	117425.913	1	117425.913	4.047	.056	.144
	sign_rate	Linear	.008	1	.008	.254	.619	.010
		Quadratic	.008	1	.008	.652	.427	.026
		Cubic	3.490E-6	1	3.490E-6	.000	.987	.000
		Order 4	.006	1	.006	.356	.556	.015
	unique_replies	Linear	52.650	1	52.650	3.031	.094	.112
		Quadratic	96.069	1	96.069	3.210	.086	.118
		Cubic	22.215	1	22.215	1.435	.243	.056
		Order 4	19.835	1	19.835	1.262	.272	.050
	total_replies	Linear	42.404	1	42.404	.201	.658	.008
	-	Quadratic	1388.794	1	1388.794	8.640	.007	.265
		Cubic	131.635	1	131.635	1.124	.300	.045
		Order 4	175.398	1	175.398	3.352	.080	.123
vlog *	vlog_length	Linear	64609.700	1	64609.700	3.227	.085	.119
website		Quadratic	2344.523	1	2344.523	.122	.730	.005
		Cubic	1172.788	1	1172.788	.035	.854	.001
			95148.246	1		3.279	.083	.120
	sign_rate	Linear	.033	1	.033	1.110	.303	.044

		Quadratic	.039	1	.039	3.364	.079	.123
		Cubic	.004	1	.004	.323	.575	.013
		Order 4	.011	1	.011	.615	.441	.025
	unique_replies	Linear	58.188	1	58.188	3.350	.080	.122
		Quadratic	31.453	1	31.453	1.051	.316	.042
		Cubic	4.985	1	4.985	.322	.576	.013
		Order 4	29.066	1	29.066	1.849	.187	.072
	total_replies	Linear	1640.035	1	1640.035	7.755	.010	.244
		Quadratic	920.992	1	920.992	5.730	.025	.193
			24.004	1	24.004	.205	.655	.008
			67.693	1	67.693	1.293	.267	.051
Error(vlog)	vlog_length	Linear	480500.860	24	20020.869			
		Quadratic	460396.502	24	19183.188			
		Cubic	808369.980	24	33682.083			
		Order 4	696426.454	24	29017.769			
	sign_rate	Linear	.714	24	.030			
		Quadratic	.282	24	.012			
		Cubic	.312	24	.013			
		Order 4	.427	24	.018			
	unique_replies	Linear	416.862	24	17.369			
		Quadratic	718.264	24	29.928			
		Cubic	371.600	24	15.483			
		Order 4	377.213	24	15.717			
	total_replies	-	5075.262	24	211.469			
	- 1		3857.714	24	160.738			
		-	2809.662	24	117.069			
		Order 4	1256.009	24	52.334			

Levene's Test of Equality of Error Variances^a

	F	df1	df2	Sig.
sec_length_1	.774	1	24	.388
sec_length_2	.074	1	24	.788
sec_length_3	.876	1	24	.359
sec_length_4	3.305	1	24	.082
sec_length_5	.129	1	24	.722
sign_rate_1	.013	1	24	.909
sign_rate_2	.391	1	24	.538
sign_rate_3	.643	1	24	.430
sign_rate_4	.058	1	24	.812
sign_rate_5	.211	1	24	.650
unique_replies_1	1.421	1	24	.245
unique_replies_2	.415	1	24	.525
unique_replies_3	1.589	1	24	.220
unique_replies_4	9.111	1	24	.006
unique_replies_5	23.837	1	24	.000
total_replies_1	1.879	1	24	.183
total_replies_2	.267	1	24	.610
total_replies_3	1.400	1	24	.248
total_replies_4	8.404	1	24	.008
total_replies_5	41.400	1	24	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups. a. Design: Intercept + website Within Subjects Design: vlog

Tests of Between-Subjects Effects

Transformed	Variable:Average

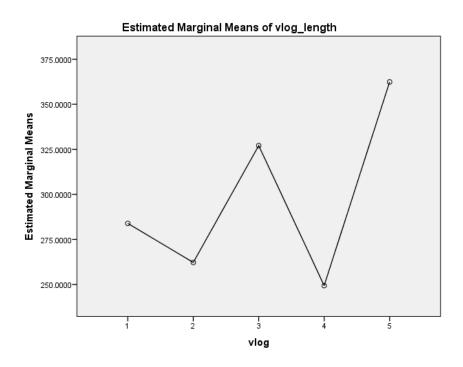
Source	Measure	Type III Sum of Squares	df	Mean Square	F
Intercept	vlog_length	11465388.069	1	11465388.069	92.031
	sign_rate	127.105	1	127.105	1486.044
	unique_replies	5427.692	1	5427.692	34.572
	total_replies	22100.192	1	22100.192	30.305
website	vlog_length	88745.320	1	88745.320	.712
	sign_rate	1.786	1	1.786	20.877
	unique_replies	520.000	1	520.000	3.312
	total_replies	3866.777	1	3866.777	5.302
Error	vlog_length	2989967.995	24	124582.000	
	sign_rate	2.053	24	.086	
	unique_replies	3767.908	24	156.996	
	total_replies	17502.431	24	729.268	

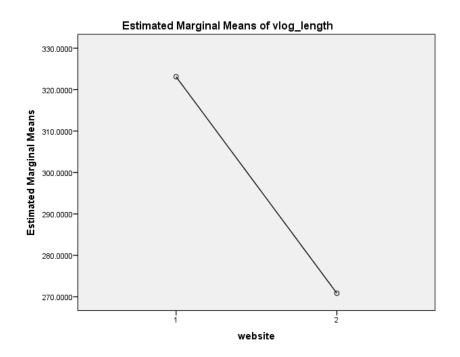
Tests of Between-Subjects Effects Transformed Variable:Average

Source	Measure	Sig.	Partial Eta Squared
Intercept	vlog_length	.000	.793
	sign_rate	.000	.984
	unique_replies	.000	.590
	total_replies	.000	.558
website	vlog_length	.407	.029
	sign_rate	.000	.465
	unique_replies	.081	.121
	total_replies	.030	.181

Profile Plots

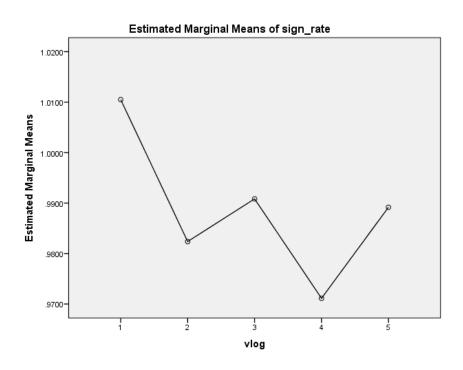
vlog_length

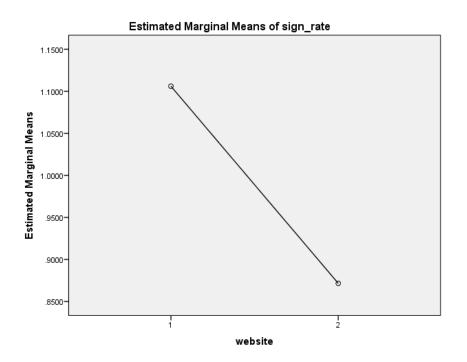




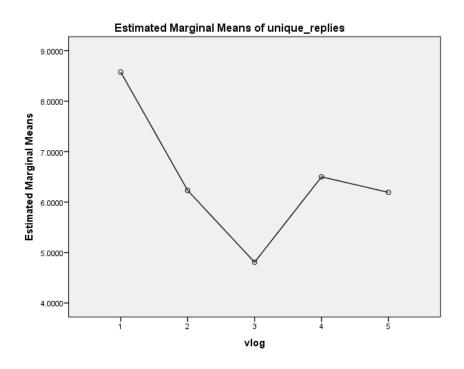
129

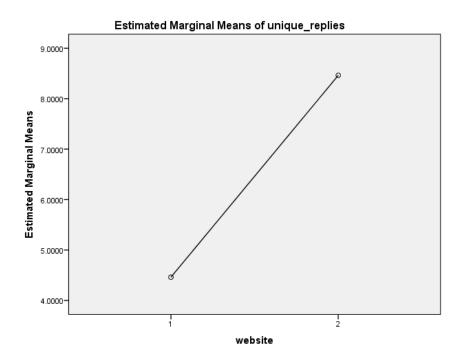
sign_rate



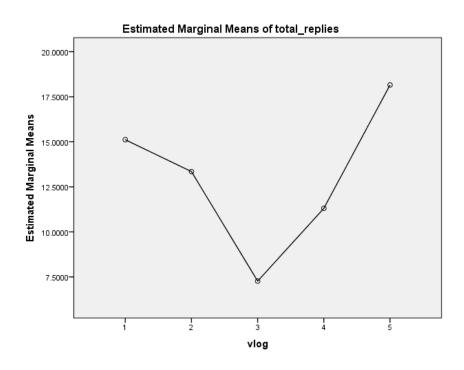


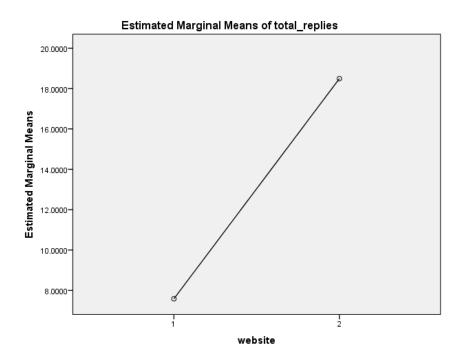
unique_replies





total_replies





SAVE OUTFILE='\\Client\C\$\Desktop\April4_deletedviewsonly.sav' /COMPRESSED. GET FILE='\\Client\C\$\Desktop\Marrch5.sav'. DATASET NAME DataSet4 WINDOW=FRONT.

SAVE OUTFILE='\\Client\C\$\Desktop\April4_deletedYouTube_participant1_3.sav' /COMPRESSED. USE ALL. COMPUTE filter_\$=(website = 2). VARIABLE LABELS filter_\$ 'website = 2 (FILTER)'. VALUE LABELS filter_\$ 0 'Not Selected' 1 'Selected'. FORMATS filter_\$ (f1.0). FILTER BY filter_\$. EXECUTE.

