

## Maximizing the persuasiveness of a salesperson: An exploratory study of the effects of nonverbal immediacy and language power on the extent of persuasion



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### ABSTRACT

The present study investigated the effects of a salesperson's use of language power and nonverbal immediacy on the persuasiveness of the salesperson. A high level of language power and a high level of nonverbal immediacy were hypothesized to singularly and jointly increase a salesperson's level of persuasiveness. A sample of 211 undergraduate students voluntarily completed an online survey, which displayed a video clip of a sales presentation. Each participant randomly viewed one of four video clips, which differed in terms of the salesperson's levels of language power (powerful vs. powerless) and nonverbal immediacy (high vs. low). A three-way ANOVA indicated that language power had a significant main effect on persuasion in the expected direction, and also revealed a significant interaction between nonverbal immediacy and participant biological sex. However, there were no main effects for nonverbal immediacy and participant biological sex, and no interaction effect was found between language power and nonverbal immediacy. Subsequent data analysis revealed that the perceived power of the speaker mediated the relationship between language power and the extent of persuasion. We conclude the article with a discussion of the implications of our findings for both researchers and practitioners.

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## Cómo maximizar la capacidad de persuasión de un vendedor: estudio exploratorio de los efectos de la cercanía no verbal y el poder del lenguaje en el grado de persuasión

### RESUMEN

Este estudio investiga los efectos de la utilización por parte de los vendedores del poder del lenguaje y de la cercanía no verbal en la persuasión del vendedor. Se postula que un grado elevado de poder del lenguaje y de cercanía no verbal aumentarán tanto individualmente como conjuntamente el nivel de persuasión del vendedor. Una muestra compuesta por 211 estudiantes universitarios cumplimentó voluntariamente una encuesta online que mostraba un video de una presentación de ventas. Cada participante vio al azar

#### Palabras clave:

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uno de los cuatro videos, que se diferenciaban en el grado de poder del lenguaje (poderoso vs. incapaz) y de cercanía (elevada vs. baja) no verbal del vendedor. Un ANOVA de tres factores indicaba que el poder del lenguaje tenía un efecto principal significativo en la persuasión en la dirección esperada, así como una interacción significativa entre la proximidad no verbal y el sexo biológico de los participantes. No obstante, no había efectos principales para la cercanía no verbal o el sexo biológico de los participantes ni se encontró interacción entre el poder del lenguaje y la proximidad no verbal. Un análisis de datos posterior reveló que el poder percibido del hablante mediatizaba la relación entre el poder del lenguaje y el grado de persuasión. El artículo finaliza con un debate sobre las implicaciones de los resultados para investigadores y los profesionales.

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Since ancient times, scholars have sought to uncover rhetorical strategies for enhancing the persuasiveness of a speaker (e.g., Aristotle, 350 BC/1960). Contemporary researchers have studied a range of linguistic features thought to impact the persuasiveness of a speaker in a variety of rhetorical situations, including sales presentations. For example, Boozer, Wyld, and Grant (1991) suggested that a salesperson's use of metaphors can increase the persuasiveness of the salesperson. Other researchers have studied the level of language power produced by the "speaker's use of specific linguistic and paralinguistic features" (Ng & Bradac, 1993, p. 190), and the extent of nonverbal immediacy displayed by the speaker (Mehrabian, 1969).

The present study investigated the effects of a salesperson's use of language power and nonverbal immediacy on the persuasiveness of the salesperson. We first review research on the individual effects of language power and nonverbal immediacy on a range of social variables. Next, we present our model, which posits that language power and nonverbal immediacy have both independent and joint effects on the extent of persuasion. We then subject our causal model of persuasion to an empirical test, and examine the possible mediating role of perceived salesperson power as an explanatory mechanism for the effects obtained. We also explore the influence of participant biological sex on the extent of persuasion. After reporting the results of our statistical analyses, we discuss the implications of our findings for researchers and practitioners.

## Theory and Research

Organizational scholars have long sought to understand the relationship between discourse and social power. One perspective holds that this relationship is reciprocal in nature (e.g., Hardy & Phillips, 2004; Marshak & Grant, 2008). Hardy and Phillips (2004) described such circularity in the following way: "discourse shapes relations of power while relations of power shape who influences discourse over time and in what way" (p. 299). Much research has been devoted to understanding how the use of various linguistic styles influences perceptions of social power (e.g., Bradac & Mulac, 1984; Conley, O'Barr, & Lind, 1978; Lakoff, 1975).

### Language Power

A range of linguistic styles have been examined in terms of the power concept. For example, Lakoff (1975) identified certain linguistic markers that characterize women's language, and that are associated with low social power. These linguistic markers include hedges, intensifiers, tag questions, hypercorrect grammar, polite forms, empty adjectives (e.g., "sweet," "adorable," "awesome"), and more expansive vocabulary items (e.g., a wider range of colors). Similarly, Conley et al. (1978) defined a powerless speech style as one that includes words and phrases that convey uncertainty. According to Conley et al., these linguistic markers include the use of (a) hedges (e.g., "somewhat"), (b) verbal fillers (e.g., "like"),

(c) vocal hesitations (e.g., "um"), (d) polite forms (e.g., "sir"), (e) intensifiers (e.g., "really"), and (f) rising intonation in declarative sentences. In contrast, Conley et al. defined a powerful speech style as one that lacks these markers.

*Language Power and Impression Formation.* The discovery of powerless and powerful speaking styles led to a stream of research on how variation in a speaker's language power influences audience members' impressions of the speaker. For example, Conley et al. (1978) found that witnesses who used a powerful language style were perceived as more trustworthy, convincing, intelligent, and competent than witnesses who used a powerless style. Bradac and Mulac (1984) investigated the effects of specific power-related linguistic markers on perceived speaker effectiveness, perceived power, and on "judgments of likelihood of fulfilling perceived intentions" (p. 309). They found that the use of intensifiers and deictic messages heightened a speaker's perceived effectiveness and power. However, they noted that the use of hedges and tags diminished a speaker's perceived effectiveness and power, and that the use of hesitations conveyed the lowest levels of speaker effectiveness and power. In addition, Bradac and Mulac (1984) discovered that listeners attributed certain motives to a speaker's use of certain speech styles. They found that the use of polite forms was perceived as an attempt to appear sociable, whereas the use of powerful language was viewed as an attempt to appear authoritative. In contrast, they reported that hedges, tag questions, and hesitations were not found to convey any particular motives.

More recent studies have also found that a speaker's language power influences audience members' impressions of the speaker. Take, for example, a study by Gibbons, Busch, and Bradac (1991). They examined the effects of low- and high-power language styles on the persuasiveness of a message, and on impression formation. According to Gibbons et al. (1991), a low power language style is characterized by the presence of hedges, tag questions, and vocal hesitations, whereas a high power style is distinguished by the absence of these linguistic markers. In their study, respondents were asked to read a transcript advocating for the implementation of comprehensive exams. The various transcripts included combinations of weak and strong arguments, as well as high and low power styles. Afterwards, the participants were instructed to evaluate the speaker. Gibbons et al. discovered that argument strength had no significant effect on the perception of a speaker's competence, but the speaker's power style did have a significant effect. In addition, they found that power style had no significant effect on the persuasiveness of a message, but argument strength did have a significant effect.

The effects of varied levels of language power have also been studied in the classroom. For example, Haleta (1996) examined the impact of teacher use of powerful vs. powerless speech on student impression formation and uncertainty reduction. Based on the results of previous research, and grounded in uncertainty reduction theory (Berger & Calabrese, 1975), Haleta predicted that teachers who used powerless speech would be perceived less

favorably, and would generate more student uncertainty, than teachers who used powerful speech. In Haleta's study, students watched videos of teachers introducing themselves to classes. Haleta manipulated language power (high vs. low) in the videos. In the powerless language condition, the teacher exhibited from five to seven hesitations. After watching the videos, the students were instructed to rate the teacher on impression formation and uncertainty reduction scales. The findings showed that the teachers who used powerful language were perceived as higher in dynamism, status, and credibility than the teachers who used powerless language. Moreover, the students who were exposed to powerless language reported higher levels of uncertainty than the students who were exposed to powerful language.

