

**THE IMPORTANCE OF REFERENCE GROUPS IN CONSUMER BEHAVIOR:
A COMPARATIVE ANALYSIS BETWEEN STUDENT POPULATIONS,
BETWEEN PRODUCTS AND BETWEEN LEVELS OF DECISION SPECIFICITY**

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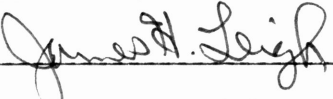
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Abstract

The purpose of this study was to determine if there is perceived to be reference group influence on product-related decisions among college students. Based on a review of the marketing and psychology literatures pertaining to reference group influence, several research hypotheses were formulated which have not been investigated heretofore. The research samples for this study consisted of two distinct groups of Texas A&M students--students enrolled in a first level consumer behavior course and a cross section of students not likely to have had a consumer behavior class. The two groups were found to differ in their perceptions of reference group influence across three decision areas--product ownership, product type or style and brand decisions. Furthermore the study showed that the product type/style decision is perceived by both student groups as being a separate and distinct decision area from ones involving product ownership and brand.

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Each day, every one of us has interactions with many different groups of people. These groups may be small -- such as one's set of close friends, family and co-workers -- or they may be large -- such as the group of students attending a university, the fans at a football game or delegates at a political convention. There is no doubt all of us interact with many different groups over the course of our daily lives. Whether we admit it or not, these groups have a tremendous impact on much of what we think and do. Moreover, we are very aware of pressures from those around us, and we usually have reasonably accurate perceptions about what is expected of us.

The influence of groups on individual behavior has been recognized by social scientists and practical men for as long as human behavior has been of concern (Bourne 1957). Such behavior patterns as speech, dress and mannerisms are conditioned by groups in which we are a member or aspire to become one (Reeves 1970, Linder 1973). The term reference groups, as coined by Hyman (1942), is used to describe those groups which serve as a source of reference and, thus, have an influence on an individual.

Marketers have long been concerned with reference groups inasmuch as these groups can have an influence on most aspects of an individual's purchase and consumption behavior. Moreover, marketers recognize that individuals perceive the ownership of particular products and brands to be an important means of identifying with certain groups. However, there have only been a handful of studies dealing with the marketing aspects of reference group influence. Furthermore, the majority of these studies have

dealt mainly with reference group influence at the product ownership level and at the brand level. No study, as of yet, has considered reference group influence on product type or style decisions -- which is one focus of the present effort.

The purpose of this study is to determine if there is perceived to be any degree of reference group influence on product type or style decisions for certain products. Another purpose is to examine differences in perceptions of reference group influence between students in consumer behavior classes and the broader population of students not having had a consumer behavior class, given that the former group of students may be more familiar with the concept than the latter group. Finally, it is desired to determine how a sample of 30 product categories typically used by students is regarded as being relevant to student-related reference groups across three decisions -- product ownership, type or style, and brand decisions.

Background Literature

In order for the reader to fully understand the project and it's purpose, it is felt a description of exactly what reference groups are and how they influence individual behavior should be given.

The term reference group has been defined in several different ways. One definition by Shibutany (1955) is that reference groups are "...the sources of values selected by an individual for the guidance of his behavior..." (p. 128). Reference groups, as defined by Sherif & Sherif (1969), are those groups to which a person relates himself as a member or aspires to relate himself psychologically. That is, even though an individual may not be a member of a group but wishes to become a member, he will refer to that group in forming attitudes, beliefs and behavior patterns. To the

extent an individual aspires to be a member or actually is a member of a valued group, the person will tend to act in accordance with standards which have been set for that group.

In delineating alternative reference groups, two general types of groups can be distinguished from one another -- membership and non-membership groups. Membership groups are those groups in which we hold member status, such as ones involving family, friends, class-mates and co-workers. As a member of the group, the individual is expected to uphold the norms and values of the group and to behave accordingly. Non-membership groups, on the other hand, are those groups in which we are not a member. Although non-membership groups include ones for which we aspire to eventually become a member and those for which there are negative attitudes held about the group and we prefer to avoid, it is the former type of group -- also known as aspirational groups -- that are likely to serve as one point of reference for us in terms of attitudes and behaviors that we will adopt. Some examples of aspirational groups for many individuals include upper-level management, professional sports teams, or exclusive clubs and organizations.

Importance of Reference Groups

The importance of reference groups to an individual derives from the fact that we live in a complex world. Some beliefs and attitudes can be easily learned. Such things governed by laws of nature, like the effects of gravity on a dropped rock or the belief that fire burns, are things that are verifiable even if one is totally isolated. On the other hand, such things as one's religious beliefs or one's attitudes about food and clothing are verifiable only to the extent other people whom we value also hold

these same beliefs (Linder 1973). Thus, a person must generally look to relevant reference groups for guidance in forming attitudes and beliefs on complex issues and in learning acceptable behavior in complex situations.

Reference groups are also important to the individual in helping develop a sense of self identity. An individual will see himself as a reflection of the groups to which he belongs or aspires to belong. Reeves (1970) goes as far to state people are to a certain extent the sum of their group memberships.

How Reference Groups Influence Behavior

There are three main types of influence a group may have on an individual -- normative, informational and self presentation or comparative (Forsythe 1983). Even though the purpose of this study is not to examine which of these influences will be more or less relevant in making purchase decisions, it is important to inform the reader about the different ways in which reference groups may influence an individual.

