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"I'm, uhh, Sorry": The Influence of Fluency and Communication Competence on Perceptions of Apologies

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“I’m, uhh, Sorry”: The Influence of Fluency and Communication Competence on Perceptions of Apologies

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ABSTRACT

This paper reports the results of an experiment that examined the influence of increasing levels of nonfluency in apologies on audience perceptions. The influence of self-perceived communicator competence (SPCC) on perceptions of apologies was also examined. Favorable ratings of apologies decreased as nonfluency increased from low to moderate levels, but then increased as nonfluency increased from moderate to high levels. For high nonfluency apologies, individuals with higher SPCC rated the apology more favorably than did individuals with lower SPCC. Limitations and directions for future research are discussed.

Complaints are routinely leveled at people in all walks of life for all sorts of alleged misbehavior; accordingly, we are repeatedly faced with situations that impel us to explain or justify our behavior, to offer excuses or apologies for those aspects of our behavior that offend and provoke reproach from those around us.


Apologies permeate daily life, and serve a variety of different functions: they can provide us with a way to restore our self-image, offer an opportunity for conflict resolution, and serve as admissions of responsibility and remorse (Goffman, 1971; Grainger & Harris, 2007; Kramer-Moore & Moore, 2003; Scher & Darley, 1997; Tavuchis, 1991). Effective apologies not only restore image, they may even induce the offended party to comply with requests in the future (Goei, Roberto, Meyer, & Carlyle, 2007). Numerous inquiries have revealed the importance of several verbal behaviors in apologies, such as promising not to repeat an offense or expressing remorse (Goffman, 1971; Scher & Darley, 1997; Sugimoto, 1997; Vassallo, 2005). Previous research also indicates that in addition to verbal content, nonverbal elements such as tone of voice, facial expressiveness, and eye contact are also important (Anderson, Linden, & Habra, 2006; Chiles, 2008; Lazare, 2004; Park & Guan, 2009).

Given that nonverbal elements can be important in how individuals perceive and respond to apologies, it is worth considering the role of fluency. It is often the case that people, particularly when undergoing stressful or difficult interactions (such as those that follow a
hurtful event), are not speaking in ideal circumstances. Similarly, speech can sometimes be imperfect or unclear. These imperfections may take the form of nonfluencies, where individuals stumble over words, pause, or accidentally repeat themselves, the presence of which can sometimes be related to how individuals perceive messages (Miller & Hewgill, 1964). Currently, no studies have specifically assessed these relationships in the context of apologizing for a hurtful event. The goal of this study is therefore to assess the extent to which nonfluency may be related to how people perceive apologies.

There is some evidence to believe that there may be a meaningful relationship between nonfluency and speaker perceptions. First, prior research indicated that, when receiving apologies, the tone and manner in which an apology is given are of no small importance (Park & Guan, 2009). Research suggests that nonfluential speech can have detrimental effects on people’s judgments of a speaker in general. For example, early credibility researchers (e.g., Miller & Hewgill, 1964; Sereno & Hawkins, 1967) found that as a persuasive speaker’s nonfluencies increased, audience’s ratings of competence and dynamism dropped, though there was less effect on perceptions of trustworthiness. In a study by Christenfeld (1995), participants attributed a number of negative characteristics to a hypothetical speaker using large numbers of “ums,” “ers,” or “uhs,” including inarticulateness, lack of sophistication, discomfort, and nervousness. The results were somewhat more complex when listening to an actual voice, but nonfluent talk (i.e., containing vocalized or unvocalized pauses) was still perceived as less eloquent (competent, articulate, fluent), and unvocalized pauses were also considered a sign of anxiety (Christenfeld, 1995; Stagner, 1936). Kraut (1978) found that observers tend to consider hesitant speech a sign of nervousness, and indicative of deception. Fluent communication has been associated with judgments of truthfulness by other researchers as well (e.g., Buller, Burgoon, Buslig, & Roiger, 1994; Riggio, Tucker, & Widaman, 1987).

Second, the effect of fluency on perceptions of apologies does not always appear to be as clear-cut as one might first expect. A study by Chiles (2008) posed various scenarios in which the participants imagined experiencing an offensive act and were then asked to describe the verbal, nonverbal, and paralinguistic behaviors they would ideally like to receive in an apology. Two distinct preferences emerged: for an apology delivered in a confident and clear manner; and for an apology delivered in a nervous manner with obvious nonverbal displays of shame and remorse. Fluency of speech or delivery neatly encompasses important nonverbal and paralinguistic components of both style preferences. The question, then, is why there are seemingly contradictory preferences for fluency or for nonfluency when evaluating apologies. To facilitate an investigation of this question, five evaluative categories were chosen for analysis based on their importance in the apology and forgiveness literature: sincerity, remorse, truthfulness, performance, and likelihood of forgiving the offender.

