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## Persistent Emotional Extremes and Video Relay Service Interpreters

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### Cover Page Footnote

The authors wish to thank the VRS providers who shared our research with their employees and the many interpreters who shared their personal experiences and their professional insight. Their participation and honesty regarding their work is a priceless and selfless contribution to the field of signed language interpreting. Thank you.

Signed language interpreters in community and conference settings process emotionally-charged information as a regular part of their work (Harvey, 2001, 2003; McCartney, 2006; Morris, 1999; Moser-Mercer, Künzli, & Korac, 1998). The information may range from extremely negative to extraordinarily positive and may result in the entire range of emotions between these two extremes. While community interpreters might encounter profoundly devastating or elating circumstances on occasion during one month's work, interpreters who work in a video relay service (VRS) environment may experience a full range of emotions during just one shift of their assigned work (Brunson, 2011). This clear distinction of VRS work leads us to investigate how interpreters respond to such frequent emotional extremes and how they cope when extreme emotions persist beyond the work environment. Interpreters naturally will vary in their ability to process emotional information on the job, and they also will vary in the degree to which extremely emotional information will impact them on a personal level after they leave an assignment or disconnect from a call.

Previously, researchers have attempted to identify variables that impact the emotional health of the interpreter and the interpreting process, leading to a variety of results about the interpreter's inability to self-monitor for errors, the interpreter's feelings of powerlessness, and the mental stress of interpreters who perceive themselves as having greater control and less burnout (Bontempo & Napier, 2011; McCartney, 2006; Moser-Mercer, et al., 1998; Schwenke, 2010; Watson, 1987). Coping strategies also differ among interpreters, and there seems to be very little empirical evidence that identifies what practices are successful for dealing with emotional extremes other than anecdotal self-care or seeking counseling with a qualified therapist.

Persistent emotions were termed "emotional extremes" in the survey and were defined as emotions that the interpreter continued to feel after the termination of a VRS call. These persistent emotions might include extreme happiness, extreme anger and /or extreme sadness. Whereas recent years have yielded increased commentary on the incidence of vicarious trauma and mental health for interpreters (Anderson, 2011; Splevins, Cohen, Joseph, Murray, & Bowley, 2010), this study centered the investigation on VRS interpreting and considered emotional responses beyond the traumatic to include positive extremes. The study was designed to identify instances in which VRS callers exhibited emotional extremes that provoked lasting emotional responses in the signed language interpreters. A secondary purpose of the study was to identify coping strategies that interpreters use to manage personal stressors in the VRS environment that contribute to longevity and motivation to continue working in this setting amidst these extreme stressors.

The nature of VRS interpreting introduces unique circumstances that have potential to emotionally affect interpreters. The two-dimensional work environment, the restrictions on freely interacting with consumers, the rapidity with which calls are answered, and the diversity of call content are but a few factors that impact the interpreter's ability to regulate interpreting quality and personal satisfaction with the work. In the course of a shift, the ordinary stressors may not present a threat to an interpreter's sense of well-being in the VRS environment; however, over an extended period of time, the aggregate of diverse, rapid, and emotionally-charged content can become increasingly unmanageable for interpreters. These factors can be compounded by shift length, frequency of VRS interpreting in proportion to community interpreting, and other situational conditions.

Understandably, interpreters bring their own strategies for maintaining balance and personal health within this intense working environment, just as they manage their well-being in

general community interpreting where restrictions on client interaction are not imposed and working conditions are self-determined. Although evidence is now beginning to accumulate on the topic of VRS interpreting (Brunson, 2011; Oldfield, 2010; Schwenke, 2010), we do not yet know how interpreters perceive the primary stressors of VRS interpreting, how interpreters manage and recover from emotional extremes, or how VRS providers can more efficiently intervene on behalf of interpreters to maximize performance and job satisfaction.

Studies that encourage the voice of VRS interpreters to be heard and attended to are becoming more prevalent as researchers seek to understand what appears to be a steady exodus from the VRS environment. These studies, including this one, contribute evidence that can be useful to interpreters as well as VRS providers. Given the ongoing demand for qualified VRS interpreters who have excellent coping strategies and stamina to remain as valuable employees in a growing industry, the researchers in the current study sought to understand more clearly how a sample of VRS interpreters perceived their ability to cope with extremely traumatic (or positive) call content. The objectives of the study were to:

1. Identify instances when signed language interpreters felt affected by the emotional extremes of the client(s) in a Video Relay Service setting.
2. Identify patterns of behavior and/or coping strategies that lead to persistence in the field.
3. Identify patterns of behavior that lead to discontinuation of work within this genre or reduction in hours worked in this setting.

### **Studies of Interpreter Burnout**

The chronology of the research that relates to emotional health of signed language interpreters began with a study on burnout conducted by Watson (1987). Anecdotally, as an interpreter coordinator, Watson identified a high number of interpreters leaving the field in her community. She conducted a survey of the interpreters in her area and found several factors that contributed to interpreters leaving the field. Watson noted that nearly half the interpreters had not been trained professionally, but this is not surprising given that training programs were still relatively young in the 1980s. Many of the survey participants identified themselves as being weak in American Sign Language to English interpreting (called reverse interpreting at the time of the study). They also mentioned that there was a great lack of respect towards the work of interpreters as evidenced through low pay, politics among those in the field and interpersonal discord among interpreters themselves. Interpreters did not view themselves as professionals at this time. This survey was conducted during the “Machine Model” era of signed language interpreting, and although the results were not particularly powerful, this was an early attempt to analyze the local market. Later commentary speaks to some of the reasons why interpreters during this earlier time may have felt powerless and unable to change their work parameters, thereby increasing the level of burnout they experienced.

Dean and Pollard (2001) note, “traditionally, interpreters have been taught that thoughts, information, commentary and feelings are to be suppressed...” (p. 8). Other research by Moser-Mercer et al., (1998) shows that interpreters are more likely to view the interpreting setting or situation as unchangeable and are likely to have higher levels of passivity and evasive behavior. This may “be interpreted as representing a potential threat to the mental health of interpreters” (p. 58).

Amidst a growing concern about interpreter self-care in a profession that has promoted isolation and suppression as an ethical response to emotional-ridden work conditions, McCartney (2006) conducted a comparative study of burnout predictors within the K-12, postsecondary and community interpreter group. She notes that previous research identified variables that can predict how burnout might happen, including “role conflict, role overload, poor working conditions, unrealistic expectations of the interpreter, and unrealistic expectations of the interpreter by others” (p. 84). During McCartney’s study, the researcher sought to identify other variables that influence burnout predictability utilizing the Maslach Burnout Inventory-Human Services Survey.

