

Does Marketing contradict Intuition?

ARIE MAHARSHAK
Department of Industrial Engineering and Management
Ort Braude Engineering College
81 Snunit St. Karmiel
ISRAEL

DAVID PUNDAK
Kinneret College
School of Engineering
Jordan Valley
ISRAEL

Abstract: Many marketing principles are contrary to the pre-existing attitudes of students in introductory marketing courses. This article addresses the difficulties arising from such contradictions. Tools were developed to identify students' opinions regarding central marketing topics both before and after taking the course. In addition, in-depth interviews were conducted among a student sample before the beginning of course, at its end, and one year after its conclusion. Research findings indicate a very slight change in student attitudes as a result of the course. The article identifies the naïve attitude of the marketing student as the principle barrier to adopting marketing theory principles. It then proposes ways of confronting the difficulties by exposing the naïve attitude and by applying various methods that divert students away from their original naïve attitude.

Key-Words: - science, active learning, student, marketing, intuition, naïve concept

1 Introduction

Scientific concepts of marketing began to be established in the 1950's and 1960's. Originally, selling was viewed as the principal marketing activity. This view changed, and a scientific theory was formulated that focused on consumer needs and the efforts of the firm to respond to those needs. This conceptual change is not intuitive among those who deal in marketing in general, and particularly not for marketing students. Students must invest substantial learning efforts to understand this concept, beginning by confronting perceptions acquired over their lifetime as consumers exposed to aggressive marketing and advertising through the various media.

For a conceptual change of this type to occur, a lecturer's abilities and skills will not suffice. Posner [1] developed a theory outlining four necessary conditions for conceptual change:

- a. A feeling of dissatisfaction with the existing approach is necessary;
- b. The new theory must be intelligible;
- c. The new theory must be plausible;
- d. The new theory must be fruitful in comparison to previous approaches.

The first condition refers to students' initial attitudes and assumes the existence of marketing insights

before the student has been exposed to scientific theory, which usually contradicts intuitive perception. Research in this area has attempted to reveal the pre-existing attitudes of students before they take courses on 'Principles of Marketing' [2]; to examine how these attitudes change when taking such courses [3], [4], [5]; to identify problems in the process of absorbing marketing theory and to make recommendations for improvement [6], [7].

To what degree do a student's pre-existing attitudes constitute a barrier to accepting scientific theory? To what degree is the student aware of intuitive thinking as a barrier to accepting scientific theory? To what degree is the lecturer aware of this problem?

The present research addresses the cognitive difficulties facing marketing students as well as the difficulties in adopting marketing theory attitudes.

2 Naïve concepts widely held by the public in relation to marketing

A naïve concept is the way a layman perceives events and phenomena in the world around him before being exposed to methodical scientific study. His naïveté rules his accumulated experience, intuition and instincts, which often have led to conclusions contrary to physical principles or

scientific doctrine. For example, there are those who figure the sun revolves around the earth and do not internalize the accepted scientific truth, even though they pay lip service to it. In the marketing area, as mentioned, theories and models have been built placing the consumer and his needs at the center of the business universe. This is a process that is frequently not short term and periodically demands investment of resources to understand needs and design the correct responses. People appear to have a naïve outlook in connection with anything related to the principles of marketing concepts. The public perceives a business organization as a body having as its primary and central goal “selling, advertising and promotion”. This perception is characteristic not only of the general public. Students also share this view before being exposed to the principles of marketing in an academic course [2]. Therefore, lecturers who want to change the naïve attitudes of marketing students must design their course so that it addresses Posner’s first condition [1].

3 The ‘Principles of Marketing’ course and its goals

The goal of a course teaching the principles of marketing is to impart the marketing principles described above, presenting them in contrast to other earlier concepts (mainly sales concepts) and describing different models that place the customer and his needs at the center of the business experience in the current competitive environment. Marketing efforts as illustrated in such a course focus on achieving profits using a long-term strategy. The entire firm should work together coherently to produce a response to the customer’s needs. Yet companies tend to dedicate most of their efforts to the short term, to “selling” activities that are meant to increase sales “at any price” and that could diminish profits in the long run.

A course teaching the principles of marketing should emphasize that sales activity is only one component among many marketing activities and that even though the marketing concept dictates adapting the product for consumer needs, effective sales power is still required. The necessity of convincing consumers that it would be to their benefit to purchase the company’s product is entirely valid, and the existence of the product has to be brought to the knowledge of potential customers. An approach that concentrates on marketing will transform the product being sold, making it more acceptable in the eyes of the consumers. Salesmen will no longer be required to attempt to convince potential buyers to

change their outlook regarding their own needs.