Subsequent research investigated the effects of language power and communication channel on attitudes toward a communicator. For example, Sparks, Areni, and Cox (1998) discovered that the effects of language power varied depending on the communication modality. Specifically, they found that powerful language induced more positive perceptions of a communicator than powerless language in audio or video formats, but that the effects did not vary when a message was presented in a print mode.

**Language Power and Persuasion.** The aforementioned studies provide compelling evidence that a speaker's language power shapes audience members' impressions of the speaker. Turning now to the focal outcome of the present study, we review research on the relationship between language power and persuasion.

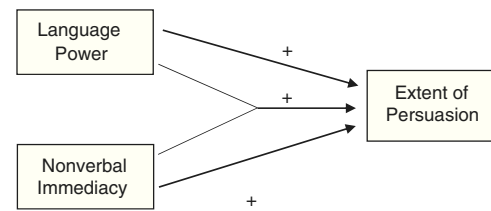
Burrell and Koper (1998) conducted a meta-analysis of 16 articles to answer the following question: "To what degree are speakers using powerful linguistic features perceived as more persuasive/credible than speakers using powerless features?" (p. 207). They ascertained that speakers who exhibited powerful language were perceived as more persuasive and credible than those who exhibited powerless language.

However, to what extent do Burrell and Koper's (1998) findings generalize to other channels of communication? Sparks and Areni (2002) found that a message was perceived as more persuasive when a communicator used powerful language, provided that the message was presented on audio as opposed to in print form.

In a follow-up study, Areni and Sparks (2005) explored the effects of powerless versus powerful language in two different modalities, print and videotape. Based on fundamentals of the elaboration likelihood model (Petty & Cacioppo, 1986), Areni and Sparks reasoned that the presence of powerless speech markers in print and on videotape would act as negative peripheral cues, and thus have a negative impact on the participants' attitudes toward the product and communicator. The participants in their print condition were given a verbatim transcript of a test ad, and were asked to evaluate the message and communicator. In the videotape condition, the participants were exposed to a five-minute video of a test ad, and were also asked to rate the message and speaker.

Areni and Sparks (2005) found that in both the print and videotape conditions, communicators who used powerful language were viewed as more persuasive than those who used powerless language. Moreover, in both the print and videotape conditions, the respondents reported a more positive attitude toward the product when the communicator used powerful language as opposed to powerless.

In short, our review of the literature on language power strongly suggests that a speaker's use of powerful language enhances his or her persuasiveness (Areni & Sparks, 2005; Burrell & Koper, 1998; Sparks & Areni, 2002). Yet, a speaker's display of verbal cues does not occur in a vacuum. Rather, speech embodies both verbal and nonverbal cues. Consequently, we reasoned that we could potentially explain more of the variation in speaker persuasiveness by generating and testing a model that incorporated both types of cues.



**Figure 1.** A Model of How Language Power and Nonverbal Immediacy Influence the Extent of Persuasion.

According to our model (see Figure 1), language power (Ng & Bradac, 1993) and nonverbal immediacy (Mehrabian, 1969) not only exert independent effects on speaker persuasiveness, but also have a synergistic effect on the extent of persuasion. Let us now analyze the other independent variable in our model, nonverbal immediacy, and review research on its extent of association with speaker persuasiveness.

### Nonverbal Immediacy

The construct of immediacy in the communication field was first introduced by Mehrabian (1967, 1969), who defined *immediacy* as a communication behavior that reinforces the perception of closeness in interpersonal relationships. Mehrabian (1969) identified a range of *nonverbal immediacy* cues, which he claimed were related to the positive evaluation of a communicator. These nonverbal immediacy cues include (a) touching, (b) decreased distance, (c) forward lean, (d) eye contact, (e) orientation, (f) higher rates of gesturing, (g) positive head nods, (h) positive facial expression, (i) longer communication, (j) higher speech rate, (k) lower rate of hesitations, and (l) lower rate of halting (p. 206). Mehrabian's work led to an abundant stream of research on nonverbal immediacy in a range of communication contexts, including public speaking (Burgoon, Birk, & Pfau, 1990), teaching (Burroughs, 2007), supervision (Teven, 2006), and sales presentations (Leigh & Summers, 2002).

**Nonverbal Immediacy in Public Speaking.** Particularly germane to the present investigation is a study by Burgoon et al. (1990), who sought to uncover associations between a public speaker's display of various categories of nonverbally immediate behavior, and audience members' perceptions of the speaker's sociability, credibility, and persuasiveness. Burgoon et al. hypothesized that kinesic immediacy, in the form of more eye contact, forward lean, and facial pleasantness, along with vocal variety, would increase perceived speaker persuasiveness and sociability. The participants were students who were delivering persuasive speeches for a public speaking course. The audience members evaluated the speakers. In addition, two trained coders independently evaluated the first two minutes of each speech, as well as a randomly-sampled, two-minute portion from the middle of each speech. Burgoon et al. found that a speaker's display of kinesic, proxemic, and vocal immediacy was positively related to audience members' perceptions of the speaker's perceived sociability, credibility, and persuasiveness.

**Nonverbal Immediacy in Teaching.** Beyond the study of nonverbal immediacy in public speaking, researchers have explored the effects of teacher nonverbal immediacy on a variety of classroom variables. For example, Burroughs (2007) investigated the relationship between teacher nonverbal immediacy and student compliance in the classroom. In Burroughs' study, student perceptions of teacher nonverbal immediacy were measured using the Immediate Behavior Scale (Andersen, 1978; Richmond, Gorham, & McCroskey, 1987). Burroughs discovered a positive relationship between teacher nonverbal immediacy and student compliance. In other words, the students who perceived their teachers as more nonverbally immediate showed more willingness to comply.

In a similar study, [Kearney, Plax, Smith, and Sorensen \(1988\)](#) studied relationships among teacher nonverbal immediacy, teacher compliance-gaining strategies, and student resistance to on-task compliance. [Kearney et al. \(1988\)](#) hypothesized that there would be a significant interaction between teacher immediacy and teacher compliance-gaining strategy on student resistance to comply with the teacher's request. In their study, student participants were randomly assigned to one of four hypothetical written scenarios. The scenarios differed in terms of teacher immediacy (immediate vs. non-immediate) and compliance-gaining strategy (prosocial or antisocial). The students then completed surveys rating their willingness to comply with on-task demands. [Kearney et al.](#) found that the students reported a higher level of resistance to the immediate teachers who used antisocial techniques than the immediate teachers who used prosocial techniques.

Beyond the study of student resistance, [Golish and Olson \(2000\)](#) examined how a teacher's nonverbal immediacy related to students' use of various power currencies ([French & Raven, 1959](#)) in the classroom. [Golish and Olson](#) found that students reported using more expert power with nonverbally immediate teachers than they did with non-immediate teachers.

Another classroom variable that researchers have explored in relation to teacher nonverbal immediacy is student judgment of instructional quality. For example, [Moore, Masterson, Christophel, and Shea \(1996\)](#) studied the relationship between students' perceptions of teacher nonverbal immediacy and students' evaluation of instruction. In particular, they had students rate the teacher's nonverbal immediacy using the Immediacy Behavior Scale ([Gorham, 1988](#)) and rate the quality of instruction. [Moore et al. \(1996\)](#) found that student ratings of teacher nonverbal immediacy were positively correlated with student ratings of instructional quality.

*Nonverbal Immediacy in Supervision.* The effects of nonverbal immediacy have also been examined in the workplace. For example, [Teven \(2006\)](#) examined the influence of perceived supervisor power (antisocial vs. prosocial) and nonverbal immediacy (high vs. low) on participant satisfaction and liking for the supervisor. The author provided written descriptions of supervisor conduct, which included six types of nonverbal behaviors: (a) gesturing, (b) smiling, (c) giving eye contact, (d) exhibiting relaxed body positions, (e) moving around the organizational environment, and (f) being vocally expressive. The participants were randomly assigned to one of four written scenarios, which varied in terms of the supervisor's described display of power and level of nonverbal immediacy. [Teven \(2006\)](#) found that the participants were more satisfied with nonverbally immediate supervisors than they were with nonverbally non-immediate supervisors. Similarly, [Teven \(2006\)](#) discovered that the participants liked the supervisors who were nonverbally immediate more than the supervisors who were nonverbally non-immediate.