One of the predictors identified in McCartney’s (2006) study was the locale in which the interpreter worked, with suburban areas predicting higher levels of burnout. Other predictors were misconception by non-deaf and deaf consumers concerning the role of the interpreter, one of the parties not valuing American Sign Language as a legitimate language, and not being treated as a professional by others in the work environment. Low levels of pay and certification maintenance requirements were identified in the study as contributors to feelings of burnout, and final predictors related to individual interpreter perception of demands and controls on the job. Those who viewed themselves as having less decisional latitude were more likely to experience burnout. Currently, no test exists that can gauge the level of burnout specifically of interpreters. In order to meet this need, McCartney suggests the creation of “a burnout instrument devised *solely* [emphasis added] for sign[ed] language interpreters” (2006, p. 104).

To build upon the knowledge base of interpreter stressors, Bontempo and Napier (2011) found that interpreters with higher ‘negative affectivity’ were more likely to perceive themselves as less competent and to experience greater stressors in the workplace. Watson and Clark (1984) documented the construct of “negative affectivity” as a psychological disposition for maladaptive approaches to stress. This affectivity type is related to a person’s evaluation of negative self-concept and impacts feelings of anger, revulsion, sadness, and dissatisfaction; continued research on affective states could benefit the search for information on stress management in the VRS setting.

Another study relating to burnout, conducted by Schwenke (2010), found that the interpreters who perceived themselves as having more decisional latitude were less likely to experience symptoms of burnout. This conclusion logically confirms the findings of McCartney (2006) that interpreters who felt less powerful to control the demands of the job were more likely to experience burnout. Schwenke identified burnout symptoms as emotional exhaustion, depersonalization and lack of personal accomplishment. The sample for this research was from community interpreters who might typically have more decisional latitude about their work when compared with VRS interpreters.

A competency model for working in VRS by Oldfield (2010) compared management expectations to what Video Interpreters (VIs) were actually doing in their work. Managers identified competency behaviors of VIs, ranking them in order of importance by personal effectiveness, customer service, interpreting skills, technology skills and telecommunication skills. They also grouped respondents into categories of *novice*, *competent* and *expert*. Individuals from these three groups were rated and ranked based on the preferred criteria and the category within which they would be classified. The data indicated those in the middle (i.e., *competent*) were more likely to be out of alignment with management expectations. Oldfield suggests for the competent VI, “this conflict may lead to frustration and dissatisfaction and, eventually, attrition” (2010, p. 49). These studies reiterate the importance of investigating

interpreter's coping strategies to inherent stressors of their work from the viewpoint of the cognitive psychology discipline.

### **Psychological Testing of Interpreters**

The literature leads us to believe there are definite predictors of burnout in the everyday work of full-time interpreters; however, the gap in the literature on VRS stressors remains to be filled. For example, we know that physiological demands on an interpreter result in increased anxiety and stress, but this has not been studied in the VRS setting. In 1998, Moser-Mercer et al. conducted a pilot study of the impact of interpreting for longer than 30 minutes on interpreters' quality of output, physiological response and psychological stress. The physiological testing showed that interpreters do experience stress as indicated by an increase in stress-related hormones (cortisol) and at the same time, the quality of the interpretation declines without the interpreters recognizing the errors. These findings did not vary between novice and expert interpreters and showed that interpreter's judgment "is extremely unreliable after increased time on task" (p. 55).

The subjects in the Moser-Mercer et al. (1998) study also completed two surveys. One survey related to the experiment itself and the other related to stress and coping. Researchers found that the interpreters felt a much lower level of control and ability to change the interpreting situation parameters when compared with a control group, thus contributing to increased stress. They also found that with regard to the experiment itself, the interpreter's level of stress hormone decreased as the time on task increased. This led the researchers to assume that, as a coping strategy, the interpreter 'disconnects' as a protection mechanism when mentally saturated. The "interpreter's performance in this study confirms that working beyond one's limits, and those established pragmatically by the profession over the years, is stressful and produces inferior quality" (p. 62).

Additional studies by Moser-Mercer (2003, 2005) found that when comparing a live interpreted event with a remote interpreted event, both settings are stressful to the interpreter, but the remote interpreting results in increased onset of fatigue and inferior quality interpretations. Although focused on spoken language interpreting, some of the issues that arose in these studies related to the interpreter feeling less control in the remote environment due to an increase in the cognitive process, and thus, would be applicable to work in VRS. The similarities between remote interpreting and VRS interpreting allow the research in one to apply to the other, and Moser-Mercer's work along with that of other VI researchers (Rozinger & Shlesinger, 2010), documents that stressors are compounded by inability of the interpreter to see the speakers or environment. These dynamics of remote interpreting clarify the increased physiological and psychological strain placed upon interpreters in remote settings.

### **Mental Health, Extremes and Interpreters**

Harvey (2001), a noted psychologist in the field of deafness and interpreter-related mental health, authored several papers that discuss the emotional impact of *caring* on interpreters. He posits that individuals viewing oppression is itself a hurtful experience to see. Signed language interpreters are frequent witnesses to the power imbalances between deaf and non-deaf people and are not only powerless to change the phenomena, but might also feel guilty for being part of the oppressing-hearing group. This can lead to self-victimization and a lack of self-care on the part of the interpreter. However, if steps are taken to manage the trauma, "it

becomes a transformative experience. On the other hand, if you don't manage it right, it can be a significant health risk" (p. 95). Harvey emphasizes how some of these issues go beyond the individual interpreter and also cause intragroup conflict that interpreters may project negative feelings towards colleagues as an effect of vicarious trauma.

Harvey (2003) also wrote that if a person "bears witness to oppression [he or she is] at higher risk for becoming hypervigilant to its occurrence" (p. 208). In other words, an interpreter may seek oppressive behaviors in other work towards people who are deaf and perhaps see oppression where none exists. Harvey discusses empathy, which is an emotional response whereby an interpreter may feel a connection to the emotions that another person experiences. Harvey considers pure empathy to be a mistake and suggest that it must be balanced out with cognition or conscious thought by the interpreter as an individual separate from whatever is happening to the other person because this latter part "is the shield that keeps you safe" (p. 210). Cognition is recognizing that while one empathizes with the deaf person's feelings, he or she is not *that person*.

Schwenke (2012) suggests several strategies for intervention related to burnout experienced by interpreters. These strategies include becoming more self-aware, understanding job and systemic analysis, stress reduction, coping, and learning about burnout and personality characteristics related to perfectionism. In this study of the relationship between perfectionism, stress, coping resources and burnout, the "findings suggest that interpreters with higher levels of maladaptive perfectionism are likely to experience higher levels of perceived stress and, as a result, increased burnout" (p. 73).

### **Possible Benefits of Extremes**

While empathy can negatively impact the interpreter's mental health, there have been some studies that show working through these emotional extremes can result in positive growth as a final outcome for the interpreter. Splevins et al. (2010) and Arnold, Calhoun, Tedeschi, and Cann (2005) take an interesting approach to the experience of trauma for caregivers. Rather than focusing on vicarious trauma (VT), they investigated the concept of vicarious posttraumatic growth (VPTG). This is a positive final outcome after exposure to the trauma of others. The researchers conducted a qualitative study using face-to-face interviews with interpreters. They identified four themes in their analysis of the interviews:

1. *Feeling what your client feels*. This phenomenon appeared to be more than just empathy because "participants felt that they were feeling the same emotions as their clients" (p. 1709).
2. *Beyond belief* or disbelief and shock at the information they were hearing while interpreting.
3. *Finding your own way to deal with it*. This refers to the interpreters' decisions to find coping methods to deal with the information they were hearing. These mechanisms varied for the participants and many found that over time, hearing new information that was distressing became less overwhelming to them.
4. *Becoming a different person*. The interpreting experience from start to finish evoked a positive change in self-concept and worldview. This growth occurred through self-reflection and by witnessing the growth of the clients.