The course should emphasize that the firm has to understand the importance of the marketing orientation and comprehend that adopting the marketing concept requires substantial organizational, structural and cultural change. The organization will need to adapt its products, logistics, level of service and marketing techniques for consumer needs, and make them their top priority. Every member of the organization must be forced to think about the consumer, and not about sales or the product, before making decisions. In an organization with a genuine marketing orientation, the marketing function is not under the sole responsibility of the marketing department. All the company’s activities should be timed to coincide with customer needs. The concept of marketing must first and foremost be instilled at the managerial level. Problems will crop up if managers do not adopt a marketing philosophy and implement it in the organizational culture. Without total commitment on the part of the entire organization, the transformation to a marketing orientation will be nothing more than lip service. Inasmuch as the marketing orientation focuses on consumer needs, if these needs should change or if new technology develops that better answers those needs, the company must respond in order to survive. The concept of marketing as a basic philosophy and comprehensive strategy is widely accepted today. This concept needs to be applied not only in business organizations. It must also be internalized in nonprofit organizations and academic institutions involved in, among other things, teaching marketing [8], [9], [10].

4 The Research

4.1 Research questions

Clinging to naïve concepts and difficulties in implementing scientific principles that contradict naïve concepts are known issues in many areas of science [11], [12]. The experiences of this article’s researchers in teaching science courses [13], [14] also support this phenomenon among students exposed for the first time to new disciplines in general and to the marketing discipline in particular. Hence, the research is designed to examine the following questions:

- ❖ To what degree does the ‘Principles of Marketing’ course have an impact upon changing the naïve concepts of students taking the course?

- ❖ To what degree do students of the 'Principles of Marketing' course maintain their scientific concepts on marketing topics one year after completing the course?

4.2 Research assumptions

- a. The 'Principles of Marketing' course will change significantly the concepts of those students who completed the course in comparison to those who have not been exposed to the course contents.
- b. The scientific concepts learned in the Principles of Marketing course will remain in students' minds even one year after completing the course.

4.3 Research method

The research was conducted in two stages:

- a. Attitude identification: Students' attitudes toward basic principles in marketing -before the course and after its conclusion - were compared through the use of a research questionnaire that was developed and validated shortly before this research was conducted.
- b. Attitude clarification: Due to the first stage results, it became necessary to attain a deeper understanding of the students' attitudes - before, during and after the course. In this stage, which involved in-depth interviews, the students were asked to provide a basis for their attitudes using applicable examples from companies and organizations.

4.4 Research populations

In Stage A of the research, readiness to surrender naïve attitudes toward marketing doctrine was examined among 207 students enrolled in 'Principles of Marketing' courses. The research was conducted in 2004 among students taking courses in Industrial Engineering and Management at two colleges. At the ORT-Braude Academic College of Engineering in Carmiel (Israel), 137 students participated in the research. At the Administration College in Rishon-Le'zion (Israel), 109 students participated in the research. At both colleges, the course involved three weekly hours over one semester. The courses were taught by two lecturers who received high evaluations on student feedback forms and who used a traditional teaching approach, in which the main teaching thrust involves the lecturer demonstrating scientific theories and their applications.

In Stage B, 24 randomly selected students from three population groups at the ORT-Braude College were

sampled (eight students from each group): first-year students who had not taken the course; second-year students immediately after having completed the course; and third-

5 Research results

5.1 Stage A – Attitude Identification

In order to examine the degree of change in students' attitudes, the Hake Improvement Index – 'g' – was adopted.

$g = (f-i)/(100-i)$ where:

i = percentage of students holding scientific concepts at the beginning of the course.

f = percentage of students holding scientific concepts at the end of the course. Hake distinguished three levels of improvement: Low level of improvement where $g < 0.3$; Intermediate level of improvement where $0.3 \leq g < 0.6$; High level of improvement where $g \geq 0.6$.

The research results indicate that in practical terms there was no substantial improvement in the ratio of naïve concepts to scientific concepts at the beginning of the course and at its conclusion. As mentioned, the courses were given by two lecturers who were highly rated in student feedback. Yet, these lecturers did not bring about any substantial change in central concepts in the field of marketing. For example, for the statement: "As manager of the firm I would always prefer hiring a marketing person who is good-looking rather than a person with higher education," 86% of the students responded positively at the beginning of the semester compared to 79% at the end of the semester. In other words, most of the students did not change their belief that good appearance is more important to the marketing profession than education.

