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The Effect of Vocal Fillers on Credibility, Communication Competence, and Likeability

Lea Gikas

Zac Sutcliffe

Abstract

This study examines the impact of vocal fillers on a person's perceived likeability, communication competence, professional credibility, and personal credibility. Previous studies have suggested that using filler words or discourse markers may decrease professional credibility and discredit communication competence. However, it is unknown how audience members of different genders will respond to the usage of vocal fillers in comparison to each other. A 2 x 2 factorial experimental design was constructed (N = 145) in which four audio recordings contained four responses to an interview question; the amount of vocal fillers were manipulated (absent or many) and the gender of the speaker in the recording was also manipulated (female or male). Results indicated that the more filler words or discourse markers were used, the less professional and personal credibility was shown, regardless of gender. However, when listening to vocal fillers, although both genders viewed them negatively, males perceived vocal fillers significantly more negatively.

Keywords: Filler Words, Discourse Markers, Professional Credibility, Communication Competence, Likeability, Personal Credibility, Vocal Fillers

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In today's competitive job market, interviewing for a position can be a demanding and high-stakes communication task for those seeking employment. In fact, the communication process in this context inherently represents a transactional model consisting of a sender (interviewer) and a receiver (interviewee). The sender sends a message to the receiver through a combination of verbal and nonverbal communication. In addition, while the sender is stating their message, the receiver is sending nonverbal and subsequently verbal feedback to the sender. While most people focus on the message being said, it is important to focus on how the message is being said. This is especially important during an interview when the interviewer is seeking to distinguish one candidate from the next to hire the best applicant. When communicating, whether it be conversational or professional, many individuals rely on vocal fillers as vocal crutches to formulate their thoughts (Clark, 2002). Vocal fillers, such as "like, um, you know, uh," impact the message that an individual is communicating, and can detract from the individual's integrity in a professional context (The Florida Bar, 2018). The goal of this research is to examine the phenomenon of vocal fillers in the specific high-stakes context of interviewing to examine the impact they may have on credibility, communication competence, and perceived likeability.

Literature Review

Explicating Vocal fillers

Vocal fillers are generally defined as irregularities in speech but assume different definitions when individually analyzed. Filler words are defined as short utterances commonly used in unpremeditated speech (Brennan & Williams, 1995; Swerts, 1998). The two most frequently used filler words within the English language include "uh" and "um." Discourse

markers are defined as "short phrases that do not contain any grammatical information yet are prevalent in natural speech" (Fox Tree & Schrock, 2002; Fuller, 2003; Matei, 2011). Common discourse markers include phrases such as "like" and "so." These phrases embodied by discourse markers and filler words range from being used in general conversation to professional speeches. For example, even President Obama was commonly known to utilize frequent vocal fillers in his communication (Baral, 2016). Although filler words and discourse markers are somewhat different when compared as irregularities in speech, they both broadly fit within a singular category of "vocal fillers."

In an article by Laserna et al. (2014), the researchers analyzed the use of filler words by particular groups over the course of several days in five different studies. Through an exploratory factor analysis, the researchers sought to clarify the psychometric properties of filler words by examining their usages across different demographic variables of gender and age. This research showed that the use of vocal fillers was greater among collegiate populations than older adult populations (Laserna et al., 2014). Discourse markers were indeed found to be associated with both age and gender, with young women being the most susceptible to using discourse markers (Laserna et al., 2014). Other studies have shown that filler words are frequently used by males for the purpose of holding the floor where males are competing to speak without letting others. In this way, the function of filler words here is to keep the floor while planning what to say next (Vinciarelli et al., 2015).

An additional report by Duvall et al. (2014) analyzed and synthesized research conducted on filler words in order to correct and explain the phenomenon of filler words in the English language. Their research looked at the causes of filler words, their impact on the credibility of the speaker, their impact on the comprehension of the listener, and possible ways to improve

communication. The overall findings of the research concluded that the most effective speakers actually do make use of filler words in moderation. Therefore, some filler words might be preferred over none.

Explicating Professional Credibility

Given the prevalence of vocal filler utilizations, it is important to consider what outcome variables are likely to be most impacted when vocal fillers are used in high-stakes interactions. One particular variable which may be impacted is the speaker's professional credibility.

According to the Merriam-Webster dictionary (2019), professionalism can be defined as, "the conduct, aims, or qualities that characterize or mark a profession or a professional person."

Although this definition begins to frame our understanding of professionalism as a concept, the dictionary has many shortcomings when creating a deeper understanding in what 'conduct, aims, or qualities' a person needs to be professional. The Florida Bar, an organization of lawyers licensed by the supreme court, indicates that fundamental attributes of professionalism consist of character, competence, civility, and commitment (The Florida Bar, 2018). Character refers to a moral or ethical quality; competence means that the individual holds particular skills or knowledge; civility indicates politeness; and commitment signifies dedication, especially in regards to a job. Furthermore, professional qualities include fairness and independence, which pertain to one's ability to act justly and work in a self-sufficient manner (Weidner, 2004).

In terms of spoken professionalism, words, tone of voice, and nonverbal behaviors each play an essential role (DeVelder, 2013). Keeping a steady voice, maintaining an average speaking pace, and avoiding high vocal pitches shows professionalism (DeVelder, 2013). Additionally, people who are clear and straightforward—not ambiguous—are seen as professional (Gillis & Nilsen, 2017). Professional credibility accordingly would describe a

person's capability to appear professional. Credible is synonymous with believable, so if an audience believes that an individual is a professional, then that person would hold high professional credibility.