Normative influence is where an individual conforms to a group's set of norms as a result of implicit or explicit pressure. A person may adhere to group norms in order to gain rewards, such as recognition or approval, or to avoid negative consequences, such as being ostracized by the group.

Informational influence derives from the desire to obtain relevant information about the accuracy of one's own perceptions and beliefs (Forsythe 1983). A person will seek and accept information from those groups perceived as credible. If these groups are also perceived as experts, then the implication is that influence is accepted by the individual (Assael 1981).

Comparative influence comes from the desire to fit in with the groups that are believed to have similar attitudes, values and behavior patterns. Assael (1981) stated people will want to support their own attitudes and behavior by associating with groups with which they agree and avoiding groups with which they do not.

In almost every situation where group influence occurs, at least one and possibly all three types of influence take place. However, one form of influence usually dominates, depending on the situation. Kelman (1958), stated the form of influence will depend on the source of power of the influencing agent.

Basis For Study

As pointed out earlier, only a handful of studies have been conducted that concern marketing aspects of reference group influence. The founding study in this area was completed by Francis Bourne (1957). Bourne theorized reference group influence will be either weak or strong to own a particular product and to own a particular brand of the product, if it is in fact acquired. Bourne based his four-category typology on the belief reference group influence is stronger for those products and brands that are more conspicuous -- that is, more socially visible. Bourne developed the typology shown in Figure 1 to determine the possible susceptibility of certain products and brands to reference group influence.

Products in the upper right quadrant are ones Bourne describes as being socially conspicuous at both the product ownership and brand level, thus exhibiting significant influence at both levels. The lower right quadrant depicts cases where the product itself is socially visible and thus important to one's reference groups, but the particular brand is not a

FIGURE 1

**Examples of Reference Group Influence
on Product Ownership and Brand Decisions**

<u>PRODUCT OWNERSHIP DECISION</u>			
	<u>WEAK</u> (-)	<u>STRONG</u> (+)	
<u>BRAND DECISION</u>		Cars	
	<u>STRONG</u> (+)	Clothing [Color TV]	Cigarettes
		Furniture [Radio-type]	Beer (Premium vs. regular)
		Magazines	Drugs
		Refrigerator-type	[Stereo]
		Toilet Soap	
		Radios	Air conditioners
		Soap	Instant coffee
		Canned peaches	TV - black & white
	<u>WEAK</u> (-)	Laundry soap	[Video-discs]
	Refrigerator-brand	[Quadraphonic sound]	
	[Black & white TV]		

* Products in brackets represent Assael's update to Bourne's typology.

Source: Assael, Henry, Consumer Behavior and Marketing Action, (Boston, Kent Publishing Company, 1981), p. 333.

distinguishing feature. In the upper left section of the figure, products are shown that are not considered socially conspicuous because virtually everyone owns these products and thus there is little reference group influence on their ownership. However, the brand of these products is a distinguishing feature, so there is an influence on the brand decision for these products. The lower left section shows those products are not generally socially visible for either product or brand, and there is little reference group influence at either level.

The Bourne study was updated in 1982 by Bearden and Etzel. The Bearden and Etzel study has advanced Bourne's theory by developing a method of categorizing products for determining the extent of likely reference group influence. The two criteria developed by Bearden and Etzel (1982) are: (1) whether the product is a luxury or a necessity; and (2) whether the product is consumed privately or publicly. Their research showed reference group influence on the product ownership decision to be stronger for products considered to be luxury items and on those brand decisions for products that are consumed in public. These two dichotomies of luxury/necessity and public/private serve to refine and strengthen Bourne's theory of conspicuousness or social visibility.

Assael (1981) addressed the question of whether certain products change over time with respect to reference group influence. In his discussion of the social multiplier effect, Assael (1981) speculated as a product becomes owned by virtually everyone, reference group influence for owning the product will be less likely to occur (p. 334). This speculation is derived from the belief that as more individuals and households opt to acquire a particular product, owning the product itself is no longer a

means of distinguishing oneself as a member of a certain group. Assael (1981) provided several examples of products that have changed over the past twenty years in terms of the degree of reference group influence operative -- radios, television (color and black & white) and stereos (see Figure 1). For example, when television was first introduced onto the market, not everyone was able or even wanted to own one. In the early stages of its life cycle, widespread ownership of television sets was probably only seen among certain groups, such as ones composed of "well to do" or "innovative" people. If a person wanted to identify with one of those groups, the ownership of a television set was probably an important means of accomplishing this objective. Now, however, television ownership is widespread and spans almost all walks of life. Thus, television ownership can no longer serve as an important means of distinguishing oneself as a member of a particular group or sector of the population. However, it may be brand decisions are still important -- and maybe more so -- even though product ownership has become less important. As can be seen in Assael's update to Bourne's typology (see Figure 1), television has evolved into two distinguishable types (color and black & white), with each type being categorized into a different cell. The point being made is not only do products change with respect to influence at the ownership level, but other aspects may also become more or less important to reference groups as well -- such as brand and product type or style decisions. This possibility leads to the premise that the Bourne typology should again be updated to include a dimension which considers reference group influence for product type or style decisions. The hypothesis here is that, for certain products, type or style decision is viewed as a separate area from owner-

ship and brand decisions, thus being subjected to reference group influence in and of itself.