One implication of this study is the possibility of the interpreter's well being having an impact on the client's [consumer's] well being. A second interesting suggestion made was to

decrease opportunities for either VT or VTPG to occur. The researchers suggested achieving this by varying the interpreters who work with one particular trauma client and not allowing one interpreter to be exposed to repeated traumatic information by one client.

When considering the emotional experiences of interpreters, it is beneficial to observe parallel professionals and their responses to similar situations. One such professional would be a mental health therapist, or counselor, who can become intimately involved in the emotions of a client or patient. A field that parallels interpreting in some ways is that of the therapist or counselor. Arnold, et al. (2005) used a sample of clinicians to identify VPTG. Their study appears to be the first of its kind in the VPTG arena. However, the authors note, “many important questions remain unanswered” (p. 260). The results are helpful to practitioners because it is encouraging for clinicians to know that while they may experience emotional pain in some of their work, they will very likely also experience a positive “opportunity for personal growth” (p. 260).

### **Framing the Work of Interpreters**

Utilizing Demand-Control Schema as a launch pad, Dean and Pollard (2001) studied the factors of interpreting work and created a model whereby interpreters can maximize their control of highly-demanding work conditions. They adapted the work by Karasek (1979) related to occupational Demand-Control Theory and applied it to the field of signed language interpreting. Dean and Pollard identify four demand categories that interpreters may experience, including paralinguistic, environmental, interpersonal and intrapersonal. How these demands are ameliorated depends on the amount of decision latitude or control the interpreter has in any given situation. While the term *control* is indicative of having power over a situation, this also refers to abilities that the individual interpreter has mastered. These controls can differ from one assignment to another, may vary depending on the interpreter’s individual controls and can also change over the course of a single assignment. As Dean and Pollard state, “conceptualizing one static level of demand for the occupation of sign[ed] language interpreting does not seem appropriate” (p. 5).

Additional demands placed on the interpreter relate to the Registry of Interpreters for the Deaf’s (RID) Code of Ethics (since revised and now called the Code of Professional Conduct or CPC). At the time of Dean and Pollard’s study, one tenet of the 1994 RID Code stated interpreters “shall not counsel, advise or interject personal opinions,” (as cited in Dean and Pollard, 2001, p. 6), while the newer CPC states that one may “judiciously provide information and referral” if needed (RID, 2005, Section 2.5). Likewise, interpreters were told to “keep all assignment-related information strictly confidential,” (as cited in Dean and Pollard, 2001, p. 6), and the newer CPC states that one may “share-assignment related information only on a confidential and ‘as-needed’ basis” (RID, 2005, 1.1).

Historically, interpreters have been taught that they are not allowed to make decisions and the only latitude they do have is related to linguistic demands. Although the CPC has evolved to reflect a growing body of evidence suggesting this lack of decisional latitude is detrimental in the long term to the individual interpreter, the interpreting profession and the Deaf community, (see Bontempo & Napier, 2011; Brunson, 2011; Moser-Mercer, 2003, 2005; Rozinger & Shlesinger, 2010; Schwenke, 2012), its final recommendation for an interpreter who experiences emotional extremes is to “withdraw from the profession when not competent” (RID 2005, Section 3.2).



## Video Relay Services

The literature points to ongoing questions regarding the specific emotional impact of VRS work environments on interpreters. VRS settings are unique in that they incorporate a layer of federal regulations that influences numerous aspects of the interpreter's work. VRS providers understandably are motivated to be as profitable as possible while adhering to the regulations imposed upon them by the federal government. Consequently, interpreters must follow certain protocols established by federal mandates, such as requirements for *speed of answer* (80% of all calls must be answered within 2 minutes), *24-hour service availability* (interpreters can work during anytime of the day or night) and *911 accessibility* (Federal Communication Commission, 2013). Companies are regulated and certified by the Federal Communications Commission (FCC) as they carry out Title IV of the Americans with Disabilities Act (ADA) to provide telecommunications access through VRS. In order to comply with these mandates, the individual companies train VIs on what they consider the most efficient ways to process a VRS call. Training includes the technical requirements related to the equipment used to process calls and the legal requirements the corporation has agreed to follow with respect to the FCC regulations.

When a non-deaf or deaf caller places calls, they are routed to a virtual queue to await the next available VI. The VI must take the calls that come through the queue without regard to content or consumers (FCC, 2013). This is unlike the way interpreters have rejected or accepted assignments based on a myriad of factors including content, consumers, and personal preferences (DO IT Center, 2005). In a VRS setting, calls come into their queue without regard to content, consumers, or settings, with the exception of 911 calls, which are automatically routed to the front of the queue. This process means that each call is decontextualized and interpreters may or may not have any background information on which to base their interpretation (Brunson, 2011; DO IT Center, 2005). This practice is similar to jumping into a conversation with strangers mid-sentence and trying to ascertain meaning and intent.

As Moser-Mercer (2005) discusses, all of these additions or changes to the way that an interpreter completes their work in a remote setting will require retrofitting of the interpreting process itself (p. 736). Furthermore, when external conditions change too much "even the most successful professionals cannot sustain this level of performance if extreme conditions prevail for too long" (Moser-Mercer, 2000/2001, p. 90). The problem that underpins the current study is that, typically, interpreters are not being educated to interpret in a remote setting, managing this new set of demands to minimize stressful impact on their cognitive load and on their ethical decision-making skills.

## Method

This study incorporated a mixed-methods design within the context of an online survey with closed and open-ended questions (Creswell & Plano Clark, 2007). The closed questions were analyzed for descriptive statistics, primarily frequencies, and the open-ended questions were analyzed using a constant comparison technique within content analysis (Strauss & Corbin, 1998). A research design in which participants had the opportunity to elaborate as well as rate their VRS experience was considered to be ideal given the sensitivity of the topic (discussing VRS interpreting experience in a highly proprietary business). The method also guaranteed anonymity through an online survey instrument, and the qualitative data collected from the participants provided a depth of response that would have been difficult to achieve in a survey-only format. The Institutional Review Board of the sponsoring institution approved the

instrument and research protocol in compliance with ethical standards for research involving human subjects.

