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The SAGE Handbook of Persuasion: Developments in Theory and Practice

The Effects of Message Features: *Content, Structure, and Style*

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Consider a generic model of the persuasion process. Affective, cognitive, and behavioral processes mediate the relationship between the message-related variables (source, message, recipient, and context) and the desired outcome variables (attitude, intention, and behavior; Petty & Wegener, 1998). Although communication scholars are interested in the mediating processes of persuasion, as reflected in the chapters on theories and models in this handbook, the study of message features distinguishes *communication* research in persuasion from that in other disciplines such as psychology. The study of message features refers to aspects of communication itself; and as pointed out by Dillard and Pfau (2002), "questions concerning how messages might be designed to produce the greatest suasory impact lies at the very center of persuasion research" (p. xvi; see also Miller & Burgoon, 1978). In this chapter, we strive to present a review of research findings regarding the effects of message features on persuasion with a discussion of both practical and theoretical implications.

Persuasive messages are often broken into parts for study and analysis with researchers examining the persuasive influence of specific message features. Message construction also encourages this type of conceptualization and often addresses one message component at a time. From a campaign design perspective for example, decisions on the message topic or theme are made prior to any work on arguments or visuals. The topic, theme, or story being told (including plot and characters) is the *content* of the message (Lang, 2000; Stephenson & Palmgreen, 2001). Essentially, what the message is about. Closely aligned with the content is the presentation or *structure* of the message's arguments. The number of arguments the message contains, the order of the arguments, and whether or not points of opposition are acknowledged and/or addressed. The final major message component, *style*, generally includes language use like word choices and figure of speech. In mediated messages, style also refers to features like edits, music, and pacing (Geiger & Reeves, 1993; Lang, 2000; Morgan, Palmgreen, Stephenson, Hoyle, & Lorch, 2003). Each message feature influences the persuasion process in unique ways. The following sections will outline important research in this area, with an emphasis on reviewing meta-analytic studies when possible, and attempt to provide an overview of how message features may work together to influence persuasion.

Message Content

Inherent in the theme of a message is the supporting evidence and whether or not opposing viewpoints will be acknowledged. For example, the theme of a political campaign advertisement is often built on the underlying goal of the message: support for our candidate or attacking an opponent. The following section focuses on the results of meta-analyses on the effects of two content-related features that have received substantial attention in persuasion research, type of evidence and message sidedness.

Type of Evidence

All persuasive messages advocate a particular position with the goal of getting the receivers to think or behave a particular way. The advocacy, therefore, more or less states a claim that the source expects the receivers to accept as true (e.g., indoor tanning damages your skin), or actions for them to enact (e.g., you should not tan indoors). Toulmin (1969) argues a claim

should be backed by data to make an argument strong. Data is therefore the basis for persuasion and consists of evidence such as factual information and the reasoning behind the claim. Data are linked to the claim by a warrant, which legitimizes the claim by demonstrating that the data are relevant. This model of argument suggests that the strength, as well as type of evidence presented to support the message advocacy, may directly impact message effectiveness (see also Reinard, 1998; Reynolds & Reynolds, 2002).

In general there are four types of evidence. *Statistical evidence* presents statistics such as frequencies and percentages to support the claim. For example, "More than 1 million skin cancer cases are diagnosed annually in the U.S.," or "Between 40–50% of Americans who live to age 65 will at least once have basal cell carcinoma (BCC) or squamous cell carcinoma (SCC)." *Testimonial evidence* uses a person's personal experience, eye-witness account, or personal opinion to support the claim (including expert testimony). For example, "It was hard, but I quit smoking so you can do it, too." *Anecdotal evidence* is evidence that is based on a person's observations of the world. It is a personal interpretation of or opinion toward a target and is often subjective in nature. *Analogical evidence* use analogies to support a claim, comparing one idea/situation to another. Analogies are mainly useful when dealing with a topic that is novel.

Neither anecdotal nor analogical evidence are as widely used or studied as statistical and testimonial evidence, likely because the latter are considered strong types of evidence. A metaanalysis examining the effectiveness of testimonial evidence provides support for this claim. The average effect size was $r = .23$, $k = 16$, $N = 2,800$ for studies with group interactions, and $r = .25$, $k = 14$, $N = 1,920$ for studies without group interactions (Reinard, 1998). However, Allen and Preiss (1997) conducted a meta-analysis comparing the persuasive impact of testimonial and statistical evidence and their results suggested that statistical evidence is more pervasive than testimonial evidence ($r = .10$, $k = 15$, $N = 1,760$), with homogenous effect sizes. Hornikx (2005) hypothesized that the inconsistent findings may be a result of the differences in evidence types and their conceptualizations and operationalizations. In a comparison of studies, Hornikx tentatively claimed anecdotal evidence to be the least effective; however, a formal statistical analysis of the data was not conducted. Hornikx was focused on describing the methodological differences between the studies, and instead provided a count of the number of studies that found certain results. For example, studies that found (1) statistical evidence to be more persuasive than anecdotal evidence *(k = 6)*, (2) anecdotal evidence to be more persuasive than statistical evidence ($k = 1$), and (3) no significant difference between statistical and anecdotal evidence ($k = 5$; Hornikx, 2005).

