

The purpose of the present study is to increase understanding of the information processing aspects of unit pricing. In order to make such an examination, data generated by a behavioral process experiment was used to examine the computation and use of unit prices by consumers. The behavioral process experiment was designed and conducted to allow for direct, systematic, and repeated observation of a number of aspects of unit price computation and use. This study taps the information acquisition and processing activities of consumers involved in unit pricing. Specifically, tests of the relationship between brand name availability and unit pricing are performed. The unit pricing activities of consumers are measured when brand names are available and unavailable in the information array. Further, the unit pricing activities of individuals and two-person groups are compared.

There are three major deficiencies in the body of previous unit pricing research. First, this research provides only indirect measures of the extent and nature of the information acquisition and processing aspects of unit pricing. Rather than directly measuring the actual computation and/or processing of unit prices by consumers, these studies have measured one or another of the presumed "end products" or "effects" of the presence of unit prices, e.g., consumers' reported usage, reported satisfaction, changes in purchase patterns, and changes in amounts of money spent. As Russo (1977) notes, the sequence and pattern of unit price information processing can only be inferred from these measures. An examination of the information processing activities consumers actually engage in is required in order to thoroughly understand their use of unit price information.

A second major deficiency of these studies is that they "...ignore brand preferences and brand attitudes" (Gardner, 1977, p. 427). Gardner argues that the presence of brand name in information arrays is likely to attenuate any effect of unit pricing. When brand names are unavailable or unfamiliar, on the other hand, unit pricing effects are likely to be pronounced. Brand name is presumed to be the most important of several alternative decision criteria which consumers are likely to use when they cannot use unit prices. Brand preferences are likely to have been learned prior to the implementation of unit pricing and/or to the education of the consumers in its use. Brand preferences are also likely to "take precedence" over unit pricing, especially if unit price differences across brands are minimal. In the present study, it is predicted that price and size information (necessary for unit price computations) will be acquired more often and unit prices will be computed more often when brand names are unavailable than when they are available.

A third major deficiency in previous research is its failure to take the relationship aspect of consumer unit price information processing into account. Whether unit prices are more likely to be computed and/or used by individual consumers

or by groups of consumers (e.g., married couples, friends, etc.) has not previously been measured. Unit pricing research has so far dealt almost exclusively with individual use of unit price information. In a recent review of the literature on consumer decision making within the household (Davis, 1976), it is concluded that "The view of consumers as individual decision makers is still very much alive despite commonsense observations that the family is the relevant decision-making unit..." (p. 242). This fact places rather severe limits on the degree to which theoretical propositions and empirical findings can be generalized across a variety of consumer information processing contexts (Davis, 1976). It is apparent that a significant proportion of consumer information processing is done not by individuals acting alone but by two or more persons in interaction (Ferber, 1973; Hempel, 1977). It appears especially common for two persons to engage in joint consumer information acquisition and processing (e.g., husband-wife, pairs of friends, etc.). Everyday observations of consumer shopping activities in a variety of retail outlets indicate that a large proportion of such activities are performed by married couples, boy-friends-girlfriends, and same-sex friendship pairs.

The present study allows comparisons to be made between the unit pricing activities of individuals and two-person groups. Prior research in laboratory small group decision making indicates that group decisions are often "superior" to decisions made by individuals. It seems reasonable to expect that these individual group differences in decision superiority may be explained, at least in part, by the differing nature of individual and group information processing. That is, groups may well acquire and process more information than do individuals. Thus, it is predicted in the present study that unit prices are more likely to be computed and used by groups than by individuals.

In summary, the following hypotheses are tested in the present study:

Hypothesis 1: Price and size information will be selected more often when brand names are unavailable in the array than when they are available.

Hypothesis 2: Unit price computations will occur more often when brand names are unavailable in the array than when they are available.

Hypothesis 3: Price and size information will be selected more often by two-person groups than by individuals.

Hypothesis 4: Unit prices will be computed more often by two-person groups than by individuals.

Method

The present study is modeled on the behavioral process methodology developed by Jacoby and his colleagues (e.g., Jacoby, 1976, 1977). This "Jacoby Paradigm" provides a method of measuring ongoing consumer information acquisition processing of individuals. As such, it represents a

reaction against the dominant static survey methodologies. The present study expands the Jacoby paradigm to include (1) ongoing information processing and decision making activities in addition to information acquisition, and (2) the information acquisition, processing, and decision making activities of two-person groups. This is done through the use of video recordings of these processes as consumers engage in them. The verbal and non-verbal interaction of the two-person groups recorded on the videotapes provides a record of their activities. The information processing activities of individual consumers are recorded by collecting verbal protocols, in which the consumer is asked to "think aloud" as he or she engages in the decision task.

