

**STUDENTS' PERCEPTIONS OF INSTRUCTOR CREDIBILITY AND SIMILARITY:  
THE EFFECTS OF SWEARING IN A COLLEGE CLASSROOM DURING  
INTERPERSONAL INTERACTIONS**

**By**

**Amanda Allard**

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## ABSTRACT

### STUDENTS' PERCEPTIONS OF INSTRUCTOR CREDIBILITY AND SIMILARITY: THE EFFECTS OF SWEARING IN A COLLEGE CLASSROOM DURING INTERPERSONAL INTERACTIONS

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This study analyzes how an instructor's accommodation tactic, in response to a student using a swear word, affects students' perceptions of the instructor's similarity and credibility, and how perceptions of similarity and credibility affect students' intrinsic motivation to learn. Sex of the instructor was also manipulated in this study based on literature indicating that an instructor's sex may affect students' perceptions of the instructor's similarity, credibility, and students' intrinsic motivation to learn course material. A 2 (swear word) x 2 (accommodation tactic) x 2 (sex of instructor) survey design was created to test hypotheses and research questions.

Participants ( $N = 396$ ) were randomly assigned to read hypothetical scenarios where either a male or female instructor converged or diverged in response to a student who used the swear word *suck* or *damn*. Results revealed that instructors who diverged, regardless of the swear word used, were perceived as more similar to the student than instructors who converged. Also, findings showed that when an instructor converges their communication in response to a student who swears that it can reduce perceptions of credibility amongst all three subdimensions of credibility: trustworthiness, goodwill, and competence. Perceptions of similarity and credibility positively impacted a student's intrinsic motivation to learn course material. The theoretical and pragmatic importance of this study is discussed throughout the remainder of the manuscript.

*Keywords:* accommodation, swearing, intrinsic motivation, instructor sex, similarity, credibility

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## INTRODUCTION

Research has found that an instructor's use of inappropriate communication can have adverse effects on student-instructor relational development and students' learning outcomes (Baker & Goodboy, 2017; Kaufmann, 2019; Kearney et al., 1991). One form of inappropriate communication that an instructor may use is swearing (Generous & Houser, 2019). An instructor swearing in a classroom setting can negatively affect students' perceptions of the instructor's credibility (Frisby & Sidelinger, 2013; Sidelinger et al., 2015). Although research has found that an instructor swearing can reduce their credibility, there are additional findings that show swearing can make instructors seem more approachable or similar to students (Generous et al., 2015b). An instructor's perceived credibility and similarity are important because they have been found to increase a student's intrinsic motivation to learn course material (Bekiari & Petanidis, 2016; Schrodtt et al., 2009; Trad et al., 2014). An individual is intrinsically motivated when they engage in activities or actions that interest them. Intrinsic motivation can enhance their ability to flourish across all academic endeavors as well as increase their retention rates (Goldman et al., 2017).

Previous research has shown that students swear in the classroom setting and even use swear words with their instructor, research has also shown that instructors may use swear words when communicating with students (Bjorklund & Rehling, 2009; Generous & Houser, 2019; Generous et al., 2015a). However, what is unknown is how an instructor's *response* to a student swearing can affect students' perceptions of the instructor's credibility and similarity, and whether these perceptions increase or decrease a students' intrinsic motivation to learn the course material. Communication accommodation theory (CAT; Giles, 1984) was chosen as the guiding theory for this study because it explains how people adjust behaviors to message receivers and

the outcomes that are associated with certain accommodations during interactions (Adams et al., 2018; Soliz & Giles, 2014).

This study aims to answer this current gap in the literature to better understand how an instructor's communication in response to a student's swearing can impact students' perceptions of instructor credibility and similarity and the student's intrinsic motivation to learn. Though research has indicated that students do indeed swear in the classroom setting, and professors must respond to this communication in the presence of other class members, not all students swear, in the classroom or otherwise (Bjorklund & Rehling, 2009; Generous & Houser, 2019; Generous et al., 2015a). Therefore, the present study examines student perceptions as observers of interactions in which another student swears, and the professor responds by either swearing or not. In addition, the sex of the instructor may matter for perceptions of swearing (Mehl & Pennebaker, 2003). Research also indicates that instructor sex moderates students' perceptions of their similarity, credibility, and swearing (Gehrt et al., 2014; Jagsi et al., 2014; Nadler & Nadler, 2001; Turman & Schrod, 2005). Therefore, this study also serves to identify how sex of the instructor may play a role amongst the variables being analyzed.

In the present study, I manipulate the instructor's use of inappropriate communication (i.e., swearing) and degree of accommodation to test the impact on the instructor's credibility and similarity, and the effect of credibility and similarity on students' intrinsic motivation to learn the course content. This study holds both pragmatic and theoretical importance. Pragmatically, it is poised to further empirical research on the specific forms of communication that positively or negatively affect a student's perceptions of their instructor, which ultimately impact students' intrinsic motivation to learn (Baker & Goodboy, 2017; Kaufmann, 2019; Kearney et al., 1991). Theoretically, this study is of importance because it addresses a gap in the

literature regarding how an instructor's credibility, similarity, and the student's intrinsic motivation to learn are affected when an instructor converges or diverges in response to a student's use of swear words.

I begin by explaining differences between inappropriate and appropriate communication regarding swearing, and how previous studies have analyzed this phenomenon between students and instructors. Then, an overview of CAT is provided as a theoretical explanation for the different forms of accommodation, which is followed by how perceptions of an instructor's similarity and credibility may be affected when they converge or diverge in response to a student swearing. This will then lead to a discussion regarding how appropriateness, accommodation, and instructor sex interact to affect students' perceptions of their instructor's credibility and similarity. I then go on to analyze how students' perceptions of their instructor's credibility and similarity affect the student's intrinsic motivation to learn course material. Throughout the literature review, hypotheses and research questions will be posed as warranted.

### **Inappropriate and Appropriate Communication**

Canary and Spitzberg (1987) define communication competence as communicating effectively and appropriately. Effective communication "accomplishes the goals, objectives, or intended functions of the interactions, whereas appropriate communication avoids the violation of the situational or relational rules governing the communicative context" (p. 93-94). Because previous literature has shown that the appropriateness of communication can increase a student's perceptions of their instructor's credibility (Heyne, 2016; Mazer & Hunt, 2008), it is the main focus of this study. To operationalize the concept of appropriateness of communication originally presented by Canary and Spitzberg (1987), Hullman (2007) created the *communication adaptability scale*. In this scale, Hullman (2007) deems communication as inappropriate when

statements reflect on one or more of the following: (a) anger, (b) a poor choice of humor, (c) use of vulgar language, and/or (d) use of verbal aggression.

A significant number of studies have examined the negative effects anger, poor choice of humor, and verbal aggression can have in the student-instructor relationship (Martin et al., 1997; McPherson et al., 2003; Wanzer et al., 2006). However, minimal literature has examined the effects of vulgar language in the student-instructor interpersonal relationship. Vulgar language can be communicated through verbal or nonverbal channels. For example, when an instructor wears an outfit that derogates others, it is considered vulgar nonverbal communication; when an instructor swears, it constitutes vulgar verbal language (Wanzer et al., 2006). The present study focuses on a specific form of verbal vulgar language—swearing—and furthers the previous literature by asking whether the instructor’s reciprocation of swearing in response to a student, in front of another student, effects observing students’ perceptions of the instructor’s credibility and similarity, as well as the observing students’ intrinsic motivation to learn course material. The next section conceptualizes swearing and explores previous literature that has examined the use of this form of linguistic communication between an instructor and student.

***Swearing.*** Generous and colleagues (2015a) define swearing as “the implementation of taboo language within interactions, intended to add emotional or connotative meaning” (p. 130). Swearing occurs when an individual uses a socially taboo word, and these taboo words can elicit different effects depending on the context in which they are communicated (Jay et al., 2008; Johnson & Lewis, 2010). For example, Generous and Houser (2019) explain that swear words are taboo depending on the reactions, evaluations, context in which the swear word is said, and the relationship one has with the person swearing. Instructor swearing may have some positive outcomes. For example, research has found that in some instances students reported viewing

their instructor as more approachable after they used a swear word (Generous et al., 2015b).

However, most outcomes associated with instructor swearing are negative (Kearney et al., 1991; Generous et al., 2015a).

Also, an instructor's use of swear words that are directed at students, or their personal assignments can have negative effects on a student's ability to learn the course material (Generous & Houser, 2019). Generous and Houser explain that students perceived an instructor's swear words as inappropriate when it was directed at a student out of frustration:

"Communication that belittles and even attacks students have a negative impact on learning and classroom motivation" (p. 193; see also Myers, 2002). These findings show that a professor's use of swearing violates the norm of communication that occurs between a student and an instructor and is therefore perceived as inappropriate. In contrast, individuals that use appropriate communication, or communication that is consistent with the context, are often seen as more credible (Canary & Spitzberg, 1987; Hullman, 2007).

Generous et al. (2015a) only analyzed the effects of swearing with the instructor as the sender of a message including a swear word – that is, they did not examine whether the student themselves had sworn. Thus, this study proposes to analyze students' perceptions of an instructor swearing as a response to another student swearing to understand how perceptions are formed from a hypothetical communicative scenario within an education setting. Research indicates that students do swear in the classroom (Kearney et al., 1991). For example, Bjorklund and Rehling (2009) explain that students' swearing in the classroom occurs regularly. The authors asked over 3,000 undergraduate participants to take an online survey asking them to rank the frequency of twenty-five different impolite classroom behaviors. Swearing was the fifteenth most frequent behavior and was reported to occur more often than doing homework for other classes and

sleeping in class. Research suggests that instructors swear as well. Generous and Houser (2019) explain that their findings suggest, “students tend to encounter instructor swearing at some point in their college career” (p. 192). The authors go on to encourage the continuation of exploring the perceptions students have about inappropriate behaviors, such as swearing, in the classroom. The following sections continue to explore this form of communication by examining the effects of instructor convergence or divergence in response to a student’s use of swearing, using CAT as a theoretical framework.

### **Communication Accommodation Theory (CAT)**

Giles (1984) created CAT as a framework to explain the verbal and nonverbal adjustments individuals enact to maintain, enhance, or decrease social differences during interactions, and it illustrates the different ways people choose to accommodate (or not) and the consequences that occur from doing so. Gallois and colleagues (2005) explain that accommodation occurs any time an individual alters their communication behavior in response to another individual’s communication behavior, and that there are two ways people can accommodate: linguistically (i.e., speech) and psychologically (i.e., motivations and intentions). Although these are two of the main ways that people can accommodate, people can accommodate nonverbally as well. The present study takes a linguistic accommodation approach because it focuses on the appropriateness of verbal swear words.