Paired T Tests

Paired Samples Statistics

		Mean	Ν	Std. Deviation	Std. Error Mean
Pair 1	sign_rate_1	1.010507	26	.2355121	.0461877
	sign_rate_4	.971123	26	.2027585	.0397642
Pair 2	sign_rate_5	.989169	26	.2272408	.0445656
	sign_rate_1	1.010507	26	.2355121	.0461877
Pair 3	sec_length_1	283.876923	26	163.6766185	32.0996258
	sec_length_5	362.376923	26	264.3271205	51.8388133
Pair 4	unique_replies_1	8.58	26	8.796	1.725
	unique_replies_3	4.81	26	5.200	1.020

Paired Samples Correlations

-		N	Correlation	Sig.
Pair 1	sign_rate_1 & sign_rate_4	26	.459	.018
Pair 2	sign_rate_5 & sign_rate_1	26	.546	.004
Pair 3	sec_length_1 & sec_length_5	26	.504	.009
Pair 4	unique_replies_1 &	26	.595	.001
	unique_replies_3			

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	sign_rate_1 - sign_rate_4	.0393836	.2297457	.0450568	0534127	.1321799	.874	25	.390
Pair 2	sign_rate_5 - sign_rate_1	0213384	.2205637	.0432561	1104260	.0677492	493	25	.626
Pair 3	sec_length_1 - sec_length_5	-78.5000000	230.4080085	45.1867281	-171.5638087	14.5638087	-1.737	25	.095
Pair 4	unique_replies_1 -	3.769	7.073	1.387	.912	6.626	2.717	25	.012
	unique_replies_3								

10 paired-samples t-tests were conducted to compare sign rate 1 and sign rate 2; sign rate 3 and sign rate 4; sign rate 5 and sign rate 5 and sign rate 2; sign rate 1 and sign rate 3; sign rate 5 and sign rate 3; sign rate 4; sign rate 4; sign rate 4; sign rate 2 and sign rate 3; sign rate 2 and sign rate 4.

Pair 1

There was not a significant difference in the scores for sign rate 1 (M=1.01, SD=0.23) and sign rate 2 (M= 0.98, SD= 0.188); t(25)= .814, p=.424.

A paired-samples t-test was conducted to compare sign rate 3 and sign rate 4.

Pair 2

There was not a significant difference in the scores for sign rate 3 (M=0.99, SD=0.21) and sign rate 4 (M=0.97, SD=0.20); t(25)= .510, p=.614.

Pair 3

A paired-samples t-test was conducted to compare sign rate 5 and sign rate 1.

There was not a significant difference in the scores for sign rate 5 (M=0.99, SD=0.22) and sign rate 1 (M=1.01, SD=.24); t(25)= -.493, p=.626.

Pair 4

A paired-samples t-test was conducted to compare sign rate 5 and sign rate 2.

There was not a significant difference in the scores for sign rate 5 (M=.99, SD=.23) and sign rate 2 (M=.98, SD=.19); t(25)=.167, p=.869.

Pair 5

A paired-samples t-test was conducted to compare sign rate 1 and sign rate 3.

There was not a significant difference in the scores for sign rate 5 (M=1.01, SD=.24) and sign rate 3 (M=.99, SD=.21); t(25)=.690, p=.496.

Pair 6

A paired-samples t-test was conducted to compare sign rate 5 and sign rate 3.

There was not a significant difference in the scores for sign rate 5 (M=.99, SD=.23) and sign rate 3 (M=.99, SD=.21); t(25)= -.045, p=.964.

Pair 7

A paired-samples t-test was conducted to compare sign rate 1 and sign rate 4.

There was not a significant difference in the scores for sign rate 1 (M=1.01, SD=.24) and sign rate 4 (M=.97, SD=.2); t(25)=.874, p=.39.

Pair 8

A paired-samples t-test was conducted to compare sign rate 5 and sign rate 4.

There was not a significant difference in the scores for sign rate 5 (M=.99, SD=.23) and sign rate 4 (M=.97, SD=.2); t(25)=.521, p=.607.

Pair 9

A paired-samples t-test was conducted to compare sign rate 2 and sign rate 3.

There was not a significant difference in the scores for sign rate 5 (M=.98, SD=.19) and sign rate 4 (M=.99, SD=.21); t(25)= -.266, p=.792.

Pair 10

A paired-samples t-test was conducted to compare sign rate 2 and sign rate 4.

There was not a significant difference in the scores for sign rate 5 (M=.98, SD=.19) and sign rate 4 (M= 0.97, SD= 0.2); t(25)= .301, p=.766.

Crosstabs Vlog Technical Elements

GET

FILE='\\Client\F\$\Ellen_SPSS\March16_unpivoted.sav'. DATASET NAME DataSet1 WINDOW=FRONT. CROSSTABS /TABLES=website BY edit videoframe light background clothing /FORMAT=AVALUE TABLES /STATISTICS=CHISQ PHI CORR /CELLS=COUNT /COUNT ROUND CELL.

Crosstabs

Notes

Notes		
Output Created		19-DEC-2013 19:14:43
Comments		
Input	Data	\\Client\F\$\Ellen_SPSS\March16_unpivo
		ted.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	130
Missing Value Handling	Definition of Missing	User-defined missing values are treated
		as missing.
	Cases Used	Statistics for each table are based on all
		the cases with valid data in the specified
		range(s) for all variables in each table.
Syntax		CROSSTABS
		/TABLES=website BY edit videoframe
		light background clothing
		/FORMAT=AVALUE TABLES
		/STATISTICS=CHISQ PHI CORR
		/CELLS=COUNT
		/COUNT ROUND CELL.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.08
	Dimensions Requested	2
	Cells Available	131029

[DataSet1] \\Client\F\$\Ellen_SPSS\March16_unpivoted.sav

Case Processing Summary

euse i rocessing Summu	J								
	Cases	ases							
	Valid	Valid		Missing					
	Ν	Percent	Ν	Percent	N	Percent			
website * Edit	130	100.0%	0	0.0%	130	100.0%			
website * Video Frame	130	100.0%	0	0.0%	130	100.0%			
website * light	130	100.0%	0	0.0%	130	100.0%			
website * background	130	100.0%	0	0.0%	130	100.0%			
website * clothing	130	100.0%	0	0.0%	130	100.0%			

website * Edit

Crosstab Count

Count										
		Edit	3dit							
		None	Text Slides	Spliced Clips	Graphics	Text and Spliced	Spliced Clips and Graphics			
website	1	36	11	9	2	2	5			
	2	53	0	1	4	0	2			
Total		89	11	10	6	2	7			

Crosstab

Count

		Edit	
		All And Moving Graphics	Total
website	1	0	65
	2	5	65
Total		5	130

Chi-Square Tests

			Asymp. Sig. (2-
	Value	df	sided)
Pearson Chi-Square	29.600ª	6	.000
Likelihood Ratio	37.590	6	.000
Linear-by-Linear Association	.265	1	.607
N of Valid Cases	130		

a. 8 cells (57.1%) have expected count less than 5. The minimum expected count is 1.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.477			.000
	Cramer's V	.477			.000
Interval by Interval	Pearson's R	045	.089	513	.609°
Ordinal by Ordinal	Spearman Correlation	214	.088	-2.474	.015°
N of Valid Cases		130			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

website * Video Frame Crosstab

Count

Count		Video Fr	'ideo Frame					
		Large	Medium	Small	Very Small	Cut	Total	
website	1	9	39	17	0	0	65	
	2	4	21	28	10	2	65	
Total		13	60	45	10	2	130	

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	22.012 ^a	4	.000
Likelihood Ratio	26.809	4	.000
Linear-by-Linear Association	19.423	1	.000
N of Valid Cases	130		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.00.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.411			.000
	Cramer's V	.411			.000
Interval by Interval	Pearson's R	.388	.069	4.763	.000°
Ordinal by Ordinal	Spearman Correlation	.383	.077	4.692	.000°
N of Valid Cases		130			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

website * light

Crosstab

|--|

		light	light			
		Optimal	Medium	Inadequate	Obscured	Total
website	1	31	26	6	2	65
	2	34	10	12	9	65
Total		65	36	18	11	130

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	13.704 ^a	3	.003
Likelihood Ratio	14.361	3	.002
Linear-by-Linear Association	2.347	1	.126
N of Valid Cases	130		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.50.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.325			.003
	Cramer's V	.325			.003
Interval by Interval	Pearson's R	.135	.084	1.540	.126 ^c
Ordinal by Ordinal	Spearman Correlation	.067	.089	.759	.449°
N of Valid Cases		130			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

website * background

Crosstab

Count

		backgrou	ckground					
		Office	Living Areas	Personal	Outside	Wall	Backdrop	Total
website	1	9	26	19	1	4	6	65
	2	1	10	30	8	5	11	65
Total		10	36	49	9	9	17	130

Chi-Square Tests

	Value		Asymp. Sig. (2- sided)
Pearson Chi-Square	23.007ª	5	.000
Likelihood Ratio	25.019	5	.000
Linear-by-Linear Association	11.514	1	.001
N of Valid Cases	130		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 4.50.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.421			.000
	Cramer's V	.421			.000
Interval by Interval	Pearson's R	.299	.081	3.542	.001°
Ordinal by Ordinal	Spearman Correlation	.363	.079	4.407	.000°
N of Valid Cases		130			

a. Not assuming the null hypothesis.b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

website * clothing

Crosstab

Count

		clothing				
		Business Full	Business Short	Not Business Full	Not Business Short	Tank Top/Straps
website	1	5	0	25	32	3
	2	2	6	16	37	4
Total		7	6	41	69	7

Crosstab

Count			
		Total	
website	1	65	
	2	65	
Total		130	

Chi-Square Tests

			Asymp. Sig. (2-
	Value	df	sided)
Pearson Chi-Square	9.767ª	4	.045
Likelihood Ratio	12.144	4	.016
Linear-by-Linear Association	.484	1	.487
N of Valid Cases	130		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is 3.00.

Symmetric Measures

			Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.274			.045
	Cramer's V	.274			.045
Interval by Interval	Pearson's R	.061	.087	.694	.489°
Ordinal by Ordinal	Spearman Correlation	.072	.088	.815	.417 ^c
N of Valid Cases		130			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

* Custom Tables.

