



Twisting Arms: Figurative Language Effects in Persuasive Discourse

Roger Kreuz, Aaron Ashley, and Kathryn Bartlett

The University of Memphis



Introduction

This study was designed to assess the effects of argument strength and various forms of figurative language in persuasive discourse.

The study is a replication and extension of Ottati, Rhoads, and Graesser (1999), who tested the *motivational resonance model*. The model predicts that metaphors should increase systematic processing of arguments if the metaphors used are of interest to the audience.

The study assessed the persuasiveness of literal language versus metaphors in an editorial advocating the institution of a senior thesis requirement (adapted from Petty & Cacioppo, 1986). Ottati et al. used sports metaphors and found that, for participants who enjoy sports, the metaphors were more persuasive than for those who did not enjoy sports. These results support the predictions of the motivational resonance model.

The present study extended the Ottati et al. experiments in the following ways:

(1) In addition to literal and metaphorical versions of the editorials, the effects of idioms and rhetorical questions were also assessed (see the Methods section). It has been suggested that different forms of figurative language may be processed in different ways (e.g., Burgess & Chiarello, 1996). Do these other forms of figurative language lead to attitude change as well?

(2) The attitudes of the participants regarding the editorial topic was assessed prior to the presentation of the editorial. This allowed for a more accurate measure of persuasion.

(3) The editorials were presented in a written format, which should allow the audience to more systematically process the message (Chaiken & Eagly, 1976), as well as providing an assessment of the generality of the effects of the motivational resonance model obtained by Ottati et al.

Method: Subjects

Participants were 212 undergraduates at the University of Memphis participating for course credit.

Method: Materials

Each participant read one of eight versions of the editorial, which was approximately 975 words in length.

Strong and weak versions with literal or metaphorical expressions were taken from Ottati et al.

In addition, strong and weak versions containing idiomatic expressions and rhetorical questions were created. Each version had 23 critical phrases that varied across condition. Examples appear below:

Weak argument excerpt, literal condition

The National Scholarship Board recently revealed the results of a study they conducted on the effectiveness of the senior thesis requirement at Duke University. *The findings of this study indicate that the thesis requirement promotes intellectual ability and persistence.*

Weak argument excerpt, metaphor condition

The National Scholarship Board recently revealed the results of a study they conducted on the effectiveness of the senior thesis requirement at Duke University. *The findings of this study indicate that the thesis requirement promotes intellectual strength and endurance.*

Strong argument excerpt, idiom condition

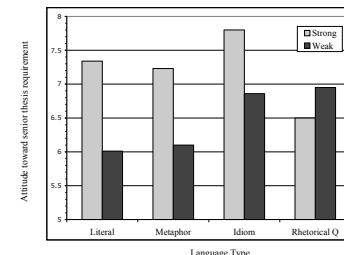
The prospect of a senior thesis seems to be effective in challenging students to work harder and faculty to teach more effectively. *Motivated students get a jump on the project and faculty take them under their wings.*

Strong argument excerpt, rhetorical question condition

The prospect of a senior thesis seems to be effective in challenging students to work harder and faculty to teach more effectively. *Wouldn't motivated students quickly become involved in the project and shouldn't faculty offer better advice and guidance?*

Results

A 2 (argument strength) x 2 (sports attitude) x 4 (language type) ANCOVA was performed. (The covariate was the pre-message attitude toward a thesis requirement). There was a significant effect of argument strength: strong editorials yielded more favorable attitudes than weak editorials.



However, there was no effect of language type, which was the same result found by Ottati et al. (comparing literal vs. metaphorical conditions).

The only significant difference between the strong versions of the editorials was between the idiom and the rhetorical question conditions. There were no differences between the weak editorial conditions.

Conclusions

The main effect of argument strength suggests that the materials were functioning as expected. This is consistent with previous research using the same stimuli without figurative forms (e.g., Petty & Cacioppo, 1986).

It seems clear that the presence of figurative language did not make the weak arguments more persuasive, suggesting that the presence of such language did not facilitate a more positive attitude about the topic.

One possible reason for the lack of a figurative language effect may be due to the density of such language within the editorials.

A meta-analysis of the persuasiveness of metaphors by Sopory and Dillard (2002) suggests that *fewer*, rather than more metaphors in a persuasive communication may lead to greater attitude change.

Given that the density of figurative language was relatively high in the editorials, the effect of such language use may have been diminished (this may be particularly true in the case of rhetorical questions, in which the argument strength was actually the reverse of the other conditions).

Howard (1990) found that rhetorical questions functioned best when used to facilitate judgments at the end of an argument, as opposed to the beginning or within the message, as in the present study.

Finally, none of the critical phrases were used to actually introduce or summarize the arguments, which, according to Sopory and Dillard, are the locations in which metaphors should have their greatest persuasive effect.

Acknowledgements

This research was funded by a grant from the Office of Naval Research (N00014-00-1-0667) awarded to the first author.

References

- Burgess, C., & Chiarello, C. (1996). Neurocognitive mechanisms underlying metaphor comprehension and other figurative language. *Metaphor and Symbolic Activity*, 11, 67-84.
- Chaiken, S., & Eagly, A. H. (1976). Communication modality as a determinant of message persuasiveness and message comprehensibility. *Journal of Personality and Social Psychology*, 34, 605-614.
- Howard, D. J. (1990). Rhetorical question effects on message processing and persuasion: The role of information availability and the elicitation of judgment. *Journal of Experimental Social Psychology*, 26, 217-239.
- Ottati, V., Rhoads, S., & Graesser, A. C. (1999). The effect of metaphor on processing style in a persuasion task: A motivational resonance model. *Journal of Personality and Social Psychology*, 77, 688-697.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.
- Sopory, P., & Dillard, J. P. (2002). The persuasive effects of metaphor: A meta-analysis. *Human Communication Research*, 28, 382-419.