Explicating Personal Credibility

An additional outcome variable which may be impacted by the usage of vocal fillers is personal credibility. Although the lines between personal credibility and professional credibility can be become blurred (especially within a workplace setting), there are a select number of attributes that a person can have that directly tie to their personal credibility. According to Wanzenried and Powell (1993) the two main factors regarding personal credibility include character and trustworthiness.

In regards to character being a principal factor determining a person's personal credibility, Melilli (2016) argues that the character of the person delivering the message impacts the credibility of the message itself. From a communication standpoint, the relationship between personal credibility can be seen in the communication transactional model. A person's character and personal credibility are shown to be directly related. In turn, this impacts the way in which the receiver of a message perceives both the credibility of the message and the credibility of the sender.

Relatedly, trustworthiness can be defined as when a communicator is unbiased in sharing a truthful message and this is subjectively perceived to be the case by the receiver (Greer, 2003). Within Dickinger's (2011) article, she asserts that "trustworthiness focuses primarily on the provider of the information but not the actual message communicated." In other words, the personal credibility of a speaker, in special regards to their trustworthiness, impacts the way that a receiver perceives a message. The trustworthiness of a speaker can be bolstered by their

character and personal integrity. In addition, when considering a person's individual trustworthiness, it is hard for a receiver to not factor in their expertise on the subject when making evaluations of their trustworthiness. In an article by O'Keefe (1990), he states that the expertise dimension of a source reflects its ability to make accurate and trustworthy opinions on the subject matter.

As evidenced by Melilli (2016), the importance of a speaker's perceived trustworthiness can be seen in a courtroom setting, where a lawyer needs his/her jury to trust them in order to enhance the credibility of their arguments. If a jury cannot trust the lawyer, then all future arguments will lose their credibility. This can also be inversely seen as when a lawyer can gain the trust of the jury and the trust will continue to grow as they create credible arguments (Melilli, 2016).

Flanagin and Metzger (2008) summarize this explication best when stating that the believability of a source, specifically its trustworthiness and expertise dimensions, as perceived by a receiver, are the primary factors determining the source's perceived credibility (Flanagin & Metzger, 2008). It is evident that many of the factors that determine a source's perceived personal credibility have ties to the source's professional credibility.

Explicating Communication Competence

In addition, perceived communication competence may also be impacted by the use of vocal fillers. Multiple studies have been conducted to examine communication competence and its effects on the perceived character of the communicator. Although communication competence can be applicable in many contexts, this study will examine communication competence within the context of an interview, which is usually an interpersonal atmosphere (Jonas et al., 2002). Accordingly, interpersonal communication competence can be understood

as the perceived ability of a person to manage and interpret the exchange of messages between them and another individual (Rubin & Martin, 1994). Communication competence is a combination of knowledge, skill, and attitude that empowers a communicator to reflect critically on their interactions with others (Kaye, 1994).

Developing communication competence in a particular environment results from long term exposure to that communication environment (McCroskey & McCroskey, 1988).

Communication competence yields various positive effects not only on the perceived character of the communicator, but also on those with whom they interact (Jeong, 2005; Allen et al., 2007). Communication competence facilitates innovative thinking, honesty, authentic relationships, and collaborative learning (Allen et al., 2007). No matter the environment, communication competence enables trust (McCroskey, 1987). For the purpose of this study, communication competence is conceptually defined as being conscientious, trustworthy, and attentive to the exchange of verbal and nonverbal messages within a conversation.

Explicating Perceived Likeability

The last outcome variable this study explores in relation to vocal filler utilizations is likeability. Likeability, and the concept of being liked, has been sought out since the beginning of time, and for many different reasons. While it may seem simple on the surface, having a likeable demeanor alone can cause a person to be more successful in their endeavors. Being liked has the ability to influence situations ranging from whether or not the Starbucks Barista writes a smiley face on a latte to whether or not a job offer is given to a particular candidate.

There are both lifestyle and professional settings where having a likeable personality can be an extreme benefit. For example, many politicians account for likeability along with policy issues when predicting polling numbers (Teven, 2008). If a presidential candidate is both

qualified and educated on the subject matter but does not connect with the people, it will be more difficult for the public to accept that candidate as their leader. In addition to politics, legal matters have often shown to be situations where likeability can influence an outcome. When a source is set to go on trial, there are means that an attorney will take in order to fully prepare the witness to produce the best possible outcome. Increasing their chances of likeability among the jury is one of those outcomes. If a jury perceives the witness to be likeable then they will also make the connection that the same witness is credible (Brodsky et al., 2009).

Expanding on the hiring process, likeability, "which refers to the extent to which one is considered friendly and cooperative," has been identified as valuable among managers in a workplace setting (Pinto et al., 2015). One of a manager's goals is to foster a cohesive environment for other employees, as a way to create a safe space where work can get done. Likeability in an employee plays a key role in positively influencing the climate of an organization as well as enhancing working relationships (Pinto et al., 2015). Research shows that a likeable employee is important because that individual will be perceived by others to have more of a social and persuasive influence, which may allow more business to succeed (Seiter et al., 2009; 2010).

Due to the importance of having a likeable employee in the office, an even larger pressure is placed on hiring a likeable employee. In addition to behaving professionally and actually being qualified for the job at hand, a candidate's likeability in an interview can influence the outcome of the hiring process. When a candidate relates to the hiring manager or interviewer on an interpersonal level, that candidate tends to perform better in the interview (Seiter et al., 2010). This goes to show that likeability, as a standalone factor, has a strong influence on future career and job outcomes for individuals (Pinto et al., 2015).

