

The Linear Interaction Model of Personality Effects in Health Communication

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The recent growth of research in message tailoring has opened up new avenues for researchers to use personality variables for message delivery. This article builds on research on idiocentrism and self-monitoring to propose a framework for message appeal construction. Based on a scheme for appeal categorization borrowed from commercial marketing, the article suggests that low and high idiocentrics differ from each other in the way they respond to appeal types. Similarly, significant differences are demonstrated between low and high self-monitors in the realm of their response to message appeals. A linear interaction model is proposed to document the combined effects of self-monitoring and idiocentrism.

Health communication scholars have often debated over the effectiveness of rational and emotional health appeals (Dutta-Bergman & Wells, 2002; Flora & Maibach, 1990). Taking a normative approach to appeal selection, these scholars have been motivated by the universal question: Which appeal type works better than the other does? This normative approach is reflected in many early health campaigns that focused on rational rather than emotional arguments and urged audiences to seek information rather than advocating specific behaviors to reduce the chance of contracting the disease (Brinson & Brown, 1997; Dutta & Youn, 1999; Friemuth, Hammond, Edgar, & Monahan, 1990). Flora and Maibach (1990), in their work on cognitive responses to AIDS information, challenged this view, arguing that emotional AIDS messages are more memorable and create more of a desire to seek further information about AIDS than do rational messages. Other em-

pirical evidence supports the findings of Flora and Maibach, pointing out that emotional messages are generally more memorable than rational messages are (Friestad & Thornson, 1985). The fundamental assumption underlying this debate over the effectiveness of rational or emotional messages is that human needs are homogeneous and universal and these needs can be better met by one message type than the other.

The question regarding which appeal type works better than the other is a reflection of the top-down approach that has often led to the failure of health campaigns (Griffin, Dunwoody, & Neuwirth, 1999). Decisions in the top-down approach are made by campaign designers who do not pay much attention to specific audience needs. The fundamental assumption here is that getting the information out to the audience is sufficient to produce behavior change (Dutta & Youn, 1999; Griffin et al., 1999, pp. 230–231). Health communication scholars (Griffin et al., 1999, pp. 230–231) argue that a bottom-up approach is often more successful and involves considerable formative research to better understand the audience before developing a campaign. This article reiterates the need for a consumer-centered approach in health communication campaigns by demonstrating the role of trait-based constructs in audience response to message characteristics. It proposes a segmentation model for appeal selection in health communication based on personality, arguing that the effectiveness of a message type depends upon the needs of the particular audience being communicated to. These needs, in turn, are shaped by systematic trait-based differences between individuals. Such personality-based approaches have been traditionally applied for message development in commercial marketing and advertising over the last three decades (LaBarbera, Weingard, & Yorkston, 1998; Plummer, 1984; Shimp, 1978; Wells, Burnett, & Moriarty, 1998).

Traditionally, personality variables were neglected in health communication campaigns, owing to the dormant and hidden nature of such variables. Media based campaigns that aimed at reaching the greatest number at the least cost used demographics and geographics as segmentation variables because of their easy accessibility (Dutta & Youn, 1999). Driven by low cost-per-thousand figures, health communicators argued that it is much easier to reach a segment based on sex and age than to reach a segment through a personality trait like extraversion. Also, it has been argued that the correlations of different behavioral variables with personality are pretty low.

However, current developments in interactive technology have made it possible for communicators to use personality as a bridge to effective communication. Progress in interactive communication has opened up the doors to individualized communication where the communicator speaks with the individual consumer, meeting his or her basic communication needs. This line of research has pointed out that tailored communication that meets individual consumer needs is much more effective than standardized approaches that send out a single message to all consumers (Rimer & Glassman, 1998; Skinner, Campbell, Rimer, Curry, &

Prochaska, 1999). This article extends that line of work into the domain of personality. Based on its findings, it suggests that personality plays a pivotal role in the context of the persuasive effects of messages and that it may be treated as a basis for message development. The article looks at the different types of image appeals and their relationship with different trait constructs, showing that personality does play an important role in health communication. Based on findings, the article makes practical suggestions for health communicators.

