ABSTRACT—Nonverbal cues are an inherent component of most persuasive appeals. We use regulatory-fit theory as a framework for understanding the effect of nonverbal cues on a message’s effectiveness, and as a foundation for developing a new persuasion technique. We propose that when the nonverbal cues of a message source sustain the motivational orientation of the recipient, the recipient experiences regulatory fit and feels right, and that this experience influences the message’s effectiveness. Experimental results support these predictions. Participants experiencing regulatory fit (promotion-focus participants viewing messages delivered in an eager nonverbal style, prevention-focus participants viewing messages delivered in a vigilant nonverbal style) had more positive attitudes toward a message’s topic and greater intentions to behave in accordance with its recommendation than did participants experiencing nonfit. Feeling right was also greater for participants experiencing fit than for those experiencing nonfit and was associated with greater message effectiveness. Regulatory-fit theory provides a framework for making precise predictions about when and for whom a nonverbal cue will affect persuasion.

How can gestures and other nonverbal cues be used by the source of a persuasive message to make the appeal more effective? Using regulatory-fit theory to answer this question, we introduce a new persuasion technique that relates the source’s nonverbal cues to the message recipient’s motivational orientation. We hypothesize that when there is fit between a recipient’s orientation toward the message and the source’s nonverbal style, the recipient will “feel right” and the message will be more effective. The idea of relating a source’s nonverbal cues to recipients’ orientations is inspired by recent research showing that written messages can be framed in ways that create fit and increase their effectiveness (Cesario, Grant, & Higgins, 2004; Lee & Aaker, 2004). In the present research, we considered whether the source can use nonverbal cues to physically deliver an identical message in different ways in order to fit different recipients’ orientations. In contrast, most research on nonverbal influence has predicted main effects of nonverbal cues without regard to characteristics of the recipient.

NONVERBAL INFLUENCE IN PERSUASION AND IMPRESSION FORMATION

Among the potential mechanisms by which nonverbal cues could influence persuasion, their effect on recipients’ impressions of the source has received the most attention. Research in this area, and on impression formation generally, typically assumes that the effects of nonverbal cues are independent of the message’s context, the message’s content, and recipients’ characteristics. Consider speech rate, the most commonly researched nonverbal cue. There has been consensus that faster rates increase message effectiveness by increasing positive impressions of the source’s credibility, confidence, or competence. Reflecting the strength of this consensus, Brown (1980) referred to this finding as having “little surprise value” (p. 294). When context dependency is found, it is treated as an aberration, rather than as reflecting meaningful underlying mechanisms (for exceptions, see Hall, 1980; Siegman & Reynolds, 1982; Street, Brady, & Putnam, 1983). Moreover, conditional effects are often actively prevented through the use of language-free or nonnatural speech samples stripped of situational information (e.g., “words” constructed by combining syllables from different languages, repetition of single sentences).

The idea that nonverbal cues should have uniform effects can be criticized from a number of perspectives emphasizing the fundamental role of context in the production and identification of
nonverbal cues (e.g., the situationist perspective; Fernández-Dols & Ruiz-Belda, 1995a, 1995b; see Cesario, 2006). For instance, although a fast speech rate may frequently convey confidence, it could also convey recklessness in certain situations—as when the source is discussing safety issues, such as those related to nuclear power. In the case of persuasion, the way nonverbal cues make a recipient feel could depend on contextual factors, and the motivational orientation or concerns of the recipient may be one such factor. Rather than being a direct function of nonverbal cues, whether or not recipients feel right about a persuasive attempt could depend on whether the cues fit their orientation during their reception of the message. Regulatory-fit theory provides the theoretical underpinning for this proposal.

**REGULATORY FIT AND FEELING RIGHT**

Regulatory-fit theory considers the importance of the relation between a person’s orientation or concerns about an activity and how he or she engages with that activity (Higgins, 2000). The same activity can be pursued by people who have different orientations and use different behavioral strategies, and a given orientation is often associated with preferred strategies. For example, in choosing a restaurant to eat at, someone high in need for cognition would prefer to thoroughly consider many possibilities, whereas someone high in need for closure would prefer to make a quick decision. In terms of regulatory-focus theory (Higgins, 1993), which we highlight in this article, promotion-focus people, who represent goals as hopes and aspirations, prefer eager, advancement strategies of engaging with tasks; prevention-focus people, who represent goals as duties and obligations, prefer vigilant, cautious strategies of engaging with tasks.