*Nonverbal Immediacy in Sales Presentations.* In addition to research on supervisor nonverbal immediacy, investigators have studied the effects of salesperson nonverbal immediacy on a variety of outcome variables. For example, [Leigh and Summers \(2002\)](#) examined how variation in salesperson display of certain nonverbal cues affected buyer judgments of the salesperson and sales presentation. In their study, individual professional buyers viewed one of eight videos, which depicted the different levels (i.e., intensities) of the nonverbal cues exhibited by the salesperson.

[Leigh and Summers \(2002\)](#) discovered that salesperson display of relatively steady eye gaze yielded more favorable buyer judgments of salesperson tactfulness, empathy, and sales aggressiveness than did intermittent eye gaze. They also found that salesperson display of relatively steady eye gaze yielded more favorable buyer judgments of the sales presentation (i.e., more interesting, emotional, believable, and personal) than did intermittent. Lastly, [Leigh and Summers](#) found that salesperson exhibition

of relatively frequent speech hesitations yielded less favorable judgments of the sales presentation (i.e., less interesting and persuasive) than did relatively infrequent speech hesitations.

In a related study of pharmaceutical sales representatives, [Teven and Winters \(2007\)](#) explored the relationship between self-perceived nonverbal immediacy and self-assessments of motivation, competence, and physical attractiveness. Based on impression management theory ([Goffman, 1959; Tedeschi, 1981](#)), [Teven and Winters](#) predicted that self-reported nonverbal immediacy would be positively related to self-reported motivation, competence, and attractiveness. The participants in their study received self-administered surveys by mail or in person and were asked to mail them back after completion. [Teven and Winters](#) discovered that nonverbally immediate pharmaceutical sales representatives perceived themselves to be more competent, motivated, and attractive than did nonverbally non-immediate sales representatives.

Taking a similar methodological approach, [Limbu, Jayachandran, Babin, and Peterson \(2016\)](#) studied how the self-reported nonverbal immediacy of pharmaceutical salespersons was related to their self-reported sales performance. In their study, salespersons rated their sales performance along two dimensions: one based on the quantity of their sales to physicians—"outcome performance" (p. 659), and the other based on the quality of their interactions with physicians—"relationship performance" (p. 659).

[Limbu et al.](#) found a significant positive association between salesperson nonverbal immediacy and relationship performance. However, they did not find a significant association between salesperson nonverbal immediacy and outcome performance. Based on these findings, [Limbu et al. \(2016\)](#) concluded "that salesperson nonverbal immediacy skills are essential for cultivating relationships with customers rather than [for] directly generating sales output" (p. 662).

## Hypotheses

Although the literature reviewed above is suggestive of main effects for language power ([Burrell & Koper, 1998](#)) and nonverbal immediacy ([Burgoon et al., 1990](#)) on persuasion, researchers have yet to explore the possible synergistic effect of heightened levels of both antecedents. As illustrated in [Figure 1](#), our model holds that salesperson language power and nonverbal immediacy exert both independent and joint effects on salesperson persuasiveness.

Past research has examined connections between language power and persuasion. Powerful/powerless language styles have been shown to impact perceptions of message and source persuasiveness ([Areni & Sparks, 2005; Burrell & Koper, 1998; Conley et al., 1978](#)). For example, [Burrell and Koper \(1998\)](#) suggested that powerful language was perceived as more persuasive than powerless language. Similarly, [Conley et al. \(1978\)](#) reported that witnesses using powerful language in the courtroom were perceived as more persuasive than witnesses using powerless language.

[Lakoff's \(1975\)](#) work suggests that the use of powerless language is associated with low social power. Accordingly, we theorized that a speaker's use of powerless language may ultimately diminish the persuasiveness of the speaker because the speaker's use of such language may lead audience members to perceive the speaker to be a relatively powerless individual, which, in turn, may have a harmful effect on the speaker's credibility ([Berlo, Lemert, & Mertz, 1969; Kenton, 1989](#)). The adverse impact on the speaker's credibility would then account for the speaker's diminished persuasiveness ([Hovland, Janis, & Kelley, 1953; Hovland & Weiss, 1951](#)). On these grounds, we advance our first hypothesis:

**H1.** In a sales presentation, participants exposed to powerful language will be persuaded more than participants exposed to powerless language.



According to Andersen and Andersen (2005), “the power and relational significance of nonverbal immediacy is, in part, the result of the multi-channeled nature of nonverbal communication” (p. 106). As nonverbal immediacy goes up, reliance on nonverbal cues increases, which renders messages more multi-channeled in nature. As messages become more multi-channeled, the sender of those messages tends to be perceived as more powerful (Andersen, 1999). In related research, Nikolaus, Thomas, and Thomas (2011) suggested that several nonverbal cues, such as gestures and vocal expressiveness, have the inherent potential to increase the perceived power of the speaker. Drawing upon these findings, we theorized that as nonverbal immediacy goes up, the perceived power of the speaker goes up (Andersen, 1999; Nikolaus et al., 2011), which will likely increase the speaker’s credibility (Berlo et al., 1969; Kenton, 1989). The heightened level of source credibility, in turn, will likely increase the persuasiveness of the speaker (Hovland et al., 1953; Hovland & Weiss, 1951). This line of reasoning forms the foundation for our next hypothesis:

**H2.** In a sales presentation, participants exposed to a high level of nonverbal immediacy will be persuaded more than participants exposed to a low level of nonverbal immediacy.

Our first two hypotheses address the independent effects that language power and nonverbal immediacy may have on persuasion. Given that both of these variables have the potential to increase the persuasiveness of a speaker through the common mechanism of increasing the perceived power of the speaker, we reasoned that a speaker’s use of powerful language, along with a high level of nonverbal immediacy, would likely interact to produce a dramatic increase in the persuasiveness of the speaker. On these grounds, we advance the following interaction hypothesis:

**H3.** In a sales presentation, the increase in persuasion that is due to language power is significantly greater for participants exposed to a high level of nonverbal immediacy than it is for participants exposed to a low level of nonverbal immediacy.

The theoretical rationale for linking the independent and dependent variables in our model is largely based on our assumption that variation in a speaker’s language power and nonverbal immediacy influence the perceived power of the speaker. Support for this assumption would derive from evidence that any statistically significant main or interaction effect discovered in the present study was, in fact, mediated by the intervening variable of Perceived Speaker Power. Thus, we pose the following research question:

**RQ1.** Does Perceived Speaker Power mediate any of the hypothesized relationships in the model of persuasion?

Although the biological sex of the salesperson in the present investigation (i.e., male) was a constant throughout the study, the biological sex of each participant varied. In a meta-analysis that examined biological sex differences in influenceability, Eagly and Carli (1981) determined that females were significantly more influenceable than males. Nevertheless, Eagly and Carli suggested that the magnitude of this biological sex difference, while statistically significant, was not practically significant: “approximately 1% of the variance of influenceability... [was] accounted for by sex. A sex difference as small as this may have few implications for social interaction” (p. 11).

Based on Eagly and Carli’s (1981) meta-analytic finding of a statistically significant biological sex difference in influenceability, participant biological sex was added as a factor in our analysis of variance. At the same time, however, the limited amount of variability explained by biological sex in Eagly and Carli’s meta-analysis suggested that it was more appropriate to pose non-directional research questions here than to advance directional hypotheses:

**RQ2.** In a sales presentation, is there a Biological Sex difference in the Extent of Persuasion?

**RQ3.** In a sales presentation, does participant Biological Sex interact with salesperson Nonverbal Immediacy and/or salesperson Language Power to influence the Extent of Persuasion?

## Method

### Participants

The participants in this study were 211 undergraduate students (100 females, 111 males) at a northwestern university in the United States. They ranged in age from 18 to 56 ( $M = 27.71$ ). The racial composition of the sample was as follows: 70.1% White, 13.3% Alaska Native, 5.2% Multi-Racial, 4.3% Hispanic, 2.4% Asian, 1.9% African-American, and 1.4% other races. Participation in the study was voluntary. At the discretion of each instructor, extra credit points were offered as an incentive for student participation in the study.