Message Sidedness

In addition to having a strong argument, the context of the argument presentation is important to the persuasion process. That is, whether or not the message will reference the opposition. Messages that only include arguments that support the position of the persuader are *one-sided messages.* A one-sided message does not make statements about the opposition's view or even acknowledge the existence of an opposing point of view. *Twosided messages* include both supportive arguments and an acknowledgement or mention of the opposition's arguments. A two-sided message can be *non-refutational*, that is, it does not provide counter-arguments against the opposing view; or can be *refutational* and provide counterarguments to demonstrate the superiority of their own arguments and advocacy over the opponents'.

Clearly, the question of which is more effective, one- or two-sided messages, has gained much attention in persuasion research. In fact, three meta-analyses, which report inconsistent conclusions, have been published on this topic (Allen, 1991; 1998; O'Keefe, 1999). Allen (1991) found a slight advantage for two-sided messages ($r = .04$, $k = 26$, $N = 7,547$) regarding persuasive effectiveness. With more data (primary studies), Allen (1998) confirmed the conclusion of his previous study: $r = .03$, $k = 70$, $N = 10,580$. On the contrary, O'Keefe (1999) found no difference between one- and two-sided messages regarding their overall persuasive effect ($r = -.00$, $k = 107$, $N = 20,111$). Although it appears that as more and more recent studies were included, the difference in effectiveness disappears, a closer examination of these meta-analyses reveals a new picture, an understanding of instances when a one-sided message will be more persuasive than a two-sided message and vice versa. Ultimately, there was more consensus than inconsistency between Allen and O'Keefe's analyses when potential moderators are considered.

Potential Moderators

Type of two-sided message (i.e., refutational vs. non-refutational) has been found to be a significant moderator. Allen (1991) found that onesided messages were actually more effective than two-sided messages when they are non-refutational ($r = -.06$, $k = 6$, $N = 1,819$); while the pattern is reversed when the two-sided messages are refutational ($r = .08$, $k = 19$, $N = 5,624$). Again, this finding is confirmed in the 1998 piece. Onesided messages were more effective than non-refutational two-sided messages ($r = -.09$, $k = 26$, $N = 3,159$); and the pattern is reversed when the two-sided messages are refutational ($r = .07$, $k = 43$, $N = 7,317$). With more data, O'Keefe's (1999) findings were very similar. One-sided messages were again found to be more persuasive than non-refutational two-sided messages ($r = -.05$, $k = 65$), but less persuasive than refutational two-sided messages ($r = .08$, $k = 42$). This shows that the inconsistency in overall conclusion was due to the fact that O'Keefe's analysis included more studies that compared one-sided and non-refutational two-sided messages, which privileged one-sided messages (65 in O'Keefe, 1999, vs. 26 in Allen, 1998), and canceled out the advantage of refutational two-sided messages over one-sided messages.

It is generally believed that refutational two-sided messages are more effective because the representation of opposing statements reduces counter-arguing by the recipients. Instead of trying to think of the opposition's arguments to combat the message advocacy, they are presented in the message. This in turn may lead to more positive cognitive responses than would occur in non-refutational messages (McGuire, 1985).

Audience Favorability

Allen (1991, 1998) and O'Keefe (1999) both found audience favorability to be a significant moderator. Allen (1991) found that one- and two-sided messages did not differ in their persuasiveness when the audience's pre-existing attitude was favorable, that is, toward the message advocacy ($r = .00$, $k = 8$, $N = 2,952$); while twosided messages were more effective when the audience's pre-existing attitude was unfavorable ($r = .08$, $k = 9$, $N = 1,195$). Allen (1998) suggested the interaction between type of two-sided message and audience favorability could be a moderator because the sample was heterogeneous. However, because of the small number of studies available, a formal test of this potential moderator was impossible. On the other hand, while O'Keefe (1999) also found audience favorability appeared to have some influence on the persuasion process, his conclusion was not exactly consistent with that of Allen (1991). O'Keefe found one-sided messages were significantly

more effective than two-sided messages when the audience had an initial attitude toward the topic, whether it was initially favorable ($r = -.14$, $k = 10$) or unfavorable ($r = -.11$, $k = 9$). There was no such difference between one- and two-sided messages when the audience was initially neutral ($r = -.02$, $k = 36$).