Once it has been identified that two or more personality traits are pivotal to the persuasiveness of an appeal type, the next question is how these traits interact with one another to produce the overall preference for a particular appeal. This article proposes a linear interaction model, suggesting that the preference for an appeal type is a linear product of the individual personality effects. The linear interaction theory suggests directions for predicting the combined effects of two or more orthogonal personality traits.

APPEAL STRATEGIES

Selecting a clear and distinct appeal strategy lies at the core of commercial marketing activities (Gardner & Levy, 1955; Grubb & Grathwhol, 1967; Moran 1973; Park, Jaworski, & MacInnis, 1986; Reynolds & Gutman, 1984; White, 1959). A clearly defined image enables consumers to identify the needs satisfied by a brand (Roth, 1995) and serves as a key to product success (Gardner & Levy, 1955; Roth, 1995). As Roth argues, developing a needs-based image strategy provides the foundation for marketing program development and enables the brand to create a clear and distinct position within its category. This argument can be extrapolated to the arena of social marketing where campaign designers are constantly vying with other products and services to grab the consumers' attention and to get them to adopt and implement a certain behavior. It may be argued that selecting a need-based strategy that matches the communication need of the audience member will lead to an effective social marketing program.

Although the literature demonstrates a large number of classifying systems for appeal types, these systems share common underlying themes. The normative model proposed by Park, Jaworski, and MacInnis (1986) is one of the most comprehensive and most widely used models in current literature (Roth, 1995), and captures the major elements in other models of appeal strategy. According to the normative model, appeal types may be classified as functional, social, and sensory. A functional image strategy is utilitarian in nature and proposes to solve and prevent consumption-related problems (Shavitt, Lowrey, & Han, 1992). Utilitarian attitudes, focusing on the inherent qualities and benefits of the product, maximize the rewards and minimize the punishments obtained from objects in one's environment, guiding the behavior in a direction that obtains the benefits associated with the objects (Katz

1960; Shavitt et al., 1992). Therefore, in the context of preventive messages of health communication, functional appeals focus on the rational elements of a health condition and the corresponding preventive behavior. Such appeals highlight the rewards of the preventive behavior or the punishments obtained by not engaging in the behavior. Social appeals fulfill internally generated needs for self-enhancement, role position, group membership and affiliation, or ego-identification (Park et al., 1986; Roth, 1995), clustered together as the social identity function (Shavitt, 1989). Such strategies are in accord with image-based attitudes that focus on the impressions created by using the product (DeBono & Packer, 1991; Shavitt, 1989; Shavitt et al., 1992; Snyder & DeBono, 1985, 1987). In this context, attitudes function in the service of one's public image and self-expression. According to Smith, Bruner, and White (1956), attitudes help gain social acceptance by mediating relationships with other people. They also symbolize and express one's identity by promoting identification with reference groups. Sensory images build around the novelty, variety-seeking, and sensory-gratification needs. The importance of experiential needs in consumption has been illustrated by work on variety-seeking, consumer aesthetics, and experiential consumption (Hirschman & Holbrook, 1982; Holbrook, 1986; Holbrook & Hirschman, 1982). Therefore, sensory appeals in health communication focus on the sensory benefits of a preventive behavior. The appeal-based framework suggested here reflects the bottom-up approach discussed by Griffin et al. (1999).

Cognitive and behavioral intention measures will be used to compare the responses to the different appeal types. In the context of health communication, cognitive responses play an important role. Consumers that read a message and think about the issue after reading the message are more likely to engage in the preventive behavior than those that do not process the message. Cognitive responses will be measured by self-report items, such as "Makes me read the entire ad," "Makes me think about AIDS," "Makes me consider the pros and cons of risky behavior," and "Makes me think about prevention." Higher order behavioral intention measures will also be used to track audience response in this study.

TWO PERSONALITY CONSTRUCTS: IDIOCENTRISM AND SELF-MONITORING

Personality has received considerable attention in the commercial marketing literature over the last two decades (DeBono & Packer, 1991; Shavitt et al., 1992; Snyder & DeBono, 1985). This literature shows strong interaction between personality and product favorability. These findings from the commercial marketing literature may be extrapolated to the domain of health and social marketing and it may be argued that personality does play an important role in shaping the effectiveness of a specific health appeal strategy.