### Procedure

The survey used in our study was administered online. One section of the survey was programmed to randomly display one of four videos to each respondent. The same speaker, a middle-aged Caucasian male, appeared in each of the four videos. In each video clip, the salesperson introduced a fictitious new book entitled *Turn Your Ideas Into A Golden Parachute*, and sought to persuade participants to purchase the book. Participants received no further information about the salesperson. The duration of each video clip was approximately two minutes. After viewing their randomly-assigned video clip, participants completed the remaining online survey items.

### Design

#### Independent variables

There were three independent variables in the present study. The first independent variable was Language Power, which had two levels: powerless vs. powerful. In the powerless language condition, the sales pitch included the following three speech markers: (a) tag questions (e.g., “isn’t it?”), (b) disclaimers (e.g., “I am not an expert, but”), and (c) nonverbal hesitations (e.g., “um”). In contrast, the sales pitch in the powerful language condition did not include these three speech markers.

The second independent variable was Nonverbal Immediacy, which also had two levels: low vs. high. These two conditions differed in terms of the frequency of occurrence of six nonverbal behaviors: (a) giving eye contact, (b) gesturing, (c) smiling, (d) displaying vocal variation, (e) varying body position, and (f) exhibiting body movement (Andersen, 1979). In the low Nonverbal Immediacy condition, the salesperson rarely displayed these six nonverbal behaviors. In contrast, in the high Nonverbal Immediacy condition, the salesperson frequently displayed these six nonverbal behaviors. The four videos used in the study represented the four unique combinations generated by crossing the independent variables of Language Power and Nonverbal Immediacy.

The last independent variable was participant Biological Sex, which had two levels: male vs. female. This naturally-occurring independent variable was measured by a single dichotomous item in the online survey. A 2 (powerless language vs. powerful language)  $\times$  2 (low nonverbal immediacy vs. high nonverbal immediacy)  $\times$  2 (male vs. female) factorial design was employed in the present study.

**Dependent variable**

The dependent variable was the Extent of Persuasion. On the basis that behavioral intention has been widely viewed as an important determinant of behavior (Ajzen & Fishbein, 1980; Triandis, 1977), the Extent of Persuasion was operationalized as a participant's intention to buy the book. The Extent of Persuasion scale consisted of six items, which participants completed after viewing their randomly assigned video. Each of the six items was accompanied by a 7-point, Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). Example items from this six-item scale included: "The speaker in the video convinced me to buy the book" and "I plan to buy the book described in the video." In the present study, Cronbach's alpha for the Extent of Persuasion scale was .86.

**Manipulation checks.** The online survey included two manipulation check items, which measured participants' perceptions of the speaker's degree of power. The first item measured whether participants discerned differences in the speaker's power due to variation in the speaker's use of powerful or powerless language: "The speaker's Verbal Messages (i.e., choice of words) made him appear powerful."

The second item, on the other hand, measured whether participants discerned differences in the speaker's power due to variation in the speaker's display of a high or low level of nonverbal immediacy: "The speaker's Nonverbal Messages (i.e., way of speaking and body language) made him appear powerful." Each of the two manipulation check items was accompanied by a 7-point, Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*).

**Results**

*Phase I: Manipulation Checks*

There were five phases of data analysis in the present study. In each phase, alpha was set at .05 for all statistical tests. The first phase was dedicated to evaluating the experimental manipulations. Participants exposed to powerful language,  $M = 3.71$ ,  $SD = 1.72$ , perceived the speaker to be significantly more powerful than did participants exposed to powerless language,  $M = 1.98$ ,  $SD = 1.22$ ,  $t(201.28) = -8.50$ ,  $p < .001$ ,  $d = 1.16$ . Similarly, participants exposed to a high level of nonverbal immediacy,  $M = 3.10$ ,  $SD = 1.74$ , perceived the speaker to be significantly more powerful than did participants exposed to a low level of nonverbal immediacy,  $M = 2.15$ ,  $SD = 1.42$ ,  $t(175.97) = -4.23$ ,  $p < .001$ ,  $d = 0.60$  (Cohen, 1988; Soper, 2016).

*Phase II: Participant Age and Race*

The objective of the second phase of data analysis was to determine the degree to which the Extent of Persuasion was related to participant Age and Race. A correlational analysis revealed that the Extent of Persuasion was not significantly related to participant Age,  $r = -.01$ ,  $p = .935$ .

Multiple regression analysis was used to assess the degree of association between the Extent of Persuasion and participant Race. To make this assessment, the nine racial categories in the online survey were treated as a set of eight dummy variables. The category of White non-Hispanic/Caucasian was omitted from the set so that comparisons could potentially be made with this racial category. As a set of dummy variables, participant Race did not explain a significant proportion of the variance in the Extent of Persuasion,  $F(8, 202) = 1.62$ ,  $p = .121$ ,  $R^2 = .060$ , adjusted  $R^2 = .023$ . The estimated value of the squared population cross-validated multiple correlation or  $\hat{\rho}_c$  (Lautenschlager, 1990) was calculated via Cattin's (1980) formula to be .010. See Table 1 for more details of the multiple regression analysis.

**Table 1**  
Multiple Regression of the Extent of Persuasion onto Participant Race.

Predictor	B	SE B	$\beta$	t	p
Alaska Native	-0.37	0.27	-.10	-1.39	.165
African-American	0.39	0.66	.04	0.59	.558
Hispanic	0.34	0.45	.05	0.76	.447
Asian	0.90	0.59	.11	1.53	.128
Pacific Islander	-1.36	1.30	-.07	-1.05	.296
American Indian	1.39	0.92	.10	1.50	.135
Multiracial	-0.10	0.41	-.02	-0.25	.804
Other	1.47	0.76	.13	1.94	.054

*Phase III: Hypotheses 1-3*

In the third phase of data analysis, Hypotheses 1-3 were tested via a three-way analysis of variance (ANOVA). The independent variables were Language Power (powerless vs. powerful), Nonverbal Immediacy (low vs. high), and participant Biological Sex (male vs. female). The dependent variable was the Extent of Persuasion. The omnibus  $F$  for the overall factorial model approached statistical significance,  $F(7, 203) = 1.98$ ,  $p = .059$ ,  $\eta_p^2 = .064$ . At the same time, however, statistically significant main and interaction effects emerged from the three-way ANOVA (see Table 2).

Support was found for  $H1$ . The three-way ANOVA yielded a main effect for Language Power,  $F(1, 203) = 4.01$ ,  $p = .047$ ,  $\eta_p^2 = .019$ . As predicted, the Extent of Persuasion was significantly greater for participants exposed to powerful language,  $M = 2.56$ ,  $SD = 1.35$ , than it was for participants exposed to powerless language,  $M = 2.17$ ,  $SD = 1.24$ . Thus, regardless of the nonverbal immediacy level of the salesperson, and the biological sex of the participant, participants reported higher levels of willingness to buy the book when the salesperson used powerful as opposed to powerless language.

However, no support was found for  $H2$ . Specifically, there was no main effect for Nonverbal Immediacy,  $F(1, 203) = 1.93$ ,  $p = .166$ ,  $\eta_p^2 = .009$ . Surprisingly, the Extent of Persuasion was less in the high nonverbal immediacy condition,  $M = 2.21$ ,  $SD = 1.21$ , than it was in the low nonverbal immediacy condition,  $M = 2.52$ ,  $SD = 1.38$ , but this difference was not statistically significant.

Lastly, no support was found for  $H3$ . The hypothesized interaction between Language Power and Nonverbal Immediacy did not attain statistical significance,  $F(1, 203) = .90$ ,  $p = .345$ ,  $\eta_p^2 = .004$ . Thus, the combination of powerful language and high nonverbal immediacy did not have a synergistic effect on the Extent of Persuasion (see Table 3 and Figure 2).