### **Participants**

Identifying a sample for this study involved soliciting the assistance of VRS providers in encouraging their employees to participate in the data collection. Emphasizing the importance of research to industry growth, the researchers assured VRS providers that all participation was anonymous and no items in the survey referred to any company by name. Directly targeting the population of interpreters currently employed by VRS companies is known as ‘purposeful sampling’ (Strauss & Corbin, 1998). This type of purposeful sampling was intentionally used in an effort to alleviate any hesitancy that respondents might have when contacted directly by the researchers. This hesitancy, in order to remain loyal to the hiring company and not violate confidentiality requirements, was anticipated by the researchers as a potential deterrent from participating in the study. Seven VRS providers were contacted to assist with participant recruitment and encourage employees to participate. One VRS provider responded to the researchers directly and sent messages to employees asking them to participate in the study, emphasizing the importance of data collection to improve working conditions. This same provider also generated a follow-up recruitment message several weeks after the first. The six other providers may have shared the survey with their employees, but did not respond to invitations to participate.

Direct solicitation of individual participants was also employed in an effort to enlarge the sample. Participants were recruited via email, electronic mailing lists and social media using the public online database of the RID. The researchers emailed an invitation to participate in the online survey to 8,173 associate and certified RID members who resided within the United States. The combined recruitment efforts resulted in 889 self-identified VIs who completed the survey. There is no verifiable documentation available that specifies with certainty the total number of VIs employed by the multiple VRS providers; however, this sample represents approximately 22% of the 4,000 estimated to have worked in this setting at one time or another (RID, 2007). The assumption is that the RID estimate includes those who have left and returned as well as those who have not returned and those who continue to work in this setting. To our knowledge, this study represents the largest sample obtained thus far that looks solely at VRS interpreters.

### **Materials and Procedures**

Participants completed a 32-question survey using the University of North Florida’s survey client, Vovici. After electronic consent was given, the survey opened to a section requesting basic demographic information. Demographic categories of gender and race were modeled after the 2010 U.S. Census. No identifiable information was collected about the participants or about the VRS companies for which they worked. Other demographic information collected included questions about education, certification, state screening, and number of years of interpreting.

Participants were asked how long they had worked in the VRS setting and how many hours were worked in an average month. Additional questions asked about an increase or decrease in hours over the past 12 months and the reason(s) for the schedule changes. Finally,

there were open-ended questions regarding the VI's experience with calls that caused persistent emotions and the coping mechanisms that were used following those types of calls.

## Results

### Demographics

There were 889 respondents, with 84% holding NAD-RID certification, and the average respondent was white (93%) and female (88%). The analysis regarding the number of years certified indicated that 30% (N=722, the number of respondents who elected to answer the question) were nationally certified for less than 5 years, 22.6% for 5-10 years, 19.2% for 11-15 years, and 23.2% for greater than 15 years. Respondents tended to be college educated (2.5% held a doctoral degree; 19.5% held a master's degree; 39.1% held a bachelor's degree; 19.9% held an associate's degree). As the degrees became more advanced, the areas of study were less likely to be in an interpreting discipline. Respondents averaged 17 years of interpreting experience, the mean age was 42, the mode was 29 years of age, and respondents included a range of ages from 21 to 79.

### Work Frequency

Most of the respondents had not had a significant change in their VRS work frequency (either an increase or decrease) during the 12 months prior to the survey. However, the participants tended to decrease work hours in VRS when other work needs increased, when their home commitments increased, or when they experienced intrapersonal stress from working conditions. For the individuals who reduced their hours (N=818), 43% reported that stress from working conditions was a direct cause for a decrease in hours. Additionally, 18.5% identified stress related to management or colleague interactions as a factor in reducing their hours.

Several open-ended questions allowed respondents to make additional comments. Within this group (N=801), a trend appeared with 5.7% of the respondents mentioning company policy as a contributing stress factor. The nature of these closed and open-ended questions might allow for duplicate responses. For example, an individual might cite intrapersonal stress and negative company policy as stressors. Individuals who reported an increase in work frequency cited lack of work in other areas as one reason for increased hours, and 60% noted the reason for an increase in work frequency was the VRS company offering increased hours. The average respondent worked 3.5 days of the week with an average of 7 hours per shift.

### Persistent Emotional Extremes

A vast majority of respondents (84%, N=776) reported experiencing emotional extremes during the previous 24 months. There were 92 emotions identified by the respondents--85 responses were coded as negative emotions and 8 were coded as positive. Survey respondents identified *anger* (77.5%), *sadness* (76.7%), and *frustration* (40.9%) as the top three negative emotions, while *happiness* (58.5%) was reported most often as a positive response to a VRS call. Other positive responses were clustered and formed 1.8% of the open-ended answers. More than one response was allowed for this question about emotional extremes, so respondents could identify multiple positive and negative emotions. However, respondents tended to identify more negative emotions than positive and were most likely to identify only negative emotions.

Furthermore, the content of a particular call was more likely to be the cause of an emotional reaction, followed by the attitude of the signed language user, and lastly, by the attitude of the non-deaf party.

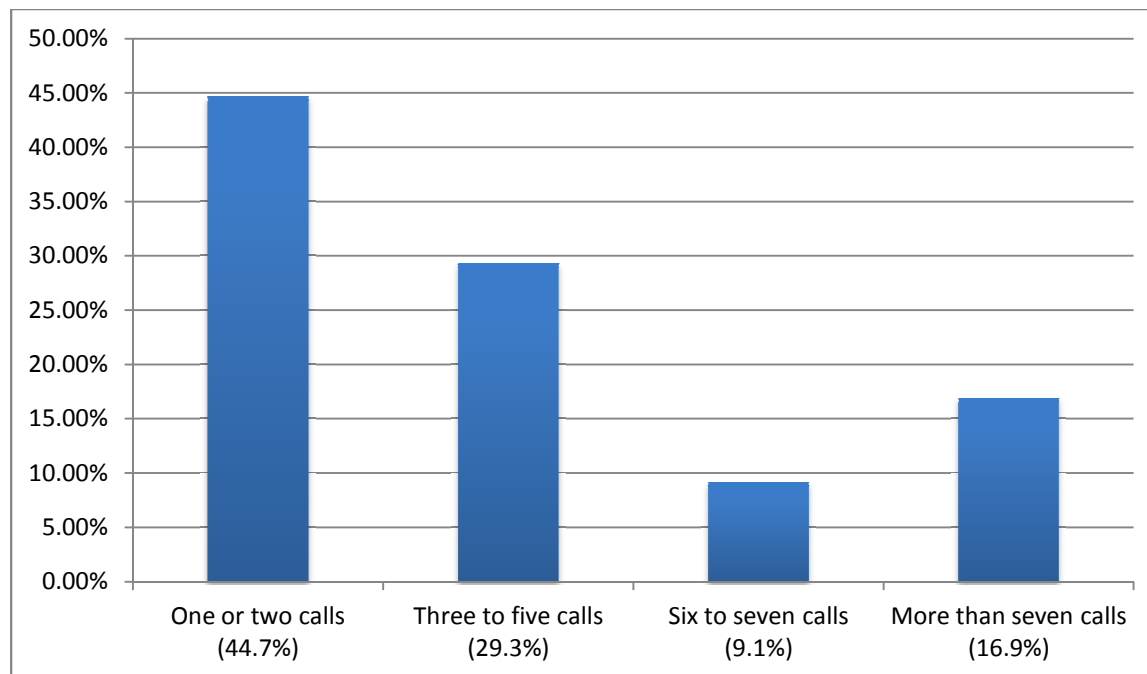


Figure 1. Frequency of emotionally extreme calls per month.