**Qualities of Apologies**
In addition to evaluating the content of an apology, people evaluate the way in which one offers it (Bachman & Guerrero, 2006; Benoit, 1995; Scher & Darley, 1997). The first three characteristics of apologies identified relate to perceptions of message veracity. **Sincerity** is one of the most important factors in determining whether or not an individual accepts or rejects an apology. Research has indicated that apologies seen as sincere consistently receive more favorable responses and a greater likelihood of forgiveness by the injured party (Anderson, Linden, & Habra, 2006; Davis, 2002; Schlenker & Darby, 1981). **Remorse** is another vital aspect of how individuals understand apologies. Remorse seems to be linked to expressions of emotion. Expressions of emotion, particularly guilt and shame, can affect how the injured party will react to an apology, and elicit a more favorable response for some (Shlomo & Eisikovits, 2006). Research has shown that statements of remorse can contribute to the likelihood of apology acceptance (Kleinke, Wallis, & Stalder, 1991). **Truthfulness** refers to how closely individuals think the apologizer stays true to the actual events. When individuals try to create new accounts that diverge from what actually occurred, particularly those that downplay their responsibility, the apology elicits a less favorable response (Benoit, 1995).

The quality of **performance** concerns how individuals assess the offender’s ability as a communicator. It could be that an individual considers an apology to be insincere but nevertheless recognizes it as a well-constructed and delivered act of mortification. As self-perceived communicative competence of the receiver is one of the factors of interest in this study, an assessment of the perceptions of the competence of the apologizer was considered both appropriate and relevant (McCroskey & McCroskey, 1988). Furthermore, because past research has found that socially-skilled communicators tend to be both more fluent, even when deceiving, and more likely to be judged as truthful (Burgoon, Buller, & Guerrero, 1995; Riggio et al., 1987), the influence of an apologizer’s fluency on others’ perceptions of performance is warranted.

The final area of interest ties into one of the vital functions of apologies: providing an **opportunity to grant forgiveness** (Bachman & Guerrero, 2006). Research has consistently positively linked an offender offering an apology to the likelihood of being granted forgiveness (Bachman & Guerrero, 2006). Indeed, some scholars consider an apology and its response to be so interlinked that they function as an adjacency pair, where the utterance of one demands the utterance of the corresponding part, similar to question-answer and greeting-greeting (Robinson, 2004). However, simply offering an apology does not guarantee forgiveness. Some research on different verbal and paraverbal elements has found that sincere apologies (as opposed to “pseudo-apologies” and “non-apologies”) elicit more favorable responses on the part of offended parties (Anderson, Linden, & Habra, 2006). Part of what comes with accepting an apology is the expectation of forgiveness, and so this evaluative category is different from the others in that it is not a quality *per se* but concerns how individuals might respond to the apology.

**Apologies as Persuasive Communication**
Benoit (1995) argued that apologies are forms of persuasion because they are goal-driven communication that seeks to elicit a change in the behavior or attitude of the audience. As such, it seems likely to expect that apologies would suffer similar negative effects of nonfluency found by researchers studying other forms of communication (Burgoon, Buller, & Guerrero, 1995; Golman-Eisler, 1968; Miller & Hewgill, 1964; Tatchell, van den Berg, & Lerman, 1983). Past studies that have examined the effect of powerful versus powerless styles of speech found the use of powerless styles of speech incorporating nonfluencies elicited more unfavorable reactions (Erickson, Lind, Johnson, & O’Barr, 1978; Hosman & Siltanen, 2006).

As a unique form of persuasion, crafting and delivering an apology may also be likened to creating a deceptive message, in that the offender, wanting to have his or her message accepted, may experience heightened arousal. The potential for conflict, rejection, embarrassment, or shame, as well as the general face-threatening nature of the situation, can lead to behaviors associated with nervousness (Han & Cai, 2010), including performance decrements such as nonfluencies. In general, skilled communicators are more fluent, and perceived as more truthful, even when they are being deceptive (Burgoon et al., 1995; Riggio et al., 1987), so it stands to reason that a skilled apologizer would be more fluent and effective as well.

Although previous research (Chiles, 2008) indicated that one of the attributes individuals desired in apologies included expressions of nervousness and shame, the study was limited to participants’ descriptions of the qualities of an effective apology, and did not measure actual responses to apologies with different qualities. It is the aim of this study to rectify this limitation. Therefore, based on past research on the effect of nonfluency on the perception of messages, we propose the following hypothesis:

H1: There is a negative monotonic relationship between levels of nonfluency in an apology and receivers’ perceptions of sincerity, remorse, truthfulness, performance, and the likelihood of forgiving one’s offender.