There are several reasons why it is felt that product type or style has become an important aspect of purchasing behavior. The first is that companies have sought to remain profitable in increasingly competitive markets by expanding product lines to appeal to broader segments of consumers. Much of this proliferation has been in the form of modification of the basic core product -- that is, offering different types or styles. With many options available in a product, it is only logical that different groups will adopt different forms of a product to distinguish their group membership, and thus each group will influence its members to conform to the sanctioned behavior. Hence, the greater the distinctiveness of product types or styles available, the greater the relevance and influence of reference groups on the decision. It is important to note that distinctiveness and number of available options are not necessarily completely overlapping.

Another reason it is felt type or style influence should be treated separately from ownership and brand influence is that both Bourne (1957) and Assael (1981) implicitly recognized the distinction but did not operationalize it. Bourne (1957) made a distinction between refrigerator brand and type, and between premium and regular beer (see Figure 1). In his update, Assael (1981) made the distinction between radio and radio type in classifying products (see Figure 1).

Although the primary emphasis of this study is to examine if student perceptions of reference group influence on product type or style decisions

differ from perceptions concerning the other more traditional dimensions, two other areas of interest will also be examined.

The first of these areas concerns whether various student populations have different perceptions about the importance of various product-related dimensions to reference groups. More specifically, it is desired to determine if differences in perceptions of influence exist between students enrolled in a consumer behavior class and the broader population of students who have not likely been exposed to the concept of reference group influence. It is hypothesized that students in consumer behavior classes will have different perceptions from the broader student population. The reason for these proposed differences is due to the likely greater levels of previous exposure of consumer behavior students to the concepts of reference group influence. Through this exposure, these students should feel more comfortable and be more careful when making judgments of likely reference group influence. As will be mentioned in the methodology section, the broader group of students were only briefly informed of the concepts of reference group influence in the cover letter accompanying the survey instrument used in the study. As an alternative to the proposed hypothesis, it is also conceivable that any student should be knowledgeable of reference group influence simply from his or her own personal experiences. Hence, there is a logical justification for a competing hypothesis as well; however, it is believed that the effects of direct and recent exposure will contribute to differences in perceptions of the consumer behavior students compared to the broader student population.

The final area of focus in this study concerns how thirty (30) different student-relevant product categories are perceived as being relevant to

reference groups across three decision areas -- product ownership, product type or style, and brand decisions. Figure 2 shows the hypothesized categorization of the thirty product categories with respect to reference group influence. This focal area of the study supplements the first question of whether certain products will exhibit reference group influence at the type or style level. That is, it is hypothesized that not only will certain products differ in reference group influence on type/style decisions separately from brand and product ownership decisions -- and will be perceived as so, but also that each of the thirty product categories can be placed into one of the sixteen defined cells. The hypothesized placement of products was partly based on Bearden and Etzel's distinctions between luxury/necessity products and public/private consumption for the respective product ownership and brand decisions and partly on the distinctiveness/lack-of-distinctiveness of alternative types/styles available.

Method

The procedure used for data collection consisted of two steps. The first step entailed generation of the list of the thirty products to be used for testing and development of the survey questionnaire. The second step involved the actual collection of data from respondents.

Survey Development

To determine the products to be used for testing, nearly two hundred students in a consumer behavior class were asked to list ten product categories they would use or purchase while in school. These responses were then tabulated to determine the frequency with which various product categories were mentioned. The thirty product categories selected for inclusion in the study were ones which were most frequently mentioned.

FIGURE 2

Hypothesized Categorization of Products Used in Study

<u>PRODUCT OWNERSHIP DECISION</u> (WEAK)(-)		<u>BRAND DECISION</u>	
	<u>WEAK (-)</u>	<u>WEAK (-)</u>	<u>STRONG (+)</u>
<u>TYPE/ STYLE DECISION</u>	<u>WEAK (-)</u>	Dictionary Hairdryer Knapsack (Bookbag) Pen Umbrella	Shampoo
	<u>STRONG (+)</u>	Alarm Clock	Camera Magazine Motorcycle
<u>PRODUCT OWNERSHIP DECISION</u> (STRONG) (+)		<u>BRAND DECISION</u>	
		<u>WEAK (-)</u>	<u>STRONG (+)</u>
<u>TYPE/ STYLE DECISION</u>	<u>WEAK (-)</u>	Camping Equipment	Cigarettes Cologne Television
	<u>STRONG (+)</u>	Wine Bicycle Birth Control Jewelry Shoes (Dress) Shoes (Leisure) Beer	Automobile Boots Car Stereo Liquor Home Stereo Calculator Albums Dress Clothes Leisure Clothes

A questionnaire was then developed which elicited perceptions of the degree of reference group influence for each product category across each of three decision areas -- product ownership, type or style and brand. The response categories for each of these three decisions ranged on a four-point scale from no reference group influence (0) to strong reference group influence (3), with the two intermediate scale positions representing weak (1) and moderate (2) degrees of influence. A cover letter accompanied the questionnaire which provided a description of reference groups and how influence might operate on various decisions. The focal reference group (Texas A&M students) to use in responding was also given.

Survey Administration

The survey was administered to two groups: (1) undergraduate students enrolled in two sections of a first-level consumer behavior class and (2) students of diverse majors not likely to have had a consumer behavior class.