Among the different personality variables in message preference, self-monitoring has received considerable attention in audience response to advertising (Snyder & DeBono, 1985). Self-monitoring is a personality index that is based on the extent to which an individual is likely to monitor and control his or her expression in situations which contain reliable cues to social appropriateness (Snyder, 1974). Therefore, high self-monitors are typically concerned with projecting social images that allow them to meet the varying needs in various social situations. They are concerned with being the right person in the right place at the right time, and therefore, are sensitive to images of self that they project in social situations. On the other hand, low self-monitors are more concerned with being consistent with their internal feelings and preferences rather than with social appropriateness. They do not attempt to mold their behavior to fit situational and interpersonal considerations (Snyder & DeBono, 1985). The behavior of low self-monitors is often a reflection of their predisposition to act on the basis of relevant inner sources such as attitudes, feelings, and dispositions (Snyder & DeBono, 1985).

High and low self-monitors differ from each other in their responses to the different appeal types (DeBono & Packer, 1991; Shavitt et al., 1992; Snyder & DeBono, 1985). High self-monitors are especially attentive to and influenced by persuasive messages that convey information about the images that they acquire and project through the consumption of the advertised products or services. Concerned with the self-presentational significance of products, high self-monitors respond positively to image-based advertisements, focusing on impressions created by using the product (DeBono & Packer, 1991; Shavitt et al., 1992; Snyder & DeBono, 1985, 1987). The image-based advertisement category serves the social identity functions and is in concurrence with the concept of social brand image strategy introduced by Park et al. (1986). On the other hand, low self-monitors are oriented toward their inner cues and are particularly responsive to advertisements that feature appeals to a product quality (Snyder & DeBono, 1985). Information about product quality is interpreted by the low self-monitors in terms of their underlying attitudes, values, and other evaluative reactions. The focus on quality reflects the utilitarian attitudes of low self-monitors and is analogous to the functional brand image orientation discussed earlier. This leads to the following hypotheses (H):

- H1: High self-monitors will display stronger positive cognitive reaction toward social appeals than toward functional and sensory appeals.
- H2: Low self-monitors will demonstrate stronger positive cognitive reaction toward utilitarian, functional appeals than toward social appeals.

Similar arguments can be made in the context of behavioral components. Differences in the responses of high and low self-monitors have been repeatedly obtained across a wide variety of products and advertisements (Shavitt et al., 1992). The consistent findings suggest that self-monitoring is a pivotal construct that con-

trols the motives of individuals in terms of their differing orientations toward products and advertisements. Yet another argument regarding self-monitoring relates to the degree of consistency demonstrated by high and low self-monitors. The externally oriented high self-monitor is constantly trying to fit in with the situation and, therefore, will demonstrate low consistency between cognition and behavior. On the other hand, the internally oriented low self-monitor demonstrates a consistent pattern of thoughts and behavior, in accordance with his or her internally held beliefs and values. Therefore, the nomological network suggests greater cognition-behavior consistency for low self-monitors than for high self-monitors.

Studies done with preference for appeal types at the cultural level have suggested yet another parameter to consider: individualism (Roth, 1992, 1995). Individualism pertains to people's tendency to value personal and individual time, freedom, and experiences (Dutta-Bergman & Wells, 2002; Hofstede, 1984; Roth, 1995). Individualists make decisions and initiate behaviors independent of others. Individualism has been shown to have particular significance in the context of brand image (Han & Shavitt, 1994; Roth, 1992; Zhang & Gelb, 1996).

Individualists view self as a relatively autonomous, self-sufficient entity independent from its surrounding interpersonal context (Triandis, 1989). An Individual strives to become independent of others by attending to his or her private qualities and cultivating and expressing those inner attributes that uniquely distinguish him or her from others (Markus & Kitayama, 1991; Suh, Deiner, Oishi, & Triandis, 1998). The individuals, putting a high value on the internal features of self, perceive samples of subjective thoughts and feelings as more diagnostic of their true self than observable behavior (Suh et al., 1998). On the other hand, collectivists are more focused on maintaining harmony with others by coming to terms with their needs and expectations (Suh et al., 1998). If necessary, collectivists subordinate their personal feelings and wishes to the goals of their in-group.