Communicator Competence and Perceptions of Apologies

As previously noted, individuals respond to apologies differently. What seems sincere to one individual may not seem that way to another. While the competence of the offender may influence the effective creation and delivery of an apology message, so might the competence of the offended. Communication competence, particularly self-perceived communicator competence (SPCC) (McCroskey & McCroskey, 1988), has received considerable treatment in the literature of communication studies, but has not yet been applied to apologies. A competent communicator is defined as a person with “knowledge of appropriate communication patterns in a given situation and the ability to use the knowledge” (Cooley & Roach, 1984, p. 25). Individuals who perceive themselves as highly competent might then react differently in communication situations than those who perceive themselves as less competent, possibly assessing others’ communication ability relative to their own.
In his study of perceptions of nonfluencies in communication, Christenfeld (1995) found that while they created the impression that the speaker was “not doing so well” (p. 173), nonfluencies did not impact comprehension of the message. Christenfeld’s finding suggests that as long as an apology contains the appropriate verbal components (expression of remorse, statement of responsibility, promise not to repeat offense, offer of reparation/compensation, and request for forgiveness), both high and low competence communicators would understand the content of a “good” apology. However, these two types of individuals (high and low SPCC) may evaluate the same apology using different criteria.

One theoretical perspective that offers some insight is the elaboration likelihood model (Petty & Cacioppo, 1986). According to this dual-process model, people respond to persuasive messages (such as apologies) by assessing different sets of cues. There are two nonexclusive routes that hearers can follow: the central and the peripheral. When hearers primarily follow that peripheral route, they tend to rely more on source characteristics when evaluating the message such as credibility and expertise, or characteristics such as nonverbal delivery style. When hearers primarily follow the central route, they focus more on message characteristics such as the presence of one- or two-sided arguments and evidence strength. If we assume that fluency is more of a peripheral cue, and that high SPCC individuals follow the central route more, we would then expect that they would be less influenced by changing levels of fluency. In other words, a competent communicator is likely to be a less influenced by style than content in any persuasive message, including an apology. Conversely, a less competent communicator may be more easily swayed by the (non-)confident delivery of a message than by the message itself.

Another explanation for differing expectations for higher and lower SPCC individuals is that communication competence has been found to be associated with a preference for more integrative conflict styles, whereas a lack of competence is associated with distributive and avoidant conflict styles (Canary & Spitzberg, 1989). As one of the measures of communication competence is a recognition of (relationally) appropriate and (task) effective communication (Spitzberg & Cupach, 1984), the association between competence and integrative conflict makes sense conceptually. This might make high-SPCC individuals more likely to accept or favorably rate all apologies, as that demonstrates a more integrative style of conflict management.

A related issue to consider is whether high SPCC individuals might respond differently to different levels of nonfluency. While few studies have been done directly linking SPCC and fluency, Blood, Blood, Tellis, and Gabel (2001) found that individuals who had frequent vocal nonfluencies (stuttering) tended to have relatively lower SPCC than fluent speakers. While not related to perceptions of others, this does suggest that nonfluency has a negative relationship with perceived communication competence. Richmond, McCroskey and McCroskey (1989) uncovered significant positive correlations between SPCC, self-esteem, and sociability, in addition to significant negative correlations between SPCC and audience anxiety, shyness, and introversion.

According to self-verification theory (Swann, 1983), individuals generally seek out and respond favorably to information that affirms their self-perceptions. In other words, high self-
esteem individuals like to receive positive information, whereas low self-esteem individuals counter intuitively like to receive negative information. This indicates the possibility that high levels of SPCC might create an “ego effect” where, because high-SPCC individuals consider themselves to be more competent communicators than the very nonfluent apologizer, they are more accepting of the apology as it confirms their self-perception of high communicative competence.