The consumer behavior group completed questionnaires during class soon after the concept of reference group influence had been covered. Students representing the broader undergraduate population were solicited for participation during registration at the start of the Fall 1984 semester. As students waited in line to complete their registration, they were requested to participate in the study.

Sixty-three (63) completed questionnaires were obtained from students enrolled in a consumer behavior course, and one-hundred (100) students from the broader student population completed questionnaires as well. None of the one-hundred students from the broader population were marketing majors and thus would likely not have already taken a consumer behavior course.

However, it is conceivable that in a few isolated instances a student might have some familiarity with the concept of reference group influence as a result of other coursework, such as a psychology or sociology class.

Each respondent made a total of ninety (90) perceptual judgments -- for each of the thirty (30) products. Respondents rated the degree of reference group influence in encouraging ownership of a particular product, of a particular type or style of that product, and of a particular brand of the product.

Results

Responses of consumer behavior students to each of the survey questions were compared to those of the other students. Both an independent-sample t-test and a chi-square test were used to test for significant differences between the two groups. In all, ninety comparisons (three decisions by thirty products) were tested using each procedure. The results of these tests are presented in Table 1. The t-tests indicated that 53 of the 90 mean responses are significantly different at the .05 level between the two groups of students. The results of the chi-square analyses are that 60 of the 90 tests revealed significant differences between the two groups. For both tests, the number of significant differences is considerably more than what one would expect due to chance alone. It is interesting to note that in almost every instance where there were significant differences, the consumer behavior students on average indicated a greater degree of reference group influence than did the other students.

The results of these analyses indicate that the other research hypotheses should be examined on a disaggregated-sample basis, as opposed to

TABLE 1

Product and Decision Specific Comparisons Between Student Groups

	<u>A. Product Ownership Decision</u>		<u>t value</u> (df=161)	<u>Chi square</u> (df=3)
	<u>Sample Means (standard deviation)</u>			
	<u>Consumer Behavior</u> <u>Students</u>	<u>Other</u> <u>Students</u>		
1. Alarm clock	1.0 (1.0)	.79 (1.14)	1.24	13.64 ^c
2. Albums	1.93 (.878)	1.58 (1.21)	2.26 ^b	9.01 ^b
3. Automobile	2.30 (0.90)	1.85 (1.11)	2.83 ^c	7.09 ^a
4. Beer	2.32 (0.82)	1.24 (1.25)	6.76 ^d	34.73 ^d
5. Bicycle	1.32 (0.86)	1.20 (1.19)	0.75	14.29 ^c
6. Birth Control Device	1.30 (1.06)	0.85 (1.22)	2.50 ^b	27.44 ^d
7. Boots	2.02 (0.87)	1.12 (0.12)	5.83 ^d	28.12 ^d
8. Calculator	1.82 (1.06)	1.59 (1.15)	1.34	3.82
9. Camera	1.13 (0.91)	1.29 (1.05)	-1.03	5.58
10. Camping Equipment	0.69 (0.82)	0.81 (1.06)	-0.76	7.96 ^b
11. Car Stereo	2.06 (0.88)	1.62 (1.21)	2.71 ^c	15.48 ^c
12. Cigarettes	1.09 (1.03)	0.41 (0.88)	4.38 ^d	37.14 ^d
13. Clothes (Dress)	2.40 (0.73)	2.00 (1.01)	2.90 ^c	10.88 ^b
14. Clothes (Leisure)	2.45 (0.66)	1.82 (1.03)	4.70 ^d	16.99 ^d
15. Cologne	1.84 (0.88)	1.42 (1.09)	2.70 ^c	10.40 ^b
16. Dictionary	0.91 (0.99)	1.07 (1.17)	-0.96	3.97
17. Hairdryer	1.20 (1.02)	0.98 (1.12)	1.33	7.08 ^a

18. Jewelry	2.11 (0.84)	1.26 (1.17)	5.36 ^d	30.33 ^d
19. Knapsack (Bookbag)	1.67 (1.05)	1.24 (1.16)	2.42 ^b	9.15 ^b
20. Liquor	2.13 (0.85)	1.19 (1.18)	5.88 ^d	27.98 ^d
21. Magazine	1.35 (0.74)	1.20 (1.03)	1.07	17.69 ^d
22. Motorcycle	1.38 (1.00)	0.81 (1.01)	3.52 ^d	16.32 ^d
23. Pen	0.92 (0.95)	0.83 (0.98)	0.58	11.42 ^c
24. Shampoo	1.34 (1.09)	1.24 (1.13)	0.61	1.47
25. Shoes (Dress)	2.13 (0.79)	1.72 (1.04)	2.83 ^c	8.98 ^b
26. Shoes (Leisure)	2.16 (0.77)	1.71 (1.11)	3.05 ^c	12.42 ^c
27. Home Stereo	2.24 (0.87)	1.73 (1.06)	3.32 ^d	9.97 ^b
28. TV	2.02 (0.94)	1.62 (1.09)	2.45 ^b	7.09 ^a
29. Umbrella	1.33 (1.08)	0.83 (0.95)	3.03 ^c	10.11 ^b
30. Wine	1.52 (0.85)	0.89 (1.05)	4.20 ^d	25.94 ^d