Whether it is in court, politics, or a job interview, there are many factors that can cause one person to succeed or not. However, one factor that each of these situations has in common is likeability of the individual at hand. A candidate that is qualified, professional, and likeable has been shown to positively impact the workplace and therefore succeed in the hiring process (Bolino & Turnley, 2003).

Explicating Gender Perceptions

In the past, the United States workplace was dominated by a male culture that heavily promoted male supremacy in the workforce. A myriad of studies show this gender bias that has discriminated against women in both their job seeking and promotion endeavors (Perry et al., 1994). But, recently there has been a shift in the United States workplace that is more inclusive of other cultures and other genders, specifically females. According to Baroudi et al. (1996), industries that have been traditionally male-dominated, such as math, science, and engineering, have seen a rise in the inclusion of women and of the inclusion of women in management.

According to U.S. Census data in 2010, "Women 25 and older were more likely than men 25 and older to have completed at least high school, at 87.6 percent versus 86.6 percent" (US Census, 2010). Clearly, there has been a paradigm shift in the United States where not only has the number of women attending college grown, but also receiving jobs and promotions post-graduation.

Even with this recent paradigm shift, there is still discrimination against females occurring in the hiring and promotion process of many companies. According to Pinto et al. (2015), there is a comprehensive list of literature that suggests that management selection is still heavily influenced by stereotyping and bias. This concept is known as the "glass ceiling" and involves the struggle that females face when trying to move up within an organization. Even

when applying for jobs, females are often discriminated against in interviewing settings. For example, in research by Forsythe (1988), results showed that the masculinity of the clothing of the interviewee had a positive effect on both the perception of management material and on the favorability of hiring decisions (Forsythe, 1988). It is evident that the male dominated corporate culture of the United States is still discriminatory against women, even in ways as subtle as clothing choice.

Although one could assume that in a male-dominated culture, females would create alliances in order to gain power in their coalition against their collective discrimination, this is not the case. In an article by Elsesser and Lever (2011), research showed that female evaluators for a management position tended to be more critical of female candidates than male candidates. In fact, these female evaluators tended to favor male candidates over females. This form of gender discrimination is what is known as "cross gender biases." Heilman (2004) determined that female managers who were perceived as "successful" were viewed negatively by both males and females, and that females tended to evaluate these "successful" females more negatively than men (Heilman, 2004).

Scholarly research on the topic of gender perceptions in the workplace discuss two main traits that women and men are shown to have diverging opinions: likeability and trustworthiness. According to Eagley et al. (1992), female managers are generally perceived to be more likeable than males. Eagley asserts that because female leadership styles often focus on the collective, emphasize relationships, and the creation of a supportive team climate development, it would be natural to assume that a female leader would be perceived as more likeable than a male counterpart employing a more task-oriented and masculine style (Eagley et al., 1992; Pinto et al., 2015). On the other hand, research by Bolino (2003) suggests that women who are successful in

their managerial role and are assertive are less liked than their male counterparts who display similar leadership styles. It is clear that females are judged more critically than their male counterparts in terms of the leadership style that they take in their management positions. One explanation for the critical judgments placed on female managers involves social judgment theory, where males and females are expected to behave in ways that are consistent to their gender roles. Because women are expected to fit into the norm of being supportive and emphasizing relationships, when they choose to be assertive, they are breaking their female stereotype, and thus can be negatively perceived by others.

In addition to the differing gender perceptions in terms of likeability, male and females are shown to have differing levels of trustworthiness, both in professional and personal settings. In a study by Buchan et al. (2008), results showed that men are more trusting of women than other men and that women are generally perceived as more trustworthy than men. In summary, studies overall indicate that female and males are evaluated according to unequal standards.

Explicating Hiring Intention

When a candidate is applying for a job, there is a plethora of considerations that factor into their candidacy for the position. The overall combination of these factors helps determine whether or not they receive the position. One of the main ways that candidates are able to display their positive attributes when applying for a position is through an in-person interview. Ruetzler (2012) developed seven criteria of successful job candidates when engaging in an in-person interview. These criteria included: "interview attire, academic grade point average (GPA), interpersonal skills, interview preparedness, the ability to work with others, alignment with organizational culture, and work experience."

Different companies, of course, have different standards by which they judge candidates depending on the size of the company and corporate needs. The hiring manager assisting the Sales and Marketing department at Toyota shared that their hiring criteria reflected more of an emphasis on personality than qualifications. After asking standard interview questions, this hiring manager asked the following questions: what the candidate was looking for, how they aligned with the corporate values, and various hypothetical situations (Burgess-Wilkerson, 2008). In order to successfully answer these questions, a candidate would need to have read and comprehended the company's mission statement along with understanding the importance.

It is important to note how verbal communication impacts hiring intention. According to a survey in 2010 by the National Association of Colleges and Employers (NACE), "communication skills are ranked first among a job candidate's 'must have' skills and qualities" (NACE Staff, 2010). This speaks volumes about necessary skills because communication abilities are essential in all departments, fields, and position levels. As mentioned previously, there is an array of strategies that a candidate can utilize to improve their perceived professionalism by an interviewer through their verbal communication.

Many companies have unique missions and values to which they hold their employees accountable. It is common for employers to quiz a candidate on these statements to test not only if the candidate and company share the same values, but if the candidate cares enough about the company and position to research the statement. Organizations have openly expressed time and time again that a big concern is how well the candidate fits in with the department goals. Interviewers even go as far as to look for the following undergraduate courses taken in a resume: public speaking, interpersonal communication, small group communication, and interviewing courses (Ross & Emmert, 1987).