A second process that might be at work in this dynamic is that of empathy. According to Spitzberg and Cupach (1984), two characteristics related to communication competence are empathy and role taking. Empathy and role taking, in turn, are critical components of the altruistic model of prosocial behavior (Stiff, Dillard, Somera, Kim, & Sleight, 1988). In response to perceived distress in another, individuals first engage in perspective-taking, which then shapes their empathic concern for the distressed party. This then influences the prosocial communicative responses of the assisting party. As previously noted, SPCC has been found to be related to integrative conflict strategies (Canary & Spitzberg, 1989), which rely in part on awareness of and concern for the needs of the other party in a conflict. As such, it is possible that high SPCC individuals may respond empathetically to highly nonfluent apologies, if nonfluencies are perceived as a sign of nervousness and distress. On the other hand, the same sensitivity to differing levels of distress might not be expected of individuals with lower communication competence. Therefore, we propose the following hypothesis based on prior theory and research:

H2: Higher SPCC individuals will rate apologies more favorably for remorse, sincerity, truthfulness, performance, and the likelihood of forgiving one’s offender than lower SPCC individuals; this difference will be greatest at high levels of nonfluency.

Method

Participants

The participants were 106 (44 male, 62 female) undergraduate students attending a small, Midwestern, religiously-affiliated private college. They ranged in age from 18 to 23 with a mean of 19.8 years. They represented 31 different majors, the most common being political science (n = 15), communication (n = 11), and education (n = 10). Potential participants were approached in students’ classrooms and public areas across campus and asked if they would be willing to participate in a study on interpersonal communication.

Experimental Design

Participants listened to one of six recordings (female and male; low, moderate, and high nonfluency) and then completed a questionnaire having four parts. Which apology was heard
was determined as the result of the random selection of a number between 1 and 6, with each
signifying a different recording of an apology.

The primary researcher scripted an apology based on a scenario in Sugimoto’s (1997)
research: a friend had been using the participant’s computer and had accidentally erased an
important paper on which he or she had been working for two weeks. The script incorporated
what previous research had indicated are the critical verbal elements of an apology: promising
not to repeat the offense, offering reparation or compensation, stating responsibility for the
hurtful event, and expressing remorse (Goffman, 1971; Scher & Darley, 1997; Vassallo, 2005).
The researchers made the decision to include all of the elements of a “good” apology to be able
to focus the results of the study on the changing levels of nonfluency rather than the absence of a
specific verbal element.

Once the basic script was ready, the researchers inserted three kinds of nonfluencies into
the script: repetitions of single words, vocalized pauses (“uh”), and unvocalized pauses (lasting
approximately one second). These types of nonfluencies were selected based on those used in the
study by Miller and Hewgill (1964). Three versions of the apology were produced: “low” (no
nonfluencies), “moderate” (two of each type of nonfluency), and “high” (three of each type of
nonfluency). A male and a female digitally recorded a reading of the script, which the
researchers then reviewed and manipulated on a computer in order to decrease variation between
the two in terms of speaker delivery, volume, and speed without compromising the authenticity
of the original recording. A transcript of the script text is included in Appendix A.α

Survey Design

In the first part of the questionnaire, the participants described their perceptions of the
apology by responding to 15 statements, each on a 7-point Likert-type agreement scale. The
statements consisted of 3-item variations of the five evaluative categories: sincerity, remorse,
thruthfulness, performance, and the likelihood of forgiving one’s offender. Cronbach’s α for each
of the 3-item measures was satisfactory (Table 1).

The next part of the survey included the self-perceived communicator competence
(SPCC) measure developed by McCroskey and McCroskey (1988). This measure identified
twelve situations in which participants were to imagine communicating with someone, such as
talking to a friend, and then rate his or her self-perceived competence at communicating in the
situation on a 0-100 scale, with 0 representing “completely incompetent” and 100 representing
“competent.” Combining scores for these 12 items yields a total SPCC score. Reliability for this
combined score was satisfactory (Table 1). Total SPCC scores were then divided into high,
average, and low categories according to McCroskey and McCroskey’s definitions. Fifty-one
individuals fell in each of the high and average categories, but because only four individuals
were in the “low” category, these individuals were excluded from subsequent analyses.
In the final section, the respondents provided basic demographic information, such as age, sex, and major. Participants were also asked whether they had participated in a previous study on apologies, or had taken a course in nonverbal communication.

**Results**

Hypotheses were tested using a 2 (high/average SPCC) x 3 (low/moderate/high nonfluency) x 2 (sex of participant) x 2 (sex of speaker) reduced-model factorial MANOVA, with the five perceptions of apologies as the dependent variables.

Although there were no specific expectations as to how sex would relate to the dependent variables, it was included as a control variable in the analysis to determine what role, if any, it played. There was no significant main effect for sex of the participant, but there was for sex of the speaker, $F(5, 88) = 2.44, p = .04$, Wilks’ $\Lambda = .88$. For low and moderate nonfluency levels, the female received higher ratings in all five categories than the male (see Table 2). Only for the high nonfluency apology did the male receive higher ratings in perceptions of performance, as well as somewhat higher ratings for sincerity and truthfulness.