Individuals converge when they adapt their communication behaviors to become more like another person (Giles et al., 1987). An example of this would be when a student uses a swear word to communicate a message to an instructor and the instructor replies by also swearing, for example, if a student said, “Mr. Smith, that was a damn hard exam” and the instructor replied, “Yeah, that exam was damn hard.” In contrast, Giles and colleagues explain that divergence

occurs when an individual emphasizes the verbal or nonverbal differences between them and another person. For example, if a student approached an instructor and said, “What the hell! Why did I make a zero on this assignment?” and the instructor responded by paraphrasing but emphasizing the absence of the word “hell,” then this would be an example of an instructor diverging: “I think you mean *why in the world* did I earn a zero on the assignment?”.

Maintenance occurs when an individual persists with their personal verbal communication, regardless of how another person is communicating. In the case of maintenance, an instructor who does not normally swear may respond to the student’s question by saying, “Let’s go over your assignment together.” A variable that can influence the amount or degree in which an individual accommodates their communication is the power structure of the relationship (Shepard et al., 2001).

Social power is one of the most well-known relational factors that can influence an individual to adapt their communication (Adams et al., 2018). In fact, when an individual does not possess a lot of power, they tend to converge to match the communication style of someone higher in power (Giles, 2008). McCroskey and Richmond (1983) define social power as “an individual’s potential to have an effect on another person’s or a group of persons’ behaviors” (p. 176). In the student-instructor relationship the instructor typically holds a higher level of power than the student (Horan et al., 2012; Paulsel et al., 2005).

The power difference between a student and instructor can influence whether the accommodation is “upward” or “downward” (Shepard et al., 2001). Thus, an individual could accommodate their communication in one of four ways by converging upward, converging downward, diverging upward, or diverging downward. More specifically, when an individual accommodates their communication upward, they are altering their speech to a more prestigious

way of speaking whereas accommodating downward refers to modifying one's communication in a more socially unacceptable fashion (Giles et al., 1991). The present study compares professors who match a student who used a swear word, which represents *downward convergence* with professors who emphasize the difference between a student's swearing and their own use of appropriate language, which represents upward divergence (Dragojevic et al., 2016).

A potential reason an instructor may converge their communication to match a student's communication may be to achieve social approval. Mazer and Hunt (2008) conducted a qualitative analysis regarding students' perceptions of an instructor who converged downward by implementing positive slang terms into their lecture such as "awesome", "cool", and "sweet". Responses from the students indicated that many of them viewed the instructor positively after they utilized slang. For instance, one student said that instructors use of slang was, "more personal, like one-on-one communication" (p. 24). This shows that instructors can enhance positive perceptions of themselves when they converge downward. However, Giles and Ogay (2007) explain that a potential consequence an instructor, who is in a higher status position compared to the student, may face when they converge is being perceived as inappropriate.

In fact, one potential negative perception a student may have about an instructor converging their communication by swearing in response to another student swearing is that it may be a norm violation. A norm violation is when an individual's verbal or nonverbal behavior is deemed as unacceptable and is perceived as inappropriate or deviant (McPherson et al., 2003). Regarding the student instructor relationship, research has found that when instructor swears in a formal setting, such as a classroom, it can often be viewed as unexpected or inappropriate (Generous et al., 2015a; Johnson & Lewis, 2010). According to the theoretical underpinnings of



CAT, norms are a critical variable in the decision- making process of whether an individual should accommodate their communication, and in the development of perceptions an individual makes of another person who accommodates their communication (Gaillos et al., 2005).

CAT is not only concerned with how and why individuals alter their communication during interpersonal interactions, but also the perceptions of these interactions (Jones et al., 2018). Therefore, the purpose of this study is to understand how students' perceptions of their instructor's credibility and similarity, as well as their own intrinsic motivation to learn is affected after they view their instructor converges downward or diverges upward in response to a student who swears. A student's perceptions of an instructor's credibility and similarity have been found to have positive impacts on their intrinsic motivation to learn course material (Abrami & Mizener, 1985; Bekiari & Petanidis, 2016; Frymier & Thompson, 1992; Robinson et al., 2019). Correspondingly, two of the main dependent variables that have been tested from the theoretical foundation of CAT are similarity and credibility (Soliz & Giles, 2014). Each of these outcomes will be discussed in more detail below.

### **Similarity**

Soliz and Giles (2014) explain that one of the main reasons people converge their communication behaviors is so that recipients will perceive them as similar. The two main elements of similarity that the present study focuses on are perceived instructor attitude and values (McCroskey et al., 1975). These aspects of similarity are important to examine because perceived attitude and value similarity have been found to affect a students' intrinsic motivation to learn course material (Abrami & Mizener, 1985; Altermatt & Pomerantz, 2003; Richmond, 1990; Robinson et al., 2019). Perceptions of similarity also increase liking and can have positive

effects on relational development (Gehlbach et al., 2016). Past research in other contexts indicates that convergence can increase perceptions of similarity (Adams et al., 2018).

Kearney et al. (1991) explain that what teachers say and do can influence either negative or positive teaching evaluations from students. Similarly, as stated in the previous section, an instructor swearing may be perceived as inappropriate and considered a norm violation (Generous et al., 2015a; Johnson & Lewis, 2010). Therefore, it could be concluded that if an instructor converged their communication to match a student it would negatively impact a student's perception of their similarity to them. However, findings regarding students' perceptions of an instructor swearing in the classroom suggest otherwise. For example, Generous and colleagues (2015b) conducted a study regarding students' perceptions of an instructor after they used a swear word in a classroom setting. The results indicated that students perceive instructors as more approachable after hearing them utilize a swear word. Since there is conflicting literature regarding how an instructor swearing may be perceived by a student, a research question is posed to assess how an instructor's accommodation tactic in response to a student swearing will affect the student's perceived similarity to them. Hence, I propose the following research question:

RQ1: How will students perceive their instructor's similarity after they converge or diverge in response to them swearing?

Another outcome associated with accommodation is perceived credibility (Soliz & Giles, 2014). Therefore, the following sections discuss how an instructor's accommodation to a swear word may affect other students' perceptions of their credibility.

## **Credibility**

Source credibility refers to the attitudes individuals hold about another person, which are based on previous communicative interactions (McCroskey & Young, 1981). Three components comprise credibility: trustworthiness (i.e., honesty), competence (i.e., expertise), and goodwill (i.e., generosity; Banfield et al., 2006). Research indicates that all three variables, trustworthiness, competency, and goodwill, coalesce to assist in helping an individual seem credible (King & Sereno, 1973; McCroskey & Teven, 1999). Perceived instructor credibility, which is conceptually defined as students' positive or negative perceptions about an instructor, was derived from McCroskey and Young's (1981) concept of source credibility. When applied to the instructor-student relationship, trustworthiness refers to the degree an instructor is perceived as honest; competence identifies whether the instructor knows what he or she is talking about, and goodwill is how caring the instructor is perceived as being by their students (Banfield et al., 2006).

As previously mentioned, CAT recognizes the importance of power difference when analyzing perceptions of an individual who accommodates their communication. Instructors are in a higher-status position compared to their students, and when they use appropriate communication, it abides by the communicative norms of their position (McPherson et al., 2003). This suggests that when an instructor receives a message containing a swear word from their student and diverges by sending a message emphasizing the absence of the swear word, they will be seen as more credible by their student than an instructor who converges. To test the effects an instructor's convergence or divergence in response to a student's use of swearing has on perceived credibility the following hypothesis is forwarded:

H1: Students will rate professors who diverge in response to a swear word higher in credibility than instructors who converge.

An additional psychological concept that plays a pivotal role in a student's education, and that is related to perceptions of instructor credibility and similarity, is intrinsic motivation to learn (Goldman et al., 2017).

### **Intrinsic Motivation to Learn**

Ryan and Deci (2000) provide the following definition for motivation: “(an) inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn” (p. 70). People can experience intrinsic motivation, extrinsic motivation, or amotivation. Intrinsic motivation is when an individual is motivated to engage in activities because they interest them, whereas extrinsic motivation refers to when an individual is motivated by some external factor, and amotivation occurs when an individual does not have a specific intention or motivation for behaviors (Goldman et al., 2017). An example of a student being intrinsically motivated would be when a student learns course material because they know it can benefit their understanding of a topic or subject and they get joy from doing so. In contrast, an example of a student learning because they are extrinsically motivated is when they study course material because they know it can help them obtain scholarship money, recognition, or a tangible asset. A student may be amotivated when they do not enjoy the course or know what the end goal of them learning the material is.

The focus of the present study is on intrinsic motivation to learn course material. When a student is intrinsically motivated to learn, it not only means that they are motivated to accomplish an assignment, but that they also value and enjoy the process of learning (Brophy, 1983; Goldman et al., 2017). Intrinsic motivation has been referred to as “one of the most

important psychological concepts in education” (Vallerand et al., 1992, p. 1004) because when an individual is intrinsically motivated, they tend to excel in multiple academic settings compared to students who are extrinsically motivated or amotivated (Goldman et al., 2017).

Additionally, prior research has linked instructor similarity to a student’s intrinsic motivation to learn the required course material (Abrami & Mizener, 1985; Bekiari & Petanidis, 2016; Frymier & Thompson, 1992; Robinson et al., 2019). For example, when students perceive they have a similar attitude to their instructor it is correlated with higher term grades, and that higher grades can result in an increase in a student’s intrinsic motivation to learn the course material (Abrami & Mizener, 1985; Robinson et al., 2019). Regarding similarity in values between a student and instructor, Altermatt and Pomerantz (2003) explain that similarity in values is linked with social attraction, which has been found to impact a student’s intrinsic motivation to learn (Bekiari & Petanidis, 2016). These findings indicate that when a student perceives themselves to have similar attitudes and values as their instructor that it can increase their intrinsic motivation to learn. Thus, previous literature and findings have shown that perceived similarity is positively correlated with students’ intrinsic motivation to learn course material. The following hypothesis was generated:

H2: Perceived instructor similarity will be positively associated with students’ intrinsic motivation to learn.

In addition, research conducted by Martin and colleagues (1997) found that students’ perceptions of all three dimensions of instructor credibility are positively associated with students’ intrinsic motivation to learn. Since all three of the subcategories of credibility have been found to predict students’ intrinsic motivation to learn in past research, the following hypothesis predicts they

will be positively associated with students' intrinsic motivation to learn course material in the present study:

H3: a) Trustworthiness, b) goodwill, and c) competence are positively associated with students' intrinsic motivation to learn.