Organizational fit, cultural match, likeability, and competence are essential factors in the hiring intention of any company. While certain employers may vary in what they value most, these categories are often important. Another uncertainty that interviewers attempt to understand is the future of the candidate. The candidate's future at any company is of course, unknown, however, the interviewer will attempt to use each of the essential factors to make a prediction (Miller, 1987). There is always a risk to be taken when bringing on a new candidate, however understanding what significant traits make for a successful candidate is important to take into consideration with hiring intentions.

Explicating Communication Accommodation Theory

Given the literature presented thus far and the emphasis on communication, it is useful to turn to communication theory to further help describe the role of vocal fillers in workplace communication. One theory this is particularly useful in this context is Communication Accommodation Theory (CAT). Howard Giles, now a retired professor from the University of California, Santa Barbara, was the first to describe CAT in 1971. While the most common practice of CAT focuses on individuals speaking similarly to each other, converging, there is an inverse situation explained in this theory. "Convergence happens when people emphasize similarities in their communication in order to identify with one another. Divergence is the complete opposite: people emphasize the differences associated with their counterparts.

Therefore, people who do not accommodate their speech are viewed in a more negative fashion" (Parcha, 2014). Instead of understanding that some people may speak differently and accepting that fact, this is another place where communication conflict can quite easily emerge.

There are many ways to communicate today, whether it is face-to-face, over the phone, or through a computer. Because of this, there are also many ways to accommodate one's

communication to converge or diverge with another style. The pace, accent, and most often, vocabulary, can all be used in order to accommodate communication in one way or another. The more someone converges their language in a conversation, the more credible and persuasive they become in the perception of the listener (Hancock et al., 2007). If someone is aware of the effects CAT can have on others, it can be used strategically in order to achieve a goal.

Diving deeper, adjustment of communication is thought to serve two functions: to manage social distance, whether it is increasing or decreasing that distance, and to facilitate comprehension (Gasiorek & Giles, 2015). However, too much accommodation is not always the best. If someone is believed to be over-accommodating with their communication, they can come across as insincere or patronizing (Morgan et al., 2017). As such, perhaps, communication accommodation is best done in moderation.

In a workplace atmosphere, Giles (2007) uses CAT to explain the perceived accommodation communication from younger respondents about their older coworkers (Abdul Malek, & Jaguli, 2018). In an interview setting, if an older interviewer does not appreciate the language being used by the younger interviewee, they may diverge their communication style to suggest their disapproval. This is where understanding communicative techniques is important for younger interviewees because, ideally, they would be able to sense the divergence by the interviewer and change their language.

Expectancy Violation Theory

Another theory that provides value in examining the influence of vocal fillers in the context of interviewing is Expectancy Violation Theory (EVT). EVT examines the perception people have on other individuals when they act in an unexpected way (Burgoon, 2015). This theory holds three primary assumptions: first of all, people act based on how they expect others

to act (West, 2014). When in conversation, one does not expect abnormal behavior from others, they expect others to act a certain way; this concept can be understood as an expectancy (Burgoon, 1978). Expectancies can be influenced by the persona of another person—gender, age, attire, interpersonal history with that person, and the environment (West, 2014). For its second and third assumption, EVT states that expectations are learned, and that people subconsciously predict the behavior of others (West, 2014). Consciously and subconsciously, humans are constantly observing their culture, social norms, physical environment, and the behavior of others. As one's mind collects data on the way the world functions, it produces predictions of how it will continue to function.

When a person's expectancy is countered, they assess it as a violation that they like, or that they do not like; this process is termed Violation Valence (West, 2014). EVT suggests that violating expectations can be beneficial, as when an employee brings coffee and donuts to work on a random morning. In this example, the co-workers and boss evaluate the violation as positive because they are receiving a reward for the violator's action. Contrarily, EVT asserts that violations can produce a negative consequence, such as when an employee uses foul language in a network meeting with another company. In this example, the boss perceives an unwanted outcome—a negative impression—when her employee violates her expectation of using polite language.

In a professional setting such as an interview, an interviewer expects the interviewee to use professional language. By violating this expectation, the interviewee can reduce the ability for their message to come across to the interviewer, and overall can lead to an unfavorable perception placed upon the interviewee by the interviewer (McGregor, 2016). According to previous studies on the effect of filler words, filler words often contribute to a negative

expectation violation and a lack of professionalism (McGregor, 2016; Thomas, Chen, Gordon, & Tenbrink, 2015; DeVelder, 2013; Duvall, Robbins, Graham, 2014). By avoiding the use of filler words within a professional setting, it may accordingly leave others holding a more positive perception of the speaker due to the conformity to fulfilling others' expectations.

In summary, the studies that have been presented in this literature review indicate that vocal fillers and discourse markers likely will have a certain impact on people using them. However, it is unknown how gender might impact perceptions of people who utilize vocal fillers. One could speculate that the use of vocal fillers will negatively impact one's credibility, perceived communication competence and overall likeability. These effects will likely vary in their magnitude based on the gender of the individual using filler words. Therefore, the following hypotheses are put forth for testing:

H1: Vocal fillers influence a speaker's professional credibility; such that the more a speaker uses vocal fillers, the more their professional credibility will be negatively perceived.

H2: Vocal fillers influence a speaker's communication competence; such that the more a speaker uses vocal fillers, the more their communication competence will be negatively perceived.

H3: Vocal fillers influence a speaker's likeability; such that the more a speaker uses vocal fillers, the more their likeability will be negatively perceived.