**Manipulation check**

In order to test whether participants accurately discriminated among the three experimental conditions of fluency, a manipulation check was conducted. Sixty students (20 males; 40 females) not involved in the main study each listened to two of the voice recordings (one male voice, one female voice) and rated the recordings using a 2-item (fluent-nonfluent; nervous-confident), 7-point semantic differential scale. Cronbach’s alpha reliability for the measure was acceptable at .79.

A 3 (condition) x 2 (sex of speaker) univariate ANOVA revealed an inverse linear relationship for perceptions of fluency and the nonfluency conditions, univariate $F(2, 114) = 175.65, p < .001$, $\eta^2 = .76$. Planned polynomial contrasts confirmed significant differences in perceptions of the three conditions, with the low nonfluency condition judged as most fluent ($m = 5.60, n = 41$), followed by the moderate nonfluency condition ($m = 2.78, n = 37$), and the high nonfluency condition ($m = 2.04, n = 42$). No main effect for perception of fluency was observed due to speaker sex, univariate $F(1, 114) = .41, p > .05$.

**Hypothesis 1: Perceptions of Nonfluency in Apologies**

For nonfluency there was a significant multivariate main effect, $F(10, 176) = 3.97, p < .001$, Wilks’ $\Lambda = .67$. There was also a significant univariate effect for nonfluency for each of the five perceptions of apologies (see Table 3). Planned polynomial contrasts confirmed that the participants perceived the three levels of nonfluency differently for each of the evaluative categories for apologies. However, although expected negative linear trends emerged as predicted in H1, they were overridden by quadratic trends (see Table 4). The highest mean...
scores for ratings of apologies were for the low nonfluency apology. Positive ratings decreased as the nonfluency increased to moderate levels, but then increased for the high nonfluency apology (see Table 5).

**Hypothesis 2: Communicator Competence and Perceptions of Apologies**

Although there was no significant main effect for SPCC and perceptions of apologies, $F(5, 88) = .57, p > .05$, the interaction for Nonfluency x SPCC was significant, $F(10, 176) = 2.03, p < .03$, Wilks’ $\Lambda = .80$. In order to explore the relationship between nonfluency and SPCC, means for individual perceptions of low, moderate, and high nonfluency apologies were compared. There was no clear pattern for the low and moderate nonfluency apologies, but as predicted, for high-nonfluency apologies the mean score for individuals with high SPCC was larger than the mean score for individuals with average SPCC for each of the five apology perceptions (see Table 6). These higher scores were significant for perceptions of sincerity, $F(1,34) = 3.03, p < .05$ (one-tailed).

**Discussion**

This study focused on the relationship of nonfluency to perceptions of apologies. An expectation was that, as nonfluency increases, the favorability of ratings decreases. The findings provided some support for this hypothesis; both linear and quadratic patterns in ratings of perceptions emerged in respect to level of nonfluency. This indicated that people’s reactions to increasing levels of nonfluency may be more nuanced than anticipated. The apology lowest in nonfluency had the highest overall ratings. Hence, targets appear to prefer fluency over nonfluency. However, if there is nonfluency in an apology, these findings suggest that high levels can elicit more favorable reactions than lower levels.

This finding helps to explain some of the results of previous research. As previously noted, Chiles (2008) determined that, generally, people seemed to fall into one of two groups: those who prefer confident apologies, and those who prefer nervous apologies. The findings of the study indicate that there are some differences between what people say they want and what they actually consider to be an “honest” apology. Although in previous research (Chiles, 2008) some individuals indicated they did not want an apology to sound “rehearsed,” the difference in mean scores of ratings between the version with the highest levels of nonfluency and the version with the lowest was large (Table 5). However, the finding that highly nonfluent apologies received more favorable responses than moderately nonfluent apologies suggests that expressions of nervousness can actually contribute to more favorable perceptions of an apology. One possible explanation is that moderately nonfluent apologies may create the impression that the offender does not care a great deal about the apology, whereas offenders offering highly nonfluent apologies may appear as truly distraught about the event. With so many nonfluencies, individuals in the study may have thought that the offender must be earnest.
A factor that was revealed to have a significant relationship to how individuals respond to apologies was communication competence. The second hypothesis addressed the relationship between self-perceived communication competence and perceptions of apologies. The expectation was that individuals with high SPCC would rate apologies on the whole more favorably, but findings did not support this. High SPCC participants did, however, rate highly nonfluent apologies more favorably than average SPCC participants, and significantly so for perceptions of sincerity. Similar to the overall pattern observed in the data, a curvilinear trend was found for high SPCC individuals, where moderately nonfluent apologies received the least favorable ratings. In contrast, lower SPCC individuals rated the low nonfluency condition as the highest, and the other two conditions as significantly worse. Lower SPCC individuals did not appear to noticeably distinguish between moderately and highly nonfluent apologies.