*Phase IV: Research Question 1*

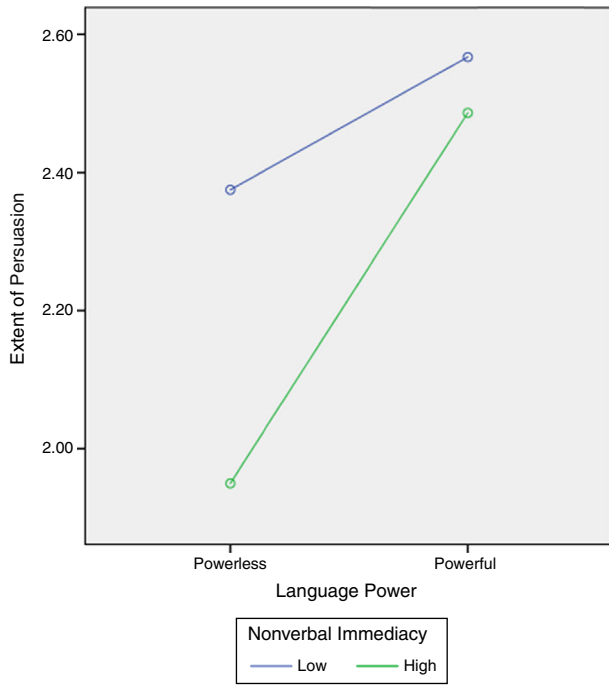
The fourth phase of data analysis was dedicated to answering  $RQ1$ . In this phase, the results of three approaches to statistical mediation analysis were triangulated. In mediation analysis, the total effect can be decomposed into the direct effect plus the indirect effect (Kenny, 2016). In words, this additive relationship can be

**Table 2**  
Three-way ANOVA for the Effects of Language Power, Nonverbal Immediacy, and Biological Sex on the Extent of Persuasion.

Source	SS	df	MS	F	p
Nonverbal Immediacy (NI)	3.23	1	3.23	1.93	.166
Language Power (LP)	6.69	1	6.69	4.01	.047
Biological Sex (BS)	2.55	1	2.55	1.53	.218
NI x LP	1.50	1	1.50	0.90	.345
NI x BS	6.58	1	6.58	3.94	.048
LP x BS	0.39	1	0.39	0.24	.628
NI x LP x BS	0.74	1	0.74	0.45	.505
Within	339.02	203	1.67		
Total	362.18	210			

**Table 3**  
Descriptive Statistics for the Effects of Nonverbal Immediacy and Language Power on the Extent of Persuasion.

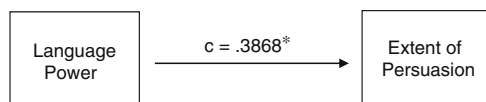
	Powerless Language		Powerful Language	
	M	SD	M	SD
Low Nonverbal Immediacy	2.39	1.45	2.61	1.45
High Nonverbal Immediacy	1.96	1.20	2.48	1.20



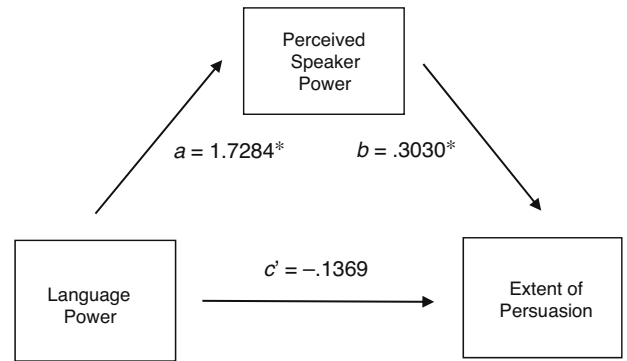
**Figure 2.** Effects of Language Power and Nonverbal Immediacy on the Extent of Persuasion.

expressed as: “total effect = direct effect + indirect effect” (Kenny, 2016, The Indirect Effect section, para. 1). In terms of unstandardized regression coefficients, the same additive relationship can be expressed as: “ $c = c' + ab$ ” (Kenny, 2016, The Indirect Effect section, para. 1). For ease of interpretation, these three effects are displayed visually in Figures 3 and 4. According to Kenny (2016), “In contemporary mediational analyses, the indirect effect or  $ab$  is the measure of the amount of mediation” (The Indirect Effect section, para. 1).

In the present study, mediational analyses were conducted using the PROCESS macro for SPSS (Hayes, 2013). The presumed mediating variable, Perceived Speaker Power, was operationalized by a participant’s score on the following 7-point, Likert-type, manipulation-check item: “The speaker’s Verbal Messages (i.e., choice of words) made him appear powerful.” The independent variable, Language Power, consisted of the experimental condition (powerless language vs. powerful language) to which a participant was randomly assigned. Prior to conducting the mediational analyses, Language Power was dummy coded (0 = powerless language, 1 = powerful language). Finally, the dependent variable, Extent of Persuasion, consisted of a participant’s average score on a



**Figure 3.** Total effect of Language Power on Extent of Persuasion. \*  $p < .05$ .



**Figure 4.** Indirect effect of Language Power on Extent of Persuasion through Perceived Speaker Power. \*  $p < .0001$ .

six-item scale that measured the participant’s intention to buy the book.

Three different statistical approaches were used to determine whether Perceived Speaker Power mediated the relationship between Language Power and Extent of Persuasion: (a) Baron and Kenny’s (1986) approach, (b) the Sobel test (Sobel, 1982), and (c) the bootstrapped confidence interval (Kenny, 2016; Preacher & Hayes, 2004).

*Baron and Kenny’s (1986) approach.* Baron and Kenny (1986) described an approach for assessing whether the effect of X (an independent variable) on Y (a dependent variable) is mediated by M (the presumed mediating variable). In particular, they argued that in order for M to be classified as a mediating variable, the following four conditions must hold. First, X must be a significant predictor of Y. Second, X must be a significant predictor of M. Third, controlling for X, M must be a significant predictor of Y. Lastly, controlling for M, X must be a weaker predictor of Y compared to when X was the sole predictor of Y (Baron & Kenny, 1986; Kenny, 2016; Preacher & Hayes, 2004). Reported below are the results of a series of regression analyses that were conducted to assess whether Baron and Kenny’s (1986) four conditions held for Language Power (the independent variable), Perceived Speaker Power (the potential mediating variable), and Extent of Persuasion (the dependent variable).

The first regression analysis assessed the total effect of Language Power on Extent of Persuasion (see Figure 3). In this analysis, Language Power was the predictor, and Extent of Persuasion was the criterion. The regression model was significant,  $F(1, 209) = 4.63, p = .0326, R^2 = .022, \text{adjusted } R^2 = .017, \hat{\rho}_c = .017$ . Path  $c$  was significant,  $c = .3868, t(209) = 2.15, p = .0326$ . So, Language Power was a significant predictor of Extent of Persuasion.

The second regression analysis assessed path  $a$  (see Figure 4). Here, Language Power was the predictor, and Perceived Speaker Power was the criterion. The regression model was significant,  $F(1, 209) = 68.94, p < .0001, R^2 = .248, \text{adjusted } R^2 = .244, \hat{\rho}_c = .244$ . Path  $a$  was significant,  $a = 1.7284, t(209) = 8.30, p < .0001$ . So, Language Power was a significant predictor of Perceived Speaker Power.

The third regression analysis assessed paths  $b$  and  $c'$  (see Figure 4). In this model, Language Power and Perceived Speaker Power were the predictors, and Extent of Persuasion was the criterion. The overall regression model was significant,  $F(2, 208) = 17.24, p < .0001, R^2 = .142, \text{adjusted } R^2 = .134, \hat{\rho}_c = .130$ . Path  $b$  was significant,  $b = .3030, t(208) = 5.41, p < .0001$ . So, controlling for Language Power, Perceived Speaker Power was a significant predictor of Extent of Persuasion. However, path  $c'$  was not significant,  $c' = -.1369, t(208) = -.070, p = .4823$ . Thus, controlling for Perceived

Speaker Power, Language Power was no longer a significant predictor of Extent of Persuasion.