CTABLES

/VLABELS VARIABLES=website edit DISPLAY=LABEL

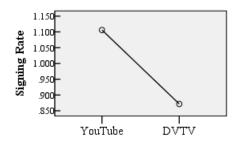
/TABLE website BY edit [COUNT F40.0, COLPCT.COUNT PCT40.1]

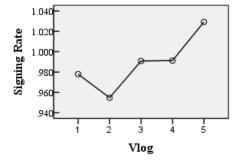
/CATEGORIES VARIABLES=website ORDER=A KEY=VALUE EMPTY=EXCLUDE

/CATEGORIES VARIABLES=edit ORDER=A KEY=VALUE EMPTY=INCLUDE.

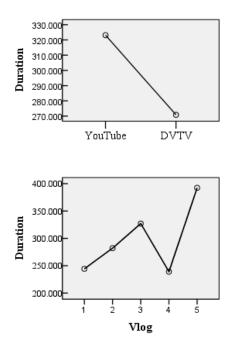
Profile Plots

Signing_Rate

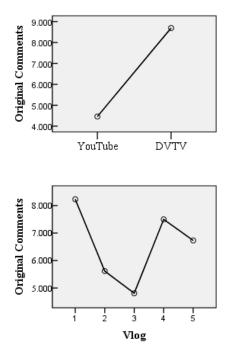




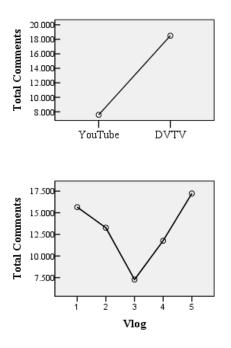
Duration



Original_Comments



Total_Comments



Chapter 4

GET

FILE='\\Client\C\$\Users\ellenhibbard\Desktop\C4_SPSS\Vlog_interview_20June2014.sav'. DATASET NAME DataSet3 WINDOW=FRONT.

SAVE OUTFILE='V:\Vlog_interview_20June2014.sav' /COMPRESSED. NPAR TESTS /CHISQUARE=viewing topics_forbidden SLS_CMS topic_type background sleeve youtube reply how_reply signing_changes impact_community impact_culture share_stories CC backstabbing /EXPECTED=EQUAL /STATISTICS DESCRIPTIVES /MISSING ANALYSIS.

NPar Tests

Notes		
Output Created		24-JUL-2015 18:04:50
Comments		
Input	Data	V:\Vlog_interview_20June2014.sav
	Active Dataset	DataSet3
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data	22
	File	23

143

Missing Value Handling	Definition of Missing	User-defined missing values are treated
Syntax	Cases Used	as missing. Statistics for each test are based on all cases with valid data for the variable(s) used in that test. NPAR TESTS /CHISQUARE=viewing topics_forbidden SLS_CMS topic_type background sleeve youtube reply how_reply signing_changes impact_community impact_culture
Resources	Processor Time Elapsed Time Number of Cases Allowed ^a	share_stories CC backstabbing /EXPECTED=EQUAL /STATISTICS DESCRIPTIVES /MISSING ANALYSIS. 00:00:00.02 00:00:00.02 43690

a. Based on availability of workspace memory.

[DataSet3] V:\Vlog_interview_20June2014.sav

Descriptive Statistics

	Ν	Mean	Std. Deviation	Minimum	Maximum
Websites	23	2.87	.548	1	4
Forbidden_Topics	23	1.30	.635	1	3
Like_SLSCMS	23	1.00	.000	1	1
Vlog_Topic	23	1.52	.846	1	3
Background_Vlog	23	1.61	.839	1	3
Sleeve_length	23	3.13	1.100	1	4
Like_YouTube	23	1.26	.541	1	3
Leave_reply	23	1.26	.541	1	3
Reply_format	23	2.43	1.273	1	5
Changes_Signing	23	1.09	.417	1	3
impact_community	23	1.00	.000	1	1
impact_culture	23	1.00	.000	1	1
Vlogs_ideal_share_stories	23	1.22	.736	1	4
Should_Vlogs_have_CC	23	1.39	.656	1	3
Bad_manners_worse_in_Vlog	23	1.48	.730	1	3

Chi-Square Test

Frequencies Websites

vv ebsites				
	Observed N	Expected N	Residual	
YouTube	1	5.8	-4.8	
Deafvideo.tv	2	5.8	-3.8	
Any	19	5.8	13.3	
None	1	5.8	-4.8	
Total	23			

Forbidden_Topics

	Observed N	Expected N	Residual
NO	18	7.7	10.3
YES	3	7.7	-4.7
Depends	2	7.7	-5.7
Total	23		

Like_SLSCMS

	Observed N	Expected N	Residual
Yes	23	23.0	.0
Total	23ª		

a. This variable is constant. Chi-Square Test cannot be performed.

Vlog_Topic

	Observed N	Expected N	Residual
Deaf related	16	7.7	8.3
Work related	2	7.7	-5.7
Any	5	7.7	-2.7
Total	23		

Background_Vlog

	Observed N	Expected N	Residual
Solid colour	14	7.7	6.3
No wall	4	7.7	-3.7
Any	5	7.7	-2.7
Total	23		

Sleeve_length

	Observed N	Expected N	Residual
Short	3	5.8	-2.8
Long	3	5.8	-2.8
3/4 long	5	5.8	8
Depends	12	5.8	6.3
Total	23		

Like_YouTube

	Observed N	Expected N	Residual
Yes	18	7.7	10.3
No	4	7.7	-3.7
Undecided	1	7.7	-6.7
Total	23		

Leave_reply

	Observed N	Expected N	Residual
Yes	18	7.7	10.3
No	4	7.7	-3.7
3	1	7.7	-6.7
Total	23		

Reply_format

-	Observed N	Expected N	Residual
ASL	7	4.6	2.4
English	6	4.6	1.4
None	4	4.6	6
Both	5	4.6	.4
Depends	1	4.6	-3.6
Total	23		

Changes_Signing

	Observed N	Expected N	Residual
Yes	22	11.5	10.5
No answer	1	11.5	-10.5
Total	23		

impact_community

	Observed N	Expected N	Residual
1	23	23.0	.0
Total	23ª		

a. This variable is constant. Chi-Square Test cannot be performed.

impact_culture

	Observed N	Expected N	Residual
1	23	23.0	.0
Total	23 ^a		

a. This variable is constant. Chi-Square Test cannot be performed.

Vlogs_ideal_share_stories

-	Observed N	Expected N	Residual
Yes	21	7.7	13.3
Same as Face-to-Face	1	7.7	-6.7
No answer	1	7.7	-6.7
Total	23		

Should_Vlogs_have_CC

	Observed N	Expected N	Residual
Yes	16	7.7	8.3
No	5	7.7	-2.7
No Answer	2	7.7	-5.7
Total	23		

Bad_manners_worse_in_Vlog?

	Observed N	Expected N	Residual
Yes	15	7.7	7.3
No	5	7.7	-2.7
No Answer	3	7.7	-4.7
Total	23		

Test Statistics

		Forbidden_Topic		Background_Vlo		
	Websites	S	Vlog_Topic	g	Sleeve_length	Like_YouTube
Chi-Square	40.826 ^a	20.957 ^b	14.174 ^b	7.913 ^b	9.522ª	21.478 ^b
df	3	2	2	2	3	2
Asymp. Sig.	.000	.000	.001	.019	.023	.000

Test Statistics

				Vlogs_ideal_share_	Should_Vlogs_hav
	Leave_reply	Reply_format	Changes_Signing	stories	e_CC
Chi-Square	21.478 ^b	4.609°	19.174 ^d	34.783 ^b	14.174 ^b
df	2	4	1	2	2
Asymp. Sig.	.000	.330	.000	.000	.001

Test Statistics

	Bad_manners_worse_in_Vlog?
Chi-Square	10.783 ^b
df	2
Asymp. Sig.	.005

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 5.8.

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 7.7.

c. 5 cells (100.0%) have expected frequencies less than 5. The minimum expected cell frequency is 4.6.

d. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 11.5.

Crosstabs analysis between experienced and inexperienced vloggers for forced choice answers

FILTER OFF. USE ALL. EXECUTE. CROSSTABS

/TABLES=experience BY duration viewing posting_preference topics_forbidden SLS_CMS topic_type background sleeve attitire clothing_colour fram youtube reply how_reply signing_changes impact_community impact_culture share_stories CC backstabbing identity

/FORMAT=AVALUE TABLES /STATISTICS=CHISQ PHI CORR /CELLS=COUNT /COUNT ROUND CELL. Crosstabs Notes

Notes		
Output Created		21-AUG-2014 14:29:17
Comments		
Input	Data	\\Client\C\$\Users\CLT\Desktop\Vlog_in terview_20June2014.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	23
Missing Value Handling	Definition of Missing	User-defined missing values are treated
		as missing.
	Cases Used	Statistics for each table are based on all
		the cases with valid data in the specified
		range(s) for all variables in each table.
Syntax		CROSSTABS
		/TABLES=experience BY duration
		viewing posting_preference
		topics_forbidden SLS_CMS topic_type
		background sleeve attitire
		clothing_colour fram youtube reply
		how_reply signing_changes
		impact_community impact_culture
		share_stories CC backstabbing identity
		/FORMAT=AVALUE TABLES
		/STATISTICS=CHISQ PHI CORR
		/CELLS=COUNT
Dagaymaag	Processor Time	/COUNT ROUND CELL. 00:00:00.03
Resources		
	Elapsed Time	00:00:00.05
	Dimensions Requested	2
	Cells Available	131029

 $[DataSet1] \label{eq:linear} \label{eq:linear}$

Case Processing Summary

	Cases					
	Valid		Missin	g	Total	
	N	Percent	Ν	Percent	N	
Experience * Vlog_length	23	100.0%	0	0.0%	23	
Experience * Websites	23	100.0%	0	0.0%	23	
Experience * Posting_Preference	23	100.0%	0	0.0%	23	
Experience * Forbidden_Topics	23	100.0%	0	0.0%	23	
Experience * Like_SLSCMS	23	100.0%	0	0.0%	23	
Experience * Vlog_Topic	23	100.0%	0	0.0%	23	
Experience * Background_Vlog	23	100.0%	0	0.0%	23	
Experience * Sleeve_length	23	100.0%	0	0.0%	23	
Experience * Style_attire	23	100.0%	0	0.0%	23	
Experience * Colour_attire	23	100.0%	0	0.0%	23	
Experience * Video_frame	23	100.0%	0	0.0%	23	
Experience * Like_YouTube	23	100.0%	0	0.0%	23	
Experience * Leave_reply	23	100.0%	0	0.0%	23	
Experience * Reply_format	23	100.0%	0	0.0%	23	
Experience * Changes_Signing	23	100.0%	0	0.0%	23	
Experience * impact_community	23	100.0%	0	0.0%	23	
Experience * impact_culture	23	100.0%	0	0.0%	23	
Experience * Vlogs_ideal_share_stories	23	100.0%	0	0.0%	23	
Experience * Should_Vlogs_have_CC	23	100.0%	0	0.0%	23	
Experience * Bad_manners_worse_in_Vlog?	23	100.0%	0	0.0%	23	
Experience * identity	23	100.0%	0	0.0%	23	

