

# Principles Involving Marketing Policies: An Empirical Assessment

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## *Abstract*

We examined nine marketing textbooks, published since 1927, to see if they contained useful marketing principles. Four doctoral students found 566 normative statements about pricing, product, place, or promotion in these texts. None of these statements were supported by empirical evidence. Four raters agreed on only twenty of these 566 statements as providing meaningful principles. Twenty marketing professors rated whether the twenty meaningful principles were correct, supported by empirical evidence, useful, or surprising. None met all the criteria. Nine were judged to be nearly as correct when their wording was reversed.

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## 1. Introduction

Does marketing contain a set of well-defined principles that can help managers to make better decisions? If so, are these principles communicated effectively? We assumed that the answer to the first question was "yes," and undertook a project to see how much progress has been made in developing marketing principles. Our goal was to develop an inventory of marketing principles and to see how this inventory changed over time. But in trying to develop this inventory, we were confronted by the second question, that is, the communication of knowledge. Thus, we sought to develop an inventory of the principles that are actually being communicated.

As a working definition, we defined principles as normative statements that specify a condition followed by a suggested action. That is, marketing principles should provide operational guidelines, telling managers how to act in a given type of situation. An example of a principle is that the illustration in a print ad should be placed above the copy. Principles should help marketing managers to make better decisions because they incorporate marketing knowledge derived through previous

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research and experience. A well-developed set of principles can act as a basis for an expert system. For example, Burke *et al.* (1990) developed an expert system in advertising based heavily upon the principles presented in the advertising textbook by Rossiter and Percy (1987).

Well-supported principles of marketing should be of interest to marketing practitioners. Those who make marketing decisions might like to know what principles can help them make better decisions. Such principles, for example, might show the conditions under which an increase in prices would improve profitability.

In many disciplines, basic principles seem to be transmitted through introductory textbooks. We wondered whether marketing was similar in this respect. The titles of basic texts imply that such should be the case. Indeed, some of these texts have the word "principles" in their title. Textbooks have been published on marketing principles for nearly a century (Bartels, 1962).

Although principles are expected to be reported originally in journals, one might expect that the more important ones with the best support should eventually be summarized in the basic marketing textbooks. Some schools design advanced courses on the presumption that students have already learned basic principles in their introductory course, in which the basic texts are used. Except for marketing majors, most students in business schools and executive programs take only one course in marketing and they might expect to learn Marketing principles from basic texts.

## 2. Scope of the study

We made decisions about the design and scope of the study prior to analyzing any of the data. This was done to help ensure that the study was objective. We did not revise any of the criteria after examining the evidence.

We limited the scope of our search for principles to those involving marketing decision-making at the tactical level. Specifically, we examined the basic marketing mix variables of product, promotion, place, and price. This limitation was partly budgetary; we expected that even this limited search would be expensive. More importantly, however, we expected that we would be more likely to find principles in these areas.

### 2.1. Textbooks

We selected three basic marketing textbooks from each of three different time periods covering a span of almost six decades. Given our resources, we were unable to include more than nine textbooks. Our intent was to select textbooks that were reasonably popular in their time. To a large extent this selection was based on convenience, as the books were chosen from those available in the University of Iowa library. From the early 1930s, we selected Clark (1932), Converse (1935), and Maynard et al. (1927); from the early 1960s, Buskirk (1961), McCarthy (1960), and Philips and

Duncan (1960); and from the 1980s, Boone and Kurtz (1989), Dalrymple and Parsons (1986), and Kotler (1988). We believe that the three texts from the earliest period were the most important texts of their day. The middle-period texts were widely used, with McCarthy introducing the "Four Ps." The three texts from our most recent period accounted for a significant proportion of total course adoptions.

## *2.2. Normative statements*

Four doctoral students in marketing at the University of Iowa independently examined the textbooks to identify all normative statements about product, promotion, place, and price. The coders attended a training session, conducted by the second author, to learn what kinds of statements should be included. He instructed the coders to include all statements that might be normative, even if questionable. Normative statements were said to be prescriptive in nature; they tell the manager what must be done or what should be done in given types of situations. For each normative statement, the coders recorded the name of text, page number, decision area, empirical evidence given for the statement (if any), and citations (if any). The citations would allow us to examine the original sources to see whether they contained empirical evidence about the statement.

Two coders were assigned to each textbook. After obtaining the statements, each pair of coders compared their statements. To minimize errors of omission, the lists were expanded but not reduced.