H4: Vocal fillers influence a speaker's personal credibility; such that the more a speaker uses vocal fillers, the more their personal credibility will be negatively perceived.

H5: The gender of the listener and the amount of filler words used by the speaker would influence perceptions towards the speaker, such that:

- H5a: female listeners would rate those who utilized vocal fillers differently than males for professional credibility.
- H5b: female listeners would rate those who utilized vocal fillers differently than males for communication competence.

- H5c: female listeners would rate those who utilized vocal fillers differently than males for likeability.
- H5d: female listeners would rate those who utilized vocal fillers differently than males for personal credibility.

Method

This study examines the use of vocal fillers during an interview and the way they affect a candidate's credibility as well as perceived communication competence and overall likeability. To test the hypotheses, a posttest only 2 x 2 experimental factorial design was utilized in which the amount of vocal fillers (absent or many) and the gender of the speaker (male or female) were manipulated. In each of the experimental conditions, participants listened to pre-recorded, hypothetical answers to an interview question.

Participants

One hundred and forty-five participants ranging from family members, community members and students from various fields of study at Cal Poly San Luis Obispo were recruited for this experiment. Participants reported their gender as 48.3% males, 51.7% females with a mean age of 31.97 years (SD = 16.016). Additionally, the participants that identified as students represented a variety as far as year in school: 4.8% first years, 11% second years, 22.1% third years, 23.4% fourth years, and 9% fifth or above years. As far as ethnicity, 78.6% identified as White, 1.4% as African American, 8% as Asian, 9.7% as Hispanic/LatinX, and 4.8% as other.

Procedures

This experiment utilized a non-representative convenience sampling method. Because the questionnaire originated on Cal Poly's campus, a large portion of responses are also from Cal Poly students. To recruit participants, a Qualtrics questionnaire was posted on multiple community pages containing people that were not students. The questionnaire began with a

consent form and then asked participants to listen to one randomized audio recording either by a male or female (with vocal fillers or without).

After listening to the audio recording, participants were asked to answer several questions about the credibility, communication competence, and likeability levels of the speaker, as well as the demographics of the actual participant. After assessing the primary outcome variables, a manipulation check was used to assess how many vocal fillers were included in the audio recording. These values ranged from "Never" with three options in the middle to "Constantly." This Qualtrics questionnaire was given to several Cal Poly Communication Studies courses: Communication Research Methods, Technology and Human Communication, Communication Theory, Contemporary Rhetorical Theory, Rhetorical Criticism, and Media Effects.

Stimulus Material

Participants were randomly assigned to listen to an audio recording of a candidate's interview answers. One recording contained an answer from a female that used vocal fillers; one recording contained an answer from a male that used vocal fillers; one recording contained an answer from a female without the use of vocal fillers; and one recording contained an answer from a male without the use of vocal fillers. Thus, the use of vocal fillers and gender of the speaker acted as the manipulation of the independent variable. In terms of vocal fillers, this study used the words "um," "so," "you know," "like," and "uh." The exclusion of other filler word types enabled greater control over the manipulation and minimized the potential for confounding factors. The hypothetical candidate interview answer in this study refers to answering the question "Why do you want this job?" posed by a hiring manager at Google. The interview answer was constructed to appear as an actual interview answer. The male and female voices used in the audio recordings were instructed to read the answer in the same manner, using

the same pitch, tone, and pace, only changing their use or absence of vocal fillers. The text transcript for the recordings is seen in Appendix A.

Measures

Professional Credibility. In evaluating the speaker's professional credibility, the first dependent variable, the study provided a seven-item Likert scale ranging from 1-7 ("Strongly Disagree" to "Strongly Agree"). Statements included phrases such as, "I thought the person in this interview seemed professional" and "This person conducted themselves in a qualified manner." The reliability for this scale was high (a = .95, M = 5.17, SD = 1.50).

Communication Competence. To measure the effect on the second dependent variable, communication competence, the study included another seven-item Likert scale ranging 1-7 ("Strongly Disagree" to "Strongly Agree"). Statements incorporated wording such as "This person seemed aware of their language" and "The person in this interview appeared to be strategic in their response." The reliability for this scale was high (a = .93, M = 4.95, SD = 1.67).

Likeability. To measure the effect on the third dependent variable, likeability, the study included another seven-item Likert scale also ranging 1-7 ("Strongly Disagree" to "Strongly Agree"). Statements incorporated wording such as "This person appeared to be friendly" and "I thought this person would be enjoyable to work with." The reliability for this scale was high (a = .92, M = 5.142, SD = 1.23).

Personal Credibility. To measure the effect on the second dependent variable, personal credibility, the study included another seven-item Likert scale also ranging 1-7 ("Strongly Disagree" to "Strongly Agree"). Statements incorporated wording such as "This person appeared to be of good character" and "This person appeared to have integrity." The reliability for this scale was high (a = .94, M = 5.05, SD = 1.27).

Manipulation Check. To assess the degree that participants noticed the presence of filler words, a manipulation check measure was adapted for this study. This measure was composed of a one-item Likert scale also ranging from 1-5 ("Never" to "Constantly." The question read as: "Thinking back, I believe the person in the interview used discourse markers (for example: words such as, um, uh, like, so, you know) frequently." The results of the manipulation check are featured in the results section.

Results

SPSS version 25.0 was utilized to analyze experimental data. Given the proposed hypotheses, an experimental design with a posttest only was conducted to examine differences between groups regarding perceptions of professional credibility, communication competence, likeability, and personal credibility when vocal fillers were used in a male and female answer to an interview question. Results and conclusions are subsequently discussed.