Table No. 1 – Distribution of students’ concepts in the ‘Principles of Marketing’ course as a percentage of different marketing facets at the beginning of the course and at its end, and the ‘g’ improvement index

Questionnaire administered	Concept / Facet	Customer needs	Organization planning	Acquired ability	Work ethic	Sales	Ongoing commitment
Beginning of course	Scientific	68	62	39	57	28	68
	Naïve	15	13	36	16	52	12
End of course	Scientific	71	63	36	59	28	70
	Naïve	11	14	36	16	51	9
‘g’		0.094	0.026	-0.049	0.047	0.000	0.063

The improvement achieved following the course for this statement is $g=0.07$. Another example is seen in the statement about the importance of packaging: “Attractive packaging plays an important role in hiding product shortcomings.” At the beginning of the semester, 77% of the students were in agreement with this statement. At the end of the semester, this number dropped to 71%, indicating an improvement index of $g=0.08$.

5.2 Stage B – Interviews with students

In the interviews, the students were presented with marketing dilemmas experienced by business firms. The interviews were recorded and transcribed. The students’ attitudes were analyzed and assigned point values from 1 to 3. One point indicated a nonscientific attitude to marketing, such as an attitude that views sales as the firm’s main endeavor. Two points indicated an intermediate attitude, somewhere between naïve and scientific concepts. Three points were assigned to an attitude that displayed a scientific approach, as described in the introductory section.

First-year students who had not yet taken the ‘Principles of Marketing’ course exhibited mixed attitudes. Some of these attitudes were expressed through a naïve way of thinking: “Advertising and sales are the principal components in the marketing process,” or “The firm needs to focus more on development of good products and less on customer needs.” Only about half the first-year students interviewed said that customer treatment after the purchase was a matter of great importance. The majority of students were convinced that the marketing manager should concentrate efforts on new customers and allot little time to dissatisfied customers. Only about half of those interviewed stated that a satisfied customer promotes the firm’s

reputation and can bring the firm new customers. Only one interviewee said that a salesperson who cheats the customer damages the firm’s sales in the long run. On the other hand, and contrary to the researchers’ assumption, for some topics investigated students’ attitudes were already consistent with scientific approaches in the first year. Students revealed a commitment to maintaining contact with the customer even after making the sale, and acknowledged the importance of marketing among all the firm’s employees and not only at management level.

Second-year students who were interviewed 6-8 weeks after the end of the course still demonstrated mixed attitudes, but generally tended towards the scientific outlook they had learned in the course. An example of this mixed attitude was seen in the question on market segmentation. The interviewees stated they supported development of separate products that respond to the needs of different population segments. On the other hand, they tended to support the policy of a common product suitable to most of the population when the situation justifies. In contrast to this scientific point of view, the naïve positions held by most of those interviewed a short time after the course was surprising. They claimed that the salesperson must make the sale under any circumstances, even when it is contrary to the customer’s best interests. Not even one student among those interviewed supported the idea that a professional salesperson has a responsibility to suggest a competitor’s product to the customer when the competing product clearly better meets the customer’s needs. Second-year students were aware of the importance of cultivating contact with different customers, and were able to distinguish between different kinds of treatment required for new and veteran customers, satisfied customers and those who are not, customers who made purchases in

the past and those who avoided doing so. Despite the importance of the customer, in the eyes of the second-year students the firm was seen as a body whose first purpose is to serve its own interests and only thereafter those of its customers.

There was no evidence of a difference between the attitudes of third-year students one year after completion of the course and those of second-year students. Third-year students were familiar with the concepts that had been discussed in the course, but their attitudes were mixed on different questions. Most of them still viewed the job of the salesperson to be convincing the customer at almost any price, without considering the customer's benefit. The students are aware of the necessity for market segmentation and tend to distinguish between different kinds of customers and the necessity of studying their problems. However, most of them are still of the opinion that the marketing person's appearance is more important than education and that power of persuasion is more important than understanding the customer's needs. It was surprising to learn how unaware students were of the importance of market surveys prior to product development and to see how many tended to hold the position that it is important to be sure to have high product quality, at high manufacturing costs, without any relation to the target market's needs.

6 Conclusions

In Stage A of the research it was possible to point to clear results according to which taking the 'Principles of Marketing' course has practically no effect on the naïve attitudes of students taking the course. This confirms the findings of Dailey and Kim [15].