**Frequency of emotional extremes.** Nearly 45% of respondents who answered *yes* to experiencing emotional extremes indicated this would happen once or twice per month, 30% indicated three to five times per month, 9% said six to seven times per month and 17% indicated that they experienced emotional extremes greater than seven times per month. When grouped by gender, women had a higher incidence of experiencing both positive and negative emotional extremes when compared with men.

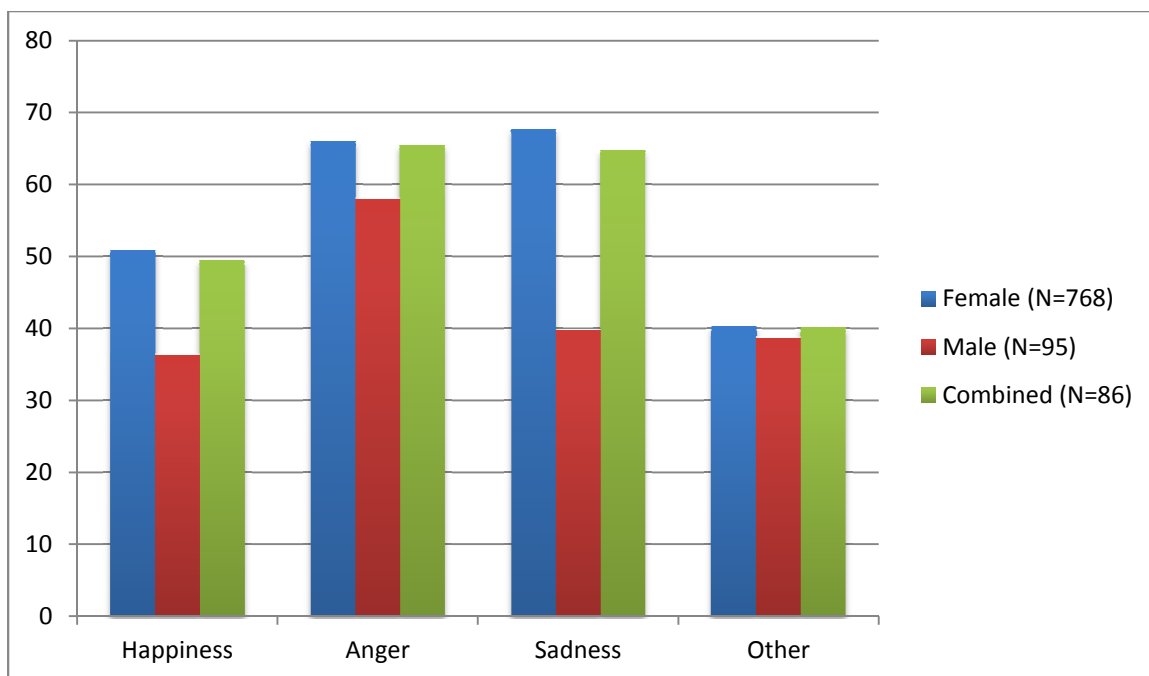


Figure 2. Emotions identified by gender.

**Coping strategies.** This portion of the survey asked participants to identify personal coping mechanisms following an emotionally extreme call (whether positively or negatively charged). Several themes emerged from the content analysis of the responses. The most common coping mechanism that VI's mentioned was to *debrief* with a manager, another VI/interpreter/mentor, friend, or spouse/significant other, while maintaining confidentiality regarding call content. Another immediate coping method was to *take a break* or *go for a walk* and *engage in positive self-talk*. Less than 8% sought professional counseling for the effects of extreme emotions, and 7% utilized the Employee Assistance Program (EAP) provided by the employer for psychological support. For those who used debriefing as a coping method, 92% revealed they sought feedback from a colleague, 68% talked to their spouse/family member/significant other, and 39% talked to a friend outside the field. Grouping the coping methods by *pre-call*, *during-call* and *post call*, the overwhelming majority of the coping mechanisms were utilized post-call.

Table 1 lists the top twenty coping methods identified by respondents. One of the interesting themes was *let it go and go on*, sometimes referred to as LIGAGO by the survey participants. Participants did not elaborate on the process involved in LIGAGO.

Despite various attempts by interpreters to cope with emotional extremes independently and in a confidential and ethical manner, 77.2% selected coping strategies that involve a team interpreter or another external person. Despite the need to involve an external person, the professional psychological resources provided by the VRS companies (such as the EAP) were underutilized, with 93% of the respondents never pursuing this type support for experiences related to VRS calls.

Table 1  
*Frequency of Top 20 Coping Responses and Control Availability*

<b>Coping Response</b>	<b>Frequency</b>	<b>Availability</b>
Debrief	69.3%	Post
Break	40.7%	Post
Walk (after)	23.5%	Post
Self-talk	20%	During; Post
Breathe	19.0%	Post
LIGAGO*	17.6%	Post
Pray	12.8%	Pre; During; Post
Exercise	12.6%	Pre; Post
Cry	9.7%	Post
Distraction	7.9%	Post
Team	7.9%	During
Eat/Snack	7.3%	Post
New call	6.7%	Post
Reduce hours	6.7%	Post
Touchstone +	6.7%	During; Post
Meditate	5.7%	Pre; Post
Reflect	4.7%	Post
Massage	3.9%	Post
Verbal Catharsis #	3.1%	Post

*Note.* \*=let it go and go on; + = something tangible that reminds them of their own life; # = spoken or signed responses to callers after they disconnect. N=505

Physical coping strategies, such as walking, yoga and exercising, were identified by 40.1% of the respondents as beneficial. Table 1 suggests that interpreters are resourceful when looking for productive ways to cope with emotional extremes, but the reality highlighted by these results is that the majority of interpreters, after attempting to debrief with someone, cope by practicing physical relaxation techniques and continuing to work. One interpreter said, “I think we all try to tuck it away in a box because we do not know how to deal with it. I do not know what kind of impact that we will have in a few years.”

## Discussion

The results of this study point to the idea that call content is affecting interpreters in VRS. The attitude of callers toward the VI is also making an emotional impact. The issues that are influencing interpreters emotionally in this setting likely will remain unchanged since the topics relate to the rights of others to speak freely about whatever content they like and to act in whatever manner they see fit with one another. While these factors may be unchangeable, the manner in which interpreters are trained to deal with the impact of these emotions is something that must be addressed. A wide variety of coping methods were identified in this study, but none of the data clearly showed which of these coping methods were more likely to lead to persistence

in the field. When these coping methods were unsuccessful, individuals reported that they reduced their scheduled hours and in some cases, discontinued working in VRS.