B. Product Type or Style Decision

1. Alarm clock	0.84 (0.86)	0.81 (1.03)	0.21	7.01 ^a
2. Albums	2.06 (0.88)	1.74 (1.11)	2.06 ^b	10.11 ^b
3. Automobile	2.43 (0.61)	2.08 (0.92)	2.90 ^c	7.98 ^b
4. Beer	2.05 (0.90)	1.39 (1.22)	3.93 ^d	19.34 ^d
5. Bicycle	1.75 (0.88)	1.26 (1.11)	3.10 ^c	13.84 ^c
6. Birth Control Device	1.22 (1.02)	0.83 (1.17)	2.25 ^b	22.70 ^d
7. Boots	2.14 (0.87)	1.42 (1.12)	4.59 ^d	18.68 ^d
8. Calculator	1.63 (0.87)	1.68 (1.02)	-.30	6.10

9. Camera	1.59 (0.89)	1.44 (1.08)	0.95	6.85 ^a
10. Camping Equipment	0.78 (0.83)	0.85 (0.97)	-0.51	2.20
11. Car Stereo	2.08 (0.85)	1.96 (1.04)	0.80	4.16
12. Cigarettes	1.11 (0.95)	0.51 (1.01)	3.83 ^d	40.76 ^d
13. Clothes (Dress)	2.48 (0.64)	2.09 (0.92)	3.14 ^c	9.48 ^b
14. Clothes (Leisure)	2.41 (0.73)	1.91 (0.96)	3.76 ^d	11.91 ^c
15. Cologne	1.82 (0.79)	1.50 (1.07)	2.22 ^b	11.95 ^c
16. Dictionary	0.54 (0.71)	1.03 (1.12)	-3.41 ^d	16.29 ^d
17. Hair Dryer	0.78 (0.75)	0.88 (0.99)	-0.74	7.59 ^a
18. Jewelry	2.16 (0.88)	1.32 (1.15)	5.23 ^d	22.08 ^d
19. Knapsack (Bookbag)	1.41 (0.99)	1.27 (1.07)	0.87	3.06
20. Liquor	2.06 (0.89)	1.25 (1.22)	4.88 ^d	24.66 ^d
21. Magazine	1.68 (0.88)	1.37 (1.06)	2.04 ^b	8.16 ^b
22. Motorcycle	1.58 (0.94)	1.07 (1.11)	3.18 ^c	14.27 ^c
23. Pen	0.83 (0.91)	0.89 (0.99)	-0.43	3.04
24. Shampoo	0.97 (0.86)	1.22 (1.07)	-1.65 ^a	8.56 ^b
25. Shoes (Dress)	2.08 (0.87)	1.95 (0.97)	0.88	1.88
26. Shoes (Leisure)	2.06 (0.78)	1.92 (1.02)	1.01	5.80
27. Home Stereo	2.17 (0.83)	1.88 (0.98)	2.04 ^b	4.85
28. Television	1.78 (0.83)	1.74 (1.04)	0.26	6.32 ^a
29. Umbrella	0.81 (0.67)	0.85 (0.91)	-0.33	10.17 ^b
30. Wine	1.68 (0.84)	1.11 (1.14)	3.67 ^d	24.94 ^d

C. Brand Decision

1. Alarm Clock	0.54 (0.82)	0.75 (0.99)	-1.47	8.44 ^b
2. Albums	1.39 (1.02)	1.23 (1.16)	0.96	10.85 ^b
3. Automobile	2.24 (0.73)	2.06 (0.99)	1.31	7.86 ^b
4. Beer	2.27 (0.90)	1.41 (1.26)	5.06 ^d	22.11 ^d
5. Bicycle	1.59 (0.91)	1.10 (1.02)	3.18 ^c	11.17 ^b
6. Birth Control Device	0.90 (1.03)	0.60 (0.97)	1.88 ^a	6.40 ^a
7. Boots	2.00 (0.74)	1.29 (1.15)	4.80 ^d	29.84 ^d
8. Calculator	1.63 (0.87)	1.69 (1.12)	-0.35	14.54 ^c
9. Camera	1.68 (0.95)	1.58 (1.16)	0.62	7.18 ^a
10. Camping Equipment	0.68 (0.80)	0.76 (0.92)	-0.57	3.29
11. Car Stereo	2.28 (0.85)	1.85 (1.12)	2.81 ^c	8.12 ^b
12. Cigarettes	1.24 (1.09)	0.41 (0.88)	5.09 ^d	33.49 ^d
13. Clothes (Dress)	2.30 (0.77)	1.98 (0.93)	2.38 ^b	5.44
14. Clothes (Leisure)	2.19 (0.82)	1.79 (0.97)	2.83 ^c	7.73 ^a
15. Cologne	1.87 (0.87)	1.52 (1.10)	2.27 ^b	10.56 ^b
16. Dictionary	0.49 (0.67)	1.00 (1.16)	-3.54 ^d	15.70 ^c
17. Hair Dryer	0.69 (0.75)	0.89 (1.04)	-1.36	10.66 ^b
18. Jewelry	1.62 (1.09)	1.20 (1.12)	2.35 ^b	7.04 ^a
19. Knapsack (Bookbag)	0.89 (0.82)	1.05 (0.99)	-1.12	3.80
20. Liquor	2.17 (0.87)	1.38 (1.26)	4.75 ^d	23.20 ^d
21. Magazine	1.73 (0.92)	1.34 (1.11)	2.43 ^b	12.77 ^c