Another variable that has been known to affect students' perceptions of their instructors as well as perceptions of swearing is biological sex. The following section explores this factor in more detail.

### **Instructor Sex**

The biological sex of an instructor is a variable that students take into consideration when evaluating a course (Young et al., 2009). Previous research regarding whether an instructor's sex effects student's intrinsic motivation to learn course material and perceptions of the instructor's credibility and similarity have shown varying outcomes. For example, El-Alayli and colleagues (2018) found that female professors must show a greater degree of professionalism than male professors to be considered competent and credible by their students; yet other research found no significant interaction between instructor sex and credibility (Heimann & Turman, 2010). In terms of similarity, research has shown that women are sometimes more motivated to pursue academic endeavors when there are female faculty and role-models present; especially in STEM fields (Jagsi et al., 2014). However, research is mixed regarding how men perceive male and female instructors. For example, Gehrt and colleagues (2014) predicted that male students would prefer higher-ranked faculty male instructors over high-ranked female instructors, yet their findings concluded that male students ranked higher-ranked female faculty as more favorable, a finding that is not in support of previous literature regarding similarity effects.

Critical to the present study, sex of the instructor may play a factor when considering the use of swear words. Research has found that men are generally more inclined to use swear words than women, and that swearing is generally perceived as a masculine trait (Mehl & Pennebaker, 2003). Women may avoid swearing because they are judged more harshly for swearing than men. For example, Gordon (1997) provides evidence that suggest women who are middle to upper class may avoid swearing so that they do not receive negative evaluations from others. However, there is research that shows women swear just as much as men (Baruch & Jenkins, 2007). Currently, there is no known literature that assess how students perceive a female versus a male instructor swearing. The only research that comes close to understanding this phenomenon is Mazer and Hunt (2008) who conducted a qualitative analysis to better understand the effects of male professors' use of slang on students' perceptions of instructor credibility. He found that although some forms of slang elicit positive outcomes such as a positive learning environment, it can cause a male instructor to be seen as unprofessional. However, Mazer and Hunt's study included only male instructors, and he implores future researchers to extend the understanding of inappropriate communication to female instructors as well.

Whether or not the sex of the instructor has an impact on students' perceptions of their credibility and similarity is unclear based on previous findings. Plus, there is no known research that analyzes how an instructor's accommodation as a response to a swear word may affect these perceptions. To better understand how an instructor's sex may play a role in the present study the following research question is posed:

RQ2: What is the main and interaction effect of instructor sex on perceptions of (a) credibility, (b), similarity, and (c) intrinsic motivation to learn when they converge or diverge in response to a student who swears?

## **PILOT STUDY METHOD**

The main purpose of the pilot study was two-fold. First, the pilot study was conducted to determine which swear words would be perceived as both realistic and inappropriate for an instructor to use with a student. The swear words chosen to be analyzed for the pilot study came from a book written by Jay (1992) on cursing in America. In this book he identified which swear words are the most used. Four of the ten most common swear words Jay identified included: *shit*, *hell*, *damn*, and *suck*. These four words were chosen from the list of ten because they were the least religiously and personally offensive in nature. Therefore, these were the four swear words assessed in the pilot study.

The second purpose of the pilot study was to determine which scenario would be considered both realistic and inappropriate: when the instructor directed the swear word at the student specifically or at the course material. The decision to assess the relationship between the target of the swear word and realism and inappropriateness was based on findings by Generous and Houser (2019) that showed when the swear word is directed at the student that it is perceived as more inappropriate. Thus, the pilot study manipulated whether the swear word was directed at the student's performance on an exam or at the exam material.

### **Procedures**

The pilot study began by asking participants to imagine that their same-sex friend approached their middle-aged instructor after a class both the participant and same-sex friend were taking, saying that they have some questions for the instructor. Participants were asked to imagine viewing a same-sex friend communicating inappropriately to an instructor to promote realism, as students may not believe (or indicate) that they themselves would use inappropriate communication. Next, participants were randomly assigned to a scenario where an instructor



used an accommodation tactic, either convergence or divergence, in response to a student who used one of four swear words (shit, damn, hell, and suck). The scenarios for this pilot study were developed based on examples of accommodation scenarios and from literature from Generous and Houser (2019) which analyzed the difference between scenarios when the instructor targeted the swear word at the student verses the course material. For example, one of the interactions began with their same-sex friend asking the instructor the following question, “Hey Dr. Smith, you know that exam we had last week?” and the instructor replies by asking, “Of course, what is your question or concern?” The participant then reads a student’s response where their same-sex friend replies by using one of the four swear words (i.e., “I felt like I did really shitty on that exam”). Based on the condition the participant were randomly assigned to, they either read a response where the instructor converges by using the same swear word as the student and directs the swear word at the student, converges by using the same swear word as the student and directs the swear word at the course material, diverges by not using any swear word and directs the response at the student, or diverges by not using any swear word and directs the response at the course material. Participants then rated their perceptions of the realism and appropriateness of the scenarios and interactions that used the swear words (shit, hell, damn, and suck). Please reference Appendix A for the specific wording of each scenario and interaction. Finally, participants concluded the survey by answering two demographic questions regarding their age and biological sex.

### **Instrumentation**

***Realism.*** Participants were asked how realistic the student-instructor scenario was with three items from Shebib et al.’s (2020) scale. The three-item measure was assessed along a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Items include “*The scenario*

*between my friend and the instructor [stem].... is realistic.”* These items were averaged to create a composite score for realism; higher scores indicated greater perceived realism. This scale had an alpha of .90.

***Instructor appropriateness.*** This construct was measured using an adapted version of Hullman’s (2007) 14-item scale. More specifically, this scale was reduced to an 11-item scale. The decision to eliminate items from this measure for the pilot study was made because three of the items were not applicable to the scenarios that were being analyzed. This scale was adapted to fit the context of the situations by replacing items such as “He/she said things that made me uncomfortable” with items specifically identifying the instructor, like “The instructor said things that made me uncomfortable”. Scores for each item on this scale indicated greater levels of inappropriate communication. Participants evaluated the instructor’s inappropriateness on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). This scale had an alpha of .93. The purpose of this scale was to identify inappropriate conversations in the pilot study. Please reference Appendix B for a complete representation of how these instruments were used for the pilot study.

## **Participants**

Participants ( $N = 74$ ) were recruited from a research participation pool at a large Midwestern University. The average age of participants was 20.73 ( $SD = 1.66$ ; range = 18-27). Regarding the biological sex of the participants, the majority identified themselves as female (54.1%), whereas 45.3% identified themselves as male. The option to select “non-binary” as a biological sex indicator was an option in this study, but no participants identified as such.

## PILOT STUDY RESULTS

Since all participants rated the appropriateness and realism of all four swear words within the convergent conditions, two 2 (target) x 4 (swear words) repeated measures analysis of variances (RM-ANOVA) were conducted. The target of the swear word was a between-subjects factor and the swear word used was analyzed through a within-subjects factor. The independent variables are categorical and include the *target of the swear word* (student or course material), and the *swear word used* (shit, hell, damn, suck). The dependent variables are measured continuously and included *realism* and *inappropriateness* of the instructor. Before conducting the main analyses for the pilot study, frequencies were analyzed to determine how many participants were in each condition. Results showed that  $n = 38$  participants were randomly assigned to view the scenario where the instructor targeted the swear word at the student and  $n = 36$  viewed the scenario where the instructor targeted the swear word at the course material.

The first 2 (target) x 4 (swear word) RM- ANOVA conducted analyzed how realistic it would be for an instructor to use a swear word. To begin, I separated the data so that the convergent conditions were the only scenarios being analyzed, because these were the only conditions where the instructor swore. The within-subjects effect results showed that there was not a significant interaction between the realism of the swear words and the target to which they were directed at,  $F(3, 38) = 1.10, p = .35, \eta_p^2 = .03$ . However, the swear word used by the instructor had a significant effect on ratings of realism,  $F(3, 38) = 4.97, p = .003, \eta_p^2 = .12$ . More specifically, the swear word *hell* was perceived as the most realistic ( $M = 4.67, SD = 1.62$ ), followed by the swear word *suck* ( $M = 4.60, SD = 1.57$ ), *damn* ( $M = 4.15, SD = 1.64$ ), and then *shit* ( $M = 3.79, SD = 1.73$ ). In addition, one-sample  $t$ -tests were conducted that showed the words *hell*,  $t(37) = 2.58, p = .01$ , and *suck*,  $t(37) = 2.35, p = .02$ , were both significantly above the

midpoint for realism, whereas the swear words *damn*,  $t(37) = .56$ ,  $p = .58$ ; and *shit*,  $t(37) = -0.74$ ,  $p = .47$ , were not significantly above the scale midpoint of 3.5 for ratings of realism. In terms of the effect of target of the swear word on perceptions of realism, the between subject effect analysis indicated a significant main effect,  $F(1, 36) = 4.62$ ,  $p = .04$ ,  $\eta_p^2 = .11$ . Results indicated that when an instructor directed their swear word at the course material it was perceived as more realistic ( $M = 4.80$ ,  $SE = .30$ , 95% CI [4.19, 5.41]) than when they directed it at the student's performance ( $M = 3.94$ ,  $SE = .26$ , 95% CI [3.42, 5.41]). Additionally, one sample  $t$ -tests were conducted to determine which target(s) of the swear word was perceived as realistic above the midpoint. The tests indicated that when the instructor directed the swear word at the course material it was significantly above the scale midpoint of 3.5,  $t(15) = 2.91$ ,  $p = .01$ , Cohen's  $d = 1.50$ , but when it was directed at the student it did not differ significantly from the midpoint,  $t(21) = -0.21$ ,  $p = .84$ , Cohen's  $d = .09$ .