These attitudes were shaped over many years, during which the students were exposed to aggressive selling of different products via advertising campaigns in the press, on the radio, on television and on the Internet. The concept of sales as a supreme value that is more important than the customer's derived benefit does not change after being exposed to scientific attitudes in an academic course. Such a course does, in fact, offer an alternative way to observe the world of marketing, but it does not address existing naïve thinking as a condition for conceptual change [1]. The naïve concepts are still fixed in the student's mind after completing the course.

For the six points examined in the first stage of the

research, no significant differences were found between students at the beginning of the course and at the end. It is clear that students who take the course are aware of the importance of customer needs (68%), and their attitudes are almost unchanged at the end of the course (71%). There were similar findings in relation to a firm's commitments to its customers, an organization's work ethic and the importance of planning in an organization. It seems that students at the beginning of the twenty-first century have been amply exposed to the marketing efforts of companies, even when the subject is an uncomplicated consumer product such as a soft drink or a basic food product. As customers who have been exposed to such marketing efforts, they know that firms want to satisfy the customer over the long term, and that customers have the ability to influence the firm's behavior. In addition, the points mentioned above represent declaratory positions that the student finds easy to express, without feeling a commitment to carry them out. The manager's job still appears too far away for the student who belongs to the customer sector and identifies with it, and who does not weigh the meaning of his statements or their consequences.

On two points, the students' concepts remained very far from the scientific objective the course hoped to instill. The first was connected to educating marketing personnel. Only 36% of the students thought it was possible to train a qualified marketing person through education and tended to go along with the assumption that the talent is inborn. The other concept was connected to the similarity between marketing and sales. Only 28% of the students held that opinion at the end of the course, the same percentage that thought so at the beginning of the course. As demonstrated in other research areas [12], in marketing it is possible to improve and upgrade the usual attitudes held by students, but it is very difficult to alter attitudes that are fixed in their consciousness and are contrary to scientific attitudes. There were even students in the interview who were ready to declare that the moment they were required to solve a problem they would resort to their naïve beliefs and the intuition they had developed over the years.

The cumulative experience of students as customers led them to recognize the importance of the customer to the firm in the pre-sale stage. Being exposed to different sales representatives convinced them that they have purchased many products they did not really need. The circumstances of these purchases were not connected to their personal needs

but rather to external pressure exerted by salespeople, aggressive advertising, social pressure, an attractive sales person, etc. This personal experience was stronger than any scientific theory that places the real needs of the customer at the firm's focus of attention. This fact constitutes a substantial difficulty for lecturers striving to impart scientific attitudes in the face of longstanding and powerful habits. It seems almost impossible to meet this difficulty head-on without a change in traditional teaching methods.

Recommendations for change and improvements in the course

- a. **Exposure of naïve attitudes** held by students at the very beginning of the course, in accordance with Posner's [1] first condition. The recommended vehicle for this exposure is by means of the research questionnaire shown in Appendix A. Identifying students' naïve attitudes will make it possible for the teacher to plan appropriate teaching methods.
- b. **Possible guidelines for appropriate teaching methods to address naïve attitudes:**
 1. Transition from passive learning to active learning in the course [6], in which a substantial portion of the study time is dedicated to student activity and not only to listening. In this way, naïve attitudes will be exposed, enabling presentation of scientific attitudes that are contrary to these attitudes.
 2. Active analysis of marketing events. This method involves role playing of the firm and its environment in the early stages of product planning and manufacturing. In this case as well, naïve attitudes are presented in contrast to contradictory scientific attitudes. This contradiction should be discussed to enable students to feel uncomfortable in adhering to their naïve positions.
 3. Working in groups during the course to carry out specific projects, beginning with planning and followed by execution and reporting. This will make it possible to reinforce the student's feeling of belonging and responsibility for the course's goals [16] while understanding the advantages of the scientific outlook.
 4. Learning about market occurrences in which sales are not made "under any conditions," but rather by coordinating the product with consumer needs [4] Confrontation between short-term and long-term goals in the field of marketing, while pointing out important achievements in long-term marketing activity likely to be realized by the firm [7].

Giving the students assignments in which they need to use a variety of marketing skills to achieve the expected result, while setting timetables and conforming to them [17]. This approach emphasizes integration of scientific attitudes in the planning stage.