The primary limitation to generalizing this study's results is the challenge of obtaining the population's voice when a list of VRS interpreters is not publicly available and companies justifiably guard employee lists or demographic information. Not all VRS interpreters are members of RID, so it is evident that these interpreters may not have been contacted directly by the researchers. Convenience sampling proved to be the best method for accessing the highest number of interpreters possible (Strauss & Corbin, 1998); nevertheless, a large portion of the population apparently remains untapped, and results from this study should be applied cautiously. If recruitment methods could be improved such that (1) all major VRS providers encouraged and incentivized employee participation or, (2) researchers were privy to the contact information for VRS interpreters, the likelihood of obtaining a representative sample would be improved.

Although 85.6% of the respondents indicated they were NAD-RID certified, the fact that participants were selected from the RID membership roster made it more likely they would be certified. This could have resulted in an underrepresentation of the pre-certified interpreters working in VRS settings. Additionally, there is no current accounting for the number of interpreters who are working in VRS settings at the time of this study since this is protected information for each VRS provider (Michael Snyder, FCC, personal communication, October 2, 2012; Chris Wakeland, Sorenson Communication, personal communication, September 24, 2012). Although we cannot guarantee the sample to be representative due to these limitations, the demographics regarding gender, race and age correspond closely with the most recent survey conducted by the National Consortium of Interpreter Education Centers (2013).

Intrapersonal stress from working conditions was identified as a factor in an interpreter's decision to reduce one's amount of work in VRS. However, respondents did not have a means to expand on this specific area to identify a wider variety of causes for intrapersonal stress. Although other open-ended responses did point to stressors caused by issues with colleagues in the call center, the survey might have collected a greater depth of information if more questions related specifically to intrapersonal stress were open-ended.

The title of the survey and the survey questions indicated that the researchers were looking at emotional extremes during VRS calls, but there was an intentional attempt to avoid steering respondents toward positive or negative ends of the spectrum. We realize that respondents who have experienced emotional extremes during a VRS call may be more likely to respond to a survey on the topic of emotions, while individuals who have not experienced emotional extremes may choose not to participate. This might be considered a good participant/good subject effect whereby the respondent answers in a way that supports the researcher's questions posed within the study materials (Nichols & Maner, 2009). Additionally, emotional responses are highly subjective, individualistic and might be influenced by a diathesis stress model of predisposition to an emotionally extreme reaction (Everly & Lating, 2002; Levi & Andersson, 1975). While one type of call may elicit an emotional response from a particular VI, this would not be the case for all VI's. As Brunson (2011) mentions, there are many variables that will impact calls, including the emotions of those involved in the process. In Brunson's account of "interpreting as a form of emotional labor" (p. 2), interpreters are, by nature of the task, participants in the type of work that involves emotions. He goes on to explain interpreting as a social task, primarily substantiated by bi-bi and ally philosophies rather than traditional helper or conduit philosophies. Brunson's experience with contradictions between VRS company

policies and his training as an “ally-approach interpreter” (p. 14) underpin this study on how interpreters cope with emotional extremes in this environment. Whether by the callers themselves or by the call content, interpreters in a VRS setting are emotionally affected, sometimes in a positive way and sometimes in a less-desirable way. As one VI in this study said, “I think the problem is that I am those people during the call and it’s hard to shake that off.” While this study is interested in the vicarious joy documented by some participants as helping them to process negative calls later, the interest in coping strategies warranted a concentration on the more disturbing emotional responses to the work.

Freelance interpreters in the community also experience a continuum of emotions in response to their work, and VRS interpreting resembles other types of interpreting specializations that introduce increased variables to job demands and satisfaction. In this study, the focus on VRS interpreting is due to the perceived exodus from the work or the schedule cuts of some VIs, the lack of research on VI retention and job satisfaction, recent steps by VIs to unionize (California Federation of Interpreters, 2013), and the effects of interpreter turnover on the overall delivery of video relay services. As one VI mentioned:

There isn’t a great deal of emotional support in the work environment and we see crazy things. I’m not sure how to address the problem better, but I know that it’s real. It leads directly to interpreter burnout, and there is a gap in the field that is a detriment to all parties: the VRS companies (they lose interpreters or interpreter-productivity), the interpreter, and the Deaf Community (they lose a skilled interpreter).

While much of the data gathered in this study came directly from VIs, several individuals from the management side of the business also responded. These individuals have an additional layer of stress added to their responsibilities in that they still process calls, yet they must also be the face of management and support within their call centers. Some of the comments from managers regarding how they process these additional responsibilities included:

VRS Manager 1: “I have sought the input of other managers, interpreters and professionals. Sometimes I walk. Sometimes I cry. Sometimes I spend time alone.”

VRS Manager 2: “I know it is not my role to counsel an employee—I do what I can within the scope of my position. I have referred employees to take advantage of EAP services. I try to remember to treat others as I want to be treated and applying that to everyone I serve—my employees and callers...my family and friends.”

VRS Manager 3: “I make every attempt to listen, encourage, hold space, empathize...I try to make sure my employees know that I appreciate them.”

In effect, VIs, managers and directors of call centers are the first responders when VIs in the center must debrief, vent or ask for feedback. Improving their ability to deal with the emotional extremes of employees might facilitate a reduction in attrition of VRS interpreters. A few respondents mentioned their own training in crisis management as a beneficial skill set when dealing with emotionally traumatic call content, and one individual associated himself with police officers and other first responders who deal with trauma in their own work.

One coping theme that became apparent in the study was reduction in hours in VRS and in some cases increasing community work. Respondents wrote the following:



- VI 1: “I have made short term changes to my VRS work schedule (limiting the number of hours I will work consecutively), and I have made long term changes to my VRS schedule (no longer building VRS in first but rather using it as a time filler or ‘extra’ income rather than primary interpreting income.)”
- VI 2: “I have reduced my hours to reduce the cumulative stress and trauma that was wearing me down.”
- VI 3: “Reduce my hours and seek other employment.”
- VI 4: “I’ve changed status from full-time to part-time.”
- VI 5: “Take more assignments out in the community rather than in VRS setting.”
- VI 6: “Work less VRS for a while; work more in the interpreting community outside of VRS to have a break from the intensity of interpreting phone calls.”
- VI 7: “Reducing hours worked. Changing shift worked to one that has fewer highly emotional calls. Finding complementary work that allows me to play an active role in the situation to combat the sense of helplessness that can come up in VRS work.”
- VI 8: “The only coping strategy I have found is to LEAVE interpreting in VRS.”