Next, another 2 (target) x 4 (swear word) RM-ANOVA was conducted to assess perceptions of inappropriateness when an instructor used one of the four swear words. Results showed that there was not a significant interaction between the swear words and target at which they were directed at,  $F(3, 38) = 2.56$ ,  $p < .06$ ,  $\eta_p^2 = .07$ . In addition, there was a significant main effect of the swear word used,  $F(3, 38) = 6.66$ ,  $p < .001$ ,  $\eta_p^2 = .16$ . The swear word *shit* was perceived as the most inappropriate ( $M = 4.91$ ,  $SD = 1.28$ ), followed by the swear word *suck* ( $M = 4.67$ ,  $SD = 1.46$ ), *damn* ( $M = 4.46$ ,  $SD = 1.34$ ), and then *hell* ( $M = 4.13$ ,  $SD = 1.42$ ). One sample  $t$ -tests were conducted to determine if these means were significantly above the midpoint of the inappropriateness scale of 3.5. Results showed that the swear words, *damn*  $t(37) = 2.10$ ,  $p = .04$ , *suck*  $t(37) = 2.80$ ,  $p = .008$ ; and *shit*,  $t(37) = 4.39$ ,  $p = .001$ , were significantly above the midpoint. The swear word *hell*,  $t(37) = .57$ ,  $p = .57$ , did not significantly differ on ratings of

inappropriateness. The RM-ANOVA between subject effects indicated a significant main effect of target of the swear word on perceptions of inappropriateness,  $F(1, 36) = 21.49, p < .001$ ,  $\eta_p^2 = .37$ . Results indicated that when an instructor directed their swear word at the student's performance it was perceived as more inappropriate ( $M = 5.16, SE = .21, 95\% \text{ CI } [4.75, 5.58]$ ) than when they directed it at the course material ( $M = 3.69, SE = .24, 95\% \text{ CI } [3.20, 4.18]$ ). One sample  $t$ -tests were then conducted to determine if these means were significantly above or below the midpoint of 3.5. Results indicated that when the swear word was directed at the student that it was significantly above the midpoint,  $t(21) = 6.51, p < .001$ , but when it was directed at the course material it did not significantly differ from the midpoint on ratings of inappropriateness  $t(15) = -0.12, p = .30$ .

### **Discussion of Pilot Study**

The goal of the pilot study was to assess which swear words (shit, hell, damn, suck) and targets of the swear words (student or course material) were perceived to be the most realistic and inappropriate for an instructor to use. Although the word *hell* was perceived as the most realistic out of all four conditions, it was not perceived to be an inappropriate word used by the instructor. Similarly, the word *shit* was seen as the most inappropriate word used by the instructor, yet it was not rated highly on realism. Since these two swear words varied so greatly in terms of realism and inappropriateness, it was decided that the swear words *damn* and *suck* would be the two swear words utilized within the main study, because they were both rated significantly above the midpoint on both realism and inappropriateness.

The second purpose of the pilot study was to determine which target of the swear word would be perceived as the most realistic and inappropriate. The results showed that when an instructor directed their response at the course material, it was perceived as more realistic than

when they directed it at the student. However, when assessing the inappropriateness of the interactions it was found that when instructors directed their response at the student they were perceived as more inappropriate than when they directed it at course material. This is in line with previous literature explaining that inappropriate communication directed at a student can have negative effects on their learning outcomes (Generous & Houser, 2019; see also Myers, 2002). To create a main study that properly assesses the proposed hypotheses and research questions presented above, the interactions between the student and instructor had to be perceived as inappropriate but also realistic. Though realism was lower in the student-directed swear word condition, it was not significantly below the midpoint. Furthermore, realism did not vary as greatly as inappropriateness ratings between targets. Thus, the decision was made to create the main study with the most inappropriate scenario, which was not perceived to be unrealistic. Therefore, the main study depicts interactions where the instructor directs their response at the student. The following sections apply these findings to the main study in greater detail.

## MAIN STUDY

### Participants

Participants ( $N = 396$ ) were recruited from a research participation pool at a large Midwestern University. Most participants identified as female (55.6%), male (43.9%), and some preferred not to answer (0.5%). The average age of the participants was 19.73 ( $SD = 1.90$ ;  $range = 18-34$ ). Regarding ethnicity, many participants did not identify as Hispanic or Latino (96.2%); 3.8% did. Racially, most participants were White/Caucasian (77.2%) followed by Asian (8.6%), Black or African American (7.1%), multiple or mixed races (4.6%), American Indian (.5%), and Native Hawaiian or Pacific Islander (.3%). Most of the participants were from the United States (91.7%) and were raised in the Midwest (89.8%). Only 8.3% of participants were not originally from the United States and most of these individuals were raised in China (48.5%). Most (70.7%) participants were not communication majors. Finally, the sample consisted of freshman (32.2%), sophomores (24.3%), juniors (24.3%), and seniors (19.2%).

### Procedures

In the main study, participants were asked to imagine their same-sex friend, who is in the same course as them, just failed an exam. Like the pilot study, the scenarios did not indicate the specific course to combat potential bias toward certain courses, consistent with previous literature (Goldman et al., 2017). Also, participants were randomly assigned to read about either a male or female instructor. After that, participants were randomly assigned to imagine that their same-sex friend used a swear word, either *suck* or *damn*, in their statement to the professor. They were then randomly assigned to a professor's accommodation tactic: using (convergence) or not using (divergence) a swear word (see Appendix C for exact wording of the scenario description).

Participants then completed a series of scales that measured the dependent variables for this study and concluded with demographic questions.

## **Instrumentation**

***Instructor sex manipulation check.*** To ensure participants accurately identified the instructor sex to which they were assigned, they answered a one item question about the sex of the instructor they were assigned to. This was a categorical variable and participants indicated whether the scenario they read included a male instructor or female instructor. This variable was used for a manipulation check in the preliminary analyses before testing the hypotheses and research questions.

***Instructor credibility.*** Instructor credibility was measured using McCroskey and Teven's (1999) ethos/credibility scale. This instrument consisted of an 18-item semantic differential scale and asked students to assess the hypothetical instructor based on bipolar adjectives on a 7-point scale. Each subscale (competence, trustworthiness, and goodwill) was measured with six items. This scale had an overall alpha score of .90. For the subscales of this instrument, reliability ( $\alpha$ ) was .95 for competence, .63 for goodwill, and .92 for trustworthiness.

***Instructor swearing appropriateness.*** As in the pilot study, this variable was measured with an adapted version of Hullman's (2007) scale using 9-items. Two additional items were removed from the pilot study for the main study because they were targeting more of the construct of *embarrassment* which was not one of the dependent variables of interest for this study. The reliability for this scale was  $\alpha = .80$ .

***Perceived similarity.*** Perceived similarity was measured using a condensed version of a scale created by McCroskey, Richmond, and Daley (1975) to assess homophily. This instrument is a 7-item semantic differential scale that asked participants to assess the hypothetical



instructor's attitudes and values based on bipolar adjectives. Originally, this instrument contained four subscales including attitude, value, background, and appearance homophily. The decision to use only items from the attitude and value subscales was made because participants did not have a visual aid to rate the instructor's appearance, and they were not provided information regarding the instructor's background. Higher scores on this scale represent a greater level of perceived similarity with the instructor. The reliability for this scale was  $\alpha = .95$ .

***Intrinsic motivation to learn.*** This was measured using Goldman and colleagues' (2017) 10-item scale. Participants answered items such as "I would not enjoy trying to comprehend new ideas for this class" and rated on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). This instrument had an alpha level of .93.

***Realism.*** Like the pilot study, this variable was measured using Shebib et al.'s (2020) scale. Additional items were added to the main study to not only ensure that these specific scenarios were "realistic" but that they were realistic for an academic context. For example, the following item was added to the realism scale, "The message exchanged between the student and instructor could be used in an academic setting." The items were measured along a 7-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*). This scale had a reliability of .92. To view how these scales were utilized within the main study please reference Appendix D.

## MAIN STUDY RESULTS

### Preliminary Analyses

Before conducting the main analyses, a manipulation check was conducted to ensure that participants answered the dependent measures with the correct instructor sex in mind. A total of 56 participants failed the manipulation check, yet their data was used for the main study because preliminary analyses indicated the same results as the main analyses. In addition, results from a chi-square showed that the manipulation was significant,  $\chi^2(1, N = 396) = 206.11, p < .001$ , indicating a successful manipulation.

Next, it was imperative to ensure that all the scenarios were perceived as realistic. Therefore, I split the data into four conditions based on the accommodation tactic and swear word used (divergent/damn, divergent/suck, convergent/damn, convergent/suck). Then, one sample *t*-tests were conducted to show whether all four scenarios were perceived as significantly above the realism scale midpoint of 3.5: divergent/damn,  $t(97) = 12.76, p < .001$  ( $M = 5.38, SD = 1.07$ ), divergent/suck  $t(100) = 17.30, p < .001$ , ( $M = 5.68, SD = .98$ ), convergent/damn  $t(97) = 4.93, p < .001$  ( $M = 4.60, SD = 1.21$ ), and convergent/suck,  $t(98) = 6.59, p < .001$  ( $M = 4.72, SD = 1.09$ ), were all perceived as significantly realistic, above the mid-point.

One sample *t*-tests were conducted to determine whether the convergent conditions where the instructor used the swear word *damn* or *suck* were perceived as significant above the mid-point for ratings of inappropriateness. Results indicated that both the convergent/suck,  $t(97) = 10.98, p < .001$  ( $M = 4.96, SD = .87$ ), and convergent/damn,  $t(98) = 4.15, p < .001$  ( $M = 4.39, SD = .94$ ), conditions were both perceived as significantly inappropriate, above the mid-point. Next, the main analyses conducted to test the present study's hypotheses and research questions are presented.

## Main Analyses

To test H1, H2, and R1, three 2 (accommodation tactic) x 2 (swear word) x 2 (sex of instructor) between subjects factorial ANOVA tests were conducted, one for each dependent variable: perceived similarity, credibility, and intrinsic motivation to learn. Frequencies showed that  $n = 192$  participants were randomly assigned to the male instructor condition and  $n = 204$  participants were randomly assigned to the female instructor condition. In addition, frequencies illustrated that the most participants were randomly assigned to the divergent *suck* condition ( $n = 101$ ) followed by the convergent *suck* condition ( $n = 99$ ), the convergent *damn* condition ( $n = 98$ ), and the divergent *damn* condition ( $n = 98$ ).