Roth (1995), in his cross-cultural research on the effectiveness of appeal types, observed that high individualism had a positive and marginally significant impact on the market share of functional and sensory brand images. Low individualism (also termed as collectivism), on the other hand, had a significantly positive correlation with greater market shares of social brand images. This observation has also supported by other research (Han & Shavitt, 1994; Zhang & Gelb, 1996). Subjects in individualistic cultures are persuaded by advertisements emphasizing personal benefits, weighing individual likes and dislikes, and perceived costs and benefits (Han & Shavitt, 1994). Social norms, roles, and values are pivotal in collectivistic cultures, and, therefore, social brand images that reinforce group membership and affiliation are more effective in such cultures.

Recent research has demonstrated that differences in individualism and collectivism may also be observed at the individual level within cultures (Kim, 1994; Triandis, 1989). In other words, systematic trait-level differences in individualism and collectivism have been observed for people within the same culture (Lay et al.,

1998). Triandis (1989) coined the term *idiocentrism* to describe individualism at the individual level. Therefore, Roth's (1995) findings at the cultural level may be extrapolated to the individual level of *idiocentrism*, suggesting that high *idiocentrics* will have a stronger preference for functional and sensory appeals while low *idiocentrics* will prefer social brand appeals. More formally, *idiocentrism* is hypothesized to affect brand image as follows:

- H3: High *idiocentrics* will have a more positive cognitive reaction toward functional appeals as compared to social appeals.
- H4: Low *idiocentrics* will demonstrate a more positive cognitive reaction toward social appeals as compared to functional and sensory appeals.

Similar hypotheses (5–8) are established in the context of behavioral intention for self-monitoring and *idiocentrism*. Hypothesis formation in the realm of intention is based on the theoretical framework that attitude, behavior and cognition are all linked to one another and, therefore, are expected to display similar effects for the same trait-level constructs.

- H5: Low self-monitors will have a more positive behavioral intention toward functional appeals as compared to social appeals.
- H6: High self-monitors will have a more behavioral intention toward social appeals as compared to functional and sensory appeals.
- H7: High *idiocentrics* will have a more positive behavioral intention toward functional appeals as compared to social appeals.
- H8: Low *idiocentrics* will have a more positive behavioral intention toward social appeals as compared to functional and sensory appeals.

In addition to studying the individual effects of self-monitoring and *idiocentrism*, this research proposes to study the interaction between these two traits in terms of their role in the determination of cognition and behavioral intention in the context of the different appeal types. A simple linear interaction model is suggested here. According to the linear model, the preference for a particular appeal type is a function of the additive effects of the individual personality effects. Therefore, self-monitoring and *idiocentrism* will either reinforce each other or counter each other in affecting the preference for an appeal type, based on their individual effects on that appeal type. For instance, high self-monitoring and low *idiocentrism* will add up to produce a strong preference for social appeals. Similarly, preferential reinforcement will be observed for the low self-monitoring and high *idiocentrism* grid since both types demonstrate a preference for functional appeals. The model predicting the combined effects of self-monitoring and *idiocentrism* is shown in Table 1.

In summary, this linear model further assumes that when both *idiocentrism* and self-monitoring reinforce a particular type of appeal, that appeal will be expressed

TABLE 1
The Linear Model Predicting the Interaction Between Self-Monitoring and
Idiocentrism as Predictor of Behavioral Intention and Cognition

	<i>Low Idiocentrics</i>	<i>High Idiocentrics</i>
Low self-monitors	Functional + Social	Functional
High self-monitors	Social	Social + Functional

more strongly within that specific interaction category as compared to the other appeal types. The linear model may be extrapolated to other domains of personality where the effects of two or more personality traits are studied together.

METHOD

Participants

The 93 respondents were undergraduate students at the University of Minnesota. Participants were recruited from two different Journalism and Mass Communication classes, and received extra credit in their respective courses in exchange for participation. The sample was comprised of 45.2% men and 52.8% women. The ages ranged between 18 and 28, with a mean age of 21.38 years.