22. Motorcycle	1.69 (1.03)	0.98 (1.12)	4.20 ^d	18.70 ^d
23. Pen	0.86 (0.98)	0.88 (1.01)	-0.14	1.98
24. Shampoo	1.06 (0.96)	1.22 (1.09)	-0.96	3.69
25. Shoes (Dress)	1.89 (0.84)	1.81 (0.98)	0.54	3.34
26. Shoes (Leisure)	1.95 (0.85)	1.79 (1.02)	1.10	3.84
27. Home Stereo	2.25 (0.84)	1.94 (1.01)	2.14 ^b	4.31
28. Television	1.56 (0.88)	1.70 (1.05)	-0.95	7.70 ^a
29. Umbrella	0.33 (0.54)	0.62 (0.81)	-2.71 ^c	7.48 ^a
30. Wine	1.87 (0.99)	1.25 (1.21)	3.58 ^d	15.65 ^b

Key: a p < .10
b p < .05
c p < .01
d p < .001

combining the two student groups for comparisons across decisions and products. The reasons for the obtained differences between samples are many, but it seems more plausible that the differential familiarity of the two groups to the concepts of reference groups and how they influence individual purchasing behavior contributed to the noted differences.

To determine if perceptions of reference group influence on the type/style decision for a particular product differ from influence on the ownership and brand decisions, a series of correlated t-tests for related samples were conducted in which mean scores for the type/style decision for each of the 30 products were compared to those for the comparable product ownership and brand decisions for each sample group (see Table 2). In the case of the consumer behavior student group, 12 of 30 and 16 of 30 comparisons were significantly different for type/style with product ownership decisions and type/style with brand decisions, respectively. For the other student group, 10 of 30 comparisons were significantly different for the type/style versus product ownership decisions, and 13 of 30 comparisons were significantly different for the type/style versus brand decisions. The expected number of significant differences at the liberal .10 alpha level would be 3. These obtained differences indicate that the type/style decision is perceived to be a separate decision area from product ownership and brand for selected product categories.

It should be pointed out that not all of these differences were predicted. For example, some products were predicted to have strong reference group influence for owning the product but weak influence for type/style decisions, and vice versa. Moreover, differences were predicted between scores on the type/style and brand decisions. Significant differences

TABLE 2
 Comparisons of Product Type/Style Decisions with
 Product Ownership and Brand Decisions for Both Student Groups