Advertisement versus Non-advertisement

One key difference between Allen (1998) and O'Keefe (1999) was the number and types of primary studies included in the meta-analysis. More advertising research was included in O'Keefe's study, which appears to be a moderator as well. O'Keefe found that whether the message was an advertisement or non-advertisement did not make a difference in the effectiveness of one- vs. two-sided messages ($r = .00$, $k = 35$ for advertising messages, and $r = -.00$, $k = 72$ for nonadvertising messages). However, when combined with type of two-sided message, whether or not the message was an advertisement did appear to have some influence. For non-advertising messages, there was a pattern in which refutational two-sided messages were more effective than one-sided messages ($r = .08$, $k = 33$), which in turn were more effective than non-refutational two-sided messages ($r = -.07$, $k = 39$). This pattern did not hold when only advertisements were examined; there was no significant difference in persuasion between two-sided messages of either kind and one-sided messages.

O'Keefe (1999) also assessed the impact of one- and two-sided messages on credibility. Overall, there was a significant advantage in perceived credibility for two-sided messages ($r = .09$, $k = 56$, $N = 6,937$). However, this advantage was only significant for advertising messages ($r = .15$) and not for non-advertising messages ($r = .04$). O'Keefe suggested credibility may be jointly influenced by topic and type of two-sided message, but there was not sufficient data to test that possibility.

Including only studies that used advertisements, Eisend (2006) conducted a meta-analysis examining differences between one- and twosided messages based on message structure, the persuader (marketer), and audience variables. Unlike O'Keefe, Eisend found two-sided advertisements were more effective than one-sided advertisements ($r = .07$, $k = 217$); although the effect size was small. Two-sided messages also significantly increased source credibility ($r = .22$, $k = 32$, $N = 1,554$), perceived novelty ($r = .35$, $k = 4$, $N = 185$), and positive cognitive responses ($r = .09$, $k = 10$, $N = 465$); they decreased negative cognitive responses ($r = -.18$, $k = 13$, $N = 615$) and resulted in more favorable attitudes toward the message ($r = -.05$, $k = 56$, $N = 3,305$) and the brand ($r = .12$, $k = 65$, $N = 3,152$). Several moderators, conducted with two-sided messages only in regression models, were found to significantly impact one or more of the outcome variables.

For example, greater amounts of negative information presented increased favorable attitudes toward the brand (unstandardized regression coefficient $B = .47$, $k = 40$, $p < .05$), and increased purchase intention ($B = .63$, $k = 22$, $p < .001$), but it also increased negative attitudes toward the advertisement ($B = -.39$, $p < .001$). When negative information was placed first, source credibility ($B = -.64$, $k = 32$, $p < .001$) and favorable attitude toward the brand ($B = -.12$, $k = 48$, $p < .001$) decreased. When negative information was placed last, favorable attitude toward the brand increased ($B = .15$, $k = 40$, $p < .001$). Eisend's results suggest that negative information should be included at the end of an advertisement; but this may not be true with other types of messages (i.e., health and political).

O'Keefe's (1999) meta-analysis included more advertising studies ($n = 35$) than Eisend's

(2006) meta-analysis (*n* = 29), and between the two authors, only 13 articles overlapped. The analyses for the most part also examined different outcome variables, so it seems likely the differences between the meta-analyses account for some of the differences among their results. One result, however, was consistent between them. Both found two-sided advertisements to be more credible than one-sided advertisements.

Message Structure

Message structure concerns primarily with how either the data or the claim are presented in persuasive communication. Two features related to message structure have received some attention in the persuasion literature: (1) climax versus anticlimax order of arguments and (2) conclusion explicitness.

Climax versus Anticlimax

In a climax structure, the most important arguments of a persuasive message are presented at the end of the message; while in an anticlimax structure, the most important arguments are presented first. Regarding overall persuasive effectiveness, there seems to be little difference between the two structures (Gilkinson, Paulson, & Sikkink, 1954; Gulley & Berlo, 1956; Sikkink, 1956; Sponberg, 1946). Available studies on climax versus anticlimax structure seem to be dated; and no systematic review is available. The lack of interest in this topic has probably been due to a lack of significant differences; and the lack of systematic review is probably due to a small number of studies. Available studies also tend to be in a public speaking setting, rather than in mediated persuasion. O'Keefe (2002) observed that it might be more advantageous to present a message in an anticlimax structure when time is limited and the message will likely be interrupted or stopped, for example, appellate oral arguments in U.S. courts or (televised) debate between political candidates. Such benefits, however, might be nonexistent in mediated persuasive messages, especially when the message is presented in a modality with high level of referability (i.e., the receiver is able to play back or read the message multiple times if they want to).