Message Appeal

The advertisements were created instead of being picked from those available in order to avoid recognition bias and any other effects of prior attitudes. Also, it was important to create mutually exclusive slogans that appropriately represent each of the categories. Advertisements contained three headlines—coded A, B, and C—each representing a particular appeal type, and simple body copy to eliminate any bias created by more elaborate executions. Headlines were manipulated to reflect functional, social, and sensory appeal types. Initially, nine advertisement headlines were designed by the author, each appeal type being represented by three headlines. Three judges viewed all nine headlines and independently classified them as functional, social, or sensory. Based on the scores assigned by the coders and the agreement among these scores, three headlines were picked, each representing a particular category. The three judges agreed on 100% of their headline classification for the three selected headlines.

Presentation of Ads

Each participant read and responded to all the three advertisement headlines. The three headlines were arranged beside a simple and general body copy, in harmony

TABLE 2
Functional, Social, and Sensory Appeals Used in the Study

<i>Appeal Type</i>	<i>Headline</i>
Functional	Save your money, time, and life. Act now!
Social	It's not cool to be careless.
Sensory	Enjoy the pleasures of life ... safely.

with each appeal type. The order of the appeals was counterbalanced so that a functional appeal was read first for one set of questionnaires, a social appeal was read first for another set, and a sensory appeal was read first for the rest. The participants were randomly assigned to the conditions.

Independent Measures

The participants were measured in terms of their degree of idiocentrism, using the individualism instrument created by Triandis (1989). A reliability test yielded a Cronbach's alpha of .78. Based on the median score, respondents were classified as high and low idiocentrics. Self-monitoring was measured using Snyder's (1974) self-monitoring scale. Cronbach's alpha was at .84. On the basis of a median split, half of the respondents were classified as high self-monitors and half as low self-monitors. Idiocentrism and self-monitoring reported very low correlation ($R = .03$, nonsignificant).

Dependent Measures

Participants rated each of the advertisement headlines on a 7-point Likert scale. Cognition was measured on a 7-point Likert scale comprising items such as "makes me read the entire ad," "makes me think about AIDS," "makes me consider the pros and cons of risky behavior," "makes me think about prevention," and "easy to remember." The cognitive scale had a high reliability ($\alpha = .82$). Finally, behavioral intention was measured by items such as "makes me want to learn more about AIDS," "makes me think about my behavior with respect to AIDS," "makes me want to gather more information about AIDS," and "makes me want to change my behavior with respect to AIDS." The behavioral intention scale reported a Cronbach's alpha of .79.

RESULTS

Traditional health communication approaches toward AIDS have focused on a rational, functional perspective. As discussed earlier in the theoretical section of this article, the lack of success in these traditional health approaches calls for an alter-

native lens to look at the issue of health communication. Functional and rational approaches, based on an information-processing perspective, are not the only means to effectively communicate preventive campaigns. This was supported by the observation that there wasn't any significant difference in the overall rankings of functional, social, and sensory slogans, when considered comprehensively. Similarly, there wasn't any significant difference in the overall cognitive and behavioral intention responses.

H1 suggested that high self-monitors will demonstrate more positive cognitive response toward social appeals than toward functional or sensory appeals. To test this H, paired comparison *t* tests were conducted comparing each of the pairs of appeal types for high self-monitors. Similar paired comparison *t* tests comparing appeal types were subsequently run for low self-monitors to test H2. Supporting H1, high self-monitors had a greater cognitive response to social appeals as compared to functional (mean difference = 2.65; $t = 4.79$; $p < .001$) and sensory (mean difference = 1.75; $t = 3.16$; $p < .005$) appeals. Also, in support of H2, low self-monitors demonstrated significantly stronger cognitive response to functional appeals as compared to social (mean difference = 2.34; $t = 4.08$; $p < .001$) and sensory (mean difference = 1.95; $t = 3.11$; $p < .005$) appeals. Whereas for low self-monitors no significant differences were observed between the social and sensory appeals, high self-monitors showed no significant difference between the functional and sensory appeals, supporting the nomological network.

