

Accessibility-Diagnosticity and the Multiple Pathway Anchoring and Adjustment Model

JOHN G. LYNCH JR.*

I discuss how the Multiple Pathway Anchoring and Adjustment model is similar to and different from the Feldman and Lynch accessibility-diagnostics model, elaborated as an anchoring and adjustment model by Lynch, Marmorstein, and Weigold. Cohen and Reed's concept of representational sufficiency embraces both attitude coherence and retrieval fluency; these map to prior operationalizations of diagnosticity in past accessibility-diagnostics research. Cohen and Reed's functional sufficiency maps closely to Lynch et al.'s notion of a comparison of cumulative diagnosticity to a diagnosticity threshold in an anchoring and adjustment process. I identify differences between the two models and call for research to distinguish their predictions.

Cohen and Reed (2006, in this issue) provide an admirable review of recent literature on routes to attitude formation and use of attitudes to guide later behavior. Their Multiple Pathway Anchoring and Adjustment (MPAA) account is generally consistent with an accessibility-diagnostics account of the attitude-behavior relation outlined in Feldman and Lynch (1988) and Lynch, Marmorstein, and Weigold (1988) and updated in Alba, Hutchinson, and Lynch (1991), Simmons, Bickart, and Lynch (1993), and Lynch (2005).

The accessibility-diagnostics model proposes that an input *A* in memory—for example, a preexisting attitude, a product belief, or an earlier survey response—will be used in determining a related judgment or behavior as a positive function of its own accessibility and diagnosticity and an inverse function of the accessibility and diagnosticity of alternative inputs *B*, *C*, and so on. An anchoring and adjustment process was proposed to explain these regularities:

Lynch et al. (1988) suggested that decisions arise from an anchoring and adjustment process in which inputs (or related “chunks”) are sequentially retrieved with the consumer updating the implications of already considered evidence with each new input retrieved. The order of retrieval is a function of the accessibility of each input, but accessible information can be actively disregarded if it is perceived to be non-

diagnostic. The cumulative diagnosticity of evidence considered up to that time is monitored (relatively effortlessly). Memory search stops after a number of searches fail to retrieve new inputs or when the cumulative diagnosticity passes some threshold. This threshold depends on involvement in the decision, among other factors. (Alba et al. 1991, 25)

SIMILARITIES

The accessibility-diagnostics model is silent on the issues of (inside out vs. outside in) attitude formation as shown in the top half of Cohen and Reed's figure 1. However, the bottom half of figure 1 showing the attitude recruitment/retrieval and assessment process is compatible with the accessibility-diagnostics model. Cohen and Reed assume that people will very often recruit and anchor on an attitude because this attitude has an advantage over other inputs in accessibility. If an attitude is not accessible, one is constructed. Regardless of how it is formed, it is tested for “representational sufficiency,” an umbrella term referring to either the coherence of an attitude or the fluency and ease with which it was retrieved. A representationally insufficient attitude feels inauthentic in some way, causing further information to be recruited. If, on the other hand, the recruited attitude seems representationally sufficient, it is tested for “functional sufficiency”—do I have enough information to act? If the answer is yes, then attitudes guide behavior. If the answer is no, some further attitude adjustment/conflict resolution is undertaken.

I agree with Cohen and Reed that some constructed attitudes may anchor on some preexisting attitude that does not quite fit the current situation, adjusting if the initially recruited attitude is not sufficiently diagnostic (e.g., use of

*John G. Lynch Jr. is the Roy J. Bostock Professor of Marketing at the Fuqua School of Business, Duke University, Box 90120, Durham, NC 27708-0120 (john.lynych@duke.edu). The author thanks Jim Bettman, Joel Cohen, Amy Dalton, Dawn Iacobucci, and Americus Reed for helpful comments on an earlier draft.

Dawn Iacobucci served as editor and Joseph Priester served as associate editor for this article.

parent brand attitudes as an input to judging an extension, adjusting for fit; Broniarczyk and Alba 1994). Their representational sufficiency test sounds like a specific route to assess the diagnosticity of a cue in the accessibility-diagnosticity model. Their functional sufficiency test sounds very much like the comparison of cumulative diagnosticity to some diagnosticity threshold in the accessibility-diagnosticity model that is postulated to follow after the assessment of the diagnosticity of any particular cue.

REPRESENTATIONAL SUFFICIENCY AS A SPECIAL CASE OF DIAGNOSTICITY

Diagnosticity is a broader metacognitive concept than representational sufficiency. Lynch et al. (1988, 171) explained that “an input is diagnostic for a judgment or decision to the degree that consumers believe that the decision implied by that input alone would accomplish their decision goals (e.g., maximize utility, choose a justifiable alternative, and so on).”