RQ1 asked a question regarding how an instructor's accommodation tactic will influence students' perceptions of similarity. Results revealed a significant difference between the convergence/divergence scenarios on perceived similarity,  $F(1, 388) = 94.83$   $p < .001$ ,  $\eta_p^2 = .11$ ; such that perceived similarity was greater when the instructor diverged ( $M = 5.25$ ,  $SD = 1.30$ ) than when they converged ( $M = 3.90$ ,  $SD = 1.54$ ). There was also a main effect for the swear word used within the scenarios,  $F(1, 388) = 4.74$ ,  $p = .03$ ,  $\eta_p^2 = .012$ . More specifically, when the swear word *damn* was used in a scenario it was rated higher in terms of perceived similarity ( $M = 4.72$ ,  $SD = 1.48$ ) more than when the word *suck* was used ( $M = 4.41$ ,  $SD = 1.67$ ). In addition, the interaction between the accommodation tactic and the swear word was significant,  $F(1, 388) = 5.77$ ,  $p = .017$ ,  $\eta_p^2 = .015$ . To decompose the interaction between the accommodation tactic and the swear word used, I split the data by accommodation tactic and conducted independent sample  $t$ -tests on perceived similarity by swear word. Results indicated that there was a significant difference in the convergent conditions when the swear words *damn* and *suck* were used,  $t(195) = 3.06$ ,  $p = .002$ , Cohen's  $d = .42$ , such that *damn* was used in the scenario ratings of perceived

similarity were higher ( $M = 4.19$ ,  $SD = 1.45$ ) than when *suck* was used in the scenario ( $M = 3.53$ ,  $SD = 1.56$ ). However, there was not a significant difference within the divergent conditions when the swear word *damn* ( $M = 5.24$ ,  $SD = 1.31$ ) or *suck* ( $M = 5.26$ ,  $SD = 1.30$ ) was used by a student,  $t(197) = -0.11$ ,  $p = .90$ , Cohen's  $d = .28$ . Please reference Figure 1.

H1 predicted that participants would perceive instructors who diverge in response to a student who swears as more credible than an instructor who converges. The results from the ANOVA revealed a significant main effect of the convergence/divergence scenarios on perceived credibility,  $F(1, 388) = 212.84$ ,  $p < .001$ ,  $\eta_p^2 = .35$ . More specifically, when an instructor diverged ( $M = 5.64$ ,  $SD = .95$ ) they were perceived as having more credibility than when they converged ( $M = 4.18$ ,  $SD = 1.10$ ). Similarly, there was a main effect for the swear word used within the scenarios,  $F(1, 388) = 4.98$ ,  $p = .026$ ,  $\eta_p^2 = .013$ ; such that when the swear word *damn* was used in a scenario, perceptions of credibility were higher ( $M = 5.03$ ,  $SD = 1.14$ ) than when *suck* was used ( $M = 4.81$ ,  $SD = 1.13$ ). In addition, the interaction between the accommodation tactic and the swear word was significant,  $F(1, 388) = 15.53$ ,  $p < .001$ ,  $\eta_p^2 = .04$ . To decompose the interaction between the accommodation tactic and the swear word used, I split the data by accommodation tactic (convergent or divergent) and conducted independent sample  $t$ -tests. Results indicated that there was a significant difference in the swear words used in the convergent conditions,  $t(195) = 4.27$ ,  $p < .001$ , Cohen's  $d = .59$ , such that when the swear word *damn* was used ratings of perceived credibility were higher ( $M = 4.49$ ,  $SD = 1.03$ ) than when the swear word *suck* was used ( $M = 3.88$ ,  $SD = 1.03$ ). In contrast, there was not a significant difference within the divergent conditions when the swear word *damn* ( $M = 5.56$ ,  $SD = .99$ ) or *suck* ( $M = 5.72$ ,  $SD = .91$ ) was used by the student only,  $t(197) = -1.20$ ,  $p = .24$ , Cohen's  $d = .17$ . In conclusion, the data supports H1 because there was a significant main effect for

accommodation tactic on perceived credibility such that when an instructor diverged their communication in response to a swear word they were perceived as more credible than when they converged. Please reference Figure 2.

To test H2, which predicts that an instructor's perceived similarity will be positively associated with students' intrinsic motivation to learn, a correlation analysis was conducted between perceived *similarity* and *intrinsic motivation*. Results revealed that there was a significant, positive correlation between perceived similarity and intrinsic motivation,  $r(396) = .44, p < .001$ . Therefore, the findings from the data are in support of H2.

H3 predicted that the three subcomponents of perceived credibility, (a) trustworthiness, (b) goodwill, and (c) competence, would predict students' intrinsic motivation to learn. Results of a multiple regression analysis of the three credibility subcomponents on intrinsic motivation to learn revealed that 22% of the variance of intrinsic motivation can be predicted by competence, goodwill, and trust,  $R^2_{adj} = .222, F(3, 392) = 38.61, p < .001$ . Analysis of regression coefficients indicated that both competence,  $b = .11, t = 2.05, p = .041, r = .10$ ; and trust,  $b = .26, t = 3.71, p < .001, r = .40$ , were significant unique predictors of intrinsic motivation, but an instructor's goodwill was not,  $b = -.02, t = -0.22, p = .83, r = -0.02$ . Therefore, the data support H3a and H3c but not H3b.

RQ2 asked what the main and interaction effects of instructor sex on perceptions of credibility, similarity, and intrinsic motivation were to learn when they converge or diverge in response to a student who swears. Results showed that the instructor's sex did not have a main effect on perceptions of credibility,  $F(1, 338) = 1.25, p = .26, \eta^2 = .003$ . Similarly, there was no significant interaction between instructor sex and accommodation tactic on perceived credibility,  $F(1, 338) = .81, p = .37, \eta^2 = .002$ , or swear word used,  $F(1, 338) = .09, p = .77, \eta^2 = .000$ . In

terms of perceived similarity, instructor's sex did not have a main effect on perceptions of similarity  $F(1, 338) = .46, p = .50, \eta_p^2 = .001$ . Similarly, there was no significant interaction between instructor sex and accommodation tactic on perceived similarity,  $F(1, 338) = 1.65, p = .20, \eta_p^2 = .004$ , or swear word used,  $F(1, 338) = 1.25, p = .26, \eta_p^2 = .003$ . Regarding intrinsic motivation to learn, results showed that the instructor sex did have a significant main effect,  $F(1, 338) = 4.26, p = .04, \eta_p^2 = .011$ ; such that when a scenario included a female instructor participants reported higher ratings of intrinsic motivation to learn ( $M = 4.94, SD = 1.06$ ) than when the instructor was a man ( $M = 4.73, SD = 1.04$ ). There was no significant interaction between instructor sex and accommodation tactic on intrinsic motivation,  $F(1, 338) = .22, p = .64, \eta_p^2 = .001$ , or swear word used,  $F(1, 338) = .05, p = .83, \eta_p^2 = .000$ .

## **DISCUSSION**

The purpose of this study was to apply CAT to understand how students perceive an instructor's similarity and credibility after the instructor converges or diverges in response to another student swearing, and how these perceptions can affect a student's intrinsic motivation to learn. Students perceived instructors who swore (i.e., convergence) to be less similar to them than professors who did not swear (i.e., divergence). Consistent with CAT research, participants found instructors who diverged their communication in response to a swear word as more credible. Both the perceptions of similarity and credibility of an instructor were positively associated with a student's intrinsic motivation to learn.

In addition, instructor's sex was explored as a possible moderator. Although instructor sex did not interact with any of the other independent variables on the dependent variables, results showed that instructor sex had a main effect on a student's intrinsic motivation to learn. More specifically, if participants read a scenario with a female instructor, they indicated higher ratings of intrinsic motivation than if they read about a male instructor. Theoretical and pragmatic implications of the study's findings will be discussed in the following sections.

### **Theoretical Implications**

The findings from this study expand the knowledge and boundaries of CAT by analyzing how appropriateness of the accommodation tactic utilized by instructors in response to a student's use of inappropriate language can affect students' perceptions of their instructor. According to Soliz and Giles (2014), one of the main reasons people converge their communication is so they can appear like another person. As mentioned in the literature review, research has found that swearing can make instructors seem more approachable, suggesting that perhaps similarity perceptions are also increased by a professor swearing (Generous et al.,

2015a). However, findings from the current study showed that when an instructor converged their communication in response to a student swearing, it did not increase students' perceptions of similarity; in fact, perceptions of similarity were greater for instructors who did not swear.

CAT research offers a potential explanation for this finding. There is a power difference between a student and instructor, such that the instructor holds more power (Paulsel et al., 2005). Research has shown that when people of higher power roles, such as an instructor, linguistically accommodated their communication with someone of lower status, such as a student, it caused the lower-power individual to have negative interpersonal impressions of their rapport, social attractiveness, and task attractiveness (Muir et al., 2017). This finding suggests that the power difference between the student and instructor in the interactions may have been a reason for why participants did not perceive the instructors to be more like them when they converged their communication by using a swear word that matched the one used by the student. Future research may want to expand upon this finding as well to assist in the development of CAT by manipulating the power status of the instructor (e.g., teaching assistant versus full professor). This research question assists in furthering the understanding of how accommodating one's communication in a student-instructor relationship can affect perceptions of similarity.

Results showed that when an instructor used divergence in response to a swear word, it increased students' perceptions of their credibility. This finding was in line with the prediction made and is consistent with CAT's assumption that power differences influence perceptions of accommodators. Thus, this finding is theoretically important because it confirms what CAT postulates regarding social power and accommodation but applies it to the student-instructor relationship.



As mentioned earlier, previous research has altered an instructor's use of swearing to determine students' perceptions of the instructor, but this study took it one step further and manipulated both the students and instructor's communication so that they both used swear words when communicating with one another. Results may have varied in the present study if participants had viewed scenarios where only the instructor swore because it may have seemed more inappropriate if an instructor swore without reason. Thus, the manipulation of both the student and instructor's communication provides theoretical insight because it provided a more realistic depiction of a conversation between a student and instructor and indicated how an instructor's accommodation effected students' perceptions of their credibility and similarity. Additional research should continue to manipulate variables in communicative interactions between a student and instructor so that a firmer understanding of the dynamics of this unique interpersonal relationship can be discovered.

Also, consistent with previous literature and findings, results showed that perceived instructor similarity, trustworthiness, and competency were associated with students' intrinsic motivation to learn (Abrami & Mizener, 1985; Cayanus & Martin, 2008; Robinson et al., 2019). However, one of the subcategories for credibility, goodwill, was not positively associated with student's ratings of motivation. According to McCroskey and Teven (1999), goodwill is a way of communicating care for another individual. Communication that elicits care often comes from people that are relationally close (McEwan, 2013). This study did not manipulate the relational closeness of the instructor or friend within the scenarios, which may be a reason why the subcomponent *goodwill* did not have a significant impact on motivation to learn. Perhaps, if relational closeness were manipulated, differences in perceptions of goodwill would be apparent. Regardless, the overall findings for credibility confirm the theoretical underpinnings of CAT.

Finally, this study posed a research question asking how an instructor's sex affected students' perceptions of their instructor's credibility, similarity, and their intrinsic motivation to learn course material. Results showed that instructor sex did not play an influential role on perceived credibility and similarity but had a significant impact on a student's intrinsic motivation to learn, with students indicating greater intrinsic motivation when the instructor was portrayed as a woman. It is important to highlight that the instructor's sex *did not* interact with the accommodation tactic utilized within the scenarios. This finding is theoretically important as it shows that the sex of the individual accommodating in an academic setting does not affect outcomes associated with CAT. This finding may be beneficial knowledge for future researchers who study outcomes associated with the communication between an instructor and student.