Conclusion Explicitness

Conclusion explicitness, however, has received substantially more attention in the literature, with two meta-analytic studies on the topic (Cruz, 1998; O'Keefe, 1997). Conceptually, researchers have disagreed over which conclusion, explicit or implicit, is more effective in terms of persuasion. Three explanations have been proposed to argue that messages with implicit conclusions should be more persuasive than those with explicit conclusions. First, Hovland and Mandell (1952) argued that messages are more persuasive when the conclusion is omitted and receivers are able to draw their own conclusions. The second explanation is rooted in the theory of psychological reactance (Brehm, 1966; Brehm & Brehm, 1981) and suggests that messages with explicit conclusions show clear intention to persuade and may be perceived as more threatening to an individual's freedom.

Hence, messages with explicit conclusions are more likely to activate psychological reactance, which reduces their persuasive impact. The third explanation suggests that explicit conclusions in persuasive messages reduce source credibility because an explicit message source may appear to have a vested interest in persuading the audience, and is therefore perceived as less trustworthy. On the other hand, an implicit message source may appear to be less biased and more objective, and therefore perceived as more trustworthy.

However, others disagree regarding the impact of conclusion explicitness on source credibility; and consequently disagree about the persuasiveness of implicit conclusion messages. Results from two meta-analyses showed that in fact the opposite was true. O'Keefe (1997) found that messages with explicit conclusions were more persuasive than those with implicit conclusions (r = .12, k = 14, N = 2,649), as did Cruz (1998; r = .05, k = 7, N = 1,675). It should be noted that there were eight studies included in O'Keefe that were not in Cruz, while Cruz had one study that was not included in O'Keefe. One explanation for the relative effectiveness of messages with explicit conclusions is related to source credibility, essentially reversing the argument made in favor of implicit conclusions. Hovland and Mandell (1952) argued that an explicit conclusion would increase source credibility because the source of an implicit message may be seen as having something to conceal; while the source of an explicit message may be seen as frank and forthright.

Potential Moderators

Researchers also have proposed conditions when messages with explicit conclusions would be more persuasive. First, when receivers are unable (due to lack of intelligence or prior knowledge) to comprehend an implicit conclusion, according to McGuire's (1968, 1989) information processing model, they will not be persuaded. In other words, ability could be a moderator of the relative effectiveness of explicit versus implicit messages. Less intelligent receivers require an explicit conclusion for understanding (to be persuaded), whereas more intelligent receivers can comprehend implicit conclusions. Another potential moderator is involvement (Kardes, 1988; Sawyer & Howard, 1991; Tubbs, 1968). These scholars argue that individuals with high levels of involvement tend to reach the correct conclusions spontaneously after hearing an implicit message, and more frequently so than would individuals with low levels of involvement. Such self-generated conclusions then lead to more persuasion. The third potential moderator is the recipient's pre-existing/initial position (Fine, 1957; Weiss & Steenbock, 1965). Weiss and Steenbock argued that individuals would resist a persuasive message with an explicit conclusion, but accept an implicit message, if the message advocacy is inconsistent with their pre-existing position. On the other hand, when the conclusion is consistent with the recipients' pre-existing position, individuals would be more receptive to explicit messages.

O'Keefe (1997) tested two potential moderators: intelligence and initial position. Neither was found to be significant. Cruz (1998) attempted to assess the role of all three potential moderators, but also lacked significant results. He found source credibility does not moderate the association between conclusion type and persuasion; nor does it mediate the relationship between conclusion drawing and persuasion. Initial position was not found to be a significant moderator either, and there were too few studies that looked at the potential role of involvement to draw any conclusions. In the same article, Cruz also reported an empirical study he conducted to test these three moderators. The results were consistent with both his and O'Keefe's meta-analyses: Involvement was not a significant moderator and conclusion drawing was not associated with source credibility. However, Cruz did find the impact of conclusion drawing on persuasion was mediated by comprehension and perceived position of the source.

Message Style

Persuasive messages can vary in the ways information is presented linguistically (McQuarrie & Mick, 1999), although the information might be the same or equivalent. Some examples of

message styles include: the use of hyperbole (Colston & Keller, 1998) and visual hyperbole (Callister & Stern, 2007), coherence markers (Kamalski, Lentz, Sanders, & Zwaan, 2008), phonetic symbolism (Lowrey & Shrum, 2007; Yorkston & Menon, 2004), powerful versus powerless language (Lakoff, 1975; O'Barr, 1982), metaphor (Sopory & Dillard, 2002), and message framing (O'Keefe & Jensen, 2006). The research reviewed in this chapter focuses on the effects of such stylistic features that are intrinsic to the messages, rather than the corresponding psychological responses (O'Keefe, 2003; Tao & Bucy, 2007) that might mediate such effects. The persuasive impacts of three message style features are examined: powerful versus powerless language, metaphor, and message framing. A brief overview of recent work on coherence markers in text-based persuasion is also included.