	Consumer Behavior Students				Other Students			
	Type/Style with Product Ownership		Type/Style with Brand		Type/Style with Product Ownership		Type/Style with Brand	
	t - value	r	t - value	r	t - value	r	t - value	r
	(standard error)		(standard error)		(standard error)		(standard error)	
1. Alarm Clock	-1.06 (0.15)	.186	3.09 (0.10)	.578 ^d	0.18 (0.11)	.498 ^d	0.86 (0.07)	.765 ^d
2. Albums	1.09 (0.12)	.445 ^d	4.39 ^d (0.15)	.205	1.58 (0.10)	.590 ^d	4.47 ^d (0.11)	.498 ^d
3. Automobile	1.16 (0.11)	.400 ^c	3.00 ^c (0.06)	.735 ^d	2.15 ^b (0.11)	.457 ^d	0.24 (0.08)	.615 ^d
4. Beer	-2.48 ^b (0.11)	.501 ^d	-1.99 ^a (0.11)	.517 ^d	1.47 (0.10)	.651 ^d	-0.25 (0.08)	.785 ^d
5. Bicycle	3.47 ^d (0.12)	.365 ^b	1.86 ^a (0.09)	.714 ^d	0.64 (0.09)	.643 ^d	2.06 ^b (0.08)	.737 ^d
6. Birth Control Device	-0.63 (0.13)	.534 ^d	3.00 ^c (0.11)	.665 ^d	-0.23 (0.09)	.734 ^d	3.12 ^c (0.07)	.780 ^d
7. Boots	1.27 (0.10)	.588 ^d	1.54 (0.09)	.596 ^d	4.10 ^d (0.07)	.799 ^d	1.74 ^a (0.08)	.783 ^d
8. Calculator	-1.80 (0.11)	.634 ^d	0.00 (0.07)	.807 ^d	1.04 (0.09)	.687 ^d	-0.15 (0.07)	.814 ^d
9. Camera	4.08 ^d (0.11)	.505 ^d	-1.52 (0.06)	.855 ^d	1.73 ^a (0.09)	.677 ^d	-2.10 ^b (0.07)	.824 ^d
10. Camping Equipment	0.84 (0.09)	.589 ^d	1.52 (0.06)	.814 ^d	0.42 (0.09)	.572 ^d	1.38 (0.07)	.763 ^d
11. Car Stereo	0.18 (0.09)	.665 ^d	-2.73 ^c (0.08)	.751 ^d	3.34 ^d (0.10)	.599 ^d	1.49 (0.07)	.771 ^d
12. Cigarettes	0.16 (0.10)	.681 ^d	-1.53 (0.08)	.799 ^d	1.39 (0.07)	.719 ^d	2.17 ^b (0.05)	.890 ^d
13. Clothes (Dress)	0.93 (0.09)	.518 ^d	1.84 ^a (0.10)	.451 ^d	1.17 (0.08)	.691 ^d	1.49 (0.07)	.684 ^d
14. Clothing (Leisure)	-0.35 (0.09)	.477 ^d	2.23 ^b (0.10)	.484 ^d	1.15 (0.08)	.696 ^d	1.68 ^a (0.07)	.726 ^d
15. Cologne	-0.18 (0.09)	.673 ^d	-0.49 (0.10)	.574 ^d	0.82 (0.10)	.588 ^d	-0.31 (0.07)	.821 ^d
16. Dictionary	-4.12 ^d (0.09)	.708 ^d	0.72 (0.07)	.718 ^d	-0.43 (0.09)	.680 ^d	0.49 (0.06)	.858 ^d
17. Hairdryer	-4.94 ^d (0.09)	.737 ^d	1.04 (0.08)	.678 ^d	-1.02 (0.10)	.577 ^d	-0.13 (0.08)	.705 ^d
18. Jewelry	0.60 (0.08)	.732 ^d	5.23 ^d (0.10)	.678 ^d	0.79 (0.08)	.786 ^d	1.38 (0.09)	.709 ^d
19. Knapsack (Bookbag)	-2.45 ^b (0.10)	.677 ^d	5.33 ^d (0.10)	.647 ^d	0.31 (0.10)	.627 ^d	2.63 ^c (0.08)	.674 ^d
20. Liquor	-0.65 (0.10)	.602 ^d	-1.47 (0.08)	.771 ^d	0.74 (0.08)	.771 ^d	-1.84 ^a (0.07)	.839 ^d
21. Magazine	5.21 ^d (0.06)	.816 ^d	-0.62 (0.08)	.772 ^d	2.11 ^b (0.08)	.705 ^d	0.48 (0.06)	.834 ^d
22. Motorcycle	2.14 ^b (0.10)	.694 ^d	-1.47 (0.08)	.818 ^d	3.11 ^c (0.08)	.694 ^d	1.07 (0.08)	.715 ^d
23. Pen	-0.88 (0.11)	.579 ^d	-0.38 (0.09)	.750 ^d	0.69 (0.09)	.610 ^d	0.12 (0.08)	.672 ^d
24. Shampoo	-2.96 ^c (0.13)	.474 ^d	-1.14 (0.08)	.740 ^d	-0.18 (0.11)	.508 ^d	0.0 (0.06)	.826 ^d
25. Shoes (Dress)	-0.57 (0.08)	.689 ^d	2.35 ^b (0.08)	.717 ^d	2.39 ^b (0.10)	.544 ^d	2.15 ^b (0.07)	.779 ^d
26. Shoes (Leisure)	-1.03 (0.09)	.549 ^d	1.72 ^a (0.06)	.807 ^d	2.08 ^b (0.10)	.557 ^d	1.84 ^a (0.07)	.761 ^d
27. Stereo (Home)	-0.81 (0.08)	.738 ^d	-1.30 (0.06)	.832 ^d	1.98 ^b (0.08)	.729 ^d	-0.73 (0.08)	.659 ^d
28. Television	-2.12 ^b (0.11)	.499 ^d	1.99 ^a (0.11)	.460 ^d	1.23 (0.10)	.584 ^d	0.58 (0.07)	.779 ^d
29. Umbrella	-4.64 ^d (0.11)	.560 ^d	6.70 ^d (0.07)	.582 ^d	0.23 (0.09)	.573 ^d	3.07 ^c (0.08)	.629 ^d
30. Wine	1.52 (0.10)	.526 ^d	-2.26 ^b (0.08)	.745 ^d	2.71 ^c (0.08)	.731 ^d	-2.63 ^c (0.05)	.899 ^d

Key: a p < .10
 b p < .05
 c p < .01
 d p < .001

between the type/style and product ownership decisions were predicted for the following eight product categories: alarm clock, camera, camping equipment, cigarettes, cologne/perfume, magazine, motorcycle, and television. Upon examining the results of the t-tests, it was found that only 4 of these 8 predictions were supported for the consumer behavior students and 3 of the 8 for other students.

Significant differences were also predicted between type/style and brand decisions for alarm clock, beer, bicycle, birth control device, camping equipment, cigarettes, cologne/perfume, jewelry, shampoo, shoes (both dress and leisure), television and wine. Out of these predictions, 9 of the 13 were significantly different for consumer behavior students, yet only 6 out of the 13 were significant for the group of other students. These differences indicate there may be a possible need to re-examine the underlying conceptual bases for the hypothesized categorization scheme, if additional tests also prove to be inconclusive.

To test the hypothesized categorization scheme of the 30 products on the basis of their degree of reference group influence for the three decision areas, comparisons of responses for each decision were made between pairs of products within cells where no significant difference were predicted and among cells where significant differences were predicted. For each decision, products that were predicted to have either weak or strong reference group influence were first compared to other products with the same prediction and then to products with the opposite prediction. The results of these comparisons are summarized in Table 3.