Case Processing Summary

	Cases
	Total
	Percent
Experience * Vlog_length	100.0%
Experience * Websites	100.0%
Experience * Posting_Preference	100.0%
Experience * Forbidden_Topics	100.0%
Experience * Like_SLSCMS	100.0%
Experience * Vlog_Topic	100.0%
Experience * Background_Vlog	100.0%
Experience * Sleeve_length	100.0%
Experience * Style_attire	100.0%
Experience * Colour_attire	100.0%
Experience * Video_frame	100.0%
Experience * Like_YouTube	100.0%
Experience * Leave_reply	100.0%
Experience * Reply_format	100.0%
Experience * Changes_Signing	100.0%
Experience * impact_community	100.0%
Experience * impact_culture	100.0%
Experience * Vlogs_ideal_share_stories	100.0%
Experience * Should_Vlogs_have_CC	100.0%
Experience * Bad_manners_worse_in_Vlog?	100.0%
Experience * identity	100.0%

Experience * Vlog_length

Crosstab

Count						
		Vlog_length	Vlog_length			
		up to 3 minutes	up to 5 minutes	up to 15 minutes	Total	
Experience	Experienced vlogger	1	5	6	12	
	Not experienced vlogger	2	4	5	11	
Total		3	9	11	23	

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	.493ª	2	.782
Likelihood Ratio	.499	2	.779
Linear-by-Linear Association	.233	1	.629
N of Valid Cases	23		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.43.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.146			.782
	Cramer's V	.146			.782
Interval by Interval	Pearson's R	103	.206	474	.640°
Ordinal by Ordinal	Spearman Correlation	086	.208	397	.695°
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Websites

Crosstab

Count						
-		Websites				
		YouTube	Deafvideo.tv	Any	None	Total
Experience	Experienced vlogger	1	2	9	0	12
	Not experienced vlogger	0	0	10	1	11
Total		1	2	19	1	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	4.017 ^a	3	.260
Likelihood Ratio	5.554	3	.135
Linear-by-Linear Association	3.439	1	.064
N of Valid Cases	23		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is .48.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.418			.260
	Cramer's V	.418			.260
Interval by Interval	Pearson's R	.395	.096	1.972	.062°
Ordinal by Ordinal	Spearman Correlation	.417	.099	2.104	.048°
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Posting_Preference

Crosstab

Count

		Posting_Pr	Posting_Preference			
		YouTube	Deafvideo.tv	Any	None	Total
Experience	Experienced vlogger	4	2	6	0	12
	Not experienced vlogger	0	0	8	3	11
Total	1 22	4	2	14	3	23

Chi-Square Tests

			Asymp. Sig. (2-
	Value	df	sided)
Pearson Chi-Square	9.260ª	3	.026
Likelihood Ratio	12.720	3	.005
Linear-by-Linear Association	8.186	1	.004
N of Valid Cases	23		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is .96.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.635			.026
	Cramer's V	.635			.026
Interval by Interval	Pearson's R	.610	.090	3.528	.002°
Ordinal by Ordinal	Spearman Correlation	.629	.083	3.707	.001°
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Forbidden_Topics

Crosstab

_		Forbidd	Forbidden_Topics		
		NO	YES	Depends	Total
1 1	Experienced vlogger	9	2	1	12
	Not experienced vlogger	9	1	1	11
Total		18	3	2	23

Chi-Square Tests

			Asymp. Sig. (2-
	Value	df	sided)
Pearson Chi-Square	.290 ^a	2	.865
Likelihood Ratio	.296	2	.862
Linear-by-Linear Association	.052	1	.819
N of Valid Cases	23		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .96.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.112			.865
	Cramer's V	.112			.865
Interval by Interval	Pearson's R	049	.209	224	.825°
Ordinal by Ordinal	Spearman Correlation	073	.207	335	.741°
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Like_SLSCMS

Crosstab

Count

		Like_SLSCMS	
		Yes	Total
Experience	Experienced vlogger	12	12
	Not experienced vlogger	11	11
Total	1	23	23

Chi-Square Tests

	Value
Pearson Chi-Square	.a
N of Valid Cases	23

a. No statistics are computed because Like_SLSCMS is a constant.

Symmetric Measures

		Value
Nominal by Nominal	Phi	. a
N of Valid Cases		23

a. No statistics are computed because Like_SLSCMS is a constant.

Experience * Vlog_Topic

Crosstab

Count

		Vlog_Topic	Vlog_Topic		
		Deaf related	Work related	Any	Total
Experience	Experienced vlogger	8	2	2	12
	Not experienced vlogger	8	0	3	11
Total		16	2	5	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	2.161ª	2	.339
Likelihood Ratio	2.930	2	.231
Linear-by-Linear Association	.017	1	.898
N of Valid Cases	23		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .96.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.306			.339
	Cramer's V	.306			.339
Interval by Interval	Pearson's R	.027	.209	.126	.901°
Ordinal by Ordinal	Spearman Correlation	016	.211	074	.941°
N of Valid Cases		23			

Any

2

3

Total 12

11

23

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Background_Vlog

Crosstab

Total

Count			
		Background_	Vlog
		Solid colour	No wall
Experience	Experienced vlogger	7	3

Not experienced vlogger

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	1.159ª	2	.560
Likelihood Ratio	1.204	2	.548
Linear-by-Linear Association	.023	1	.880
N of Valid Cases	23		

7 14

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.91.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
NT			LIIOI	rippion. 1	11 0
Nominal by Nominal	Phi	.224			.560
	Cramer's V	.224			.560
Interval by Interval	Pearson's R	.032	.209	.148	.884°
Ordinal by Ordinal	Spearman Correlation	.000	.211	.000	1.000 ^c
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Sleeve_length

Crosstab

Count	

		Sleeve_l	Sleeve_length			
		Short	Long	3/4 long	Depends	Total
Experience	Experienced vlogger	1	1	4	6	12
	Not experienced vlogger	2	2	1	6	11
Total		3	3	5	12	23

Chi-Square Tests

			Asymp. Sig. (2-
	Value	df	sided)
Pearson Chi-Square	2.428ª	3	.488
Likelihood Ratio	2.564	3	.464
Linear-by-Linear Association	.297	1	.586
N of Valid Cases	23		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is 1.43.

Symmetric Measures

			Asymp. Std.		
		Value	Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.325			.488
	Cramer's V	.325			.488
Interval by Interval	Pearson's R	116	.206	536	.598°
Ordinal by Ordinal	Spearman Correlation	057	.213	262	.796°
N of Valid Cases	-	23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Style_attire

Crosstab

Count

-		Style_att	Style_attire				
		Work	Causual	Any	Depends	Total	
Experience	Experienced vlogger	4	0	4	4	12	
	Not experienced vlogger	4	1	3	3	11	
Total	1	8	1	7	7	23	

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	1.245 ^a	3	.742
Likelihood Ratio	1.629	3	.653
Linear-by-Linear Association	.159	1	.690
N of Valid Cases	23		

a. 8 cells (100.0%) have expected count less than 5. The minimum expected count is .48.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.233		I	.742
	Cramer's V	.233			.742
Interval by Interval	Pearson's R	085	.208	391	.699°
Ordinal by Ordinal	Spearman Correlation	083	.208	381	.707°
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Colour_attire

Crosstab

Count

		Colour_a	Colour_attire					
		Solid	Constrast with skin	Any	Depend	Total		
Experience	Experienced vlogger	5	1	6	0	12		
1	Not experienced vlogger	2	6	1	2	11		
Total		7	7	7	2	23		

Chi-Square Tests

			Asymp. Sig. (2-
	Value	df	sided)
Pearson Chi-Square	10.405 ^a	3	.015
Likelihood Ratio	11.982	3	.007
Linear-by-Linear Association	.213	1	.645
N of Valid Cases	23		

a. 8 cells (100.0%) have expected count less than 5. The minimum expected count is .96.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.673			.015
	Cramer's V	.673			.015
Interval by Interval	Pearson's R	.098	.202	.453	.655°
Ordinal by Ordinal	Spearman Correlation	.069	.220	.315	.756°
N of Valid Cases		23			

a. Not assuming the null hypothesis.b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Video_frame

Crosstab

Count	

		Video_frame			
		Hips to head	mid-chest to head	Shoulder to head	Depend
Experience	Experienced vlogger	6	4	1	1
	Not experienced vlogger	9	1	0	1
Total		15	5	1	2

Crosstab

Count

		Total
Experience	Experienced vlogger	12
-	Not experienced vlogger	11
Total		23

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	3.363ª	3	.339
Likelihood Ratio	3.874	3	.275
Linear-by-Linear Association	.959	1	.327
N of Valid Cases	23		

a. 6 cells (75.0%) have expected count less than 5. The minimum expected count is .48.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.382			.339
	Cramer's V	.382			.339
Interval by Interval	Pearson's R	209	.209	978	.339°
Ordinal by Ordinal	Spearman Correlation	303	.197	-1.457	.160 ^c
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Like_YouTube Crosstab

Count

-		Like_Y	Like_YouTube		
		Yes	No	Undecided	Total
Experience	Experienced vlogger	9	3	0	12
	Not experienced vlogger	9	1	1	11
Total		18	4	1	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	1.960 ^a	2	.375
Likelihood Ratio	2.389	2	.303
Linear-by-Linear Association	.010	1	.920
N of Valid Cases	23		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .48.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.292			.375
	Cramer's V	.292			.375
Interval by Interval	Pearson's R	.021	.209	.098	.923°
Ordinal by Ordinal	Spearman Correlation	055	.210	251	.804°
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Leave_reply Crosstab