Prior to conducting analyses related to the hypothesis tests, results from the manipulation check were analyzed to assess the degree that participants noticed the presence of vocal fillers when they were utilized in two of the four conditions. A t-test was conducted to examine differences between groups in the amount of vocal fillers perceived to be present. Results showed that participants who were assigned to the conditions with vocal fillers did indeed perceive more vocal fillers to be present (M = 6.11, SD = 1.11) in comparison to the participants who were assigned to the conditions without vocal fillers who perceived there to be less vocal fillers present (M = 2.37, SD = 1.71). These differences were statistically significant t(143) = -15.60 p < .001. As such, vocal fillers were perceived in the correct direction indicating that the manipulation of vocal fillers was effectively noticed by participants.

Hypothesis one predicted that vocal fillers would influence a speaker's professional credibility; such that the more a speaker used vocal fillers, the more their professional credibility

would be negatively perceived. A t-test was conducted to examine differences between groups related to perceptions of credibility. Findings indicate that participants rated the speaker in the recording without vocal fillers consistently higher (M = 6.0, SD = .97) than the recording containing vocal fillers (M = 4.32, SD = 1.23). The greater score indicating a greater level of professional credibility. Differences were statistically significant overall, t(143) = 9.17 p < .001. Therefore, hypothesis one was supported.

Hypothesis two predicted that vocal fillers would influence a speaker's communication competence; such that the message receiver would perceive a lack of communication competence associated with vocal fillers. A t-test was conducted to examine differences between groups related to perceptions of communication competence. Findings indicate that the recordings without filler words or discourse markers scored higher in communication competence (M = 5.93, SD = .99) than the recordings including vocal fillers (M = 3.99, SD = 1.24). The greater score indicating a greater level of communication competence. Differences were statistically significant overall, t(143) = 10.62, p < .001. Therefore, hypothesis two was supported.

Hypothesis three predicted that vocal fillers would influence a speaker's likeability; such that the more a speaker used vocal fillers, the more their personal credibility would be negatively perceived. A t-test was conducted to examine differences between groups related to perceptions of likeability. Findings indicate that the recordings without filler words or discourse markers scored higher in likeability (M = 5.49, SD = 1.03) than the recordings including vocal fillers (M = 4.79, SD = .99). The greater score indicating a greater level of likeability. Differences were statistically significant overall, t(143) = 4.20, p < .001. Therefore, hypothesis three was supported.

Hypothesis four predicted that vocal fillers would influence a speaker's personal credibility; such that the more a speaker used vocal fillers, the more their personal credibility would be negatively perceived. A t-test was conducted to examine differences between groups related to perceptions of personal credibility. Findings indicate that participants rated the speaker in the recordings without vocal fillers consistently higher (M = 5.43, SD = 1.10) than the recordings containing vocal fillers (M = 4.66, SD = 1.08). The greater score indicating a greater level of personal credibility. Differences were statistically significant overall, t(143) = 4.23, p < 0.001. Therefore, hypothesis four was supported.

Hypothesis five predicted that females would rate those who utilized vocal fillers differently than males for (a) professional credibility. A factorial ANOVA was conducted to examine differences between groups for professional credibility. Lower scores in these areas should indicate harsher interpretations of each of the outcome variables. Findings indicate that males rated those who utilized vocal fillers harsher than females with males rating females utilizing vocal fillers M = 4.11, SD = .88; females rating females utilizing vocal fillers M = 4.64, SD = 1.17; males rating males utilizing vocal fillers M = 3.94, SD = 1.05; females rating males utilizing vocal fillers M = 4.56, SD = 1.46. As can be seen, the male perceptions were consistently lower (harsher) compared to female perceptions. Therefore, hypothesis five (a) was supported.

Given these results for Hypothesis five (a), we also examined whether there was an interaction between the gender of the participant and whether they heard vocal-fillers or not for perceived credibility. A univariate factorial ANOVA found a significant main effect for gender, F(3, 134) = 5.04, p = .002, and a significant main effect for vocal fillers, F(3, 134) = 18.38, p < .002

.001. However, there was no significant interaction between the two variables, F(4, 134) = .65, p = .629. Therefore, there were no interaction effects.

Hypothesis five predicted that females would rate those who utilized vocal fillers differently than males for (b) communication competence. A factorial ANOVA was conducted to examine differences between groups for communication competence. Findings indicate that males rated those who utilized vocal fillers harsher than females with males rating females utilizing vocal fillers M = 3.6, SD = 1.12; females rating females utilizing vocal fillers M = 4.17, SD = 1.03; males rating males utilizing vocal fillers M = 3.68, SD = 1.22; females rating males utilizing vocal fillers: M = 4.33, SD = 1.45. As can be seen, the male perceptions were consistently lower (harsher) compared to female perceptions. Therefore, hypothesis five (b) was supported.

Given these results for Hypothesis five (b), we also examined whether there was an interaction between the gender of the participant and whether they heard vocal-fillers or not for communication competence. A univariate factorial ANOVA found a significant main effect for gender, F(3, 134) = 3.11, p = .029, and a significant main effect for vocal fillers, F(3, 134) = 22.58, p < .001. However, there was no significant interaction between the two variables, F(4, 134) = .67, p = .615. Therefore, there were no interaction effects.