As such, this finding suggests one possible answer to the conundrum previously described in the introduction: a group of people who reported that fluent apologies were the most sincere and another group who reported that nonfluent apologies were the most sincere. While high SPCC individuals still rated the low nonfluency condition the highest, the different patterns for moderate and high conditions indicate that different levels of SPCC could account for at least some of the discrepancy between the two “ideal” apologies described.

This relatively favorable rating of highly nonfluent apologies may indicate the existence of the “ego effect” discussed earlier, whereby individuals with high SPCC see a highly nonfluent apology as confirmation of their self-perception and, therefore, respond more positively. On the other hand, it could be that individuals with high SPCC saw nonfluency itself as a kind of communicative tactic and, consequently, a sign of a more competent apology. It is also possible that high SPCC individuals are more perceptive, and recognize that nervousness might accompany a heartfelt apology, as one might expect if empathic processes are at work. The high ratings of the veracity measures (sincerity, remorse, and truthfulness) by high SPCC participants of the high nonfluency message, in comparison to the average SPCC participants, seem to confirm this. Interestingly, for the low nonfluency condition, average SPCC participants’ ratings of the veracity measures were higher than high SPCC participants’ ratings.

Though not hypothesized, the sex of the speaker to whom participants listened had a clear relationship to ratings of the apology heard. In almost every case, the female offering the apology received higher ratings than the male. This finding could indicate at least two things. First, it could indicate that people of both sexes tend to respond more favorably to apologies from women than apologies from men. Previous research has indicated that women are generally more sensitive to expressions of emotion than men (Bataineh & Bataineh, 2005; Shlomo & Eisikovits, 2006). It is interesting, then, that both sexes responded in a similar manner to the female voice. The socially constructed gender roles may make it more acceptable for women to admit mistakes than men. Second, the finding could simply indicate that the two different speakers received different reactions because of differences in voice and tone. Although the researchers limited variation between the male and female voice samples as much as possible, some divergence was inevitable.
Implications

Previous research on apologies has tended simply to focus on whether or not apologies were considered sincere or insincere without specifically attempting to isolate and test the influence of specific elements (e.g. Bachman & Guerrero, 2006; Tomlinson, Dineen, & Lewicki, 2004). Those that have tend to stress the presence or absence of verbal elements such as expressions of remorse (Kleinke, Wallis, & Stadtler, 1996). Previous research on fluency tended to emphasize that nonfluency was almost always an undesirable quality in a communication act (e.g., Christenfeld, 1995; Hosman & Siltanen, 2006; Kraut, 1978; Sereno & Hawkins, 1967).

However, these findings indicate that in some cases, nonfluency can actually lead to more favorable perceptions (at least relative to other levels of nonfluency). As such, this study is valuable in that the findings suggest not only that paraverbal elements also have important relationships with evaluations of apologies, but that these relationships are complex and do not always follow linear trends. Furthermore, while fluency and apologies are both well-established fields of study in their own right, by bringing them together we were able to gain additional insight into both areas of research.

Limitations and Directions for Future Research

This research had a number of limitations. First, the sample consisted of primarily white, college-age students of mostly homogeneous cultural background. Reflective of the population from which it was drawn, participation from students of different ethnic or national backgrounds was low (2.8%). Therefore, this study could not speak to the myriad cultural differences that conceivably influence responses to apologies and is not generalizable beyond its sample. Some cross-cultural studies (e.g. Sugimoto, 1997) have found cultural differences, so this is a limitation worthy of note. However, these findings can serve as a starting point and comparison for subsequent research, and is therefore still valuable.

Second, there were inevitably differences between the male and female voices. Although variations between (male and female) and within (low to high nonfluency) audio clips were controlled as much as possible, there was probably more variation than simply the number of nonfluencies. This is one possible reason why there were significant differences in how individuals reacted to the male and female versions of the apology. However, given that visual stimuli were removed from the equation, participants were limited to audio cues, and the apology script was carefully crafted to allow focus on differences in levels of fluency rather than the apology itself, the expected noise that these variations could have created is presumably small.