Each of the individual Hs further tested by running repeated measures analysis of variance (ANOVAs) to compare cognitive and conative responses toward the different types of image appeals for each personality segment (low or high self-monitors, and low or high idiocentrics). At the cognitive level, low self-monitors demonstrated stronger effect, $F(2, 80) = 10.1$, $p < .001$, in the context of functional appeals as compared to the social and sensory appeals. High self-monitors, on the other hand, demonstrated significant cognitive effects, $F(2, 76) = 10.6$, $p < .001$, for social appeals as compared to functional and sensory appeals, supporting the nomological network.

H3 stated that high idiocentrics will have stronger cognitive response when the appeal is functional as compared to when it is social. Results of the pairwise comparison of cognitive responses to the different appeal types for low and high idiocentrics supported the H. High idiocentrics reported greater cognitive responses to the functional appeal as compared to the social (mean difference = 3.84; $t = 7.64$; $p < .001$) and sensory (mean difference = 3.00; $t = 1.38$; $p < .001$). The pairwise comparison of social and sensory appeals was not significant. H4 was also supported by the data, with low idiocentrics demonstrating a stronger response to social appeals as compared to functional (mean difference = 1.24; $t = 2.37$; $p < .05$) and sensory (mean difference = .93; $t = 1.63$; $p < .10$).

The pairwise comparisons for behavioral intentions demonstrated that self-monitoring, by itself, did not exhibit significant effects in terms of its potential

to predict behavioral intention. Neither low nor high self-monitors showed a significant difference between the behavioral intention responses to the appeal types. In other words, for both low and high self-monitors, there were no significant differences between functional and social appeals, social and sensory appeals, or functional and sensory appeals. However, idiocentrism had an affect on conative responses to appeal types. Although H7 was not supported, with no significant difference in the behavioral response of high idiocentrics to functional appeals as compared to social and sensory appeals, H8 found support. Low idiocentrics demonstrated a stronger conative response to social appeals as compared to functional (mean difference = 2.47; $t = 3.48$; $p < .001$) and sensory (mean difference = 2.54; $t = 2.87$; $p < .01$).

The linear effect model suggests clear guidelines for studying the appeal preferences for the personality combinations. Repeated measure ANOVAs were conducted for all the different combinations of self-monitoring and idiocentrism. Each of the self-monitoring and idiocentrism combinations for cognition and behavioral intention are shown in Tables 3 and 4.

Both low self-monitoring, high idiocentrism and high self-monitoring, low idiocentrism combinations produced significant cognitive effects, supporting the nomological network. Low self-monitoring, high idiocentric respondents demonstrated strong cognitive effects for functional appeals as compared to the other appeal types. The significant difference in the mean of the functional effect (Functional = 9.23; Sensory = 5.59; Social = 5.06) exhibits the strong reinforcement of functional appeals by both high idiocentrism and low self-monitoring. Similarly, significant effects were observed for the high self-monitoring, low idiocentrism combination, with a greater preference for social appeals over other appeal types. Therefore, the linear effect model is supported at the cognitive level.

Low self-monitoring and high idiocentrism have a significant effect, $F(2, 48) = 6.36$, $p < .01$, on behavioral intention. These respondents demonstrate significant

TABLE 3
The Effect of Self-Monitoring and Idiocentrism on Cognition

	<i>Low Idiocentrism</i>	<i>High Idiocentrism</i>
Low self-monitoring	Nonsignificant results Functional (7.21) Social (6.54) Sensory (6.13)	Significant results $F(2, 32) = 15.38, p < .001$ Functional (9.23) Sensory (5.59) Social (5.06)
High self-monitoring	Significant results $F(2, 46) = 13.48, p < .001$ Social (8.83) Functional (6.25) Sensory (5.38)	Nonsignificant results Functional (7.33) Sensory (7.27) Social (6.33)

TABLE 4
The Effect of Self-Monitoring and Idiocentrism on Behavioral Intention

	<i>Low Idiocentrism</i>	<i>High Idiocentrism</i>
Low self-monitoring	Nonsignificant results	Significant results $F(2, 48) = 6.36, p < .01$
	Social (12.16)	Functional (12.48)
	Functional (11.68)	Social (10.36)
	Sensory (11.48)	Sensory (8.96)
High self-monitoring	Nonsignificant results	Nonsignificant results
	Sensory (12.67)	Functional (12.26)
	Social (12.60)	Sensory (11.74)
	Functional (10.67)	Social (10.37)

effect in terms of their intention to change behavior when exposed to functional appeals. This is in harmony with the cognitive reaction of the group. In agreement with the nomological network, these low self-monitors demonstrate consistency between cognition and conation.