Powerful versus Powerless Language

Based on Lakoff's (1975) model of women's language, O'Barr (1982) and associates started investigating the effects of powerful and powerless language. Powerless language is characterized with frequent use of specific linguistic features that indicate lower social power/status of the speaker such as hedges, hesitation forms, polite forms, and questioning intonations. Language that does not demonstrate frequent use of such features is considered powerful language. The majority of the research on powerful versus powerless language focuses on applied contexts, such as the courtroom, although the messages are not necessarily delivered as speeches (e.g., Areni & Sparks, 2005; Hosman & Siltanen, 2006). Source credibility is oftentimes an outcome variable of interest in addition to attitude change.

To date, there has been one meta-analytic study on the impact of powerful/powerless language on source credibility and persuasion (Burrell & Koper, 1998). Burrell and Koper found that powerful language is significantly more persuasive than powerless language ($r = .23$, $k = 5$, $N = 413$. In addition, powerful language also enhances source credibility ($r = .21$, $k = 14$, $N = 1,299$). The effect sizes appeared to be homogenous in both cases, but the obvious limitation is that there were a small number of studies reviewed.

Additional evidence comes from more recent studies that replicated and extended the results from the Burrell and Koper (1998) meta-analysis. The impact of powerful language on source credibility was replicated by Hosman and Siltanen (2006), and Areni and Sparks (2005) replicated the impact of powerful language on persuasion. In addition, Areni and Sparks (2005) found evidence that when presented in video format, powerful/powerless language functions as a peripheral cue: Powerful language led to more positive source-related thoughts than powerless language. On the other hand, when presented in print format, powerless linguistic features (i.e., hedges, hesitation forms, polite forms, and questioning intonations) might direct the receivers' attention toward the message source and results in more source-related cognitive response (but of negative valence). The (relative) ineffectiveness of powerless language may be attributed to the negative perception of the source and the resulting biasing influence.

Metaphor

As a figure of speech, metaphor is traditionally defined as a comparison between two (dissimilar) objects (e.g., "A is B."), such that the comparison results in aspects that normally apply to one object would be transferred to the other (Sopory & Dillard, 2002). The object whose meaning is transferred (B in this particular example) is called the base, and the object that receives the meaning that it is otherwise not associated with (A in this example) is the

target. Sopory and Dillard argued that, despite being distinctive linguistic devices, simile, analogy, and personification can be treated as equivalent to metaphor when it comes to persuasive effects because they all involve transferring a certain meaning from the base to the target.

Scholars believe that metaphor has a powerful impact on persuasion and can structure, transform, and create knowledge; evoke emotions; and change attitudes (Aristotle, 1952; Lakoff & Turner, 1989; MacCormac, 1985). Six different explanations have been provided for the persuasive impact of metaphor. The first explanation, *pleasure or relief*, is rooted in the assumption that metaphors are semantic anomalies, and the impact of a metaphor comes from how it is comprehended. Both pleasure and relief approaches argue that the perception that there is an "error" in the metaphorical message leads to negative tension, although the reasoning of these approaches is slightly different. The pleasure approach suggests that resolving the true meaning for the metaphor and finding the novel similarities between the base and the target is a pleasurable experience. On the other hand, the relief approach posits that comprehending the metaphor dissipates the negative tension, thus experiencing relief. Pleasure and relief are both rewarding and reinforce the metaphorical meaning, which results in the persuasive impact.

The second explanation lies in *source credibility*. This explanation argues that communicators who use metaphors are perceived to be more credible than ones who do not. Aristotle (1952) argued that the use of metaphor is a sign of genius. Bowers and Osborn (1966) suggested that by using metaphor, the communicator points out previously unknown similarities between the target and the base, which is a source of interest and pleasure to the receiver; hence, source credibility is enhanced.

The third explanation assumes that any persuasive message is going to encounter considerable resistance in the form of counter-arguments. This view argues that the comprehension of a metaphor requires a great deal of cognitive capacity, thus fewer cognitive resources are available for counter-arguments. Persuasion is then increased by *reducing counter-arguments.*

The fourth explanation, *resource matching*, also concerns cognitive capacity in message processing. Similar to the reduced counter-arguments explanation, this view proposes that comprehending a metaphor requires cognitive elaboration, hence higher demand for cognitive capacity. In addition, this explanation acknowledges that there is limited cognitive capacity. When there is a match between the resources required to comprehend the metaphor and the resources available, maximum elaboration is possible and persuasion is enhanced. On the other hand, when there is too little or too much cognitive resource (i.e., a mismatch), persuasion is inhibited. When resources are insufficient, the metaphor is not comprehended; hence, less persuasion. When resources are too abundant, there will either be more counter-arguments or more irrelevant thoughts that dilute the persuasive impact of the metaphor.