Recall that when Language Power was the sole predictor of Extent of Persuasion (see Figure 3), the unstandardized regression coefficient for Language Power (that is,  $c$ ) was .3868. In contrast, when Language Power and Perceived Speaker Power were jointly entered as predictor variables (see Figure 4), the unstandardized regression coefficient for Language Power (that is,  $c'$ ) decreased in magnitude to  $-.1369$ . Furthermore, the accompanying  $t$ -test revealed that this value for  $c'$  (that is,  $-.1369$ ) was not significantly different from 0. In short, the pattern of results from the set of regression analyses performed in this study closely corresponded to the pattern described by Baron and Kenny (1986) for a mediating variable. So, based on the criteria outlined by Baron and Kenny, Perceived Speaker Power appeared to mediate the relationship between Language Power and Extent of Persuasion. Nevertheless, as pointed out by Preacher and Hayes (2004), "There are more statistically rigorous methods by which mediation may be assessed" (p. 718). Preacher and Hayes (2004) identified the Sobel test (Sobel, 1982) and bootstrapping (Kenny, 2016; Preacher & Hayes, 2004) as two of the more rigorous approaches.

**Sobel test.** The second approach used to assess whether Perceived Speaker Power mediated the relationship between Language Power and Extent of Persuasion was the Sobel test (Sobel, 1982). According to Preacher and Hayes (2004), "the Sobel test is conducted by comparing the strength of the indirect effect of X on Y [that is,  $ab$ ] to the point null hypothesis that it equals zero" (p. 718). In the present study, the results of the Sobel test ( $z=4.51$ ,  $p<.0001$ ,  $\kappa^2=.18$ ) provided additional confirmatory evidence that Perceived Speaker Power significantly mediated the relationship between Language Power and Extent of Persuasion.

**Bootstrapped confidence interval.** A third assessment of whether Perceived Speaker Power was a significant mediator was performed via analysis of a bootstrapped 95% confidence interval for the value of the indirect effect (that is,  $ab$ ) (Preacher & Hayes, 2004). According to Kenny (2016), "If zero is not in the [confidence] interval, then the researcher can be confident that the indirect effect is [significantly] different from zero" (Bootstrapping section, para. 1). In the present study, a 95% confidence interval for the value of the indirect effect, which was constructed from 1000 bootstrap samples, did not contain zero, 95% CI [.3221, .7810]. This finding further buttressed the position that Perceived Speaker Power significantly mediated the relationship between Language Power and Extent of Persuasion.

#### Phase V: Research Questions 2 and 3

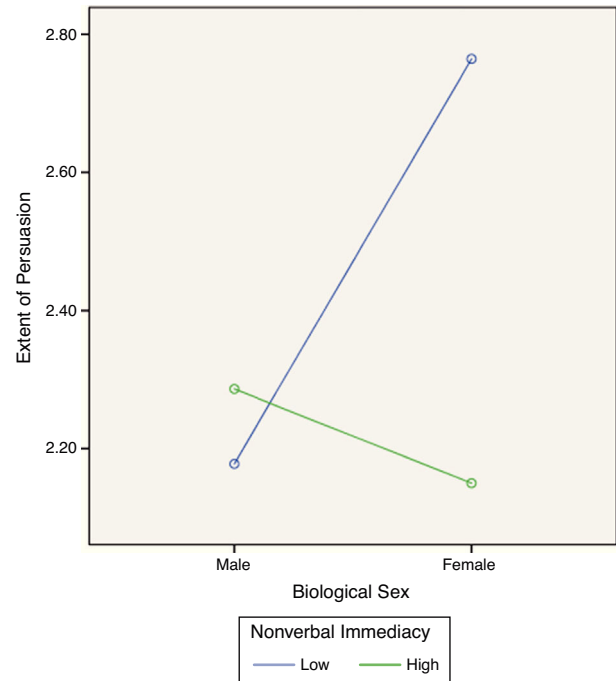
The fifth and final phase of data analysis addressed Research Questions 2 and 3. With regard to RQ2, no main effect was found for participant Biological Sex,  $F(1, 203) = 1.53$ ,  $p = .218$ ,  $\eta_p^2 = .007$ . Male participants,  $M = 2.22$ ,  $SD = 1.26$ , did not differ significantly from female participants,  $M = 2.52$ ,  $SD = 1.35$ , in the Extent of Persuasion. As concerns RQ3, however, there was a statistically significant interaction between Biological Sex and Nonverbal Immediacy,  $F(1, 203) = 3.94$ ,  $p = .048$ ,  $\eta_p^2 = .019$  (see Table 2). The nature of this interaction was probed using tests of simple effects.

The Extent of Persuasion for the female participants exposed to a low level of Nonverbal Immediacy,  $M = 2.76$ ,  $SD = 1.46$ , was significantly greater than it was for the female participants exposed to a high level of Nonverbal Immediacy,  $M = 2.16$ ,  $SD = 1.07$ ,  $F(1, 203) = 5.84$ ,  $p = .017$ ,  $\eta_p^2 = .028$ . In contrast, the Extent of Persuasion was not significantly different between the male participants exposed to a low level of Nonverbal Immediacy,  $M = 2.19$ ,  $SD = 1.20$ , and the male participants exposed to a high level of Nonverbal

**Table 4**

Descriptive Statistics for the Effects of Nonverbal Immediacy and Biological Sex on the Extent of Persuasion.

	Male		Female	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Low Nonverbal Immediacy	2.19	1.20	2.76	1.46
High Nonverbal Immediacy	2.25	1.33	2.16	1.07



**Figure 5.** Interaction Effect of Biological Sex and Nonverbal Immediacy on the Extent of Persuasion.

Immediacy,  $M = 2.25$ ,  $SD = 1.33$ ,  $F(1, 203) = .17$ ,  $p = .678$ ,  $\eta_p^2 = .001$  (see Table 4 and Figure 5).

## Discussion

The present study sought to integrate two lines of research on the antecedents of persuasion, one rooted in the study of verbal communication, and the other anchored in the study of nonverbal communication. According to our model (see Figure 1), a salesperson's use of powerful language, and display of a high level of nonverbal immediacy, should singularly and jointly increase the persuasiveness of the salesperson.

The rationale underlying our particular choice of independent variables—language power and nonverbal immediacy—was our assumption that both variables have the potential to influence the perceived power of a speaker. We theorized that as the perceived power of a speaker increases, his or her credibility will increase (Berlo et al., 1969; Kenton, 1989) and, as a consequence, the persuasiveness of the speaker will increase (Hovland et al., 1953; Hovland & Weiss, 1951).

With the justification for our model firmly in place, we then subjected the model to a rigorous empirical test using a three-way ANOVA. We found that the average persuasive effect was significantly greater for participants exposed to powerful language than it was for participants exposed to powerless language. Thus, regardless of the salesperson's level of nonverbal immediacy, and the participant's biological sex, participants reported a higher level of willingness to buy the book when the salesperson used powerful as opposed to powerless language.



Contrary to expectations, however, the average persuasive effect was not greater in the high nonverbal immediacy condition than in the low nonverbal immediacy condition. Similarly, the combination of powerful language and high nonverbal immediacy did not synergistically amplify the persuasiveness of the salesperson. Thus, powerful language and high nonverbal immediacy were not mutually reinforcing variables in the present study.

Research on interpersonal attraction could account for the lack of a statistically significant effect of nonverbal immediacy on persuasion. Past research has shown that nonverbal immediacy is positively related to liking in interpersonal relationships (Andersen, 1978; Teven, 2006; Teven & Winters, 2007). Likeability of a communicator, in turn, has been found to lead to successful sales (Brown, 1990; Jones, Moore, Stanland, & Wyatt, 1998). However, the effect of nonverbal immediacy on liking may not be immediate.

Research on nonverbal immediacy and liking has revealed that nonverbal immediacy promotes liking in such long-term communicative patterns as supervisor and subordinate, and teacher and student (Andersen, 1978; Teven, 2006). In real-life sales contexts, where there is some kind of long-term, buyer-seller relationship, feelings of positive affect may gradually increase over time due to nonverbal immediacy and other factors, which, in turn, may lead to successful sales. However, in the present study, the brief time that participants were exposed to the salesperson, coupled with the inability to interact directly with him, could have limited participants' development of positive affect for the salesperson. In short, due to the brevity of the sales pitch, the potential persuasive effect of the salesperson's high level of nonverbal immediacy could have been reduced by participants' lack of positive affect for the salesperson.