Another limitation of this research is that it is inherently artificial, first due to the experimental nature of the study, and second in that it is hypothetical. The participants were not the recipients of actual apologies. Also, the apologies were scripted, meaning that they may have sounded less natural than apologies that occur in everyday life. However, the fact that...
participants were listening to human voices rather than reading scenarios significantly enhanced the realism of the study. Additionally, the results of this study are in line with other experimental research that involved participants being placed in hurtful events and then receiving apologies of differing levels of sincerity (Anderson, Linden, & Habra, 2006). Therefore, this limitation does not inherently reduce the validity of the findings reported here. Future research could determine whether findings similar to those reported here are replicated when using a behavioral stimulus as opposed to a hypothetical one.

The final limitation involves the self-perceived communication competence measures. The SPCC measure did not produce an equal or even somewhat equal distribution into the low, average, and high categories McCroskey and McCroskey (1988) identified. Given that the inclusion of the four low SPCC individuals into multivariate analyses might have produced more noise than meaningful data, their exclusion is warranted. Further, that the other two categories divided so evenly (51 participants in each) allowed for meaningful data analysis of differences. Nevertheless, future research that includes a more substantial low SPCC group could produce more representative results.

Furthermore, although an individual may perceives him or herself as a competent communicator, it does not necessarily mean that he or she is actually communicatively competent. The argument also was made that individuals with high SPCC scores were better at recognizing a competently crafted message, yet the evidence for that statement remains to be found. It seems clear from the results of this study that differing self-perceptions may correspond to the types of cues to which one gives weight in evaluating an apology. Future research could benefit from parsing of the competence component to determine whether confidence in one’s communication ability is the key factor in the equation, or whether high SPCC individuals actually do process messages differently because of superior analytical skills.

Appendix A: Stimulus Script

Speaker: I—I’m sorry that I, uh, erased your big paper. I was wrong to (pause) use your computer carelessly. I didn’t mean for this to happen, but your work is gone and it’s—it’s my fault. You didn’t deserve to have this, uh, happen to you, especially after you worked so hard on your paper. I (pause) promise I will never mess around on, uh, your computer again. I want to try to make it up to you. If there’s anything I can (pause) do to help you get back to where you were on your—your paper, let me know.

Note. Nonfluency appeared in the moderate (6 nonfluencies) condition. Nonfluency appeared in the high (9 nonfluencies) condition.
### Table 1

**Inter-Item Reliabilities for Measures**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perceptions of Apologies</strong></td>
<td></td>
</tr>
<tr>
<td>Sincerity</td>
<td>.93</td>
</tr>
<tr>
<td>Remorse</td>
<td>.94</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.93</td>
</tr>
<tr>
<td>Performance</td>
<td>.92</td>
</tr>
<tr>
<td>Likelihood to forgive offender</td>
<td>.87</td>
</tr>
<tr>
<td><strong>Self-Perceived Communicator Competence</strong></td>
<td></td>
</tr>
<tr>
<td>Combined Measure (Total)</td>
<td>.90</td>
</tr>
<tr>
<td>Stranger</td>
<td>.87</td>
</tr>
<tr>
<td>Acquaintance</td>
<td>.82</td>
</tr>
<tr>
<td>Friend</td>
<td>.81</td>
</tr>
</tbody>
</table>
Table 2

*Mean Scores (and Standard Deviations) for Apology Perceptions by Sex of Speaker and Fluency*

<table>
<thead>
<tr>
<th></th>
<th>Low Nonfluency</th>
<th>Moderate Nonfluency</th>
<th>High Nonfluency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
<td>Male Voice</td>
<td>n = 15</td>
<td>n = 19</td>
<td>n = 18</td>
</tr>
<tr>
<td>Female Voice</td>
<td>n = 19</td>
<td>n = 18</td>
<td>n = 16</td>
</tr>
<tr>
<td>Male Voice</td>
<td>n = 19</td>
<td>n = 16</td>
<td>n = 19</td>
</tr>
<tr>
<td>Sincerity</td>
<td>5.00 (1.02)</td>
<td>5.26 (1.72)</td>
<td>3.33 (1.32)</td>
</tr>
<tr>
<td>Remorse</td>
<td>4.56 (1.15)</td>
<td>5.23 (1.73)</td>
<td>3.06 (1.25)</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>4.78 (1.12)</td>
<td>5.28 (1.49)</td>
<td>3.39 (1.15)</td>
</tr>
<tr>
<td>Performance</td>
<td>4.84 (1.19)</td>
<td>5.47 (1.21)</td>
<td>2.78 (1.15)</td>
</tr>
<tr>
<td>Likelihood to forgive</td>
<td>5.04 (1.27)</td>
<td>5.40 (1.28)</td>
<td>3.76 (1.13)</td>
</tr>
</tbody>
</table>

*Note.* Higher mean scores represent more favorable ratings in evaluative categories.
Table 3