The coders identified 566 normative statements. Table 1 summarizes these statements by area and year. The number of normative statements increased over time for most areas, especially for product policy.

## *2.3. Identifying principles*

The normative statements were rated to identify principles. Which of the 566 statements provided guidelines for decision making or action in specified conditions? The ratings were done independently by the authors and by two marketing undergraduates. These raters are from the primary target audiences of the texts.

The raters used a written page of instructions that contained a rating scale. It stated:

The purpose of this task is to identify operational guidelines for marketing. In other words, we want to say which of the passages provide normative statements. In still other words, a statement of actions to be taken in given situations. Note that whether you agree or disagree with the statement is not relevant.

Table 1. Number of normative statements by topics

| Topic                | Early 1930s | Early 1960s | Late 1980s | Totals |
|----------------------|-------------|-------------|------------|--------|
| • Product            |             |             |            |        |
| Targeting            | 3           | 5           | 68         | 76     |
| Positioning          | 2           | 35          | 29         | 66     |
| Segmentation         | 0           | 0           | 29         | 20     |
| Product total        | 5           | 40          | 126        | 171    |
| • Promotion          |             |             |            |        |
| Advertising          | 5           | 8           | 18         | 31     |
| Message              | 0           | 17          | 1          | 18     |
| Budgeting            | 5           | 2           | 4          | 11     |
| Media                |             |             |            |        |
| Personal selling     | 18          | 27          | 3          | 48     |
| Call plan            | 4           | 14          | 13         | 31     |
| Sales promotion      | 1           | 10          | 2          | 13     |
| Compensation         | 2           | 7           | 3          | 12     |
| Assignment           |             |             |            |        |
| Promotion total      | 35          | 85          | 44         | 164    |
| • Place              |             |             |            |        |
| Vertical integration | 7           | 33          | 39         | 79     |
| Retailing            | 17          | 9           | 20         | 46     |
| Wholesaling          | 13          | 7           | 6          | 26     |
| Place total          | 37          | 49          | 65         | 151    |
| • Price              | 16          | 27          | 37         | 80     |
| Yearly total         | 93          | 201         | 272        | 566    |

The rating scale, which drew upon Halbert (1965), was as follows:

- 0 = Not a normative statement about marketing.
- 1 = Homilies: tedious exhortations of moral points.
- 2 = Truisms: an undoubted or self-evident truth, especially one too obvious or trifling to mention.
- 3 = Tautologies: redundancy consisting of needless repetition of meaning in other words.
- 4 = Overly general: imprecise, not operational.
- 5 = Too specific: not able to generalize to another situation.
- 6 = Guidelines: meaningful operational guidelines as described above. If the passage looks like it might possibly be a guideline, call it a "6." That is, give it the benefit of the doubt.

While our primary concern was with identifying guidelines (category 6), we believed that a detailed rating sheet would assist in such an identification.

The raters found vastly different numbers of principles (items rated as “6”): One undergraduate rater identified 163 principles, the other undergraduate 342, one author identified 111, and the other author identified 262 principles. We speculate that there may be two reasons for these differences: first, the instructions were to classify the statements as normative when in doubt; second, the normative statements were often ambiguous.

Only twenty of the statements drew the raters’ unanimous agreement that they were “meaningful principles.” An example of one of these principles is that “products should be divisible to permit sample purchases” (Boone and Kurtz, 1989, p. 28). We restricted our attention to these 20 principles partly because of space and budgetary consideration, but also because it seemed more sensible to start with those items about which there was more agreement. The appendix presents the twenty principles. Those from the 1930s (two principles) are listed first, followed by those from the 1960s (two principles), and finally those from the 1980s (sixteen principles). Of the nine texts, Boone and Kurtz contributed almost half the principles.

### 3. Support for the marketing principles

#### *3.1. Support in the textbooks*

Not only did the textbooks fail to provide empirical support for any of the twenty principles, but also they lacked support for any of the 566 normative statements. Only one statement was supported by a citation: “The salesman must develop a frame of reference about human nature and behavior that will allow him to evaluate and learn effective lessons from his experience.” (Frey 1955, p. 126). We examined the cited paper and found that it contained no supporting evidence. (An optimist might be pleased that none of the meaningless normative statements were supported by evidence.)

The lack of empirical support was surprising to us. We had been concerned in the design of our study with how to classify the evidence and with obtaining research support for tracking what we expected would be a large volume of references.