Regulatory fit is experienced when individuals use those strategies of engaging with a task that they prefer given their current regulatory orientation, because using preferred strategies sustains (i.e., fits) the orientation, whereas using nonpreferred strategies disrupts it. When individuals experience regulatory fit, they feel right about what they are doing (Cesario, Higgins, & Scholer, 2008; Higgins, 2005, 2006; Lee & Aaker, 2004), and this experience of feeling right can inform their evaluation of different aspects of the activity (Avnet & Higgins, 2006; Higgins, Idson, Freitas, Spiegel, & Molden, 2003). Regarding persuasion, research has shown that eager framings of written messages (describing the gains of an advocated position) create regulatory fit for promotion-focus recipients, whereas vigilant framings (describing nonlosses of the same position) create fit for prevention-focus recipients (Cesario et al., 2004; Lee & Aaker, 2004).

**THE CURRENT RESEARCH**

The research reported here addressed the following question: Can a message source use nonverbal cues to vary the delivery style of a given message in a way that produces regulatory fit in message recipients with different orientations? In particular, if the source uses nonverbal cues to convey eagerness or vigilance, might this produce regulatory fit for promotion-focus and prevention-focus recipients, respectively? To answer this question, it was necessary to convey nonverbally the experiential states of eager advancement and vigilant caution. We accomplished this by systematically varying the nonverbal cues used by a message source, creating two videotaped versions of the same persuasive message, one with an eager delivery style and one with a vigilant delivery style. Advancement implies eager movement forward, so eagerness should be conveyed by gestures that involve animated, broad opening movements; hand movements openly projecting outward; forward-leaning body positions; fast body movement; and fast speech rate. Caution implies vigilant carefulness, so vigilance should be conveyed by gestures that show precision; “pushing” motions representing slowing down; slightly backward-leaning body positions; slower body movement; and slower speech rate. We took a “constellation” approach in creating these delivery styles, using multiple nonverbal cues together to convey each one. Figure 1 provides examples. It is important to note that the content of the message was identical in the two videos.

The current study tested two predictions. First, we predicted that regulatory fit produced by nonverbal cues would result in greater message effectiveness, with the eager delivery style being more effective for promotion-focus than for prevention-focus recipients, and the vigilant delivery style being more effective for prevention-focus than for promotion-focus recipients. Second, we predicted that regulatory fit would result in greater experiences of feeling right, and that greater experiences of feeling right would be associated with greater message effectiveness.

**METHOD**

**Participants**

Ninety students participated in return for $5 or course credit. They completed the Regulatory Focus Questionnaire (RFQ; Grant & Higgins, 2003; Higgins et al., 2001), were randomly assigned to watch one of the two videos, and were given the questionnaire packet containing the dependent measures.

---

1 We also tested a neutral style, in which the source minimized all nonverbal cues, but results for this video are not discussed for several reasons. First, a neutral style is irrelevant theoretically, as regulatory-fit theory is silent on neutrality—it predicts fit only for the combination of eager style and promotion focus and the combination of vigilant style and prevention focus. Second, pretesting revealed that the neutral style was not neutral, but instead was rated more vigilant than eager. Third, the source in this video was evaluated differently than the source in the other videos.

2 A thought-listing measure and the Need for Cognition scale (Cacioppo, Petty, & Kao, 1985) were administered to test for differences in the nature and valence of thoughts among high- and low-elaboration participants experiencing fit and nonfit. The only finding of interest was that fit, compared with nonfit, led to more thoughts related to the central merits of the message. This is consistent with findings showing improved memory for central events in a film under conditions of fit (Bianco, Higgins, & Klein, 2005). Additionally, 40 participants mentioned the source’s gestures during thought listing, and 12 mentioned the gestures during debriefing. Like participants who do not believe a cover story or who consciously perceive subliminal primes, they had awareness of an influencing process. It was not possible to make predictions about these participants, and they were dropped from analyses.
Materials

Regulatory Focus Questionnaire
The 11-item RFQ (Grant & Higgins, 2003; Higgins et al., 2001) assesses an individual’s chronic regulatory focus, operationalized as history of success and failure with promotion- and prevention-related strategies. Regulatory focus has been shown to be distinct from many personality variables, including approach and avoidance motivation (see Scholer & Higgins, in press; Summerville & Roese, in press). A respondent’s predominant focus is computed by subtracting the mean rating for prevention-related items from the mean rating for promotion-related items. Thus, the RFQ provides a single continuous measure, with positive numbers indicating predominant promotion focus and negative numbers indicating predominant prevention focus.

Persuasive Videos
Two videos resembling professional advocacy videos were created. In both videos, a message source (ostensibly a public-school teacher) advocated implementing a new after-school assistance program for children. The content of the message was identical in the two videos; the only difference was whether an eager or vigilant nonverbal delivery style was used by the source when delivering the message. (The text of the message and the videos are available from the first author.) It is important to note that pretesting found no significant differences between the two videos on any of 18 source-impression ratings, including classic source variables (e.g., expertise, attractiveness) and other variables (e.g., authentic, active-passive) from prior research on nonverbal cues. Thus, use of an eager versus a vigilant style

Fig. 1. Screen shots from the two videos: eager delivery style (top panel) and vigilant delivery style (bottom panel). For each video, two illustrative sequences are shown.
carried no direct implications for evaluations of the source. Consistent with research showing that regulatory fit increases processing fluency (Lee & Aaker, 2004), pretesting showed that promotion-focus subjects rated the video with the eager style as significantly easier to process than did prevention-focus subjects, and the reverse was true for the video with the vigilant style.