The absence of a statistically significant interaction between language power and nonverbal immediacy could be due to the disparity in the levels of perceived speaker power generated by the manipulation of the independent variables. Close examination of the means for the manipulation check items revealed that the heightened levels of language power and nonverbal immediacy yielded perceptions of speaker power that were significantly greater than the perceptions yielded by the diminished levels of these variables. However, the magnitude of each variable's effect was noticeably different between the two variables. In particular, the mean difference and corresponding effect size were smaller for Nonverbal Immediacy,  $M_1 - M_0 = .95$ ,  $d = 0.60$ , than they were for Language Power,  $M_1 - M_0 = 1.73$ ,  $d = 1.16$  (Cohen, 1988; Soper, 2016). Consequently, the combination of powerful language and high nonverbal immediacy may not have generated a high enough level of perceived speaker power to ultimately produce a statistically significant interaction effect.

The discovery of a main effect for language power provided the impetus for determining whether perceived speaker power mediated the relationship between language power and the extent of persuasion. To make this determination, three different statistical approaches were utilized: (a) Baron and Kenny's (1986) approach, (b) the Sobel test (Sobel, 1982), and (c) the bootstrapped confidence interval (Kenny, 2016; Preacher & Hayes, 2004). The results of all three approaches converged in support of our position that perceived speaker power mediates the effect of language power on the extent of persuasion.

Although there was no main effect for biological sex on the extent of persuasion, there was a statistically significant interaction between biological sex and nonverbal immediacy. Analysis of this interaction revealed a synergistic effect, which resulted from the exposure of female participants to a low level of nonverbal immediacy.

The observed interaction between biological sex and nonverbal immediacy may be attributable to two complementary

mechanisms. First, the results of Eagly and Carli's (1981) meta-analysis suggested that women are slightly more persuadable than men. Second, the female participants in this study may have perceived the salesperson's display of a low level of nonverbal immediacy as role-appropriate, professional behavior, which, in turn, could have increased the perceived credibility of the salesperson. The coupling of the female participants' slightly elevated baseline persuadability (Eagly & Carli, 1981) along with their exposure to a salesperson who they likely perceived to be relatively high in credibility (Hovland et al., 1953; Hovland & Weiss, 1951) could have been mutually reinforcing, and thus account for the spike in the extent of persuasion.

Whereas the present finding of an effect for language power on persuasion is similar to the results of previous studies (e.g., Areni & Sparks, 2005; Burrell & Koper, 1998), the non-significant effect of nonverbal immediacy on persuasion is inconsistent with past scholarship (e.g., Burgoon et al., 1990). Recall that in the present study, a high level of nonverbal immediacy did not have a significantly greater persuasive effect than did a low level of nonverbal immediacy. Yet, a manipulation check revealed that nonverbal immediacy behaviors were positively related to perceptions of power. These seemingly contradictory findings suggest that our theoretical rationale for connecting nonverbal immediacy to persuasion needs to be modified.

Future research should identify the mechanisms by which an increase in nonverbal immediacy can lead to an increase in persuasion (Burgoon et al., 1990). Variables other than the perceived power of the speaker, such as source credibility (e.g., Burgoon et al., 1990) and likeability of the source (e.g., Brown, 1990), should be investigated as possible mediators of the hypothesized relationship between nonverbal immediacy and persuasion.

Future research should also examine a wide range of potential moderating variables that could possibly interact with nonverbal immediacy to influence the extent of persuasion. These moderating variables could include various individual difference variables such as the salesperson's biological sex, gender, race, physical attractiveness, formality of dress, regional dialect, and fluency in English.

Furthermore, replication of the present study using a range of different communication channels (e.g., actual face-to-face interaction), and with different types of products, could shed light on whether communication channel or product type moderate the impact of nonverbal immediacy on persuasion. Finally, the addition of survey measures of intrapsychic variables, such as psychological proneness and resistance to persuasion (Brandt, 1979), could further advance researchers' understanding of possible person-situation interaction effects on persuasion.

Moving beyond the theoretical implications of this study, the present findings have practical implications for the training and development of salespeople. Our findings suggest that when giving sales presentations, salespeople should carefully construct and rehearse their sales pitches to ensure that they are relatively free of powerless speech markers, such as tag questions, disclaimers, and nonverbal hesitations.

Another practical implication of this investigation concerns the appropriateness of relying on nonverbal immediacy to bring about persuasion. The findings of the present study, along with those of other researchers (Andersen, 1978; Brown, 1990; Jones et al., 1998; Teven, 2006), suggest that language power has more of an immediate effect on persuasion, whereas nonverbal immediacy has more of a cumulative, delayed effect. Therefore, we recommend that when called upon to make infrequent, brief sales presentations, salespeople should not rely heavily on nonverbal immediacy as a persuasive strategy.

Although carefully designed, the present study does have limitations. One limitation is that actual behavioral evidence of persuasion (i.e., buying the book) was not observed. Instead,

behavioral intent was measured. Because moderating variables, such as individual difference characteristics and past behavior, may weaken the link between intention and behavior (e.g., Bentler & Speckart, 1979; Howard & Sheth, 1969; Zuckerman, Siegelbaum, & Williams, 1977), intention to buy the book may not necessarily have led to actual buying behavior.

Another limitation is that the book dealt with ways to increase one's wealth. However, participant income was not measured in the survey. If an additional survey item that measured participant income had been included in the survey, then the potential influence of participant income on willingness to buy the book could have been controlled for in the statistical analyses.

A further limitation stems from the nature of the sales presentation. Because the sales presentation was a simulation, and was relatively brief in duration, the ecological validity of the study may be somewhat diminished. Nevertheless, the manipulation checks did confirm that participants perceived the differential levels of language power and nonverbal immediacy.

A final limitation concerns the unit of analysis in the present study. Specifically, this investigation focused solely on the salesperson's communication behavior. The customer's communication style was not measured. However, Williams and Spiro (1985) discovered that in salesperson-customer interactions, both the salesperson's communication style and the customer's communication style exerted independent effects on the amount sold. Shifting to a dyadic unit of analysis, which characterizes the communication styles of both the salesperson and the customer (participant), would likely increase the amount of variance explained in participant intention to buy the book.

## Conclusion

From the characterization of various persuasive strategies (e.g., logos, pathos, and ethos) by Aristotle in 350 BC, to the groundbreaking research on source credibility by Hovland and Weiss in 1951, to the study of language power and nonverbal immediacy in the present study, researchers have endeavored to discover ways to maximize the persuasiveness of a speaker. The present investigation not only provides insight into the effects of language power on persuasion, but also provides a foundation on which to expand researchers' understanding of the complex interplay between nonverbal immediacy and persuasion.

## Conflict of Interest

The authors of this article declare no conflict of interest.