Hypothesis five predicted that females would rate those who utilized vocal fillers differently than males for (c) likeability. A factorial ANOVA was conducted to examine differences between groups for likeability. Findings indicate that females did not rate those who utilize vocal fillers differently than males; with males rating females utilizing vocal fillers M = 4.64, SD = .69; females rating females utilizing vocal fillers M = 4.67, SD = 1.03; males rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, SD = 1.01; females rating males utilizing vocal fillers M = 4.7, M =

5.19, SD = 1.08. As can be seen, there is no difference between male perceptions compared to female perceptions. Therefore, hypothesis five (c) was not supported. Because there were no reported differences between groups, main effects and interaction effects were not tested.

Hypothesis five predicted that females would rate those who utilize vocal fillers differently than males for (d) personal credibility; A factorial ANOVA was conducted to examine differences between groups for personal credibility. Findings indicate that males rated those who utilized vocal fillers harsher than females with males rating females utilizing vocal fillers M = 4.71, SD = .85; females rating females utilizing vocal fillers M = 4.70, SD = 1.03; males rating males utilizing vocal fillers M = 4.87, SD = 1.09. As can be seen, the male perceptions were consistently lower (harsher) compared to female perceptions. Therefore, hypothesis five (d) was supported.

Given these results for Hypothesis five (d), we examined whether there was an interaction between the gender of the participant and whether they heard a vocal-fillers or not for personal credibility. A univariate factorial ANOVA found a significant main effect for gender, F(3, 134) = 3.21, p = .024, and a significant main effect for vocal fillers, F(3, 134) = 3.60, p = .015. However, there was no significant interaction between the two variables, F(4, 134) = .18, p = .947. Therefore, there were no interaction effects.

Discussion

This study tested the impact of vocal fillers on perceived professional credibility, communication competence, and likeability, and personal credibility. To measure the impact of vocal fillers, this study divided voluntary participants into four groups and gave each group an audio recording to listen to which manipulated the amount of vocal fillers (absent or many) and the gender of the speaker (male or female). The results of this study overwhelmingly found

participants believed vocal fillers had a negative impact on professional credibility, communication competence, likeability, and personal credibility (see hypothesis one through four).

In particular, hypothesis five predicted that females would rate those who utilized vocal fillers differently than males for the following outcome variables on (a) professional credibility; (b) communication competence; (c) likeability; (d) personal credibility; this hypothesis was made because females were often perceived to be judged harsher than males. This prediction was partially supported. The results showed that males rated those who utilized vocal fillers significantly harsher than females on (a) professional credibility, (b) communication competence, and (d) personal credibility. However, findings indicate that females rated those who utilized vocal fillers similarly to males on (c) likeability.

These results are comparable to similar studies conducted on this subject. In research found by Duvall et al. (2014), the more a speaker used vocal fillers in their day to day as well as professional speech, the less credible they were found to be. However, the difference in these two studies is that Duvall et al. (2014) found that when someone used absolutely no vocal fillers in their speech, they seemed almost robotic. Regardless, studies overwhelmingly indicate that excessive use of vocal fillers damaged professional credibility, communication competence, likeability, and personal credibility.

Theoretical Implications

The findings of this experimental design have a direct relation to the EVT (West, 2014). As stated previously, EVT considers one's reactions when confronted with something they are not expecting. This experiment was conducted in a mock professional setting, implying that unprofessional actions would be considered a violation of the expectancy. In accordance with

the assumptions of this theory, the treatment audio recording containing vocal fillers received a lower score than the control group because vocal fillers likely negatively violated the professional expectancies, while the control audio recording without vocal fillers did not.

Therefore, EVT is a useful theory to consider in speculating on why speakers were judged poorly when using filler words.

The findings of this study also relate to CAT (Gasiorek & Giles, 2015). While the most common practice of CAT focuses on individuals speaking similarly to each other, converging, there is an inverse situation explained in this theory. "Convergence happens when people emphasize similarities in their communication in order to identify with one another. Divergence is the complete opposite: people emphasize the differences associated with their counterparts.

Therefore, people who do not accommodate their speech are viewed in a more negative fashion" (Parcha, 2014). Given the results of this study, we can make predictions about how the rest of the interview would be likely to progress if the hypothetical Google interviewer was to answer. The results showed overwhelmingly that those who use vocal fillers were seen as less professional, less competent regarding communication, less likeable and less credible. The Google interviewer would have likely thought the same and thus, in an effort to diverge, would likely not accommodate the vocal fillers.

Limitations

This study had three primary limitations. The first limitation is that a volunteer bias likely occurred while gathering data. In order to collect our data, we utilized an online software questionnaire, Qualtrics. We shared the online Qualtrics questionnaire via email, text, and social media asking groups of individuals to participate. There was no requirement or obligation for the individuals to take the questionnaire, therefore these individuals volunteered to be

participants. It is known that samples consisting of volunteers run the risk that they might not be representative of the general population. Additionally, more women typically volunteer compared to men and volunteers in general tend to be more educated (Catalogue of Bias Collaboration). Based on the demographics of the one hundred forty-five participants, there were indeed more women that responded compared to men. In this study, it is difficult to assess whether or not the one hundred forty-five participants were representative of the general population.

The second limitation to this study is that it was conducted utilizing a 2 x 2 factorial experimental design in which four audio recordings contained four responses to an interview question; the amount of vocal fillers were manipulated (absent or many) and the gender of the speaker in the recording was also manipulated (female or male). The four manipulated interview question responses followed the hypothetical interview scenario of a Google hiring manager asking the question, "Why do you want this job?" Due to the nature of the scenario, the manipulated interview question responses were constructed based on our definition of professional interview language. The language utilized in these manipulated interview question responses have the potential to lead participants towards certain biases depending on their definition of professional interview language. In addition, this scenario, involving a Google hiring manager, can lead to biased responses from participants based on the reputation of Google and the perceptions that participants have of Google before taking the questionnaire.