DISCUSSION

This study serves two primary purposes. At one level, it clearly emphasizes the importance of using an appeal-based model of strategic communication design. Second, it points out that different communication needs among different personality types lead to preference for different appeal types. Personality emerges as a key variable in determining how audience members will react to a message. This is a certain shift from traditional health communication perspectives that have debated over the effectiveness of one appeal type over another, without looking at systematic differences within the population. Additionally, traditional media-based approaches have ignored personality and have instead focused on segmentation variables such as demographics, psychographics, and geographics in order to make campaign decisions. This article points out that personality affects the way an audience member reacts to a message and, therefore, may be used for health message development.

This study demonstrated that there were no significant differences when the cognitive and behavioral intention effects were considered comprehensively. However behavior and cognition demonstrated significance when studied in the context of self-monitoring, idiocentrism, and the interaction between the two. Therefore, the results reflected the contention that personality indeed serves as an important measure for predicting the attitudinal, cognitive, and behavioral reactions to definite appeal types. Personality can be used as a pivotal segmentation

variable when designing tailored health campaigns that involve and result in behavior change through targeted channels.

The results suggest that both idiocentrism and self-monitoring serve as good indexes to predict the effectiveness of a particular appeal type in the cognitive domain. Whereas high idiocentrism leads to a preference for functional appeals, low idiocentrism leads to a preference for social appeals. Also, while low self-monitors react more strongly to functional appeals, high self-monitors respond more strongly to social appeals. Therefore, both idiocentrism and self-monitoring turned out to be important traits in understanding audience response at the cognitive level, supporting the nomological network. However, at the level of behavioral intention, only idiocentrism had an effect on the conative response to appeal type.

Moreover, the results provide a good picture of the relationship between self-monitoring and idiocentrism, supporting the linear model of personality effects proposed in this article. According to the linear relationship model, the effects of self-monitoring and idiocentrism just add up, and therefore, the overall effect can be predicted from the individual effects of self-monitoring and idiocentrism. The effects are strong and pronounced when the traits reinforce each other, whereas the effects are weak when the traits act in opposition. High self-monitoring, low idiocentric respondents had the strongest cognitive effect for social advertisements. Both low idiocentrism and high self-monitoring contribute to the preference for social appeals, in agreement with the theoretical framework. Similarly, the low self-monitoring, high idiocentrism combination produced significant results, exhibiting the preference for functional appeals. The cognitive preference for functional appeals originates from the high idiocentrism and low self-monitoring characteristics. The linear relationship model may be tested in the domain of the effects of other personality types.

At the behavioral intention level, most studies haven't shown significant results when participants were exposed to particular print advertisements and messages. Although limited support was found at the level of the singular personality traits, this research points out that significant effects can be observed at the behavioral intention level if it is observed in terms of the cumulative effect of the individual personality variables. Therefore, the linear model can provide effective guidelines in understanding conative responses to appeal types and may be explored in future research.

As has been pointed out throughout this article, personality plays a pivotal role and must not be ignored in understanding the persuasion process. More attention must be paid to understanding personality in a health communication setting and the way personality traits affect people and the underlying persuasion process. Also, the research demonstrated considerable agreement between behavioral intention and cognition for low self-monitors, supporting the previous literature. Supporting the notion of high self-monitors being inconsistent, the group did not demonstrate a match between cognition and conation.

As discussed earlier, idiocentrism is the manifestation of individualism at the individual level. Various researchers have looked at individualism at the cultural level and have shown its significant effect on the persuasion process (Dutta-Bergman & Wells, 2002; Han & Shavitt, 1994; Roth, 1995; Zhang & Gelb, 1996). This study demonstrated significant effects of idiocentrism on cognition and behavioral intention in the context of persuasive messages related to prevention. Further research should be done to look at the effect of individualism and collectivism on the effectiveness of health campaigns at the cultural level. Future message-design research must explore the role of other personality traits in shaping the preference for particular image appeals.

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