Previous research identified mixed results regarding whether the sex of the instructor had an impact on students' perceptions of their credibility and similarity. These findings from the present study are theoretically important because they support the notion that an instructor's sex has an insignificant relationship with a student's perceptions of an instructor's similarity and credibility. Future research should analyze how the sex of the instructor may moderate the relationship between perceived similarity and intrinsic motivation to learn. More specifically, it may be that although instructor sex had an insignificant effect on perceived similarity and credibility it may moderate the relationship between perceived similarity and credibility on intrinsic motivation to learn.

As hypothesized, I found that perceived similarity and two of the subcomponents of credibility (competence and trust) were positively associated with a student's intrinsic motivation to learn. Theoretically, these findings strengthen literature that highlights the importance an instructor's perceived credibility and similarity has on intrinsic motivation to learn, and it assists

in understanding how to test the relationship between these variables in future communicative interactions between a student and instructor (Abrami & Mizener, 1985; Bekiari & Petanidis, 2016; Frymier & Thompson, 1992; Martin et al., 1997; Robinson et al., 2019).

Overall, this study expands the boundaries of CAT and enhances the understanding of how certain theoretical underpinnings work within the student and instructor interpersonal relationship. It shows that certain types of communication such as the use of swearing may not produce the exact outcomes that CAT originally posited, and it identifies some potential avenues for future research to pursue to better understand how an instructor's sex, accommodation, and communicative actions may affect a student's perceptions of an instructor and their intrinsic motivation to learn. However, not only do this study's findings have theoretical implications, but they also have pragmatic implications. The following section explores these implications in greater detail.

### **Pragmatic Implications**

Research conducted by Generous and Houser (2019) showed that instructors may use swearing in the classroom for a variety of reasons (e.g., to show humor, frustration, or to elaborate). Findings from the present study showed that for an instructor to be perceived as more similar and credible they should diverge their communication and *not* swear in response to a student swearing, because diminished credibility and similarity are associated with a decrease in a student's intrinsic motivation to learn. This finding may be beneficial to instructors who want to be perceived as similar with their students in the hopes of furthering the development of the student-instructor relationship, yet still be perceived as credible. Although an instructor may be wanting to be liked by converging their communication by swearing, doing so can have

significant negative effects on perceptions of similarity and credibility of the instructor, which then impact students' intrinsic motivation to learn.

The main study analyzed the words *suck* and *damn* as examples of inappropriate swear words, because in the pilot study, these two swear words were rated as mildly inappropriate yet realistic words that instructors might use in an academic setting. For reasons of realism and so as not to unnecessarily offend participants, swear words that are typically seen as more inappropriate than *suck* and *damn* were not analyzed. An important pragmatic implication of this is that lower ratings of credibility and similarity when instructors used mildly inappropriate words shows the gravity of an instructor using *any* swear word in an academic setting. Although this study held theoretical and pragmatic importance, there were some limitations that may be addressed with additional research.

### **Limitations and Future Directions**

The first limitation to discuss is though credibility was one of the main variables analyzed, ratings of the instructor's professionalism were not incorporated in this study. An instructor's perceived credibility is different from professionalism. Credibility is concerned with how competent, caring, and trustworthy an individual is perceived whereas an instructor is perceived to be professional based on their behaviors, attitudes, and intellectual knowledge (Parlar et al., 2017). Although there is some overlap between these two concepts, they are different. For instance, an individual may be deemed as professional solely by the attire they wear but not credible. Similarly, an individual may have credibility yet be viewed as unprofessional in the way they behave or dress. Therefore, it is important that future research explores how an instructor's accommodation in response to a student swearing impacts the student's perceptions of the instructor's professionalism.

Another limitation of this study is that age of instructor was not manipulated, for the sake of parsimony. There is conflicting literature regarding the impact of instructor age on the dependent variables. For example, some research had found age to be a determining factor in assessing credibility, whereas other literature has found age to be an insignificant factor (Heyne, 2016; Semlak & Pearson, 2008). Future research should manipulate the instructor's age and other pertinent demographic factors to assess their impact on perceptions of instructors who converge or diverge in response to a swear word. Similarly, future research should manipulate the relational closeness between the instructor and participant, and the friend and the participant. Doing so may assist in comprehending why goodwill was not positively associated with a student's motivation to learn.

Regarding demographics, the study's generalizability is limited in that the sample came from only one Midwestern university. Future research should strive to achieve greater generalizability by applying this research to a variety of context, cultures, and demographics. This request for future research is supported by Generous et al. (2015a) who also encourage the continuation of research regarding swearing within the student-instructor relationship, and even recommend applying it to students and instructors at private colleges.

Another limitation is that ratings were done by participants who imagined witnessing their same-sex friend interacting with a professor. This decision was made to increase scenario realism for participants who may have difficulty imagining themselves swearing to a professor. Future research could potentially replicate this study so that participants had to imagine they were the student using a swear word with the instructor; however, realism should be carefully assessed. Also, it is imperative to highlight that the Cronbach's alpha for the goodwill subscale of credibility was lower than anticipated as previous research has demonstrated this scale to be

reliable and valid (McCroskey & Teven, 1999). However, reliability refers to consistency of a measure not its accuracy. Future research is encouraged to further this measurement for contexts similar to the present study as this may have attributed to the low reliability.

Finally, a lab experiment could be conducted. Not only would such a study avoid the hypothetical nature of the present research, but it would also allow for the researcher to understand how the appearance and presence of a male or female instructor interacts with perceived credibility, similarity, and a student's motivation to learn. If these future directions were to be acted upon, they would be beneficial to expanding not only the current study but also the knowledge of how instructors can manage their communication with students in a way that promotes positive learning outcomes.

## **CONCLUSION**

The present study found that instructors who diverged their communication in response to a student swearing were perceived as more similar and credible than instructors who converged. An instructor's perceived similarity and credibility, in terms of trustworthiness and competence, had a significant relationship with a student's intrinsic motivation to learn. Another variable that was found to have a significant effect on a student's intrinsic motivation to learn was the instructor's sex. Findings from the present study hold theoretical importance for CAT, as they illustrated how an instructor's accommodation tactic in response to a student swearing can influence students' perceptions of them, which were then associated with the student's motivation to learn. Also, this study highlights how swearing in a classroom can have implications for both the instructor and students. Future research is encouraged to continue analyzing how the communicative accommodations between a student and instructor can impact students' perceptions of the instructor and their motivation to learn.

## **APPENDICES**



## **APPENDIX A:**

### **Pilot Survey Scenarios**

**Swear words utilized:** shit, hell, damn, and suck

#### **Convergence Scenarios**

##### **Shitty/Directed at student:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like I did really shitty on that test (insert swear phrase)

Instructor: Yeah, you did do really \_\_shitty\_\_(reiteration of swear phrase) on that test, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

##### **Shitty/Directed at course material:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like I did really shitty on that test (insert swear phrase)

Instructor: Yeah, that test was really \_\_shitty\_\_(reiteration of swear phrase), but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

##### **Hell/Directed at student:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like that test was a hell of a hard test for me (insert swear phrase)

Instructor: Yeah, that was a hell of a hard test for you (reiteration of swear phrase), but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

##### **Hell/Directed at course material:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like that test was a hell of a hard test for me (insert swear phrase)

Instructor: Yeah, that was a hell of a hard test (reiteration of swear phrase), but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Damn/Directed at student:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like this test was too damn hard for me (insert swear phrase)

Instructor: Yeah, that test was too damn hard (reiteration of swear phrase) for you, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Damn/Directed at course material:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like this test was too damn hard for me (insert swear phrase)

Instructor: Yeah, that test was too damn hard (reiteration of swear phrase), but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Suck/Directed at student:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like I really sucked at taking that test (insert swear phrase)

Instructor: Yeah, you did suck at taking (reiteration of swear phrase) that test, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Suck/Directed at course material:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like I really sucked at taking that test (insert swear phrase)

Instructor: Yeah, that test did suck (reiteration of swear phrase), but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Divergence****Shitty/Directed at student:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like this test was really \_shitty\_\_\_\_\_ (insert swear phrase)

Instructor: Yeah, that test was a really DIFFICULT test for you but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Shitty/Directed at course material:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like this test was really \_shitty\_\_\_\_\_ (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Hell/Directed at student:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like that test was a hell of a hard test (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT for you but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Hell/Directed at course material:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like that test was a hell of a hard test (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Damn/Directed at student:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like this test was damn hard (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT for you but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Damn/Directed at course material:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like this test was damn hard (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Suck/Directed at student:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like that test really sucked (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT for you, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Suck/Directed at course material:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like that test really sucked (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

## APPENDIX B:

### Survey Instrument for Pilot Study

#### Informed Consent for MSU Students

This survey will ask you to provide your opinions about the relationship between a student and an instructor. This research study is being conducted by Amanda Allard from the Department of Communication at Michigan State University for her thesis study for her Master of Arts degree. **We are looking for volunteers who are at least 18 years of age, and have attended at least one college level course to participate in this study.** There are no right or wrong answers to any of the questions on this survey. For your responses to be most helpful, it is important that you answer each question as honestly as you can. Please make sure you answer every question. It should take no more than about 25 minutes to complete the survey.

We see no risks or discomfort associated with completing this survey. Your responses to this survey will be combined with the responses of many other people to generate a statistical profile of what people think about themselves and communication. Your responses will remain private and won't be connected to your personal information.

Participants who consent to take part in this survey will be awarded SONA credits through <http://msucas.sona-systems.com>. The duration of this online survey is approximately 25 minutes. Hence, participants who complete this survey will receive .25 SONA credits.

Please do not complete this survey if you did not register for it on SONA. Some studies have prerequisites. If you did not see this study advertised in your SONA account (e.g., if a friend forwarded you the link), you should not complete this study. In order to receive credit for participation you MUST be registered on SONA for this study. Participation in this online survey is voluntary. You may withdraw at any time without penalty. This means that no SONA credits will be deducted from your account, nor will withdrawal have any effect on your relationship with any of your instructors.

We greatly value your participation in this research study. We want to remind you that your participation in this study is completely voluntary. You may choose to refuse to answer any particular question or quit participating in this study at any time.

If you have any questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the lead researcher, Amanda Allard (her contact information is below).