#### *3.2. Support other than in textbooks*

We considered the possibility that the principles may be supported by evidence that is not presented in the textbooks. To examine this, we presented our list of twenty principles to a group of experts and asked them whether they thought the principles were correct, and whether they were aware of any evidence supporting these principles. The experts were all professors of marketing: four at the Wharton School, four at the University of Iowa, three others contacted by mail, and nine who attended a session at the American Marketing Association meeting in San Diego in August of 1991.

As an additional check on the extent to which the professors thought the principles were correct, we asked them to rate principles for which we had reversed the meaning. For example, the reversed wording of item 13 from Appendix A is as follows: “A manufacturer’s list price need not incorporate the costs incurred by channel members in performing required marketing functions and expected profit margins for each member.” Reversing the meaning proved to be a difficult task that required pretesting.

We prepared two sets of the twenty principles. Each set contained half of the items with the original wording and the other half with reversed wording. The order of presentation of the principles was reversed for each list. The order of the items was also varied so that there was no pattern by year of publication. Each of the twenty professors received ten of the items from the appendix, along with ten “reversed” items. In effect, then, each professor rated ten original statements and ten reversed statements. This sample size, twenty experts, was judged as adequate based on research by Hogarth (1978) and Libby and Blashfield (1978). Item nonresponse occurred for about 6% of the items.

We gave the following written instructions to the professors: “Below, we provide twenty proposed marketing principles. Please give us your opinion on each principle for the following criteria: *A*: Is it *correct* in your opinion? *B*: Is there empirical *evidence* that supports the principle? *C*: If it were correct, would it be *useful* to marketing managers? *D*: If it were correct, would the principle be *surprising* to someone who has no formal training in marketing?”

Table 2 presents the average responses for each criterion using the following scale of agreement: 0 = no!, 1 = probably not, 2 = not sure, 3 = probably yes, and 4 = yes! The items are arranged from “most correct” to “least correct.” The experts judged one principle (#18) to be incorrect. Of the remainder, ten were judged to be “substantially” correct (having an average rating of 3.0 or more). Substantial differences of opinion occurred among the professors.

The three left-hand columns of Table 2 show the professors’ responses to the correctness of the statements as originally worded and when reversed. Of the twenty items, the original wording was judged to be substantially more correct (a difference on the scale of at least 1.0) than the reversed wording for 12 principles. For three principles (45, #7, and 410), the reversed wording was judged to be more correct than the original.

The three right-hand columns of Table 2 show the professors’ average ratings as to the evidence on each item, whether the principle is useful, and as to whether it is surprising. Of the ten correct principles in Table 2 (those scoring 3.0 or better), evidence was available for only two (using 3.0 or better for “evidence”). Eight were judged to be useful (3.0 or more). Only one item (#9) was judged to be correct, supported by evidence, and useful. This principle is the following:

Table 2. Professors' average ratings of marketing principles  
(responses from ten professors for each item where 0 = No! and 4 = Yes!)

| Principle*                    | Correct? original vs. reversed |          |            | Original version |         |             |
|-------------------------------|--------------------------------|----------|------------|------------------|---------|-------------|
|                               | Original                       | Reversed | Difference | Evidence?        | Useful? | Surprising? |
| Retailer Promotion (15)       | 3.6                            | 0.8      | 2.8        | 2.7              | 3.1     | 0.7         |
| Recycling (17)                | 3.6                            | 3.4      | 0.2        | 1.3              | 3.0     | 0.9         |
| Test Cities (9)               | 3.5                            | 0.1      | 3.4        | 3.5              | 3.4     | 0.8         |
| Pretesting Ads (19)           | 3.5                            | 1.4      | 2.1        | 3.2              | 3.1     | 1.2         |
| Sales Return (1)              | 3.5                            | 0.3      | 3.2        | 1.9              | 3.1     | 1.1         |
| Package Image (12)            | 3.4                            | 0.4      | 3.0        | 2.5              | 3.5     | 0.6         |
| Segmentation Selection (6)    | 3.2                            | 2.5      | 0.7        | 2.2              | 3.4     | 0.3         |
| Promotional Brands (11)       | 3.1                            | 1.5      | 1.6        | 2.3              | 2.8     | 1.8         |
| Local Freedom (2)             | 3.1                            | 0.8      | 2.3        | 2.1              | 3.0     | 0.7         |
| Materials (3)                 | 3.0                            | 0.4      | 2.6        | 2.5              | 2.9     | 0.8         |
| Segmentation Requirements (5) | 2.9                            | 3.0      | -0.1       | 2.1              | 2.9     | 1.3         |
| Line Price (13)               | 2.8                            | 1.1      | 1.7        | 2.9              | 3.5     | 0.5         |
| Sampling (20)                 | 2.7                            | 1.2      | 1.5        | 2.3              | 3.3     | 2.1         |
| Channel Cooperation (16)      | 2.6                            | 1.5      | 1.1        | 1.7              | 3.2     | 1.5         |
| Channel Members (4)           | 2.5                            | 1.5      | 1.0        | 2.0              | 2.9     | 1.2         |
| Marketing Functions (14)      | 2.2                            | 1.9      | 0.3        | 2.4              | 3.0     | 1.6         |
| Family Brand (8)              | 2.2                            | 1.4      | 0.8        | 2.2              | 3.4     | 1.9         |
| Joint Operating Costs (7)     | 2.1                            | 2.7      | -0.6       | 1.7              | 3.0     | 1.7         |
| Divisible Products (10)       | 2.0                            | 2.4      | -0.4       | 1.9              | 2.9     | 2.4         |
| Business Channels (18)        | 1.9                            | 1.3      | 0.6        | 1.8              | 2.3     | 2.8         |