The third limitation in this study occurred in regards to the majors of participants that identified as students. This experimental study was conducted in a Communication Studies class and as a result of that, the majority of the participants who listened to both audio recordings and answered the twenty-one questions were Communication Studies majors as well. Part of our

data collection method was distributing our questionnaire to classrooms. Six classes were given the questionnaire and all of them were Communication Studies classes. While there were participants from different majors among the results, the majority was clearly Communication Studies, possibly resulting in a lack of variety in professional experience.

Directions for Future Research

This study examined the way that the use of vocal fillers influence audience perceptions of professional credibility, communication competence, likeability, and personal credibility. However, little research explores how an interviewer's use of vocal fillers affect the messages that an interviewee would respond with. Future studies in this area could directly test Communication Accommodation Theory, which seeks to explain and predict how people adjust their communication during social interaction and what social consequences might result from such communication adjustments (Giles, 2007). Communication Accommodation Theory would suggest that an interviewee would either respond similarly to the interviewer, using language that mirrors the language used by the interviewer in an act of convergence, or the interviewee would respond differently than the interviewer by using language opposite to that of the interviewer in an act of divergence.

Concluding Remarks

Regardless of resume quality, employment can be difficult to secure without adequate interviewing skills. Coming out of high school and even after college, many students struggle to feel proficient in their ability to present themselves in a professional manner during an interview. Proper preparation to potential interview questions provides an opportunity to fine tune the answer as well as practice avoiding the use of filler words. As shown in this study, vocal fillers play a significant role in one's perceived professional credibility, communication competence,

likeability, and personal credibility. Developing language without the use of filler words is the first step towards enhanced professionalism and can be essential when it comes to finding a job and launching a lifelong career.

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Appendix A1

Male and Female Manipulated Interview Question Response – No Vocal Fillers

"You are a hiring manager for Google and you have asked an interviewee the following question: 'Why do you want this job?' The interviewees response is recorded here. Please listen to this file and then answer the questions below"

(AUDIO FILE TRANSCRIPT) "I applied for the Google Marketing Analyst position for several reasons. First off, the Marketing Analyst position interests me because I recently graduated with a Marketing degree and an Integrated Marketing Communications minor, and I am excited for the opportunity to use the skills that I have learned at one of the most well-known technology companies in the world. At my previous internship, I was able to utilize my knowledge of Search Engine Optimization to improve the landing page for the company's website by twenty-eight percent within my ten weeks at the company. In addition, I value the work environment that Google is able to create through their use of small teams. I prefer companies that work in small teams because they better support collaboration and an overall creative work environment. Lastly, I know that Google is able to create a strong company culture through their employee health benefits including their top of the line, on-site health and wellness programs. I'm really excited to learn more and see how I'll be able to contribute to the company."

Appendix A2

Male and Female Manipulated Interview Question Response – With Vocal Fillers

"You are a hiring manager for Google and you have asked an interviewee the following question: 'Why do you want this job?' The interviewees response is recorded here. Please listen to this file and then answer the questions below"

(AUDIO FILE TRANSCRIPT) "Oh, um, so I applied for the... Google Marketing Analyst position for several reasons. First off, the uh Marketing Analyst position interests me because I uh recently graduated with a Marketing degree and an Integrated Marketing Communications minor, and am excited for the opportunity to like use the skills that I have learned at one of the uh most well-known technology companies in the world. Um... so at my previous internship, I was able to uh utilize my knowledge of Search Engine Optimization to improve like the uh the landing page for the company's website by, um... twenty-eight percent within my ten weeks at the company. So, in addition, I uh value the work environment that Google is able to create through their use of small teams. I prefer companies that, you know, work in small teams, because they better support collaboration and an overall creative work environment. Lastly, I know that Google is able to create a like strong company culture through their, uh, employee health benefits, including their top of the line on-site health and wellness programs. I'm really excited to learn more and, uh, see how I'll be able to contribute to the company."

APPENDIX B

Outcome Measures

Professional Credibility Measure (1-7 Strongly Disagree to Strongly Agree)

- 1. I thought the person in this interview seemed professional.
- 2. I thought the person in this interview seemed competent.
- 3. This person conducted themselves in a qualified manner.
- 4. I thought that the person in this interview exhibited a high level of professional credibility.
- 5. This person appeared to be educated.

Communication Competence Measure (1-7 Strongly Disagree to Strongly Agree)

- 1. The person in this interview appeared to be strategic in their response.
- 2. The person in this interview appeared to answer the question appropriately.
- 3. This person appeared to be well-spoken.
- 4. This person seemed aware of their language.
- 5. This person appeared to be effective in communicating their message.

Likeability Measure (1-7 Strongly Disagree to Strongly Agree)

- 1. This person appeared to be friendly.
- 2. This person appeared to be cooperative.
- 3. I thought this person would be enjoyable to work with.
- 4. I would think positively about this person.
- 5. This person would likely make friends at work.

Personal Credibility Measure (1-7 Strongly Disagree to Strongly Agree)

- 1. This person appeared to be of good character.
- 2. This person appeared to be honest in their answering.
- 3. This person appeared to have integrity.
- 4. This person appeared to communicate with goodwill.
- 5. This person appeared to be truthful.

Vocal Filler Manipulation Check (1-7 Never to Constantly)

1. Thinking back, I believe the person in this interview used discourse markers (for example: words such as, um, uh, like, so, you know) frequently.