Message Effectiveness
The questionnaire asked participants to indicate their attitudes toward the program (i.e., how favorably they felt toward it, how good an idea they thought it was, their overall attitude toward it), the extent to which they agreed that the program should be implemented, and their behavioral intentions toward it (the likelihood that they would vote in favor of it). Ratings were made on 9-point scales. A message-effectiveness score was computed for each participant by averaging responses across these items; higher scores indicate greater effectiveness.

Subjective Experiences
Participants’ subjective experiences were assessed by asking them to indicate “how right” and “how wrong” they felt about the program, as well as how “happy,” “relaxed,” “bad,” “sad,” “good,” and “anxious” they felt. Ratings were made on 9-point scales. A feeling-right index was created by subtracting feeling-wrong ratings from feeling-right ratings; higher numbers indicate feeling more right. A pleasant-moods index was created by subtracting the average rating for unpleasant-mood items from the average rating for pleasant-mood items; higher numbers indicate more pleasant moods. This latter measure was included because the effects of fit concern specifically feeling right, which is distinct from classic hedonic pleasure (feeling pleasure or pain).

RESULTS
Message Effectiveness
Message-effectiveness score served as the predicted variable in multiple regressions; in the first, the predictors were regulatory focus (continuous measure) and delivery style (vigilant = 0, eager = 1), and in the second, the interaction between these two was included as well. No main effects were observed (t < 1), but the interaction was significant, \( \beta = .60, t(40) = 3.03, p = .004 \). As predicted, the vigilant delivery style was more effective for participants higher in prevention focus, and became less effective as promotion focus increased. In contrast, the eager delivery style was more effective for participants higher in promotion focus, and became less effective as prevention focus increased (see Fig. 2). Simple slope analyses revealed that both the slope for the eager delivery style, \( t(40) = 2.20, p = .03 \), and the slope for the vigilant delivery style, \( t(40) = -2.10, p = .04 \), differed significantly from zero.

Feeling Right
The feeling-right index served as the predicted variable in the same regressions. No main effects were present (t < 1), but the interaction was significant, \( \beta = .75, t(39) = 3.91, p < .001 \). As predicted, the vigilant delivery style produced more feeling right for participants higher in prevention focus, and feeling right decreased as promotion focus increased. In contrast, the eager delivery style produced more feeling right for participants higher in promotion focus, and feeling right decreased as prevention focus increased (see Fig. 3). Again, both the slope for the eager delivery style, \( t(39) = 2.89, p = .006 \), and the slope for the vigilant delivery style, \( t(39) = -2.68, p = .01 \), differed significantly from zero. When pleasant mood was included as an additional term in these regressions, fit still had a significant effect on feeling right, \( \beta = .52, t(38) = 3.22, p = .003 \); thus, feeling right was independent from pleasant mood. Finally, as predicted, greater feeling right was associated with greater message effectiveness, \( r(43) = .61, p < .001 \).3

DISCUSSION
The first goal of this research was to test the prediction that the effect of nonverbal cues on persuasion can be contingent on how these cues relate to recipients’ orientations. Indeed, an eager nonverbal delivery style resulted in greater message effective-

---

3A series of regressions yielded evidence that the effect of fit on message effectiveness was mediated by feeling right, as expected. However, statistical mediation with simultaneously measured mediator and dependent variables cannot prove conceptual mediation. We therefore refrain from presenting the results of this analysis. (They can be obtained by request from the first author.) It is useful to note, however, that mediation analyses treating pleasant mood as the mediator demonstrated less mediation by pleasant mood than by feeling right; also, fit had a smaller effect on pleasant mood than on feeling right.
The concept of regulatory fit, as described here, takes this idea a step further and contributes to understanding of the subsequent effects of nonverbal cues, once they have been expressed and identified. A regulatory-fit framework can guide researchers in understanding when and for whom nonverbal cues will have an effect, thereby allowing more precise predictions about the nature of nonverbal influence. Our findings also suggest that research on nonverbal cues should not strip them of situational or contextual information. The common practice of isolating nonverbal cues from any features of context may have the unintended effect of obscuring the natural complexity vital to both theory and practice.

Acknowledgments—This research was part of the first author’s doctoral dissertation at Columbia University. The authors thank Dan Dominguez, Alex Flores, and Metropolitan Montessori School for help in creating experimental materials and Geraldine Downey, Tor Wager, Michel Pham, and Michael Morris for useful feedback during the dissertation defense.

REFERENCES


(RECEIVED 7/25/07; REVISION ACCEPTED 11/19/07)