*Univariate Effects for Nonfluency for Perceptions of Apologies*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F</th>
<th>(\eta^2)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sincerity</td>
<td>2</td>
<td>9.92</td>
<td>.18</td>
<td>.001</td>
</tr>
<tr>
<td>Remorse</td>
<td>2</td>
<td>8.70</td>
<td>.16</td>
<td>.001</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>2</td>
<td>10.52</td>
<td>.19</td>
<td>.001</td>
</tr>
<tr>
<td>Performance</td>
<td>2</td>
<td>19.07</td>
<td>.29</td>
<td>.001</td>
</tr>
<tr>
<td>Likelihood to forgive</td>
<td>2</td>
<td>5.09</td>
<td>.10</td>
<td>.008</td>
</tr>
<tr>
<td>(Group error)</td>
<td>92</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4

**Planned Polynomial Contrasts for Nonfluency for Perceptions of Apologies**

<table>
<thead>
<tr>
<th></th>
<th>Linear Trend</th>
<th>Quadratic Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( t )</td>
<td>( p )</td>
</tr>
<tr>
<td>Sincerity</td>
<td>-2.64</td>
<td>.005</td>
</tr>
<tr>
<td>Remorse</td>
<td>-2.28</td>
<td>.013</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>-2.89</td>
<td>.003</td>
</tr>
<tr>
<td>Performance</td>
<td>-4.42</td>
<td>.001</td>
</tr>
<tr>
<td>Likelihood to forgive</td>
<td>-1.74</td>
<td>.043</td>
</tr>
</tbody>
</table>

*Note. \( df = 99 \)*

Table 5

**Mean Scores (and Standard Deviations) for Apology Perceptions Organized by Fluency**

<table>
<thead>
<tr>
<th></th>
<th>Low Nonfluency</th>
<th>Moderate Nonfluency</th>
<th>High Nonfluency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n = 34 )</td>
<td>( n = 34 )</td>
<td>( n = 38 )</td>
</tr>
<tr>
<td>Sincerity</td>
<td>5.15 (1.44)</td>
<td>3.61 (1.41)</td>
<td>4.24 (1.56)</td>
</tr>
<tr>
<td>Remorse</td>
<td>4.93 (1.52)</td>
<td>3.42 (1.35)</td>
<td>4.16 (1.64)</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>5.06 (1.34)</td>
<td>3.52 (1.29)</td>
<td>4.11 (1.57)</td>
</tr>
<tr>
<td>Performance</td>
<td>5.19 (1.23)</td>
<td>3.19 (1.28)</td>
<td>3.79 (1.59)</td>
</tr>
<tr>
<td>Likelihood to forgive</td>
<td>5.25 (1.27)</td>
<td>4.23 (1.39)</td>
<td>4.73 (1.37)</td>
</tr>
</tbody>
</table>

*Note. Higher mean scores represent more favorable ratings in evaluative categories*
Table 6

*Mean Scores (and Standard Deviations) for Apology Perceptions by Fluency and SPCC*

<table>
<thead>
<tr>
<th></th>
<th>Low Nonfluency</th>
<th>Moderate Nonfluency</th>
<th>High Nonfluency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg SPCC</td>
<td>High SPCC</td>
<td>Avg SPCC</td>
</tr>
<tr>
<td></td>
<td><em>n = 15</em></td>
<td><em>n = 18</em></td>
<td><em>n = 18</em></td>
</tr>
<tr>
<td>Sincerity</td>
<td>5.40 (1.30)</td>
<td>4.89 (1.57)</td>
<td>3.74 (1.36)</td>
</tr>
<tr>
<td>Remorse</td>
<td>5.13 (1.47)</td>
<td>4.76 (1.62)</td>
<td>3.52 (1.23)</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>5.16 (1.18)</td>
<td>4.93 (1.51)</td>
<td>3.39 (1.29)</td>
</tr>
<tr>
<td>Performance</td>
<td>5.11 (1.12)</td>
<td>5.19 (1.32)</td>
<td>3.44 (1.28)</td>
</tr>
<tr>
<td>Likelihood to forgive</td>
<td>5.40 (1.12)</td>
<td>5.09 (1.43)</td>
<td>4.17 (1.32)</td>
</tr>
</tbody>
</table>

*Note.* Higher mean scores represent more favorable ratings in evaluative categories.
References


Sereno, K. K., & Hawkins, G. J. (1967). The effects of variations in speakers’ nonfluency upon audience ratings of attitude toward the speech topic and speakers’ credibility. *Speech Monographs, 34,* 58-64. doi: 10.1080/03637756709375520