The table shows that where weak influence and no significant difference were predicted, the product ownership decision had the highest per-

TABLE 3

Summary Results of Decision-Specific Pairwise Product Comparisons Associated with the Hypothesized Categorization Scheme

Decision	Percent Correct Predictions of Nonsignificant Differences Between Products with Weak Predicted Influence on Decision			Percent Correct Predictions of Significant Differences Between Products in Degree of Influence on Decision ²		
	Decision			Decision		
	Consumer Behavior Students	Other Students	Other Students	Consumer Behavior Students	Other Students	Other Students
Product Ownership (Number of pairs)	40.0 (45)	35.6	26.3 (190)	21.6	87.5 (200)	80.0
Product Type or Style (Number of pairs)	24.4 (45)	17.8	26.8 (153)	22.9	88.5 (200)	79.0
Brand (Number of pairs)	13.2 (91)	8.8	25.8 (120)	20.8	78.6 (224)	75.9
All Three Decisions Combined (Number of pairs)	22.7 (181)	17.7	26.3 (463)	21.8	84.6 (624)	78.2

Notes:

¹ Based on two-tailed, correlated t-tests, with an alpha level of .10.

² Based on one-tailed, correlated t-tests, with an alpha level of .10.

centage of correct predictions for both student groups, with 40% of the predictions being correct for consumer behavior students and 35.6% correct for other students. The brand decision had the lowest percentage of correct predictions, with 13.2% correct for consumer behavior students and 8.8% correct for other students. Results for the type/style decision revealed that 24.4% of the predictions were correct for consumer behavior students and 17.8% correct for other students where no significant difference and weak influence were predicted.

For product comparisons where no significant difference and strong influence were predicted, the results were comparable across all three decision areas. The three decisions combined had respective correct predictions of 26.3% and 21.8% for consumer behavior students and for other students.

Where significant differences were predicted, the results largely supported the hypothesized categorization. For each decision area, it was hypothesized that mean responses would be larger for those products predicted to have strong reference group influence. Thus, it was predicted that there would be significant differences in a particular direction for a given decision area between products predicted as having strong reference group influence and those predicted as having weak reference group influence. The table shows that among these predictions, the highest percentage correct was 88.5% for consumer behavior students at the type/style decision level and the lowest percentage correct was 75.9% for the other student group at the brand decision level. For all three decision areas combined, the percentage of correct predictions were 84.6% and 78.2%, respectively, for consumer behavior students and other students.

It should be pointed out that the results were very similar across both student groups in spite of the consistent between-group differences found earlier. Although the student groups usually differed in the mean level of perceived influence associated with a decision related to a particular product, the two groups were very similar in the patterns of relationships across products for particular decisions.

Summary and Conclusions

The results of this study reveal that for certain products, the type or style decision is an important consideration in purchasing behavior, is distinct from other decision areas, and, thus, should be incorporated into the conceptual framework of reference group influence. Since the time of the Bourne study in 1957, products have become more complex with many brands, types and styles being made available. It is only natural that the type or style of product one owns will depend largely on the types and styles owned by one's reference groups. As products change in complexity and become more or less an important means of identifying with certain groups, marketers must frequently re-examine how products are perceived as being relevant to reference groups and adjust their marketing efforts accordingly. Marketers must also be aware that different aspects of purchasing behavior may change over time and become more or less important to particular reference groups, such as those purchasing aspects involving product type or style decisions.

Also, the hypothesized categorization of the thirty products in relation to the three decision areas was largely supported by the results of this study. Not all of the product-decision predictions were completely

supported, however, which suggests that additional analysis and conceptual refinement are needed to identify the underlying bases for the departures from prediction. Even though not all of the categorizations were supported, overall the results showed this trichotomy of perceived reference group influence to be fairly accurate regarding the thirty products studied.

This study also found that different student groups have different perceptions about reference group influence. Where there were significant differences, consumer behavior students tended to give responses reflective of greater perceived influence than did the other group of students. These results suggest that the more a person is exposed to the concepts of reference group influence, the more likely he or she is to perceive a greater amount of influence for certain product decisions. This finding does not imply that students who are educated in the concepts of group influence are more susceptible to that influence or that their perceptions are more accurate; rather, they simply seem to be more cognizant of such influence. As pointed out earlier, although the student groups were found differ in the amount of influence perceived on an individual product-decision basis, the two groups were found to be roughly comparable in their patterns of responses.

As with any study, this research effort has numerous limitations and shortcomings. One of the major shortcomings is that even though the hypothesized categorization was largely supported as a whole, predictions of no significant difference within cells were not well supported. One possible explanation for this set of departures from prediction is that, in some cases, the low levels of variability for particular product-decision response variables resulted in the significant differences. The procedure

that was used to test the hypotheses is based on variability for each paired variable; dispersion for one variable might be limited and the other normal, or both might have low levels of variability. In either case, even minute mean differences would be statistically significant. Another explanation for the departures from prediction concerns the manner in which the correlated t-test procedure is computed. In cases where the magnitude of the intercorrelation among pairs is large, the t-test procedure controls for this covariation and thus accentuates the likely significance of the mean difference, even though the difference may be small in a practical sense.

Another limitation of this study involves the reliance on a convenience sampling procedure for gathering the data. Although this method may not have provided a sufficiently-accurate representation of the total Texas A&M student population to allow for specific generalizations about the student body to be advanced, it was, however, deemed appropriate, given the objectives of the study and its emphasis on examination of relationships derived from prior theorizing. Moreover, it is felt that the use of convenience sampling was not a severe limitation because the student population at Texas A&M appears to be more homogeneous than those of other universities.

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