- c. **Changing course evaluation methods**, from a procedure based on testing knowledge to one that examines scientific marketing concepts and their practical application [3]. The application of these recommendations is not simple; difficulties that accompany changes in teaching habits developed over many years in the profession must be addressed. Students who are accustomed to being passive and spending most of their time listening to lectures will now need to actively confront hidden attitudes they usually do not express, and to present solutions to questions while relying on a new logic that sometimes runs contrary to their intuition. It is also possible to learn from the experience of teachers in other academic fields [18], [19]. Naïve approaches can be successfully addressed, and we believe this is also applicable to introductory courses in marketing.

References:

- [1] Posner, G., Strike, K., Hewson, P., & Gertzog, W., Accommodation of a scientific conception: Toward a theory of conceptual change, *Science Education*, 66 (2), 1982, pp. 211-227.
- [2] Ferrell, L. & Gonzalez, G. Beliefs and Expectations of Principles of Marketing Students, *Journal of Marketing Education*. 26 (2), 2004, pp. 116-122.
- [3] Baker, S.M. Kleine, S.S & Bennion, M., What Do They Know? Integrating the Core Concept of Customer Value into the Undergraduate Marketing Curriculum and Its Assessment, *Journal of Marketing Education*, 25 (1), 2003, pp. 79-89.
- [4] Elam, L.R. & Spotts, H.E., Achieving Marketing Curriculum Integration: A Live Case Study Approach, *Journal of Marketing Education*, 26 (1), 2004, pp. 50-65.
- [5] Young, M.R., The Motivational Effects of the Classroom Environment in Facilitating Self-Regulated Learning, *Journal of Marketing Education*, 27 (1), 2005, pp. 25-40.
- [6] Ackerman, D.S. & Gross, B.L., My Instructor Made Me Do It: Task Characteristics of Procrastination. *Journal of Marketing Education*, 27 (1), 2005, pp. 5-13.

- [7] Caney, J.P. & Williams, J.K., Selling Principles: Influencing Principles of Marketing Students' Perceptions of Attitude toward Marketing as a Discipline, *Journal of Marketing Education*, 26 (2), 2004, pp. 154-160.
- [8] Klink, R.R. & Athaide, G.A., Implementing Service Learning in the Principles of Marketing Course, *Journal of Marketing Education*, 26 (2), 2004, pp.145-153.
- [9] Maharshak, A., Pundak, D., Physics Learning – Combining the Marketing Concept with Information Technology, *Journal of Educational Technology Systems*, 32(4), 2004, pp. 399-418.
- [10] Maharshak, A., Pundak, D., Is University a Service System? In *Proceedings of ICSSM'04, International Conference on Service Systems and Service Management*, Beijing, China: Research Center for Contemporary Management, Tsinghua University, edited by Jian Chen, 2004, pp. 922-924
- [11] Redish, E. F., Implications of cognitive studies for teaching physics, *American Journal of Physics*, 62, 1994, pp. 796-803.
- [12] Redish, F. E., *Teaching Physics – with the Physics Suite*, pp. 33-36, Wiley, 2004
- [13] Pundak, D., Rozner, S., Improving Teaching Physics and Basic Academic Courses by Just in Time Teaching. *Announcer*. 32 (4), 2002, p.112.
- [14] Pundak, D. Maharshak, A. (2003). Teaching Physics – The Marketing Concept. *Announcer*. 33 (4), p. 135
- [15] Dailey, Richard M., and Joon Seok Kim.(2001). To what extent are principles of marketing students market oriented? The review category: Marketing Education, *Marketing Education Review* 11 (1), 2001, pp.57-72.
- [16] Wood, C.M. (2003). The Effects of Creating Psychological Ownership among Students in Group Projects, *Journal of Marketing Education*, 25(3), 2003, pp. 240-249.
- [17] Young, M.R., (2005) The Motivational Effects of the Classroom Environment in Facilitating Self-Regulated Learning, *Journal of Marketing Education* 27 (1), 2005, pp. 25-40.
- [18]Beichner, R.J., Saul, J.M., Allain, R.J., Deardorff, D.L., & Abbott, D.S., *Introduction to SCALE UP: Student-Centered Activities for Large Enrollment University Physic.*. Proceedings of the 2000 Annual meeting of the American Society for Engineering Education, 2000.
- [19] Dori, Y.J. & Belcher, J.W. (2005). How does technology-enabled active learning affect students' understanding of scientific concepts? *The Journal of the Learning Sciences*, 14(2), 2005, pp. 243-279.