Count

		Leave_r	Leave_reply		
		Yes	No	3	Total
Experience	Experienced vlogger	10	2	0	12
	Not experienced vlogger	8	2	1	11
Total	- •••	18	4	1	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	1.181 ^a	2	.554
Likelihood Ratio	1.565	2	.457
Linear-by-Linear Association	.761	1	.383
N of Valid Cases	23		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .48.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.227		I	.554
	Cramer's V	.227			.554
Interval by Interval	Pearson's R	.186	.184	.868	.395°
Ordinal by Ordinal	Spearman Correlation	.146	.204	.677	.506°
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Reply_format

Crosstab Count

		Reply_f	Reply_format				
		ASL	English	None	Both	Depends	
Experience	Experienced vlogger	6	1	2	3	0	
	Not experienced vlogger	1	5	2	2	1	
Total		7	6	4	5	1	

Crosstab

Count

		Total
Experience	Experienced vlogger	12
	Not experienced vlogger	11
Total		23

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	7.409ª	4	.116
Likelihood Ratio	8.418	4	.077
Linear-by-Linear Association	1.113	1	.291
N of Valid Cases	23		

a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .48.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.568			.116
	Cramer's V	.568			.116
Interval by Interval	Pearson's R	.225	.193	1.058	.302°
Ordinal by Ordinal	Spearman Correlation	.250	.206	1.185	.249°
N of Valid Cases	-	23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Changes_Signing

Crosstab

Count					
		Change	Changes_Signing		
		Yes	No answer	Total	
Experience	Experienced vlogger	11	1	12	
	Not experienced vlogger	11	0	11	
Total		22	1	23	

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	.958ª	1	.328		
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	1.343	1	.247		
Fisher's Exact Test				1.000	.522
Linear-by-Linear Association	.917	1	.338		
N of Valid Cases	23				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .48.

b. Computed only for a 2x2 table

Symmetric Measures

ſ			Asymp. Std.		ĺ
		Value	Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	204			.328
	Cramer's V	.204			.328
Interval by Interval	Pearson's R	204	.104	956	.350°
Ordinal by Ordinal	Spearman Correlation	204	.104	956	.350°
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * impact_community

Crosstab

Count			
		impact_communit	
		У	
		1	Total
Experience	Experienced vlogger	12	12
	Not experienced vlogger	11	11
Total		23	23

Chi-Square Tests

	Value
Pearson Chi-Square	. a
N of Valid Cases	23

a. No statistics are computed because impact_community is a constant.

Symmetric Measures

		Value
Nominal by Nominal	Phi	.a
N of Valid Cases		23

a. No statistics are computed because impact_community is a constant.

Experience * **impact_culture**

Crosstab

Count

		impact_culture	
		1	Total
Experience	Experienced vlogger	12	12
	Not experienced vlogger	11	11
Total	1	23	23

Chi-Square Tests

	Value
Pearson Chi-Square	. a
N of Valid Cases	23

a. No statistics are computed because impact_culture is a constant.

Symmetric Measures

		Value	
Nominal by Nominal	Phi	.a	
N of Valid Cases		23	

a. No statistics are computed because impact_culture is a constant.

Experience * Vlogs_ideal_share_stories

Crosstab

Count						
-		Vlogs_ideal	Vlogs_ideal_share_stories			
		Yes	Same as Face-to- Face	No answer	Total	
Experience	Experienced vlogger	11	0	1	12	
	Not experienced vlogger	10	1	0	11	
Total		21	1	1	23	

Chi-Square Tests

			Asymp. Sig. (2-
	Value	df	sided)
Pearson Chi-Square	2.008^{a}	2	.366
Likelihood Ratio	2.777	2	.249
Linear-by-Linear Association	.049	1	.824
N of Valid Cases	23		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .48.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.295			.366
	Cramer's V	.295			.366
Interval by Interval	Pearson's R	047	.197	217	.830°
Ordinal by Ordinal	Spearman Correlation	.000	.209	.000	1.000 ^c
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Should_Vlogs_have_CC

Crosstab

Count

		Should_Vlogs_have_CC			
		Yes	No	No Answer	Total
Experience	Experienced vlogger	8	4	0	12
	Not experienced vlogger	8	1	2	11
Total		16	5	2	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	3.764ª	2	.152
Likelihood Ratio	4.657	2	.097
Linear-by-Linear Association	.196	1	.658
N of Valid Cases	23		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .96.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.405			.152
	Cramer's V	.405			.152
Interval by Interval	Pearson's R	.094	.200	.434	.669°
Ordinal by Ordinal	Spearman Correlation	.000	.214	.000	1.000 ^c
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * Bad_manners_worse_in_Vlog?

Crosstab

Count					
		Bad_manners_worse_in_Vlog?			
		Yes	No	No Answer	Total
Experience	Experienced vlogger	8	2	2	12
	Not experienced vlogger	7	3	1	11
Total		15	5	3	23

Chi-Square Tests

	Value	df	Asymp. Sig. (2- sided)
Pearson Chi-Square	.558ª	2	.757
Likelihood Ratio	.564	2	.754
Linear-by-Linear Association	.022	1	.881
N of Valid Cases	23		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.43.

Symmetric Measures

		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Nominal by Nominal	Phi	.156		I	.757
	Cramer's V	.156			.757
Interval by Interval	Pearson's R	032	.206	146	.886 ^c
Ordinal by Ordinal	Spearman Correlation	.000	.209	.000	1.000 ^c
N of Valid Cases		23			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

Experience * identity

Crosstab

Count

[identity	
		1	Total
Experience	Experienced vlogger	12	12
	Not experienced vlogger	11	11
Total	- •••	23	23

Chi-Square Tests

	Value
Pearson Chi-Square	.a
N of Valid Cases	23

a. No statistics are computed because identity is a constant.

Symmetric Measures

		Value
Nominal by Nominal	Phi	a •
N of Valid Cases		23

a. No statistics are computed because identity is a constant.

NEW FILE. DATASET NAME DataSet2 WINDOW=FRONT. GET DATA /TYPE=XLSX /FILE='\\Client\C\$\Users\CLT\Desktop\Thematic_SPSS_20Aug2014.xlsx' /SHEET=name 'Sheet1' /CELLRANGE=full /READNAMES=on /ASSUMEDSTRWIDTH=32767. EXECUTE. DATASET NAME DataSet3 WINDOW=FRONT. NPAR TESTS /M-W= Community_Postive Community_negative BY Experience(1 2) /MISSING ANALYSIS. NPar Tests

Notes

Notes		
Output Created		21-AUG-2014 15:17:30
Comments		
Input	Active Dataset	DataSet3
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	23
Missing Value Handling	Definition of Missing	User-defined missing values are treated
		as missing.
	Cases Used	Statistics for each test are based on all
		cases with valid data for the variable(s)
		used in that test.
Syntax		NPAR TESTS
		/M-W= Community_Postive
		Community_negative BY Experience(1
		2)
		/MISSING ANALYSIS.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Number of Cases Allowed ^a	98304

a. Based on availability of workspace memory.

[DataSet3]

Mann-Whitney Test

Ranks

	Experience	Ν	Mean Rank	Sum of Ranks
Community_Postive	1.0	9	10.89	98.00
	2.0	8	6.88	55.00
	Total	17		
Community_negative	1.0	3	3.50	10.50
	2.0	2	2.25	4.50
	Total	5		

Test Statistics^a

	Community_Posti	Community_nega
	ve	tive
Mann-Whitney U	19.000	1.500
Wilcoxon W	55.000	4.500
Z	-1.733	889
Asymp. Sig. (2-tailed)	.083	.374
Exact Sig. [2*(1-tailed Sig.)]	.114 ^b	.400 ^b

a. Grouping Variable: Experience

b. Not corrected for ties.

NPAR TESTS

/M-W= Community_Postive Community_negative Manners_Postive Manners_Negative Sign_Identity_Positive Sign_Identity_Negative Interaction_Postive Interaction_Negative Recommendations_Postive Recommendations_Negative Equipment_Postive Equipment_Negative Visual_Monitor_Postive Visual_Monitor_Negative Creating_Vlog_Postive Creating_Vlog_Negative Find_Share_Vlog_Postive Find_Share_Vlog_Negative Quality_Positive Quality_Negative Access_positive Access_Negative CC_Postive CC_Negative Feedback_Postive Feedback_Negative News_Informed_Positive News_Informed_Negative Entertainment_Postive Entertainment_Negative Sign_Changes_Positive Sign_Changes_Negative Technical_Communication_Positive Technical_Communication_Negative Impact_Culture_Postive Impact_Culture_Negative Impact_Community_Postive Impact_Community_Negative Impact_Access_Postive Impact_Access_Negative Impact_Self_Postive Impact_Self_Negative BY Experience(1 2) /MISSING ANALYSIS. NPar Tests

Notes

Notes		
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	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.

Syntax		NPAR TESTS /M-W= Community_Postive Community_negative Manners_Postive Manners_Negative Sign_Identity_Positive Sign_Identity_Negative Interaction_Postive Interaction_Negative Recommendations_Postive Recommendations_Negative Equipment_Postive Equipment_Negative Visual_Monitor_Postive Visual_Monitor_Negative Creating_Vlog_Postive Find_Share_Vlog_Postive Find_Share_Vlog_Negative Quality_Positive Quality_Negative Access_positive Access_Negative CC_Postive CC_Negative Feedback_Postive Feedback_Postive Entertainment_Postive Entertainment_Negative Sign_Changes_Positive Sign_Changes_Negative Technical_Communication_Positive Technical_Communication_Negative Impact_Culture_Negative Impact_Culture_Negative Impact_Community_Postive Impact_Access_Negative Impact_Access_Negative Impact_Access_Negative Impact_Self_Postive Impact_Self_Negative BY Experience(1 2) /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.02
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Resources	Processor Time	00:00:00.02
b	р	
		/MISSING ANALYSIS.
		2)
		· · · ·
		Impact_Access_Postive
		Technical_Communication_Positive
		—
		News_Informed_Positive
		Creating Vlog Postive
		Visual_Monitor_Negative
S y man		
Svntax		NPAR TESTS

a. Based on availability of workspace memory.

[DataSet3]

Warnings

There are not enough valid cases to perform the Mann-Whitney Test for Impact_Culture_Negative * Experience (1.0, 2.0). No statistics are computed.