Diagnosticity has task-specific and goal-specific indicators. In inference making, diagnosticity has been operationalized in terms of the perceived correlation between an observable cue and an unobserved property (Dick, Chakravarti, and Biehal 1990). In judging beliefs and attitudes, diagnosticity has been operationalized as relevance or importance (Miniard, Sirdeshmukh, and Innis 1992) or in terms of the ambiguity of classification of an object based on a cue (Herr, Kardes, and Kim 1991). Similarly, attitude confidence has been shown to affect the strength of attitude-behavior links (Smith and Swinyard 1983), and thought confidence has been shown to affect the correlation between the valence of cognitive responses and overall attitudes as well as resistance to persuasion (Briñol, Petty, and Tormala 2004).

Cohen and Reed’s two antecedents of representational sufficiency—attitude coherence and fluency—correspond to two other determinants of diagnosticity in the literature. Coherence maps onto how we manipulated diagnosticity of overall evaluations in Lynch et al. (1988, experiment 2). We predicted and found that when the two prior overall evaluations were consistent—yielding the same ordering of the two choice alternatives—choosers retrieved these evaluations without retrieving the descriptive attribute information on which the overall evaluations were originally based. When the two overall evaluations were inconsistent, people gave no evidence of elaborating on those evaluations; instead, they chose by retrieving attribute information and comparing brands on those attributes. We interpreted this consistency-inconsistency manipulation to be affecting the diagnosticity of the overall evaluations. Keller (1991) similarly argued that product category base rates are diagnostic for attitudes toward remembered brands when based on consistent rather than inconsistent interfering products.

Cohen and Reed also discuss the role of retrieval fluency on representational sufficiency, based on the notion that information that is hard to retrieve seems less diagnostic.

Lynch et al. (1988, 172) noted that, “if consumers experience difficulty in recalling price information for a particular choice alternative, they may be reluctant to use this (possibly fallible) information as a basis for choice. Thus, experienced low accessibility causally influences perceived diagnosticity for choice.” Lynch (2005), Menon (2005), and Menon and Raghbir (2003) discuss these fluency effects in more detail, examining conditions under which accessibility and diagnosticity are likely to be highly correlated. Levav (2005) used the idea that inaccessible information is perceived to be less diagnostic to explain conditions under which one’s predictions of future liking will be self-fulfilling versus full of error.

DIFFERENCES

I see five main points of difference between the two models. First, Cohen and Reed seek to give a rich and detailed analysis of the effects of one particular class of inputs—attitudes. The accessibility-diagnosticity model is more general and asserts that similar principles govern the use of nonattitudinal inputs. Second, Cohen and Reed’s model seems to give attitudes primacy, based on recent evidence about automatic attitude activation. They believe that the initial anchor in decision making will usually be an attitude because they believe that attitudes are likely to be more accessible than other inputs. In contrast, our prior work has shown that sometimes attitudes are not retrieved or constructed to guide behavior because other inputs are accessible and sufficiently diagnostic to guide choice and attitudes are nondiagnostic (Lynch et al. 1988; Miniard et al. 1992). Related is Simonson’s argument (2005, 212–13) that automatic inputs often do not guide choice because conscious features of the choice alternatives have an advantage in both accessibility and diagnosticity. Third, the MPAA model envisages a conflict resolution phase to follow from identifying a recruited attitude as nondiagnostic, whereas the accessibility-diagnosticity model envisages an effortful discounting.

Fourth, under those circumstances when attitudes are retrieved, we outlined three mechanisms by which accessible attitudes might guide behavior (Alba et al. 1991): (a) retrieved attitudes are the direct determinant of behavior, as in Wright’s (1975) concept of affect referral (Lynch et al. 1988); (b) automatically activated attitudes color perceptions that are the proximate determinants of behavior (Fazio 1986); (c) accessible attitudes are used to retrieve a consideration set of alternatives, with retrieved (belief-based) details used to choose from the set (Priester et al. 2004). The MPAA model seems to me to be focusing primarily on the first of these routes.

Finally, the models differ in the breadth of umbrella terms used to label diagnosticity-like concepts. One’s taste for a narrower versus more general concept is a matter of the trade-off between parsimony and fit to the particular domain one seeks to explain. Cohen and Reed are interested in the attitude-behavior relation, so they explicate two determinants of diagnosticity that are particularly relevant in explaining certain new developments in this literature. The

antecedents of attitude coherence and fluency differ from each other and from the antecedents of other diagnosticity concepts, such as goal relevance, confidence, and separation between the best alternative and the rest. Therefore, there is value in deepening our understanding of these two metacognitive processes giving rise to diagnosticity. An umbrella label of middle range might be appropriate if these two types of diagnosticity could be shown to have consequences that are similar to each other but different from the consequences of other diagnosticity concepts that have appeared in the literature. My own conjecture is that the consequences of coherence and fluency would be similar to each other but perhaps no more similar than the consequences associated with any other pair of antecedents of attitude diagnosticity for choice. Research is needed to assess the validity of this conjecture and to show empirically if and where the MPAA model and accessibility-diagnosticity would lead to conflicting predictions.