Each month, VIs process approximately 9.1 million minutes of VRS calls (Rolka Loube Saltzer Associates, 2012). This leads to a variety of juxtapositions in call content that interpreters may experience during just one shift of work. The volume and frequency of emotional calls is a concern to all parties involved including the VI, the company, and the Deaf and non-deaf communities that utilize VRS. Whereas 43% of the participants reported they were reducing VRS working hours because of intrapersonal stress, and 92.4% never sought professional counseling for the disturbance emotional extremes were causing in their lives, the most common coping mechanism discovered in this study was to debrief with someone, usually another VI, afterwards. A sample of what the respondents mentioned regarding debriefing identifies another VI as the *go-to* coping mechanism:

- VI 1: “Talking to someone in the office right away or as soon as I am off the call, regardless of policies.”
- VI 2: “I try to seek out colleagues first because they are more apt to understand why I am bothered and can give me ways to work through it.”
- VI 3: “Usually I speak with a coworker inside the center and speak in generalities about the call...hearing worse situations helps me realize I’m not the only one who has experienced a bad situation before.”
- VI 4: “I usually need to ‘vent’ to someone such as my fiancé or other co-workers. Co-workers are better listeners because they are the only ones who really understand what I am experiencing.”
- VI 5: “Speak with another VRS interpreter who I trust and value their expertise and experience in VRS. Sometimes this is purely to vent about the call, other times it is to gather insight into what I could have done differently as the interpreter and how I may of [sic] impacted the call.”
- VI 6: “Case-conferencing with a colleague.”
- VI 7: “Sometimes, simply relaying the experience to a trusted colleague helps.”

This practice by VIs raises issues of confidentiality and the repercussions of relying on external support. Whether or not the individuals who are functioning as sounding boards are

sufficiently trained to debrief is not clear (Dr. Ron Lybarger, LP, personal communication, September 18, 2012). VRS companies may want to examine ways to increase the availability of qualified debriefing counselors, and perhaps train their managers and VI's in successful techniques for confidential post-call and/or post-shift debriefing. A concern is raised that individuals who are unqualified or under-qualified to debrief might actually do more harm than good for the individual VI's emotional wellbeing.

For calls that influence VIs with negative emotional content, there are very few controls at their immediate disposal, while they are processing the call. Several VIs mentioned that they are able to *call a team* or *hand off* the call as immediate coping methods. However, survey participants and other researchers have mentioned that this practice has been discouraged because it reduces the VI's production numbers (Brunson, 2011; Peterson, 2011). Consequently, this may also reduce the billable minutes to the FCC, reducing the company profit margin. Responses that referred to this theme included:

- VI 1: "Unfortunately, policies have changed, and we are no longer allowed the freedom to take a break immediately after a tough call, or to take an extra long break if we need to decompress. I find it a very dehumanizing position to be in."
- VI 2: "Take an extra break and don't sweat about the production report."
- VI 3: "I often feel that my personal well-being [sic] is less important than my productivity."
- VI 4: "Log in standards, billable minutes, and company bottom lines are always the most important thing in VRS."
- VI 5: "I often need to log off for a few minutes. Unfortunately, this causes more stress since we're monitored so closely and required to meet percentages in order to keep our jobs."
- VI 6: "We really often don't have time to do anything about it, we gotta [sic] stay on the phones and here comes the next call."
- VI 7: "Next call comes in 20 seconds..."
- VI 8: "We are told that if we need to log off, we can. But, we must balance that with the 10 minutes per hour we are allotted to be off the phones. That 10 minutes has to cover our bathroom needs, need to get a snack or drink, need to get up and walk around, need to make a call or check messages, etc., etc., etc..."
- VI 9: "We crank out calls and make money...it is enterprise. A business...and bottom line no one really cares how I feel, as long as I crank out \$\$."
- VI 10: "It's about the stats, not how I do my job."

Better self-care has been identified as a needed area for VIs; however, the concept of self-care rarely includes how VIs processes emotional information or maintains mental health but more typically focuses on ergonomics and kinesthetics (NCIEC, 2008; RID, 2012). Other post-call coping methods such as taking an off-schedule *break*, *logging off*, or *returning future calls to the queue* might have the same deleterious impact on production numbers. Typical breaks are reported as ten minutes per hour of a shift. Conversely, VIs are actually in an active call status for only 38% of an hour or for about 23 minutes during an average shift (Brunson, 2011). Yet, in a remote setting, interpreters have been shown to fatigue at about the 15-18 minute mark (Moser-Mercer, 2003) causing the quality of their interpretation to deteriorate. One practice that may improve this issue is increasing multiple break times during the hour so the VI can better manage

negative call content. Of course, this must be balanced with the financial impact this might have on the VRS provider. Furthermore, preventative coping methods should be investigated to assist the VI in avoiding the negative impact of emotionally extreme calls. In effect, interpreters should expect that some call content will impact them in an emotional way and should be prepared for these calls when they happen. The analogy was made by one individual that, “over the years I’ve come to look at VRS like a batting cage. You step in, put on your helmet, and the pitches start coming.” The key to increasing future longevity is to provide VIs with this protective garb through preemptive training, preparation and further empirical research.

### **Future of VRS Research**

In consideration of the self-reflective nature of the coping responses, one cannot overlook the fact that many coping strategies are experience-based, trial and error methods. Future empirical study might focus on successful ways to train interpreter managers and VIs in debriefing, and a comparative study of the benefits of debriefing with a professional versus a colleague would aid in our understanding of effective coping strategies. As noted, a small percentage of the participants reported using professional counselors, which indicates that VIs will go to a colleague first because, as one person mentioned, “no one understands like another VI does.” An emphasis on preventative coping exercises and other immediate methods to remain grounded during an emotional VRS call would be beneficial. As noted in Table 1, having a touchstone, engaging in positive self-talk, prayer, and meditation/reflection help to remind the VIs of the positives in their own lives and reduce the stressful feelings they experience.

Much of the data gathered in this survey point to the need for the VI to have a myriad of coping methods during all phases of a call (pre-call, during-call and post-call) rather than just one or two. Increasing the options that VIs have at their disposal before, during and after a call may decrease the impact that emotionally extreme calls have upon the VIs’ emotional health and ultimately, to their ability to remain within the VRS field.

VRS interpreting continues to be an attractive and viable option for new as well as seasoned interpreters who are attracted by the consistency and stability of interpreting in one place for extended periods. As previously mentioned, the market demand continues to exceed the supply in many VRS call centers around the country. The diversity of experience obtained through this type of work is also a known benefit of working in the VRS context. In order to maintain the intrigue and allure of this setting, it is critical that research continues to reveal how to improve the delivery of these services. Neutral parties, such as universities and autonomous entities, are ideal for conducting research on the various aspects of VRS interpreting; however, cooperation with VRS providers is needed for increasing the likelihood of obtaining larger samples for more credible results. Even when large samples are not part of the research design (as in Brunson’s 2011 qualitative approach utilizing focus groups and institutional ethnography), a collaborative model would be the most productive. In short, interpreters need to be assured by their VRS employers that participating in external research is a contribution to the profession and the industry, and can only result in valuable information that will improve policies and workplace standards.

In addition to the perspectives of interpreters, empirical evidence about the community of deaf and non-deaf VRS users and their perspectives of VRS efficacy would be highly informative. Additional research topics that have yet to be explored include the balance between interpreting in the community as well as VRS settings, predictors of emotional competency in a VRS setting, comparative studies of coping methods utilized in VRS, and the influence of gender

on emotional competency within a VRS environment. Ultimately, increasing this body of knowledge relevant to VRS interpreting from the perspectives of multiple stakeholders will allow VRS providers and interpreters to utilize evidence-based practices to recruit and retain highly-qualified interpreters.