\*The number in parentheses refers to the item in the Appendix, which provides the full description of this principle.

“Test cities should be isolated from each other so that promotional campaigns in one city do not influence sales in other areas.” However, the panel believed that this item was not surprising to someone who had never taken a marketing course. (This principle of having independent experimental units had been discovered long ago by scientists in other fields.) Overall, *none of the twenty items did well on all of the criteria* (using 2.0 or better on each of the four criteria). This finding, surprising to us, meant that it was difficult to achieve our objective of developing an inventory of marketing principles.

#### 4. Limitations

The procedures for analysis were established prior to our analysis of the text- books. We did this to help ensure objectivity. In retrospect, one might question some of these decisions. For example, we used Halbert’s six-item categorization. Our assumption that this made the task of identifying principles more reliable may not be correct.

The limitation of the “meaningful principles” to those on which the coders had unanimous agreement restricted our search. A less stringent criterion would have revealed many more “meaningful principles.” Similarly, one might employ less stringent criteria when rating the principles for correctness, evidence, usefulness, and surprise.

Our analysis was limited to the traditional decision-making activities, the “four P’s.” The texts may present principles in other areas, such as marketing research or consumer behavior.

Our conclusions apply only to basic texts on marketing. Some specialized texts in marketing provide well-supported principles; these include, but are not limited to, Rossiter and Percy (1987) and Ogilvy (1983) in advertising, Nagle (1987) in pricing, and Comer and Dubinsky (1985) in managing the sales force. Comer and Dubinsky discuss “what the research found” and “what the research suggests” in most chapters. They also summarize empirical findings and provide extensive citations.

We have no assurance that our selection of textbooks is representative of all basic marketing textbooks. For example, we believe that Bagozzi’s (1986) text contains principles. Nevertheless, we expected to find more principles than we did in this set of widely-known texts.

#### 5. Discussion

As noted above, we assumed that many principles exist in marketing. We also believe that most of those who teach marketing communicate principles, and most of those who practice marketing use principles. In designing the criteria for our study, we expected that we would be dealing with a large number of principles and that we faced a difficult data-processing task. Our expectations proved to be unrealistic. The basic texts that we examined did not incorporate well-supported principles, according to our criteria.



Our study does not address *why* it is so difficult to find principles in basic texts. One possible explanation is that our basic assumption may be wrong. That is, there may not be many marketing principles. Arguing for this explanation are the studies by Leone and Schultz (1980), which concluded that academic research had not produced many useful generalizations, and Hubbard and Armstrong (1993), which found that research studies in marketing have seldom been replicated or extended, thus limiting generalization. Given the broad marketing literature, however, we believe that our assumption is correct. Furthermore, as noted, some advanced marketing texts do provide principles.

Another possible explanation for the lack of principles in basic texts is that students in introductory courses have no obvious interest in learning principles. For example, Abrami, Leventhal, and Perry's (1982) extensive review of the empirical literature in education revealed little relation between the content of lectures and the students' course ratings.