The fifth explanation, *stimulated elaboration*, is attributed to two theories. The structure-mapping theory (Gentner, 1983, 1989; Whaley & Wagner, 2000) proposes that understanding metaphors stimulates cognitive elaboration by focusing on a similar relational structure between the target and the base, rather than simple inferences. The increased semantic connections then produce greater message elaboration. The salience-imbalance theory (Ortony, 1979) proposes that the common features of the target and base are assembled into the ground when a metaphor is comprehended. The evaluation associated with these common features is also part of the ground. In other words, both the groundrelevant attributes

and their associated evaluations are integrated in the message elaboration. Therefore, more valenced thoughts would be generated, which leads to more persuasion. With different assumptions and rationale, both theories argue that metaphors facilitate persuasion by enhancing the number of favorable cognitive responses to the persuasive message.

The sixth explanation, *superior organization*, is also based on the structure-mapping theory (Gentner, 1983, 1989). This view proposes that a metaphor helps to structure and organize the arguments in a persuasive message (see Mio, 1996). When a metaphor activates a great number of semantic associations, the arguments are connected more coherently. In addition, a metaphor also increases the salience of these arguments. Better coherence and salience facilitates the comprehension of the arguments, leading to more persuasion (McGuire, 1985).

The meta-analysis by Sopory and Dillard (2002) assessed the overall persuasive effectiveness of metaphor and tested some of the explanations. They found that compared to literal messages, metaphor is significantly more persuasive ($r = .07$, $k = 38$, $N = 3,945$). The data did not allow for a test of the pleasure or relief explanation since no mediating variable was measured; and the same was more or less true for the resource matching explanation. The advantage of novel metaphors ($r = .12$) over old metaphors ($r = .01$) implies that source credibility could be an explanation; however, there was no significant effect of metaphor on perceived competence or character aspects of source credibility. The use of metaphor did enhance the perceived dynamism of the source ($r = .06$), meaning that it is less likely that source credibility could have explained the effect of metaphor on persuasion, as the theoretical explanation lies in the aspects of competence and character in source credibility. There was also no evidence for the reduced counterargument or the stimulated elaboration explanation. One potential reason, however, could be due to the small number of studies that looked at message elaboration (i.e., number of thoughts of agreements and/or disagreements).

One explanation, the superior organization explanation, did receive consistent support. The results from the meta-analysis showed that: (1) Persuasive messages are more persuasive with a single metaphor ($r = .31$) than with more than one metaphor ($r = .11$); (2) metaphors are also most persuasive when non-extended ($r = .42$) than extended ($r = .18$); and (3) metaphors are more persuasive when placed in the introduction position of a message ($r = .25$) than when introduced later in the message ($r = -.05$; Sopory & Dillard, 2002). Combined, these results show that superior organization seems to be the best explanation for the persuasive impact of metaphors.

Message Framing

Another stylistic feature that has received substantial attention in the literature is message framing. Message framing refers to the persuasive strategy either to highlight benefits and rewards from compliance with the message advocacy (i.e., the gain frame), or to emphasize the costs and punishments associated with noncompliance (i.e., the loss frame). There are several explanations for the relative effectiveness of gain versus loss frame.

One explanation in favor of the loss frame is based on the premise that the loss frame leads to higher levels of message elaboration, hence better persuasion. The most frequently mentioned perspective in support of this claim is the negativity bias, which proposes that individuals assign greater weight to negatively valenced information than positively valenced information, even when they are equivalent in intensity (Rozin & Royzman, 2001). The second explanation is rooted in the elaboration likelihood model (ELM, Petty & Cacioppo, 1986). This

explanation considers the inherent valence associated with the two frames as peripheral cues (e.g., Maheswaran & Meyers-Levy, 1990; Rothman, Salovey, Antone, Keough, & Martin, 1993), which affect subsequent message processing. This logic suggests that the loss frame would be processed more carefully because it is more attention grabbing and/or it is more likely to violate individuals' expectancies. The third explanation lies in the fear appeal literature. Conceptually and operationally, the loss frame and the threat-to-health component of a fear appeal message share certain common characteristics (O'Keefe & Jensen, 2008). Other research shows that fear can increase message processing (e.g., Das, de Wit, & Stroebe, 2003; Hale, Lemieux, & Mongeau, 1995; Slater, Karan, Rouner, & Walters, 2002). Lazarus's (1991) cognitive-motivational-relational theory also suggests that the function of fear is to protect the individual from risks. Thus, fear motivates individuals to seek and process information that offers protection from and/or reduction of risks involved in the message (Das et al., 2003; Nabi, 2003).