## References

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Andersen, J. F. (1978). *The relationship between teacher immediacy and teaching effectiveness* (unpublished doctoral dissertation). West Virginia University, Morgantown, WV.
- Andersen, J. F. (1979). Teacher immediacy as a predictor of teaching effectiveness. In D. Nimmo (Ed.), *Communication Yearbook 3*. (pp. 543–559). New Brunswick, NJ: Transaction Books.
- Andersen, P. A. (1999). *Nonverbal Communication: Forms and function*. Mountain View, CA: Mayfield.
- Andersen, P. A., & Andersen, J. F. (2005). Measurements of perceived nonverbal immediacy. In V. Manusov (Ed.), *The sourcebook of nonverbal measures: Going beyond words* (pp. 106–110). Mahwah, NJ: Lawrence Erlbaum Associates.
- Areni, C. S., & Sparks, J. R. (2005). Language power and persuasion. *Psychology and Marketing*, 22, 507–525.
- Aristotle (1960). *Rhetoric* (L. Cooper, Trans.). New York, NY: Appleton-Century-Crofts, Inc. (Original work published 350 BC).
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bentler, P. M., & Speckart, G. (1979). Models of attitude-behavior relations. *Psychological Review*, 86, 452–464.
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research*, 1, 99–112.
- Berlo, D. K., Lemert, J. B., & Mertz, R. J. (1969). Dimensions for evaluating the acceptability of message sources. *The Public Opinion Quarterly*, 33, 563–576.
- Boozer, R. W., Wyld, D. C., & Grant, J. (1991). Using metaphor to create more effective sales messages. *The Journal of Consumer Marketing*, 8, 59–67.
- Bradac, J. J., & Mulac, A. (1984). A molecular view of powerful and powerless speech styles: Attributional consequences of specific language features and communicator intentions. *Communication Monographs*, 51, 307–319.
- Brandt, D. R. (1979). Listener propensity to counterargue, distraction, and resistance to persuasion. *Central States Speech Journal*, 30, 321–331.
- Brown, S. P. (1990). Use of closed influence tactics by salespeople: Incidence and buyer attributions. *Journal of Personal Selling and Sales Management*, 10, 17–29.
- Burgoon, J. K., Birk, T., & Pfau, M. (1990). Nonverbal behaviors, persuasion, and credibility. *Human Communication Research*, 17, 140–169.
- Burrell, N. A., & Koper, R. J. (1998). The efficacy of powerful/powerless language on attitudes and source credibility. In M. Allen, & R. W. Preiss (Eds.), *Persuasion: Advances through meta-analysis* (pp. 203–215). Cresskill, NJ: Hampton.
- Burroughs, N. F. (2007). A reinvestigation of the relationship of teacher nonverbal immediacy and student compliance-resistance with learning. *Communication Education*, 56, 453–475.
- Cattin, P. (1980). Estimation of the predictive power of a regression model. *Journal of Applied Psychology*, 65, 407–414.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Conley, J., O'Barr, W., & Lind, E. A. (1978). The power of language: Presentational style in the courtroom. *Duke Law Journal*, 1978, 1375–1399.
- Eagly, A. H., & Carli, L. L. (1981). Sex of researchers and sex-typed communications as determinants of sex differences in influenceability: A meta-analysis of social influence studies. *Psychological Bulletin*, 90, 1–20.
- French, J. R. P., Jr., & Raven, B. H. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150–167). Ann Arbor, MI: Institute for Social Research.
- Gibbons, P., Busch, J., & Bradac, J. (1991). Powerful versus powerless language: Consequences for persuasion, impression formation, and cognitive response. *Journal of Language and Social Psychology*, 19, 115–126.
- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NY: Doubleday Anchor Books.
- Golish, T. D., & Olson, L. N. (2000). Students' use of power in the classroom: An investigation of student power, teacher power, and teacher immediacy. *Communication Quarterly*, 48, 293–310.
- Gorham, J. S. (1988). The relationship between verbal teacher immediacy behaviors and student learning. *Communication Education*, 37, 40–53.
- Hardy, C., & Phillips, N. (2004). Discourse and power. In D. Grant, C. Hardy, C. Oswick, & L. Putnam (Eds.), *The Sage handbook of organizational discourse* (pp. 299–317). London: Sage.
- Hayes, A. (2013). *Introduction to mediation moderation and conditional process analysis*. New York, NY: Guilford Press.
- Haleta, L. L. (1996). Student perceptions of teachers' use of language: The effects of powerful and powerless language on impression formation and uncertainty. *Communication Education*, 45, 16–28.
- Hovland, C. I., Janis, I. L., & Kelley, H. H. (1953). *Communication and persuasion: Psychological studies of opinion change*. New Haven, CT: Yale University Press.
- Hovland, C. I., & Weiss, W. (1951). The influence of source credibility on communication effectiveness. *Public Opinion Quarterly*, 15, 635–650.
- Howard, J. A., & Sheth, J. N. (1969). *The theory of buyer behavior*. New York: John Wiley & Sons.
- Jones, E., Moore, J. N., Stanland, A. J. S., & Wyatt, R. A. (1998). Salesperson race and gender and the access and legitimacy paradigm: Does difference make a difference? *Journal of Personal Selling and Sales Management*, 18, 71–88.
- Kearney, P., Plax, T. G., Smith, V. R., & Sorensen, G. (1988). Effects of teacher immediacy and strategy type on college student resistance to on-task demands. *Communication Education*, 37, 54–67.
- Kenny, D. A. (2016, May 22). *Mediation*. Retrieved from <http://davidakenny.net/cm/mediate.htm>.
- Kenton, S. B. (1989). Speaker credibility in persuasive business communication: A model which explains gender differences. *The Journal of Business Communication*, 26, 143–157.
- Lakoff, R. (1975). *Language and a woman's place*. New York: Harper & Row.
- Lautenschlager, G. J. (1990). Sources of imprecision in formula cross-validated multiple correlations. *Journal of Applied Psychology*, 75, 460–462.
- Leigh, T. W., & Summers, J. O. (2002). An initial evaluation of industrial buyers' impressions of salespersons' nonverbal cues. *Journal of Personal Selling & Sales Management*, 22, 41–53.
- Limbu, Y. B., Jayachandran, C., Babin, B. J., & Peterson, R. T. (2016). Empathy, nonverbal immediacy, and salesperson performance: the mediating role of adaptive selling behavior. *Journal of Business & Industrial Marketing*, 31, 654–667.
- Marshak, R. J., & Grant, D. (2008). Transforming talk: The interplay of discourse, power, and change. *Organization Development Journal*, 26(3), 33–40.
- Mehrabian, A. (1967). Attitudes inferred from neutral verbal communications. *Journal of Consulting Psychology*, 31, 414–417.
- Mehrabian, A. (1969). Methods & Designs: Some referents and measures of nonverbal behavior. *Behavioral Research Methods and Instrumentation*, 1, 203–207.

- Moore, A., Masterson, J. T., Christophel, D. M., & Shea, K. A. (1996). College teacher immediacy and student ratings of instruction. *Communication Education, 45*, 29–39.
- Ng, S. K., & Bradac, J. J. (1993). *Power in language: Verbal communication and social influence*. Newbury Park, CA: Sage Publications.
- Nikolaus, J., Thomas, R., & Thomas, P. (2011). The effects of verbal and nonverbal elements in persuasive communication: Findings from two multi-method experiments. *Communications: The European Journal of Communication Research, 36*, 245–271.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York, NY: Springer-Verlag.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*, 717–731.
- Richmond, V. P., Gorham, J. S., & McCroskey, J. C. (1987). The relationship between selected immediacy behaviors and cognitive learning. In M. L. McLaughlin (Ed.), *Communication Yearbook* (10) (pp. 574–590). Beverly Hills, CA: Sage.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological Methodology* (pp. 290–312). Washington, DC: American Sociological Association, 1982.
- Soper, D. S. (2016). *Effect Size (Cohen's d) Calculator for a Student t-Test* [Software]. Available from <http://www.danielsoper.com/statcalc>.
- Sparks, J. R., & Areni, C. S. (2002). The effects of sales presentation quality and initial perceptions on persuasion: A multiple role perspective. *Journal of Business Research, 55*, 517–528.
- Sparks, J. R., Areni, C. S., & Cox, K. C. (1998). An investigation of the effects of language style and communication modality on persuasion. *Communication Monographs, 65*, 108–125.
- Tedeschi, J. T. (1981). *Impression management: Theory and social psychology research*. New York, NY: Academic Press.
- Teven, J. J. (2006). The effects of supervisor nonverbal immediacy and power use on employees' ratings of credibility and affect for the supervisor. *Human Communication, 13*, 69–85.
- Teven, J. J., & Winters, J. L. (2007). Pharmaceutical representatives' social influence behaviors and communication orientations: Relationships with adaptive selling and sales performance. *Human Communication, 10*, 465–486.
- Triandis, H. C. (1977). *Interpersonal Behavior*. Monterey, CA: Brooks/Cole.
- Williams, K. C., & Spiro, R. L. (1985). Communication style in the salesperson-customer dyad. *Journal of Marketing Research, 22*, 434–442.
- Zuckerman, M., Siegelbaum, H., & Williams, R. (1977). Predicting helping behavior: Willingness and aspiration of responsibility. *Journal of Applied Psychology, 7*, 295–299.