The inclusion of principles might improve the status of the field. Without principles, might students be more likely to claim that "it is all common sense?" Without principles, is not marketing open to the publication of such books as the *One-minute Manager*? Fields based on principles are less likely to become the subjects of superficial books. We expect that there is not much demand for the *One-minute Brain Surgeon*, the *One-minute Civil Engineer*, or the *One-minute Physicist*.

Researchers might help the situation by conducting studies that test potential marketing principles. Much current research seems to be of little value for actually developing principles.

## 6. Conclusions

We assumed that marketing contains many principles. We used an extensive procedure based on pre-specified criteria to search for principles in basic marketing textbooks. Full disclosure of our method is provided so that others can replicate the study. We would welcome and assist in such a replication or extension.

Here is what we found. Four coders identified 566 normative statements from nine textbooks published over six decades. These marketing statements were presented in the texts without any empirical support. Of these 566 statements, four raters agreed on only twenty as representing marketing principles. When we asked marketing professors whether the twenty principles were correct, they judged one to be wrong and ten to be substantially correct. No principle was rated as correct, supported by empirical evidence, useful, and surprising.

Despite this expensive effort, we were unable to find useful principles about pricing, product, promotion, or place in basic marketing textbooks. This is only a first attempt. Other researchers might have more success, by using other criteria. But the basic conclusion is clear: *it is difficult to find marketing principles in basic textbooks*.

Our finding has practical implications. First, authors of basic texts might want to present principles. Publishers could use this as an important criterion. Professors might select textbooks that contain well-supported principles. By incorporating principles, the basic texts would assist in the development of expert systems, as illustrated by the relationship between Rossiter and Percy's text and the expert system developed by Burke *et al.* (1990). Finally, in addition to communicating basic principles, such marketing texts could also be valuable to researchers by providing a cumulative record of the research findings to date; this would aid in furthering marketing as a science.

## Notes

1. Webster's *Ninth New Collegiate Dictionary* defines a principle as "a comprehensive and fundamental law, doctrine or assumption; a rule or code of conduct." We used the latter part of this definition.

## Appendix

### *Marketing principles*

1. Sales returns: A careful analysis of the causes of the (sales) returns (should be carried out by the retailer) with a view to overcoming them. (Clark, p. 240)
2. Local freedom: The managers [of stores handling stylish merchandise] must be given more freedom to operate their stores to meet local [market] preferences and conditions. (Converse, pp. 630, 637)
3. Materials: The choice of materials (which go into making the product) must be made on the basis of: 1) sales appeal, 2) production characteristics, and 3) functionality. (Buskirk, p. 229)
4. Channel members: Each channel member must be thought of as equally important. If one member does not operate effectively, the whole channel may be handicapped. (McCarthy, p. 475)
5. Segmentation requirements: To be effective, segmentation must meet the following basic requirements:
  - a. the market segments should be measurable in terms of both purchasing power and size;
  - b. marketers must be able to effectively promote to and serve a market segment;
  - c. market segments must be sufficiently large to be potentially profitable;

- d. the number of segments must match the firm's marketing capabilities. If one or more of these factors are missing, the marketer should reassess the proposed segmentation strategy. (Boone, p. 236)
6. Segment selection: Segmentation bases should be selected so that each segment contains customers who respond similarly to specific marketing mix alternatives. Customers in different segments respond differently. (Boone, p. 253)
7. Joint operating costs: When the joint costs of operating in two or more segments are less than operating in the segments independently (economies of scope), then companies should attempt to identify and work in supersegments rather than in isolated segments. (Kotler, p. 305)
8. Family brands: Family brands should be used when products are of similar quality or the firm will risk harming its product image. (Individual brand names should be used for dissimilar products.) (Boone, p. 317)
9. Test cities: Test cities should be isolated from each other so that promotional campaigns run in one city do not influence sales in other test areas. (Dalrymple, p. 321)
10. Divisible products: Products should be divisible to permit sample purchases. (Boone, p. 28)
11. Promotional brands: The "promotional" brand, although stripped, must be up to the brand's quality image. (Kotler, p. 455)
12. Package image: Like brand names, packages should evoke the product's image and communicate its value. (Boone, p. 321)
13. List price: A manufacturer's list price must incorporate the costs incurred by channel members in performing required marketing functions and expected profit margins for each member. (Boone, p. 384)
14. Marketing functions: Marketing functions must be performed by some members of the channel. They can be shifted, but they cannot be eliminated. (Boone, p. 445)
15. Retailer promotion: The retailer must use promotional tools that support and reinforce its image positioning. (Kotler, p. 568)
16. Channel cooperation: Distribution channels must be organized so as to function in coordination and cooperation to achieve operating efficiency. (Boone, p. 420)
17. Recycling: For recycling to succeed, the following four basic conditions must be satisfied:

- a. a technology for efficiently processing the material being recycled must be available;
  - b. a market must be available for the end product – the reclaimed material;
  - c. a substantial and continuous quantity of secondary products (recycled aluminum, reclaimed steel for automobiles, recycled paper) must be available;
  - d. a marketing system that can profitably bridge the gap between suppliers of secondary products and end users must be developed. (Boone, p. 416)
18. Business channels: Distribution channels for business have to be simple and direct because there are relatively few buyers and they are concentrated geographically. (Dalrymple, p. 510)
19. Pretesting ads: The advertiser should pretest (the advertisement) with the hope of determining which appeal has the strongest behavioral impact. (Kotler, p. 625)
20. Sampling: Sampling should be used if the product exhibits a demonstrable superiority, if the concept is difficult to convey by advertising, if a sizable budget is available for a brand usage category, or if product class dominance is sought. (Dalrymple, p. 611)

## References

- Abrami, P. C., L. Leventhal, and R. P. Perry. (1982). "Educational Seduction," *Review of Educational Research* 52, 446 – 464.
- Bagozzi, Richard P. (1986). *Principles of Marketing Management*. Chicago: Science Research Associates.
- Bartels, Robert. (1962). *The Development of Marketing Thought*. Homewood, Ill.: Irwin.
- Boone, Louis E. and David L. Kurtz. (1989). *Contemporary Marketing*. Hinsdale, Ill.: Dryden Press.
- Burke, Raymond R., A. Rangaswamy, J. Wind, and J. Eliashberg. (1990). "A Knowledge-based System for Advertising Design," *Marketing Science* 9, 212 – 229.
- Buskirk, Richard H. (1961). *Principles of Marketing: The Management View*. New York: Holt, Rinehart and Winston.
- Clark, Fred E. (1932). *Principles of Marketing*. New York: Macmillan.

- Comer, James M. and A. J. Dubinsky. (1985). *Managing the Successful Sales Force*. Lexington, Mass.: Lexington Books.
- Converse, Paul D. (1935). *The Elements of Marketing*. New York: Prentice-Hall.
- Dalrymple, Douglas J. and Leonard J. Parsons. (1986). *Marketing Management: Strategy and Cases*. New York: John Wiley.
- Frey, J. M. (1955). "Missing Ingredient in Sales Forecasting," *Harvard Business Review* 13, no. 6, 126-132.
- Halbert, Michael. (1965). *The Meaning and Sources of Marketing Theory*. New York: McGraw-Hill.
- Hogarth, Robin M. (1978). "A Note on Aggregating Opinions," *Organizational Behavior and Human Performance* 21, 40 – 46.
- Hubbard, Raymond and J. Scott Armstrong. (1993). "Replications and Extensions in Marketing and Consumer Behavior: Rarely Published but Quite Contrary," *International Journal of Research in Marketing* (forthcoming).
- Kotler, Philip. (1988). *Marketing Management: Analysis, Planning and Control*. Englewood Cliffs, N.J.: Prentice Hall.
- Leone, Robert P. and Randall L. Schultz. (1980). "A Study of Marketing Generalizations," *Journal of Marketing* 44, 10 – 18.
- Libby, Robert and R. K. Blashfield. (1978). "Performance of a Composite as a Function of the Number of Judges," *Organizational Behavior and Human Performance* 21, 121 – 129.
- Maynard, Harold H., Walter C. Weidler, and Theodore N. Beckman. (1927). *Principles of Marketing*. New York: Ronald Press.
- McCarthy, E. Jerome. (1960). *Basic Marketing: A Managerial Approach*. Homewood, Ill.: Irwin.
- Nagle, Thomas T. (1987). *The Strategy and Tactics of Pricing*. Englewood Cliffs, N.J.: Prentice Hall.
- Ogilvy, David. (1983). *Ogilvy on Advertising*. New York: Random House.
- Phillips, Charles F. and Delbert J. Duncan. (1960). *Marketing: Principles and Methods*. Homewood, Ill.: Irwin.

Rossiter, John R. and Larry Percy. (1987). *Advertising and Promotion Management*. New York: McGraw-Hill.