There are also a few explanations in favor of the gain frame. The first explanation lies in affect and persuasion. There has been evidence that the gain frame leads to stronger positive affect and the loss frame stronger negative affect (e.g., Millar & Millar, 2000; Schneider et al., 2001; Shen & Dillard, 2007). In turn, this positive affect might facilitate persuasion (Hullett, 2005). The second explanation involves psychological reactance (Reinhart, Marshall, Feeley, & Tutzauer, 2007). The loss frame might be perceived as more threatening to an individual's freedom for two reasons: (1) by depicting negative consequences, the language used in the loss frame might be perceived as more intense; and (2) due to the fact that the loss frame arouses stronger negative emotions, it tends to be perceived as more manipulative (e.g., Witte, 1994). Therefore, the loss frame tends to arouse stronger psychological reactance, which potentially makes the gain frame more persuasive.

O'Keefe and Jensen have conducted a series of meta-analyses examining the relative effectiveness of gain versus loss frame and potential moderators (2006, 2007, 2009) and the impact of message framing on message processing (2008). These meta-analyses showed that the two message frames do not differ in their overall persuasive impact ($r = .02$, k = 164, $N = 50,780$); the effect size was not statistically different from zero (95% confidence interval: $-.01-.04$; O'Keefe & Jensen, 2006). Surprisingly, the gain frame leads to slightly but significantly greater message elaboration than the loss frame ($r = .06$, $k = 42$, $N = 6,378$; O'Keefe & Jensen, 2008). Scholars have suggested that main effects conclusions regarding depth of message processing tend to be overly simple, and that moderators should be considered. There has been evidence that behavioral inhibition/activation systems (BIS/BAS) might be moderators. Specifically, BIS-oriented individuals process the loss frame in more depth, while BAS-oriented individuals process the gain frame in a more effortful manner (e.g., Shen & Dillard, 2009).

Rothman and colleagues (Rothman, Bartels, Wlaschin, & Salovey, 2006; Rothman & Salovey, 1997; Salovey, Schneider, & Apanovitch, 2002) argue that when the targeted behavior is perceived as risky and uncertain (i.e., detection behavior), the loss frame is more effective; while the gain frame will be more effective when the targeted behavior is viewed as safe and certain (i.e., prevention behavior). O'Keefe and Jensen also tested these potential moderators in their meta-analysis series. Type of behavior did not emerge as a significant moderator for the persuasive effect (O'Keefe & Jensen, 2006), nor for the impact on message elaboration (O'Keefe & Jensen, 2008). When examined within each type of behavior, the gain frame was found to be more persuasive than the loss frame for encouraging disease prevention behaviors ($r = .03$, $k = .93$, $N = 21,656$); however, this effect can be attributed to the studies included that examined the topic of dental hygiene behaviors. Brushing and flossing are

behaviors generally thought of positively; most individuals believe these are useful preventative behaviors and are widely socially acceptable. There was no significant difference between the effectiveness of the two frames for any other prevention behaviors (O'Keefe & Jensen, 2007). In addition, the gain frame leads to greater message elaboration than the loss frame within the topic of disease prevention behavior ($r = .08$; O'Keefe & Jensen, 2008).

Similarly, the loss frame was found to be more persuasive than the gain frame when advocating disease detection behaviors ($r = -.04$, $k = 53$, $N = 9{,}145$). Again, this effect can be attributed to the included studies on the topic of breast cancer self-exams, another widely accepted health behavior. There was no message framing effect for any other type of disease detection behaviors (O'Keefe & Jensen, 2009). Within disease detection behavior, there was also no difference between the two frames regarding their impact on message elaboration (O'Keefe & Jensen, 2008).

Despite the presence of attractive explanatory mechanisms (e.g., the negativity bias), together these results suggest that there is no overall difference in persuasiveness between gain-framed and loss-framed messages. Rothman and Updegraff (2010) suggest that we need to turn to both mediating and moderating variables to better our understanding of message framing effects. One possible explanation for the null effect is that the mechanism in favor of the loss frame and the one in favor of the gain frame (e.g., psychological reactance) could be at work at the same time and end up canceling each other out. To better understand and investigate message framing, both mediating mechanisms need to be operationalized and accounted for in empirical studies simultaneously, rather than just assumed, or only one of them should be included.

In their responses to O'Keefe and Jensen (2007), Latimer, Salovey, and Rothman (2007) called for more research on potential moderators, particularly motivational variables. That call was echoed in Rothman and Updegraff (2010). Rothman and Updegraff proposed that there are two general perspectives regarding moderators of message framing effects: (1) individuals' *construal* of targeted health behavior (e.g., detection vs. prevention, Rothman et al., 2006; Salovey et al., 2002), and (2) individuals' dispositional sensitivity to outcomes presented in gain/loss (e.g., Mann, Sherman, & Updegraff, 2004; Shen & Dillard, 2007; Yan, Dillard, & Shen, 2010). So far, these studies have offered some evidence for these mediating and moderating variables, but there has yet to be systematic/meta-analytic reviews regarding the role and impact of these factors.