The hypotheses described above were tested in a 2 (brand name, manufacturer name available/unavailable) x 3 (individual/ad hoc, cross-sex dyad/married couple) x 2 (toothpaste/vitamins) between-within cases experimental design. Sixty-four males and females were paid \$2.50 each for their participation in a "Consumer Behavior Study." During the main part of the experiment, consumers were asked to imagine that they were shopping for toothpaste and vitamins and were asked to make a purchase decision from among four alternative brands. All consumers acquired information on the four brands from "information display boards" and then made their purchase decisions for both products (presented in random order). The information processing activities were video recorded for later analysis. Dependent measures included selection of price and size information, and computation of unit prices.

Apparatus

The present study simulated consumer decisions through the use of two information display boards (IDBs) similar to the one employed by Jacoby, Szybillo, and Busato-Schach (1977). One IDB was constructed for each of the two test products used in the study. Each board was designed to display information on four brands (down the columns) and up to 12 information dimensions (across the rows). Thus, each board could contain up to 48 information values. Consumers in the study acquired the information values for all four brands on any given information dimension simply by removing a strip of black posterboard covering the values on that particular dimension.

Two inexpensive/nondurable test products were chosen: toothpaste and vitamins. Four brands for each test product were chosen. All brands used were real and were actually available in the local market area as of November 1, 1978. The four brands of toothpaste used were the four brands having the greatest amount of shelf facings in three randomly selected grocery supermarkets and three randomly selected drug stores. The four brands of vitamins were chosen in a similar manner from a random sample of six drug stores.

The number of information dimensions presented on the IDBs was determined on the basis of evidence from prior research. A number of studies

(e.g., Capon & Burke, 1977; Jacoby, et. al., 1977; Newman & Staelin, 1973) indicate that, given an array of about 10-15 information dimensions, consumers tend to choose about 4-7 dimensions before making a purchase decision. This finding appears to hold regardless of the number of brands available, and for both durable and nondurable products. For the present study, it was decided to employ 12 basic information dimensions for each product, thus minimizing the likelihood of a ceiling effect while still limiting the complexity of the decision task.

Research evidence also indicates that certain information dimensions are likely to be chosen from an array. These include brand name, price, and to a lesser extent, manufacturer name (Jacoby, et al., 1977), and thus these information dimensions were included in the arrays for both products. Size information (ounces for toothpaste and number of tablets per container for vitamins) was included in the arrays to allow the possibility of unit price computation. Because unit price labels were not used in the local market area, they were not included in the arrays as an information dimension.

Experimental Conditions

A 2 x 3 x 2 between-within cases analysis of variance design was employed. The two between-cases variables were: (1) brand names, manufacturer name available/unavailable, and (2) individual/ad hoc dyad/married couple as the decision making unit. Both brand name and manufacturer name information were deleted from the brand name unavailable condition because knowledge of one often leads to knowledge of the other (e.g., Colgate). For the sake of brevity, "brand name, manufacturer name availability" conditions are referred to simply as "brand name availability." The within-cases variable was the product type: toothpaste/vitamins. Consumers were presented with two different IDBs, each one representing a different product. The IDBs were presented in random order and information dimensions were arranged in random order on each IDB.

Subjects

All participants in the study as individuals (n=16; eight male, eight female) or as members of ad hoc dyads (n of dyads=12) were undergraduates enrolled in Introductory Sociology or Introductory Social Psychology. These participants were selected from a pool of volunteers solicited at the beginning of the semester and were randomly assigned to the individual or the ad hoc dyad condition. Married couples (n of couples=12) were solicited for participation in the study through an advertisement placed in the local student newspaper. In all couples used in the study, at least one partner was an undergraduate student. Participants were randomly assigned to brand name availability conditions.

Procedure

Upon arrival at the laboratory, participants were greeted by the experimenter and were given a brief, general introduction to the study.

Following the general introduction to the study, participants were then seated before the IDBs (which were stacked so that only the front one was visible) and received instructions for their first purchase decision. These instructions asked them to assume that they were shopping for a product and to select one brand from the four brands available on the IDB (identified across the top of the IDB as Brands A, B, C, and D). Dyads and couples were told that they had to reach agreement on a single brand.