REFERENCES

- Alba, Joseph W., J. Wesley Hutchinson, and John G. Lynch Jr. (1991), "Memory and Decision Making," in *Handbook of Consumer Behavior*, ed. Harold Kassarian and Thomas Robertson, Englewood Cliffs, NJ: Prentice Hall, 1–49.
- Briñol, Pablo, Richard E. Petty, and Zakary L. Tormala (2004), "Self-Validation of Cognitive Responses to Advertisements," *Journal of Consumer Research*, 30 (4), 559–73.
- Broniarczyk, Susan M. and Joseph W. Alba (1994), "The Importance of the Brand in Brand Extension," *Journal of Marketing Research*, 31 (2), 214–28.
- Cohen, Joel B. and Americus Reed II, "A Multiple Pathway Anchoring and Adjustment (MPAA) Model of Attitude Generation and Recruitment," *Journal of Consumer Research*, 33 (1), 1–15.
- Dick, Alan, Dipankar Chakravarti, and Gabriel Biehal (1990), "Memory-Based Inferences during Consumer Choice," *Journal of Consumer Research*, 17 (1), 82–93.
- Fazio, Russell H. (1986), "How Do Attitudes Guide Behavior?" in *Handbook of Motivation and Cognition*, ed. Richard M. Sorrentino and E. Tory Higgins, New York: Guilford, 204–43.
- Feldman, Jack M. and John G. Lynch Jr. (1988), "Self-Generated Validity and Other Effects of Measurement on Belief, Attitude, Intention, and Behavior," *Journal of Applied Psychology*, 73 (3), 421–35.
- Herr, Paul M., Frank R. Kardes, and John Kim (1991), "Effects of Word-of-Mouth and Product-Attribute Information of Persuasion: An Accessibility-Diagnosticity Perspective," *Journal of Consumer Research*, 17 (4), 454–62.
- Keller, Kevin Lane (1991), "Memory and Evaluation Effects in Competitive Advertising Environments," *Journal of Consumer Research*, 17 (4), 463–76.
- Levav, Jonathan (2005), "When Are Affective Forecasts Self-Fulfilling? An Accessibility-Diagnosticity Perspective on Forecasts of Enjoyment from Repeated Consumption," working paper, Graduate School of Business, Columbia University, New York, NY 10027.
- Lynch, John G., Jr. (2005), "Accessible but Nondiagnostic Memories about Memory and Consumer Choice," in *16th Paul D. Converse Symposium*, ed. Abbie Griffin and Cele C. Ottnes, Chicago: American Marketing Association, 88–115.
- Lynch, John G., Jr., Howard Marmorstein, and Michael F. Weigold (1988), "Choices from Sets including Remembered Brands: Use of Recalled Attributes and Prior Overall Evaluations," *Journal of Consumer Research*, 15 (2), 169–84.
- Menon, Geeta (2005), "Accessibility, Diagnosticity, and the Lynch Vision," in *16th Paul D. Converse Symposium*, ed. Abbie Griffin and Cele C. Ottnes, Chicago: American Marketing Association, 134–40.
- Menon, Geeta and Priya Raghurir (2003), "Ease-of-Retrieval as an Automatic Input in Judgments: A Mere-Accessibility Framework?" *Journal of Consumer Research*, 30 (2), 230–43.
- Miniard, Paul W., Deepak Sirdeshmukh, and Daniel E. Innis (1992), "Peripheral Persuasion and Brand Choice," *Journal of Consumer Research*, 19 (2), 226–39.
- Priester, Joseph R., Dhananjay Nayakankuppam, Monique Fleming, and John Godek (1994), "The A²SC² Model: The Influence of Attitudes and Attitude Strength on Consideration and Choice," *Journal of Consumer Research*, 30 (4), 574–87.
- Simmons, Carolyn J., Barbara Bickart, and John G. Lynch Jr. (1993), "Capturing and Creating Public Opinion in Survey Research," *Journal of Consumer Research*, 20 (2), 316–29.
- Simonson, Itamar (2005), "In Defense of Consciousness: The Role of Conscious and Unconscious Inputs in Consumer Behavior," *Journal of Consumer Psychology*, 15 (3), 211–17.
- Smith, Robert E. and William R. Swinyard (1983), "Attitude-Behavior Consistency: The Impact of Product Trial versus Advertising," *Journal of Marketing Research*, 20 (3), 257–67.
- Wright, Peter L. (1975), "Consumer Choice Strategies: Simplifying vs. Optimizing," *Journal of Marketing Research*, 12 (1), 60–67.