#### **Principal Investigator:**

Dr. Amanda Holmstrom

[holmstr6@msu.edu](mailto:holmstr6@msu.edu)

517-432-1286

556 Communication Arts & Sciences Building

East Lansing, MI 48824

**Lead Researcher:**

Amanda Allard  
allardam@msu.edu  
713-478-7329

If you have any questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this research study, you may contact, anonymously if you wish, Michigan State University Human Research Protection Program at 517-355-2180, FAX 517-432-4503, or e-mail [irb@msu.edu](mailto:irb@msu.edu), or regular mail at: 4000 Collins Rd, Suite 136, Lansing, MI 48910. If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the lead researcher.

Continuing on with the web survey indicates that you give your consent to participate.

**Section 1:****Directions:**

*"In this study, you are going to be asked to imagine a scenario that occurs between an instructor and a student. Then, you will be asked questions regarding four possible conversations about the scenario between the student and the instructor.*

*Please read the scenario on the following page and keep the scenario in mind when answering questions related to it."*

**Section 2:**

*[Participants were randomly assigned to read scenarios and were asked dependent measure questions that are present in section 4. Please reference Appendix A for example of the scenarios.]*

**Section 3:****Transition:**

*"On the next page, you will read one of the four hypothetical interactions between an instructor and student. Remember, after each interaction you will then be asked a series of questions regarding that interaction.*

*Then you will receive the next interaction. Please remember to keep in mind the previous scenario throughout all of the interactions."*

**Section 4:**

### **Realism of Scenario**

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regard to the scenario you read.

1. The scenario between my friend and the instructor is realistic.
2. The scenario between my friend and the instructor is believable.
3. The scenario between my friend and the instructor commonly occurs.

### **Severity**

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regard to the scenario you read.

Stem: *I would perceive this situation between my friend and the instructor as.....*

1. serious.
2. severe.
3. upsetting.

### **Section 3:**

#### **Instructor and Student Appropriateness of Communication**

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regard to your **friend's** behavior when interacting with your instructor.

#### **Appropriateness of Communication of the Friend**

- **Scale Creator:** Hullman (2007)
  - 7-point Likert-type scale 1 = strongly disagree to 7 = strongly agree
1. My friend said things that seemed out of place in the conversation.
  2. My friend said some things that should not have been said.
  3. Some of my friend's remarks were inappropriate.
  4. I was comfortable throughout the conversation with my friend's remarks.
  5. Some of the things that my friend said were in bad taste.
  6. None of my friend's remarks were embarrassing to me.
  7. My friend said some things that were simply the incorrect things to say.
  8. The WAY my friend said their remarks was unsuitable.
  9. The things my friend spoke about were all in good taste as far as I'm concerned
  10. Some of my friend's remarks were simply improper.
  11. At least one of my friend's remarks was rude.

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regards to your **instructor's** behavior when interacting with your friend.

#### **Appropriateness of Communication of the Instructor**

- **Scale Creator:** Hullman (2007)
- 7-point Likert-type scale 1 = strongly disagree to 7 = strongly agree

1. My instructor said things that seemed out of place in the conversation.
2. My instructor said some things that should not have been said.
3. Some of my instructor's remarks were inappropriate.
4. I was comfortable throughout the conversation with my instructor's remarks.
5. Some of the things that my instructor said were in bad taste.
6. None of my instructor's remarks were embarrassing to me.
7. My instructor said some things that were simply the incorrect things to say.
8. The WAY my instructor said their remarks was unsuitable.
9. The things my instructor spoke about were all in good taste as far as I'm concerned
10. Some of my instructor's remarks were simply improper.
11. At least one of my instructors' remarks was rude.

### **Demographic Questions**

#### **Age**

1. What is your age? Please type your age as a numerical value in the box provided (e.g., 18, 26, 45).

\_\_\_\_\_

#### **Biological Sex**

1. What is your biological sex?
  1. Male
  2. Female

### **Debrief Statement**

Dear Participant,

Thank you for taking the time to participate in this experiment.

The purpose of this study was to understand how some different ways an instructor responds to a student's use of swearing are viewed by students.

Your participation in this study is greatly appreciated because the responses collected from this survey can assist in the understanding of how the communication between an instructor and a student can positively or negatively impact the student/instructor relationship and a student's learning.

Although the scenarios you were presented were hypothetical, we as researchers understand that reading them may have caused some distress. If this study has made you feel uncomfortable or distressed, please follow the following link to contact MSU's student counseling services (<https://caps.msu.edu>). Also, you are highly encouraged to contact the Principal Investigator, Lead Researcher, or the Institutional Review Board (IRB) if you have any additional questions or concerns regarding the survey you just took. You can find names, emails, and phone numbers located below to contact these three individuals.



Again, your participation in this study is greatly appreciated. To conclude, we ask you not to discuss this survey with anyone else who is currently participating in this study or has intentions to participate in this study. We would greatly appreciate this gesture as it will allow the researchers to truly examine the effects of inappropriate communication in the classroom.

Thank you!

Principal Investigator:  
Dr. Amanda Holmstrom  
holmstr6@msu.edu  
517-432-1286  
556 Communication Arts & Sciences Building  
East Lansing, MI 48824

Lead Researcher:  
Amanda Allard  
allardam@msu.edu  
713-478-7329

If you have any questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this research study, you may contact, anonymously if you wish, Michigan State University Human Research Protection Program at 517-355-2180, FAX 517-432-4503, or e-mail [irb@msu.edu](mailto:irb@msu.edu), or regular mail at: 4000 Collins Rd, Suite 136, Lansing, MI 48910. If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the lead researcher.

## **APPENDIX C:**

### **Main Survey Scenarios**

**Swear words utilized:** Suck and Damn

**Scenario Directions:** Please imagine class has just ended and you and a fellow classmate, who is a friend of the same-sex as you, approach your [male/female] instructor. You have a question that will take some time, so you allow the other student to go first. This is the following interaction you observe:

### **Convergence Scenarios**

**Damn:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like this test was too damn hard for me (insert swear phrase)

Instructor: Yeah, that test was too damn hard (reiteration of swear phrase) for you, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Suck/Directed:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like I really sucked at taking that test (insert swear phrase)

Instructor: Yeah, you did suck at taking (reiteration of swear phrase) that test, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

### **Divergence Scenarios**

**Damn:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like this test was damn hard (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT for you but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

**Suck:**

Student: Hey Dr. Smith, you know that exam we had last week?

Instructor: Of course, what is your question or concern?

Student: I felt like that test really sucked (insert swear phrase)

Instructor: Yeah, that test was really DIFFICULT for you, but we can discuss some options for you to still do well in this course during my office hours. Can you make it this week?

Student: Yeah, I can. I will see you then.

## APPENDIX D:

### Survey Instrument for Main Study

[Same informed consent as pilot study].

**Introduction:** *In this survey you will be asked to imagine that you are in a class with a same-sex friend who has just failed an exam. You will read a couple situations and messages that occur between your friend and instructor regarding this exam and will be asked to answer some questions about the conversations they have.*

#### **Section 1:**

*[randomly assigned to male instructor or female instructor condition]*

#### **Section 2:**

*[Participants are asked to read the hypothetical scenario, Please see Appendix C]*

#### **Section 3:**

*[randomly assigned to accommodation condition; see Appendix C for wording of the scenarios].*

Directions: *The following set of questions will ask you to reflect specifically on your instructor's behavior.*

**Directions:** Please indicate your impression of your instructor in this scenario by circling the appropriate number between the pairs of adjectives below. The closer the number is to an adjective, the more certain you are of your evaluation. For example, if you were asked how intelligent the instructor was perceived with intelligent being closest to 1 and unintelligent being closest to 7, please choose 7 if you perceive the instructor to be unintelligent and 1 if you perceive them as intelligent.

#### **Measure of Ethos/Credibility**

- **Scale Creators:** McCroskey and Teven's (1999)
- Semantic differential scale, 7-point

#### **Competence**

1. Intelligent//Unintelligent
2. Untrained //Trained
3. Inexpert//Expert
4. Informed//Uninformed
5. Incompetent//Competent
6. Bright//Stupid

#### **Goodwill**

1. Cares about the student // Doesn't care about the student

2. Has the student's interest at heart // Doesn't have the student's interest at heart
3. Self-centered // Not self-centered
4. Concerned with the student // Unconcerned with the student
5. Insensitive // Sensitive
6. Not Understanding // Understanding

#### **Trustworthiness**

1. Honest // Dishonest
2. Untrustworthy // Trustworthy
3. Honorable // Dishonorable
4. Moral // Immoral
5. Unethical // Ethical
6. Phony // Genuine

#### **Perceived Homophily**

- **Scale Creators:** McCroskey, Richmond, and Daley (1975)
- Semantic differential scale, 7-point

**Directions:** Please indicate your impression of the instructor in this scenario by circling the appropriate number between the pairs of adjectives below. The closer the number is to an adjective, the more certain you are of your evaluation. For example, if you were asked how similar the instructor was perceived to be you would select 1 meaning very similar to you and 7 meaning very different from you.

#### **Attitude:**

1. Doesn't think like me // Thinks like me
2. Behaves like me // Doesn't behave like me
3. Similar to me // Different from me
4. Unlike me // Like me

#### **Value:**

1. Morals unlike mine // Morals like mine
2. Shares my values // Doesn't share my values
3. Treats people like I do // Doesn't treat people like I do

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regard to your **instructor's** behavior when interacting with your friend.

#### **Appropriateness of Communication of the Instructor**

- **Scale Creator:** Hullman (2007)
  - 7-point Likert-type scale 1 = strongly disagree to 7 = strongly agree
1. My instructor said things that seemed out of place in the conversation.
  2. My instructor said some things that should not have been said.
  3. I was comfortable throughout the conversation with my instructor's remarks.
  4. Some of the things that my instructor said were in bad taste.
  5. My instructor said some things that were simply the incorrect things to say.
  6. The WAY my instructor said their remarks was unsuitable.

7. The things my instructor spoke about were all in good taste as far as I'm concerned
8. Some of my instructor's remarks were simply improper.
9. At least one of my instructors' remarks was rude.

*{The following set of questions will ask you to reflect on your friend behavior}*

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regard to your **friend's** behavior when interacting with your instructor.

**Appropriateness of Communication of the Friend**

- **Scale Creator:** Hullman (2007)
  - 7-point Likert-type scale 1 = strongly disagree to 7 = strongly agree
1. My friend said things that seemed out of place in the conversation.
  2. My friend said some things that should not have been said.
  3. I was comfortable throughout the conversation with my friend's remarks.
  4. Some of the things that my friend said were in bad taste.
  5. My friend said some things that were simply the incorrect things to say.
  6. The WAY my friend said their remarks was unsuitable.
  7. The things my friend spoke about were all in good taste as far as I'm concerned
  8. Some of my friend's remarks were simply improper.
  9. At least one of my friend's remarks was rude.