Textual Messages and Style

Although no meta-analyses are currently available, recent and interesting research has been conducted on the persuasive impact of coherence markers in written messages. Coherence markers like connectives (because, therefore, so) and lexical cue phrases (as a result, for that reason) are grammatical tools that allow the author to make an explicit connection between the cause and result or evidence and conclusion. It has been argued this more complex sentence structure actually makes reading easier for the audience because they do not need to make an implicit connection (Sanders & Spooren, 2007).

Not all coherence markers have the same effect on persuasive communication; however, and recent work has explored some of these differences. Coherence markers of subjective relationships may cause a forewarning effect (signaling the audience that the message is persuasive) and result in message resistance. Coherence markers of objective relationships, however, may not. Whether a relationship is subjective or objective is determined by the word

or phrase choice and, occasionally, the structure of the sentence. Subjective causality occurs when the persuader presents arguments to demonstrate her or his conclusion; objective causality occurs when the persuader is simply reporting a causal relationship that already exists. Take the following sentences as examples: (1) Crest is the best brand of toothpaste because it is the brand my mom bought; (2) I ran out of toothpaste this morning, so I need to stop at the store on my way home. The first sentence demonstrates subjective causality; it equates my mom's taste with quality and serves as an argument for why Crest is the best brand of toothpaste. The second sentence demonstrates objective causality; it explains why I am stopping at the store.

Controlling for previous knowledge, Kamalski and colleagues (Kamalski et al., 2008), found that sentences with objective markers were more persuasive than sentences with subjective markers within topic. However, the text with no markers and the version that contained both objective and subjective markers were not significantly different from the objective-only or subjective-only text versions. It is important to note, though, that the comparison sentences were not equivalent and the manipulations were complex; each version of text was two pages long and contained 25 different manipulations of text. Ultimately, additional research is needed to determine potential moderators. For example, text-based persuasion is a context when the education level, or more specifically reading ability, of the audience could be extremely important.

Message Features and Persuasion

In this chapter, we reviewed existing research on the effects of some major message features on persuasion outcomes, including content (type of evidence and one- vs. two-sided messages), structure (climax vs. anti-climax structure and explicit vs. implicit conclusion), and style (powerful vs. powerless language, metaphor, message framing, and coherence markers). Overall, available metaanalyses show that these message features have significant effects on persuasion. Dillard and Pfau (2002) argued that studies on the impact of message features are at the heart of persuasion research. Conceptually speaking, persuasion research on message features is uniquely communicative and distinguishes such research from those in the psychology tradition. It does not mean, however, that we can study message effects without considering the psychological mechanisms that underlie such effects. Burleson (1992) argued that if we are to take communication research seriously, we need to study both. This review of the literature suggests that communication scholars are indeed doing that. Researchers have proposed mediating variables that explain effects of message features, and have been testing moderators in meta-analytic studies as well.

Practically speaking, findings regarding the effectiveness of message features have direct implications and should provide clear guidelines for message design and production. Arguably, all persuasion theories must consider message features and have implications for message design and production to be good theories. This is what brings truth-value to Kurt Lewin's (1951, p. 169) famous quote "there is nothing so practical as a good theory."

In his chapter in the first edition, Hosman (2002) suggested that in persuasion studies, message features can be analyzed at a micro and linguistic level: phonology, syntax, lexicon, and text/narrative. The literature reviewed in this chapter analyzes message features at a rather macro level: content, structure, and style. This difference demonstrates that there are different approaches to the study of message features in persuasion; and that the meaning of message features is not necessarily objective in nature. McQuarrie and Mick (1999) suggested that interpretation of message features can be (1) based on the presence/absence

of features (i.e., more objective); (2) based on receiver response, which emphasizes the receivers' perception and interpretation of the message features; and (3) text-interpretative meaning that draws on semiotic, rhetorical, and literary theories. Similarly, O'Keefe (2003) observed that in the literature, message features are either defined in an effect-based approach or in terms of intrinsic features (see also Tao & Bucy, 2007).

For both theoretical and practical purposes, message feature definitions based on effects should be avoided in favor of definitions based on intrinsic features (O'Keefe, 2003). On one hand, variations in message effects variables are caused by the intrinsic features of the message. Implicitly or explicitly, these message effects variables are the mediators of the message featurespersuasion outcomes relationship. On the other hand, effects-based definitions offer little when it comes to guidance for message design and production. O'Keefe (2003) argued that failure to recognize the difference between the two types of definitions and oversight of the relationships among these two types of variables and persuasion outcomes would thwart progress in understanding of the effects of message features on persuasion, and understanding of the persuasion process in general. We strive to echo his position and the call for more and better conceptualized and operationalized research on message features and persuasion, with emphasis not just on effects, but on the mediating mechanisms and potential moderators as well. Only in this approach can we further our understanding of the effects of message features on persuasion, test and extend persuasion theories, and at the same time, provide guidance for message design and production for the practice of persuasion.

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- moderator
- persuasion
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- framing

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