Mann-Whitney Test

Ranks

	Experience	Ν	Mean Rank	Sum of Ranks
Community_Postive	1.0	9	10.89	98.00
	2.0	8	6.88	55.00
	Total	17		
Community_negative	1.0	3	3.50	10.50
<i>y b</i>	2.0	2	2.25	4.50
	Total	5		
Manners_Postive	1.0	10	8.80	88.00
	2.0	7	9.29	65.00
	Total	17		
Manners_Negative	1.0	12	10.88	130.50
	2.0	9	11.17	100.50
	Total	21		
Sign_Identity_Positive	1.0	10	10.85	108.50
	2.0	10	10.15	101.50
	Total	20		
Sign_Identity_Negative	1.0	4	4.50	18.00
	2.0	4	4.50	18.00
	Total	8		
Interaction_Postive	1.0	10	10.05	100.50
	2.0	8	8.81	70.50
	Total	18		
Interaction_Negative	1.0	3	3.50	10.50
	2.0	4	4.38	17.50
	Total	7		
Recommendations_Postive	1.0	12	11.58	139.00
	2.0	10	11.40	114.00
	Total	22		
Recommendations_Negative	1.0	3	3.17	9.50
	2.0	3	3.83	11.50
	Total	6	10.44	0.4.00
Equipment_Postive	1.0	9	10.44	94.00
	2.0	8	7.38	59.00
	Total	17	8.20	02.00
Equipment_Negative	1.0	10	8.20	82.00
	2.0	5	7.60	38.00
Viewal Maniton Destine	Total	15	7 75	46.50
Visual_Monitor_Postive	1.0	6 7	7.75	46.50
	2.0	12	6.36	44.50
Visual_Monitor_Negative	Total	13	5.50	27.50
visual_iviointor_inegative	1.0 2.0	5 5	5.50 5.50	27.50 27.50
	Z.0 Total	5 10	5.50	27.30
Creating_Vlog_Postive		8	6.94	55.50
Creating_viog_rostive	1.0	0	0.94	55.50

	2.0	5	7.10	35.50
	Total	13		
Creating_Vlog_Negative	1.0	9	6.67	60.00
	2.0	8	11.63	93.00
	Total	17		
Find_Share_Vlog_Postive	1.0	10	10.15	101.50
	2.0	9	9.83	88.50
	Total	19		
Find_Share_Vlog_Negative	1.0	6	5.83	35.00
	2.0	6	7.17	43.00
	Total	12		
Quality_Positive	1.0	6	7.25	43.50
	2.0	5	4.50	22.50
	Total	11		
Quality_Negative	1.0	6	6.83	41.00
	2.0	6	6.17	37.00
	Total	12		
Access_positive	1.0	10	9.20	92.00
	2.0	8	9.88	79.00
	Total	18		
Access_Negative	1.0	8	7.81	62.50
	2.0	6	7.08	42.50
	Total	14		
CC_Postive	1.0	8	9.00	72.00
	2.0	8	8.00	64.00
	Total	16		
CC_Negative	1.0	3	6.00	18.00
	2.0	6	4.50	27.00
	Total	9		
Feedback_Postive	1.0	12	12.04	144.50
	2.0	10	10.85	108.50
	Total	22		
Feedback_Negative	1.0	10	7.05	70.50
	2.0	5	9.90	49.50
	Total	15		
News_Informed_Positive	1.0	10	13.70	137.00
	2.0	11	8.55	94.00
	Total	21		
News_Informed_Negative	1.0	3	3.67	11.00
	2.0	3	3.33	10.00
	Total	6		
Entertainment_Postive	1.0	8	9.06	72.50
	2.0	9	8.94	80.50
	Total	17		
Entertainment_Negative	1.0	1	2.00	2.00
	2.0	2	2.00	4.00
	Total	3		
Sign_Changes_Positive	1.0	9	8.33	75.00
	2.0	9	10.67	96.00
	Total	18		

Sign_Changes_Negative	1.0	3	3.00	9.00
	2.0	2	3.00	6.00
	Total	5		
Technical_Communication_Positive	1.0	9	8.61	77.50
	2.0	8	9.44	75.50
	Total	17		
Technical_Communication_Negative	1.0	7	10.86	76.00
	2.0	9	6.67	60.00
	Total	16		
Impact_Culture_Postive	1.0	7	6.14	43.00
	2.0	6	8.00	48.00
	Total	13		
Impact_Community_Postive	1.0	11	12.73	140.00
	2.0	11	10.27	113.00
	Total	22		
Impact_Community_Negative	1.0	8	6.38	51.00
	2.0	5	8.00	40.00
	Total	13		
Impact_Access_Postive	1.0	9	10.67	96.00
	2.0	10	9.40	94.00
	Total	19		
Impact_Access_Negative	1.0	6	5.83	35.00
	2.0	5	6.20	31.00
	Total	11		
Impact_Self_Postive	1.0	10	11.00	110.00
	2.0	10	10.00	100.00
	Total	20		
Impact_Self_Negative	1.0	12	11.46	137.50
	2.0	10	11.55	115.50
	Total	22		

Test Statistics^a

	Community_Post	Community_nega		Manners_Negativ
	ive	tive	Manners_Postive	e
Mann-Whitney U	19.000	1.500	33.000	52.500
Wilcoxon W	55.000	4.500	88.000	130.500
Z	-1.733	889	198	109
Asymp. Sig. (2-tailed)	.083	.374	.843	.913
Exact Sig. [2*(1-tailed Sig.)]	.114 ^b	.400 ^b	.887 ^b	.917 ^b

Test Statistics^a

	Sign_Identity_Posit	Sign_Identity_Nega		Interaction_Negativ
	ive	tive	Interaction_Postive	е
Mann-Whitney U	46.500	8.000	34.500	4.500
Wilcoxon W	101.500	18.000	70.500	10.500
Z	269	.000	517	866
Asymp. Sig. (2-tailed)	.788	1.000	.605	.386
Exact Sig. [2*(1-tailed Sig.)]	.796 ^b	1.000 ^b	.633 ^b	.629 ^b

Test Statistics^a

	Recommendations_	Recommendations_		Equipment_Negati
	Postive	Negative	Equipment_Postive	ve
Mann-Whitney U	59.000	3.500	23.000	23.000
Wilcoxon W	114.000	9.500	59.000	38.000
Z	066	471	-1.281	259
Asymp. Sig. (2-tailed)	.947	.637	.200	.796
Exact Sig. [2*(1-tailed Sig.)]	.974 ^b	.700 ^b	.236 ^b	.859 ^b

Test Statistics^a

	Visual_Monitor_Po	Visual_Monitor_Ne	Creating_Vlog_Pos	Creating_Vlog_Ne
	stive	gative	tive	gative
Mann-Whitney U	16.500	12.500	19.500	15.000
Wilcoxon W	44.500	27.500	55.500	60.000
Z	679	.000	074	-2.136
Asymp. Sig. (2-tailed)	.497	1.000	.941	.033
Exact Sig. [2*(1-tailed Sig.)]	.534 ^b	1.000 ^b	.943 ^b	.046 ^b

Test Statistics^a

	Find_Share_Vlog_ Postive	-	Quality_Positive	Quality_Negative
Mann-Whitney U	43.500	14.000	7.500	16.000
Wilcoxon W	88.500	35.000	22.500	37.000
Z	129	713	-1.535	345
Asymp. Sig. (2-tailed)	.898	.476	.125	.730
Exact Sig. [2*(1-tailed Sig.)]	.905 ^b	.589 ^b	.177 ^b	.818 ^b

Test Statistics^a

	Access_positive	Access_Negative	CC_Postive	CC_Negative
Mann-Whitney U	37.000	21.500	28.000	6.000
Wilcoxon W	92.000	42.500	64.000	27.000
Z	274	377	466	853
Asymp. Sig. (2-tailed)	.784	.706	.641	.394
Exact Sig. [2*(1-tailed Sig.)]	.829 ^b	.755 ^b	.721 ^b	.548 ^b

Test Statistics^a

			News_Informed_Po	News_Informed_N
	Feedback_Postive	Feedback_Negative	sitive	egative
Mann-Whitney U	53.500	15.500	28.000	4.000
Wilcoxon W	108.500	70.500	94.000	10.000
Z	448	-1.213	-1.929	236
Asymp. Sig. (2-tailed)	.654	.225	.054	.814
Exact Sig. [2*(1-tailed Sig.)]	.674 ^b	.254 ^b	.061 ^b	1.000 ^b

Test Statistics^a

	Entertainment_Post	Entertainment_Neg	Sign_Changes_Posi	Sign_Changes_Neg
	ive	ative	tive	ative
Mann-Whitney U	35.500	1.000	30.000	3.000
Wilcoxon W	80.500	4.000	75.000	6.000
Z	052	.000	971	.000
Asymp. Sig. (2-tailed)	.958	1.000	.331	1.000
Exact Sig. [2*(1-tailed Sig.)]	.963 ^b	1.000 ^b	.387 ^b	1.000 ^b

Test Statistics^a

	Technical_Commu	Technical_Commu	Impact_Culture_Po	Impact_Communit
	nication_Positive	nication_Negative	stive	y_Postive
Mann-Whitney U	32.500	15.000	15.000	47.000
Wilcoxon W	77.500	60.000	43.000	113.000
Z	348	-1.899	896	898
Asymp. Sig. (2-tailed)	.728	.058	.370	.369
Exact Sig. [2*(1-tailed Sig.)]	.743 ^b	.091 ^b	.445 ^b	.401 ^b

Test Statistics^a

	Impact_Communit	Impact_Access_Pos	Impact_Access_Ne	Impact_Self_Postiv
	y_Negative	tive	gative	e
Mann-Whitney U	15.000	39.000	14.000	45.000
Wilcoxon W	51.000	94.000	35.000	100.000
Z	777	500	218	382
Asymp. Sig. (2-tailed)	.437	.617	.827	.702
Exact Sig. [2*(1-tailed Sig.)]	.524 ^b	.661 ^b	.931 ^b	.739 ^b

Test Statistics^a

	Impact_Self_Negative
Mann-Whitney U	59.500
Wilcoxon W	137.500
Ζ	033
Asymp. Sig. (2-tailed)	.973
Exact Sig. [2*(1-tailed Sig.)]	.974 ^b

a. Grouping Variable: Experience b. Not corrected for ties.

Counts of forced choice answers

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/BARCHART FREQ /FORMAT=AFREQ /ORDER=ANALYSIS.