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regard to how you would view the course after viewing this conversation that occurred between your friend and instructor.

**Intrinsic Motivation to Learn**

- **Scale Creators:** Goldman, Goodboy, and Weber's (2017)
  - 7-point Likert-type scale 1 = strongly disagree to 7 = strongly agree
1. Learning new concepts for this course would be fulfilling to me.
  2. Developing my understanding for this course's content would be rewarding to me.
  3. Learning new things for this class would make me feel better about myself.
  4. I would find learning new things in this course fulfilling.
  5. Understanding new concepts in this class would be enjoyable to me.
  6. It would be personally satisfying for me to learn new concepts for this class.
  7. I would get a sense of fulfillment when I learn new things for this class.
  8. I would not enjoy trying to comprehend new ideas in this class.
  9. Learning new things in this class would make me feel like I am growing as a person.
  10. I would desire to learn new things in this class because it would give me a sense of fulfillment.

**Manipulation Check**

**Directions:** What was the sex of the instructor you read about in the previous scenarios?

1. Male
2. Female

**Realism of Scenario**

- Shebib et al.'s (2020) scale
- 7-point Likert-type scale 1 = strongly disagree to 7 = strongly agree

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regard to the scenario you read.

1. The scenario between my friends and the instructor is realistic.
2. The scenario between my friends and the instructor is believable.
3. The scenario between my friends and the instructor is something that could happen.
4. There is a possibility the scenario between the instructor and my friend would occur.
5. There is a chance the interaction between the instructor and my friend could occur in an academic setting
6. The messages exchanged between the student and instructor could be used in an academic setting.

**Frequency Scale**

**Directions:** Please rate the frequency in which you hear the following swear word used by a classmate/instructor in an academic setting

1. Never
2. Rarely
3. Sometimes
4. Very Often
5. Always

**Severity**

- **Scale creators:** Shebib et al. (2020)
- 7-point Likert-type scale 1 = strongly disagree to 7 = strongly agree

**Directions:** Please rate the extent to which you disagree or agree with the following statements in regard to the scenario you read.

Stem: *I would perceive this situation between my friend and the instructor as.....*

1. serious.
2. severe.
3. upsetting.

**Demographic Questions**

**Age**

2. What is your age? Please type your age as a numerical value in the box provided (e.g., 18, 26, 45).

\_\_\_\_\_

**Biological Sex**

2. What is your biological sex?
  1. Male
  2. Female

**Gender**

1. Please click the option that best describes your gender.
  1. Extremely feminine
  2. Moderately feminine
  3. Slightly feminine
  4. Androgynous
  5. Slightly masculine
  6. Moderately masculine
  7. Extremely masculine

**Ethnicity**

1. Which of the following choices best describes your ethnicity?
  1. Hispanic or Latino
  2. Not Hispanic or Latino

**Race**

Which of the following choices best describes your ethnicity?

1. White
2. Black or African American
3. American Indian or Alaska Native
4. Asian
5. Native Hawaiian or Pacific Islander
6. Multiple or mixed races
7. Other/prefer not to answer

**Location**

Are you from the US?

1. Yes
2. No

*[ If yes, participants were directed to a question where they chose what state they are from. If no, participants were directed to a page where they indicated what country they were from]*

**Class**

1. What is your class standing?
  1. Freshman
  2. Sophomore
  3. Junior
  4. 4th year Senior
  5. 5th year Senior



6. Beyond 5th year Senior
7. Graduate Student

**ComMaj**

1. Are you a communication major?
  1. Yes
  2. No

**Inter**

1. Are you an international student?
  1. Yes
  2. No

**SONA**

1. Are you taking this survey through SONA?
  1. Yes (at end will be redirected to SONA).
  2. No (at end will be redirected to another survey, not linked to their responses in this survey, to fill out information to get class credit).

**Thank You Page**

Thank you for participating in the present study! Your participation was greatly appreciated and will be recorded and used to enhance empirical scholarly research in family communication.

**Class Credit Page**

Thank you for participating in the present study! Your participation was greatly appreciated and will be recorded and used to enhance empirical scholarly research in romantic relationships. Please fill out all the information to ensure you get class credit. This information is in no way linked to your responses to the survey.

Your First Name: \_\_\_\_\_

Your Last Name: \_\_\_\_\_

Course Letters & Number for Credit (i.e., Com 425): \_\_\_\_\_

Course Section Number for Credit (i.e., 003): \_\_\_\_\_

Professor's Name of the Course: \_\_\_\_\_

Your MSU email address: \_\_\_\_\_

**Debrief Statement**

Dear Participant,

Thank you for taking the time to participate in this experiment.

The purpose of this study was to understand how some different ways an instructor responds to a student's use of swearing are viewed by students.

Your participation in this study is greatly appreciated because the responses collected from this survey can assist in the understanding of how the communication between an instructor and a student can positively or negatively impact the student/instructor relationship and a student's learning.

Although the scenarios you were presented were hypothetical, we as researchers understand that reading them may have caused some distress. If this study has made you feel uncomfortable or distressed, please follow the following link to contact MSU's student counseling services (<https://caps.msu.edu>). Also, you are highly encouraged to contact the Principal Investigator, Lead Researcher, or the Institutional Review Board (IRB) if you have any additional questions or concerns regarding the survey you just took. You can find names, emails, and phone numbers located below to contact these three individuals.

Again, your participation in this study is greatly appreciated. To conclude, we ask you not to discuss this survey with anyone else who is currently participating in this study or has intentions to participate in this study. We would greatly appreciate this gesture as it will allow the researchers to truly examine the effects of inappropriate communication in the classroom.

Thank you!

Principal Investigator:  
Dr. Amanda Holmstrom  
[holmstr6@msu.edu](mailto:holmstr6@msu.edu)  
517-432-1286  
556 Communication Arts & Sciences Building  
East Lansing, MI 48824

Lead Researcher:  
Amanda Allard  
[allardam@msu.edu](mailto:allardam@msu.edu)  
713-478-7329

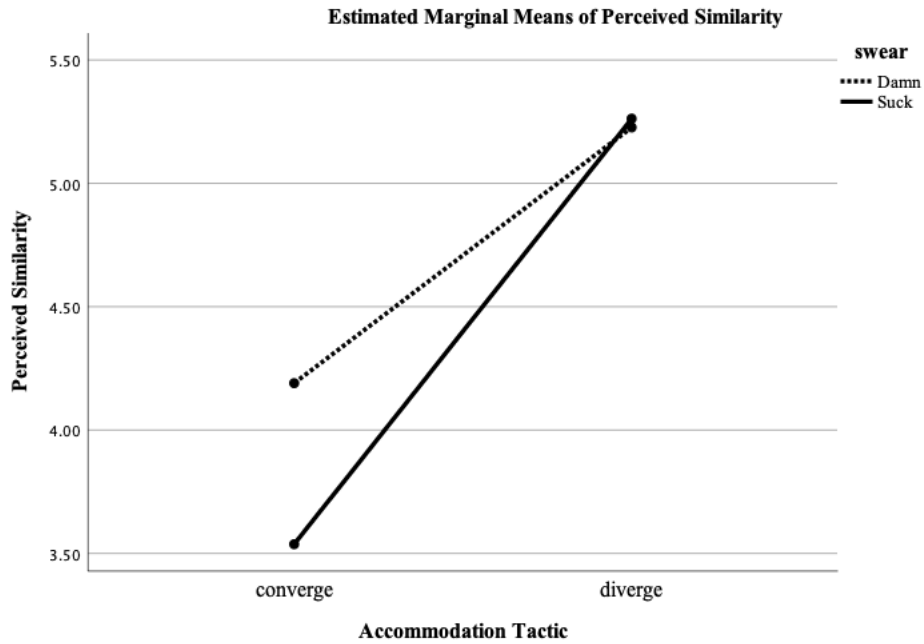
If you have any questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this research study, you may contact, anonymously if you wish, Michigan State University Human Research Protection Program at 517-355-2180, FAX 517-432-4503, or e-mail [irb@msu.edu](mailto:irb@msu.edu), or regular mail at: 4000 Collins Rd, Suite 136, Lansing, MI 48910. If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the lead researcher.

## APPENDIX E:

### Main Study Figures

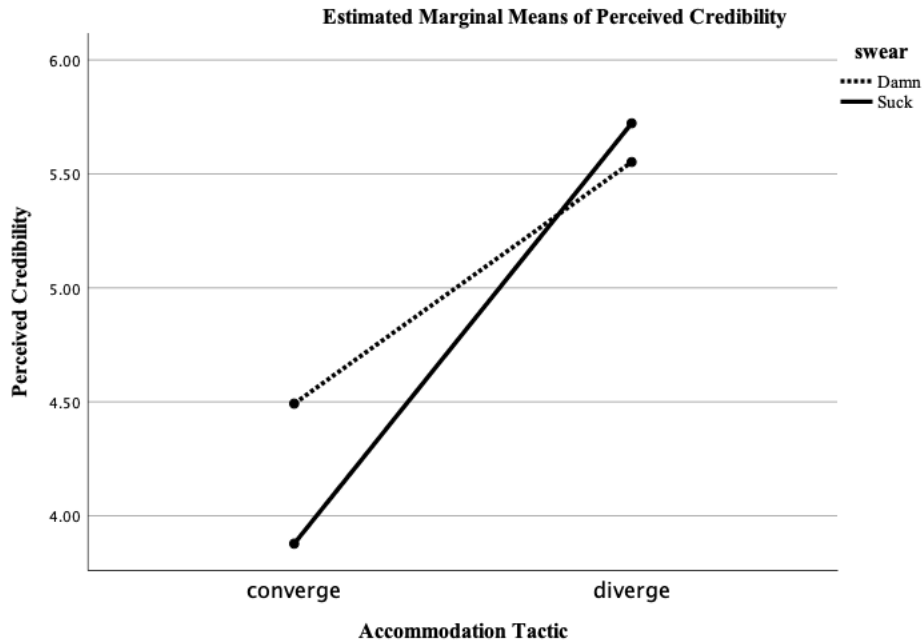
**Figure 1:**

*Interaction Between Accommodation Tactic Used and Swear Word on Perceived Similarity*



**Figure 2:**

*Interaction Between Accommodation Tactic Used and Swear Word Used on Perceived Credibility*



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