## References

- Anderson, A. (2011). Peer support and consultation project for interpreters. *Journal of Interpretation*, 21(1), 9-20.
- Arnold, D., Calhoun, L. G., Tedeschi, R., & Cann, A. (2005). Vicarious posttraumatic growth in psychotherapy. *The Journal of Humanistic Psychology*, 45(2), 239-263. doi:10.1177/0022167805274729
- Bontempo, K., & Napier, J. (2011). Evaluating emotional stability as a predictor of interpreter competence and aptitude for interpreting. *Interpreting*, 13(1), 85-105. doi: 10/1075/intp.13.1.06bon
- Brunson, J. (2011). *Video relay service interpreters: Intricacies of sign language access*. Washington, DC: Gallaudet University Press.
- California Federation of Interpreters. (2013). Interpreter solidarity. [Web log post]. Retrieved from <http://www.calinterpreters.org/news/interpreter-solidarity/>
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: SAGE.
- Dean, R. K., & Pollard, Jr., R. Q. (2001). Application of Demand-Control Theory to sign language interpreting: Implications for stress and interpreter training. *Journal of Deaf Studies and Deaf Education*, 6(1), 1-14.
- Distance Opportunities for Interpreter Training (DO IT) Center. (2005). *Video relay services interpreting task analysis report*. Greeley, CO: DO IT Center at the University of Northern Colorado.
- Everly, Jr., G. S., & Lating, J. M. (2002). *A clinical guide to the treatment of the human stress response* (2<sup>nd</sup> ed.). New York, NY: Kluwer Academic Publishers.
- Federal Communication Commission. (2013). *Video relay services*. [Guide]. Retrieved from <http://www.fcc.gov>.
- Harvey, M. A. (2001). Vicarious emotional trauma of interpreters: a clinical psychologist's perspective. *Journal of Interpretation*, 85-98.
- Harvey, M. A. (2003). Shielding yourself from the perils of empathy: The case of sign language interpreters. *Journal of Deaf Studies and Deaf Education*, 8(2), 207-213.
- Karasek, Jr., R. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly* 24(2), 285-308.
- Levi, L., & Andersson, L. (1975). *Psychosocial stress: Population, environment and quality of life*. Holliswood, NY: Spectrum Publications, Inc.
- McCartney, J. (2006). Burnout of sign language interpreters: A comparative study of K-12, postsecondary, and community interpreters. *Journal of Interpretation*, 83-108.
- Morris, R. (1999). The gum syndrome: Predicaments in court interpreting. *Forensic Linguistics*, 6(1), 23-29. Retrieved from Google Scholar at <http://www.ruth-morris.info/wp-content/uploads/2010/03/GumForensicLinguistics.pdf>
- Moser-Mercer, B. (2000/2001). Simultaneous interpreting. *Interpreting*, 5(2), 83-94.
- Moser-Mercer, B. (2003). Remote interpreting: Assessment of human factors and performance parameters. *Joint project, International Telecommunication Unit (ITU)*. Ecule de traction et interpretation, University of Geneva (ETI). Retrieved from <http://aiic.net/page/1125/remote-interpreting-assessment-of-human-factors-and-performance-parameters/lang/1>
- Moser-Mercer, B. (2005). Remote interpreting: Issues of multi-sensory integration in a multilingual task. *Meta: Translators' Journal*, 50(2), 727-738. doi: 10.7202/011014ar

- Moser-Mercer, B., Künzli, A., & Korac, M. (1998). Prolonged turns in interpreting: Effects on quality, physiological and psychological stress (Pilot study). *Interpreting*, 3(1), 47-64.
- National Consortium of Interpreter Education Centers. (2008). *Steps toward identifying effective practices in VRS interpreting*. Interpreting via video work team report. Retrieved from [http://www.gallaudet.edu/Documents/Academic/GURIEC/Interpreting\\_Via\\_Video\\_Work\\_Team\\_Report\\_2008Q\[1\].pdf](http://www.gallaudet.edu/Documents/Academic/GURIEC/Interpreting_Via_Video_Work_Team_Report_2008Q[1].pdf)
- National Consortium of Interpreter Education Centers. (2013). *Interpreting practitioner national needs assessment of 2012*. Final report of the National Interpreter Education Center. Boston, MA: Northeastern University.
- Nichols, A.L., & Maner, J.K. (2009). The good-subject effect: Investigating participant demand characteristics. *Journal of General Psychology*, 135(2), 151-165.
- Oldfield, N. (2010). A competency model for video relay service interpreters. *International Journal of Interpreter Education*, 2, 41-57.
- Peterson, R. (2011). A narrative inquiry into interpreting in video settings. In B. Nicodemus & L. Swabey (Eds.), *Advances in interpreting research: Inquiry in action* (pp. 199-222). Amsterdam/Philadelphia, PA: John Benjamins.
- Registry of Interpreters for the Deaf, Inc. (2005). *NAD-RID code of professional conduct*. Standard practice paper [Brochure]. Alexandria, VA: Author.
- Registry of Interpreters for the Deaf, Inc. (2007). *Video relay service interpreting*. Standard practice paper [Brochure]. Alexandria, VA: Author.
- Registry of Interpreters for the Deaf, Inc. (2012). *Video interpreter member section 2011-2012 winter survey*. Retrieved from <http://www.rid.org/userfiles/File/VIMSWinterSurveyResults.pdf>
- Rolka Loube Saltzer Associates, LLC. (2012, April 30). *Interstate telecommunications relay services fund payment formula and fund size estimate: Telecommunications relay services and speech-to-speech services for individuals with hearing and speech disabilities* (CG Docket No. 03-123). Presented before the Federal Communications Commission, Washington, DC. Retrieved from <http://www.r-l-s-a.com/TRS/reports/2012AnnualFiling.pdf>
- Rozinger, I., & Shlesinger, M. (2010). Much ado about something remote: Stress and performance in remote interpreting. *Interpreting*, 12(2), 214-247. doi: 10.1075/intp.12.2.05roz
- Splevins, K. A., Cohen, K., Joseph, S., Murray, C., & Bowley, J. (2010). Vicarious posttraumatic growth among interpreters. *Qualitative Health Research*, 20(12), 1705-1716. doi:10.1177/1049732310377457
- Schwenke, T. (2010). Sign language interpreters and burnout. *Journal of Interpretation*, 31-54.
- Schwenke, T. (2012). *The relationship between perfectionism, stress, coping resources, and burnout among sign language interpreters* (Doctoral dissertation). Retrieved from <http://digitalarchive.gsu.edu>
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Technologies and procedures for developing grounded theory*. Thousand Oaks, CA: SAGE.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional stress. *Psychological Bulletin*, 96(3), 465-490.
- Watson, J. (1987). Interpreter burnout. *Journal of Interpretation* 4, 79-86.