Frequencies	
Notes	

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_		Statistics are based on all cases with valid data.
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		background sleeve attitire clothing_colour fram youtube
		reply how_reply backstabbing
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		/BARCHART FREQ
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[DataSet1] \\Client\C\$\Users\CLT\Desktop\Vlog_interview_20June2014.sav

Statistics

			posting_preferenc				
		viewing	е	topics_forbidden	topic_type	background	sleeve
Ν	Valid	23	23	23	23	23	23
	Missing	0	0	0	0	0	0
Std	. Deviation	.548	.926	.635	.846	.839	1.100

Statistics

		attitire	clothing_colour	fram	youtube	reply	how_reply
Ν	Valid	23	23	23	23	23	23
	Missing	0	0	0	0	0	0
Std. D	Deviation	1.273	.984	.945	.541	.541	1.273

Statistics

		backstabbing	
Ν	Valid	23	
	Missing	0	
Std. Deviation	_	.730	

Frequency Table viewing

		Frequency	Percent		Cumulative Percent
Valid	1	1	4.3	4.3	4.3
	4	1	4.3	4.3	8.7
	2	2	8.7	8.7	17.4
	3	19	82.6	82.6	100.0
	Total	23	100.0	100.0	

posting_preference

		Frequency	Percent		Cumulative Percent
Valid	2	2	8.7	8.7	8.7
	4	3	13.0	13.0	21.7
	1	4	17.4	17.4	39.1
	3	14	60.9	60.9	100.0
	Total	23	100.0	100.0	

topics_forbidden

-		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	2	8.7	8.7	8.7
	2	3	13.0	13.0	21.7
	1	18	78.3	78.3	100.0
	Total	23	100.0	100.0	

topic_type

		Frequency	Percent		Cumulative Percent
Valid	2	2	8.7	8.7	8.7
	3	5	21.7	21.7	30.4
	1	16	69.6	69.6	100.0
	Total	23	100.0	100.0	

background

_		-			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	2	4	17.4	17.4	17.4
	3	5	21.7	21.7	39.1
	1	14	60.9	60.9	100.0
	Total	23	100.0	100.0	

sleeve

		Frequency	Percent		Cumulative Percent
Valid	1	3	13.0	13.0	13.0
	2	3	13.0	13.0	26.1
	3	5	21.7	21.7	47.8
	4	12	52.2	52.2	100.0
	Total	23	100.0	100.0	

attire

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	4.3	4.3	4.3
	3	7	30.4	30.4	34.8
	4	7	30.4	30.4	65.2
	1	8	34.8	34.8	100.0
	Total	23	100.0	100.0	

clothing_colour

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	2	8.7	8.7	8.7
	1	7	30.4	30.4	39.1
	2	7	30.4	30.4	69.6
	3	7	30.4	30.4	100.0
	Total	23	100.0	100.0	

frame

			Cumulative
Frequency	Percent	Valid Percent	Percent

Valid	3	1	4.3	4.3	4.3
	4	2	8.7	8.7	13.0
	2	5	21.7	21.7	34.8
	1	15	65.2	65.2	100.0
	Total	23	100.0	100.0	

youtube

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	3	1	4.3	4.3	4.3
	2	4	17.4	17.4	21.7
	1	18	78.3	78.3	100.0
	Total	23	100.0	100.0	

reply

-		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	4.3	4.3	4.3
	2	4	17.4	17.4	21.7
	1	18	78.3	78.3	100.0
	Total	23	100.0	100.0	

how_reply

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1	4.3	4.3	4.3
	3	4	17.4	17.4	21.7
	4	5	21.7	21.7	43.5
	2	6	26.1	26.1	69.6
	1	7	30.4	30.4	100.0
	Total	23	100.0	100.0	

backstabbing

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	3	3	13.0	13.0	13.0
	2	5	21.7	21.7	34.8
	1	15	65.2	65.2	100.0
	Total	23	100.0	100.0	

Appendix F: Theme Chart

Number ing in ASL chapter	Themes	General description	General description
1	Deaf culture	Do/ Positive (eye brows up, smiling, express happy)	Don't/Negative (eyebrows down, clenched teeth)
1.1	Community	people, in person or see people presence online, have people online	don't have community, community is limited, too small
1.2	Manners	know how, have good manners, rules in how to sign in space, use of right space box, range or register of sign, level of signing for public vs causal	bad manners, rude, backstabbing, don't use space box right, bully
1.3	Deaf/Sign	See Sign, see Deaf, express self as a deaf person, Deaf culture, deaf culture, vlog is deaf culture, resource, deaf use asl vlog, use sign (important)	don't have, can't see, don't know about
1.4	Socialization/inte raction	face to face to meet, interact, talk with, learn, deaf events do this, go online can see other deaf positive way to meet find other deaf	isolated Deaf
2	Technology regarding Deaf use vlog	Do/ Positive (eye brows up, smiling, express happy)	Don't/Negative (eyebrows down, clenched teeth)
2.1	Recommendation s	ie webcam should keep up with ASL, webcam is not keeping up with signing, depends on story, if story is long, then vlog is long it, depend on people, people are different, if people are funny, show funny, ifthen do	I recommend Deaf people should not put captioning
2.2	Equipment	webcam, internet speed good, fast, editing software have for video, have more than one computer, use computer, computer	internet too slow, webcam not good for signing, can't upload
2.4	Creating Posting Vlog	can do this, make, film, put online	can't do this
2.5	Find or Share Vlog	can do this, use google, find, share, someone give me link to vlog	can't do this
3	Access	Do/ Positive (eye brows up, smiling, express happy)	Don't/Negative (eyebrows down, clenched teeth)
3.1	Watching Quality	good quality, can see, good light, size	bad quality, light, size too small
3.2	General Access	access information through sign, can see sign on computers, use, linked, website easy to use	can't access info, can't find good vlog to watch, BARRIER

3.3	CC or subtitles	should use, good idea	bad idea to use
3.4	Reply Feedback	I do like to reply in ASL or English, either, doesn't matter	I don't like no ASL replies. I don't like all in English.
4	Communication	Do/ Positive (eye brows up, smiling, express happy)	Don't/Negative (eyebrows down, clenched teeth)
4.1	News Informed	I like to know, I like to tell people what's up, politics, events, update, teach, learn, explain, educate	I don't what's going on, not informed, politics
4.2	Entertainment	vlogs entertain, funny, fun, jokes, stories, enjoy watch on break, interesting, poetry	vlogs should not be entertaining, must be all educational
4.3	Signing Changes	Of course I change my sign to be more clear in vlog, sign box use right space	I am limited, I must change my sign for vlog, Its hard, it's not easy, can't see same as in face-to-face, sign box not right space, smaller (if score this, don't need to score manners)
4.4	Technical Communication	having knowledge and skill how to use: vlog, webcam, computer, edit video; sign to webcam, have good light, how not too dark, not too close	not having knowledge, or not know how to communicate through vlogs, not have skill to do
5	Technology and Culture	Do/ Positive (eye brows up, smiling, express happy)	Don't/Negative (eyebrows down, clenched teeth)
5.1	Impact Culture	use online to share info instead of face to face, have more options	manners in general Deaf culture will change (more rude)
5.2	Impact Community	can find and see more Deaf people by going on line	deaf people won't meet face-to-face
5.3	Impact Access	can have ASL info better, have better access	English, hearing websites are not accessible.
5.4	Impact Self	I feel empowered, I feel better about myself as Deaf, see signing is good, have better self-awareness of self as Deaf, like see Deaf on computers	bullying I feel bad and quit or want to, impact how I use sign box, feel controlled by technology, I drop use FB

Appendix G: Methodology Justification

1.0 Introduction:

This section describes Deaf cultural and ASL centric mixed methods used for my dissertation, which were based on a cultural model to approaching research for social-linguistic minorities as suggested by Fels et al. (2006), Hibbard & Fels (2011), and Hibbard & Fels (2013). In addition, Wilson and Winiarczyk (2014) argue that having an understanding of the historical and society (cultural) perspectives of Deaf people and how those perspectives influence research is important when developing research designs for Deaf researchers and conducting research on and about Deaf people. The historical and social perspectives include discrimination and oppression of Deaf people in research e.g. medical focus on repairing hearing function which disregards their cultural identity or communication and cultural experiences (Wilson and Winiarczyk, 2014).

Wilson and Winiarczyk (2014) describe typical research designs for inductive, exploratory research that have historically ignored cultural and linguistic uniqueness within the Deaf community and thus have resulted in challenges for Deaf researchers. They argue that research conventions of mono-method approaches such as surveys are not inclusive for Deaf people. Hearing people prefer surveys while Deaf people participate more in focus group discussions. The survey approach usually uses text form and Deaf people prefer to participate in focus group/face-to-face interview approach because of ease communication in their own language. Typical mono-method research on Deaf people can be quantitative however it is not truly objective due to subjective nature of decision making process the researcher employs or researcher bias e.g., a hearing researcher conducts research searching for cures for hearing loss based on the assumption that Deaf people need/want their hearing loss "fixed" (Wilson & Winiarczyk, 2014; Onwuegbuzie & Leech, 2005). Research on Deaf people and related issues historically overlook the fact that Deaf people have their own Deaf culture and can be completely content communicating in sign language. Deaf related research has been associated with lack of inclusion of Deaf people in decision-making roles of research. There is scant academic literature that has analysed research methodologies with respect to how those methodologies are inclusive of Deaf people, particularly the consideration of Deaf culture and communication norms.

Cultural centric design used to inform the mixed methods allows for inclusion of diverse voices in the methodology (Mertens, 2009, Mertens & Wilson, 2012). In addition, Wilson and Winiarczyk (2014) and McKee et al. (2012) describe limitations of typical quantitative research on Deaf people in that researchers may describe participants as 'people who do not hear' while Deaf people are a cultural and linguistic minority with their own set of norms and rules that are different from those who hear. Those considerations for the technical aspects, the use of sign language, and Deaf culture norms in communication for the methodology are outlined here for each study.

The mixed methods approach used in this dissertation involved a combination of: online ethnography, hierarchal task analysis, online white space analysis, text/video description, nonparametric, parametric and descriptive statistics, semi-structured interviews, and thematic analysis. This combination was applied due to the nature of the research questions, online setting of vlogs and context of culture-linguistic communication features of Deaf participants. Deaf and ASL vlogging can be considered a cultural-technical activity in which Deaf people interact with each other through a computer based interface in order to share online signed content. This mixed methods approach was used to avoid the limitations of a single method design and to take advantage of having more than one way to explore the research questions as suggested by Miles & Huberman (1994). Research questions were asked on different levels for vlogging and opinions about vlogging ranging from a technical question to high level questions involve behaviours and user opinions requiring a combination of qualitative and quantitative data collection and analysis methods and influenced by the Deaf cultural context as described by Wilson and Winiarczyk (2014).

1.1 Study #1 Vlogs:

Typical mainstream vlog research exemplified by Molyneaux, et al. 2008 did not describe vlogging as needing the vloggers to be visually present in the video in order to share content. However, Biel and Gatica-Perez (2010) found that 40% of vlogs in YouTube contain one person. Other more recent vlog studies such as Snelson's (2015) described how vloggers used text to share and comment on video content. As described in Chapter 2 a complete view of a sign language user is required in order to convey signed content. In addition, text comments on vlogs are not an option for vlogs on Deafvideo.TV, one of the websites examined in this dissertation. As a result, methods that have been described by Molyneaux, et al. 2008, Biel and Gatica-Perez (2013), and Snelson (2015) were informed by Bellugi (1974)'s description of signing space with modifications to include the use of space around the vlogger (e.g. video size was characterized to be large, medium, small or very small). For the assessing the usability of an interface, Rogers, Sharp, and Preece (2011) provide guidelines that are based on text-oriented interfaces (e.g. how much of the content is text, where text is displayed, etc.). For this dissertation this methodology was modified from to be image-focused, including accounting for the view of the signer and how much screen area was devoted to representing video image.

The selection criteria for participants described in Chapter 3 section 3.3.1 was developed using sign language and Deaf culture approach to ensure that the vlogs selected contained ASL signed content created by Deaf people. As the focus of the study was on how individuals use vlogging, vlogs with more than one person creating content were excluded. Sample size as reported in qualitative and quantitative research of vlogging has not been well defined and varied (Snelson 2015). For example, Warmbolt et al. (2010) used a sample size of 74 vlogs for quantitative analysis. In addition, Snelson (2015) described how size is dependent on the nature of the study, resources present and type of questions being asked. At the time of my study, there were only two public websites that showed Deaf ASL vlogs by active vloggers: YouTube and Deafvideo.TV.

An online vlog ethnographic approach as described by Lange (2007), Molyneaux et al. (2008), Harley and Fitzpatrick (2009) and Snelson (2015) was used to analyse vlog characteristics and vlogging behaviour. The online ethnographic approach involves collecting online data from people without direct interaction (e.g. content posted by people online in vlogs, blogs and forums). This also includes examining relationships between people online by looking at how they comment and respond to each other (Harley & Fitzpatrick, 2009, Beneito-Montagut, 2011). Features analysed in this approach includes:

- Vlog Technical characteristics
 - Setting of vlog (bedroom, outside, office, kitchen)
 - Vlog length, views, number of comments, content (topic type)

- Editing (camera takes)
- Music
- Community interaction
- Types of comments
- Culture (gender communication approach, greetings, audience orientated)

Deaf cultural-linguistic specific characteristics present in face-to-face ASL communication and described in Chapter 2 were added as follows:

- Lighting (needed to access signed content)
- Video frame (signing space size)
- Attire and background characteristics for monochrome colour (Deaf cultural norm for ASL presentations and ASL video guidelines as described in Chapter 2)
- Editing (use of special effects, graphics, text)
 - Text is a representation of the second language of Deaf people while mainstream vloggers are not noted to use text from a second language in their vlogs.
- Atypical signing in vlogs that differs from face-to-face (Innovations, z-axis use)

Research methodology for recent YouTube research on vlogging was centred on text: the use of search engines that require text tag to search for vlogs, and text-based playlists of popular vlogs that users create are common selection techniques (Shifman, 2011). Typical analysis of text content would not be an effective method of selecting sign language vlogs because text use is

considered second language use for most Deaf people as described in Chapter 2. However, the text interface is present and dominant in most vlogging applications and cannot be disregarded as it may have some implications for understanding of how Deaf people vlog online and navigate websites to vlog. My analysis of vlogging thus included a modified textual analysis to consider the presence of text and the quantity of text that was visible on the website.

Nielson (2000) recommends considering the presence of text and white space around text on websites as a tool for examining the user-friendliness of the website. However, he does not consider user friendliness from a Deaf culture or ASL perspective. In order to include a Deaf cultural perspective in the analysis of text, Nielson's text/white space dichotomy was modified in two ways: (1) white space was the amount of space around a video (rather than text); and (2) the amount of text was replaced with the quantity of space occupied by video image representing a thumbnail image of the online video. This adaption was informed by the visual-only approach as described in Chapter 2.

1.3 Study #2 Interviews:

Traditional types of surveys in which participants provide written answers were considered culturally inappropriate for Deaf people. Deaf people prefer face-to-face interactions, which has been described as having a strong cultural value for discussing and understanding information due to a history of communication oppression, described elsewhere in Deaf culture scholarly research (references). Also, Deaf people value transparency, openness and directness over secrets or remaining anonymous as it is not possible to hide one's identity when using signed language as described in Chapter 2. While Wilson and Winiarczyk (2014) suggest that Deaf people prefer focus group discussions using their native signed language for participating in research, the availability of experienced vloggers was limited and would not be possible for this dissertation. One-on-one interviews were thus conducted in which participants could interact with the researcher in ASL.

Filming the interviews allowed for data to be recorded and eliminated distractions from the interview process. Use of paper and pen or computers to document data during interviews can create distraction and result in eye contact being broken. Deaf people consider breaking eye contact as rude, and maintaining eye contact is appropriate and needed for communication (Wilson and Winiarczyk 2014).

Semi-structured interviews using forced choice and open ended questions allowed for participants to expand on their responses to the forced-choice questions and elicited explanations and additional unanticipated questions. Barriball and While (1994) describe semi-structured interviews (compared with structured interviews) were useful when researcher cannot interview participants more than once. They also described that structured interviews assumed that everyone shared same vocabulary and meaning to the words used in the interviews and poses limitations on being able to re-phrase or ask follow up question on the same content (perhaps with different words). Semi-structured interviews were employed in this dissertation in order to take into account that ASL asynchronous communication is a new concept to Deaf people for sharing signed content and thus they may not share same vocabulary about this. In forced choice question design to assess attitude and opinion, Likert scale type or agree/disagree rating type questions are usually recommended (Rogers et al., 2011). For the forced choice questions, neither a Likert type nor agree/disagree type scale were used as it was considered culturally inappropriate. As there was no research examining cultural approaches regarding Likert scale methodology. In ad hoc discussions I had with different Deaf community members, Likert scale type questions were confirmed to be not culturally appropriate. Deaf people prefer to be direct, and say "yes" or "no" (Mindess, 2004, 2014). Likert scales or agree/disagree rating systems are considered confusing and indirect.

Open ended questions were analysed using thematic analysis which has the flexibility to analyze data collected asynchronously such as when answers to open ended questions were collected from interviews (Miles & Huberman, 1994). Miles and Huberman (1994) describe how this method can be used to categorize data into themes, which can be used to make connections between different parts of the data. Themes also include the participant's perspective as subthemes (e.g. participant response shows negativity or positivity). The sub-themes used in my analysis included 'non-verbal' content of participant answers such as furrowed eyebrows with thinned lips showing frustration (Braun, 2006). This was not to be confused with ASL linguistic meaning of non-signed content, as furrowed eyebrows are ASL linguistic markers. All themes and sub-themes were developed collaboratively myself and another Deaf person who was fluent in ASL. This was done to ensure that the definition or coding of the themes was not confused with linguistic aspects.

After the data collection and analysis of the interviews, the use of narrative summaries (in ASL), and observations of participant's repeated comments or atypical comments were also used to highlight the unique experiences and of participants as described by Winiarczyk (2014).

Thematic analyses included developing themes in ASL with three different Deaf community members in sequence, one who had a college education and two who had graduate experience or worked in Deaf linguistic research. This approach is suggested by Strauss & Corbin (1990) as one valid method of developing themes. Originally 40 themes were developed and as the themes were sequentially developed with the second person, and then reduced to 21 with 5 main themes and 16 subthemes of 4 or 5 each for the main themes. The number could not be reduced anymore with the third person. Interrater reliability analysis was then done to assess the reliability of those 21 themes.

Deaf people have developed conventions to represent ASL concepts and ASL content using text form for the purpose of notes or review only, e.g. at meetings, memorizing content for ASL lecture, or creating ASL video. This use has not been mentioned for research designs in academic literature aside from recommendations for best ASL video practices. Within linguistics literature researchers have described using "ASL gloss" in which upper-case text is used to represent the signed concept. This is not to be confused with translation of ASL as "ASL gloss" does not show full content in text form. As my research was not linguistic but communication and culture driven, text was used to note ASL concepts for review of the themes but was not "ASL gloss." The text notes were developed sequentially similar to how the themes were developed. The development of themes also included video recordings of the discussion between the two Deaf theme developers (myself and one other). However, due to time constraints and limitation of the video analysis software it was not feasible to use video to represent themes for use in the software used for the analysis. The text representations of the themes used in the software analysis and their descriptions in English have been created in table format and shown in Appendix E of this dissertation. The same approach that was used for developing the themes was used for the text representations; this text was also developed by consensus between myself and one other person. The text notes/labels were then imported into the text-based video analysis software for analysis of the themes, which was termed coding (Miles & Huberman, 1994). Researchers, Braun and Clarke (2006) and Weitzman and Miles (1995) described using

computers and computer software to code themes and conduct thematic analysis of data, which allow data to be annotated with themes. This process allows for faster analysis process and researcher can devote more time on conceptual issues. Attride-Stirling (2001) recommended that researchers conducting thematic analysis take advantage of the software tools available for thematic analysis while reducing time to code themes in data. The computer technology also allowed for storage and retrieval of annotated data and their themes.

1.4 Summary:

Understanding complex phenomena such as how Deaf people use online visual medium of vlogging to share signed content and their attitudes toward it cannot be fully captured using a mono-method research approach. However, standard mixed methods approaches were also problematic as they were unable to account for the unique linguistic and cultural aspects of Deaf participants. As a result the selected methods were modified to respect Deaf cultural norms and be ASL centric. This allowed me to work with and in ASL, and understand and discover salient dimensions of signed vlogging by Deaf people. These modified methods may also be useful to other researchers who are with working in signed languages or studying people who use them.

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