The Video Recordings

An assistant of the experimenter, in addition to timing and monitoring the proceedings, activated and deactivated a video recorder. The video recordings were used to code the presence or absence of unit pricing activities. Four coders were asked to produce data enabling an examination of the unit pricing activities. Two of the coders separately viewed the videotapes to do their coding; the other two separately read the transcripts created from the videotapes to do their coding. All coders were instructed to examine each case and note the presence or absence of overt acts of unit price computation. Intercoder reliability was considered to be satisfactory. No significant differences were evident between the coding done by those viewing the tapes and those reading the transcripts.

Dependent Variables

The depth of acquisition of price and size information was measured by the number of these dimensions selected from among those available. Unit price computations were measured simply by the number of cases in which unit prices were computed for either product.

Results

Hypothesis 1 predicts that price and size information will be chosen more often when brand names are unavailable than when they are available. The combined number of price and size information dimensions selected in the brand name available and unavailable conditions was calculated separately for the two test products (Table 1). In order to test the significance of the price and size information acquisition pattern for each product, Fisher's Exact Tests were performed. The results of these tests confirm the hypothesis for toothpaste, but not for vitamins. For toothpaste, price and size information was chosen significantly more often when brand name was unavailable than available.

TABLE 1. Depth of Price and Size Information Chosen by Brand Name Availability Across Two Products

Condition	Number of Price and Size Information Dimensions		
	Chosen	Not Chosen	p
Toothpaste			
Brand Name Available (20)	15	5	.02
Brand Name Unavailable (20)	20	0	
Vitamins			
Brand Name Available (20)	20	0	n.s.
Brand Name Unavailable (20)	20	0	

The probabilities associated with each 2 x 2 array based on Fisher's Exact Test. Number of observations in parentheses.

Hypothesis 2 predicts that unit price computations will be more likely to occur when brand name is unavailable than when it is available. The number of times unit prices were computed in the brand name available and unavailable conditions was calculated separately for the two test products. In order to test the significance of the unit price computation pattern for each product, Fisher's Exact Tests were performed. While the patterns were in the predicted direction, the results of these tests disconfirmed Hypothesis 2 for both products. Unit price computations were not significantly more common in the brand name unavailable condition.

Hypothesis 3 predicts that price and size information will be chosen more often by two-person groups than by individuals. The combined number of price and size information dimensions selected in the individual and group conditions was calculated separately for the two test products. In order to test the significance of the price and size information acquisition pattern for each product, Fisher's Exact Tests were performed. The results of these tests disconfirm Hypothesis 3. Groups were not significantly more likely to chose both price and size information than were individuals.

Hypothesis 4 predicts that unit prices will be computed more often by two-person groups than by individuals. The number of times unit prices were computed by individuals and groups was computed separately for the two test products (Table 2). In order to test the significance of the unit price computation pattern for each product, Fisher's Exact Tests were performed. The

results of these tests confirm the hypothesis for toothpaste, but not for vitamins. For toothpaste, unit prices were computed significantly more often by groups than by individuals.

TABLE 2. Number of Unit Price Computations by Decision Unit Across Two Products

Condition	Number of Unit Price Computations		
	Present	Absent	p
Toothpaste			
Individuals (16)	3	13	.006
Two-Person Groups (24)	15	9	
Vitamins			
Individuals (16)	3	13	.23
Two-Person Groups (24)	2	22	

The probabilities associated with each 2 x 2 array based on Fisher's Exact Test. Number of observations in parentheses.

Discussion

These results indicate that the acquisition of price and size information is a necessary but not a sufficient condition for the computation of unit prices.

The likelihood that price and size information would be acquired was significantly affected by the availability of brand names in the array. These information dimensions were chosen significantly more often when brand names were unavailable. Apparently brand names, at least for toothpaste, communicated information to consumers which all led them to forego the selection of price and size information. A similar, but non-significant, pattern was found for unit price computations. It may well be, as has been suggested elsewhere (e.g., Jacoby, et al., 1977), that toothpaste brand names serve an information "chunking" function. That is, these brand names may carry with them additional information, making the acquisition and processing of further information unnecessary or redundant (Miller, 1956; Simon, 1974). For instance, toothpaste brand names may carry with them information regarding approximate price per ounce, or other information which enables consumers to avoid acquiring price and size information.

The relationship aspects of unit pricing tested in the present study included the effects of individuals vs. two-person groups on the acquisition of price and size information and on unit price computations. As predicted, two-person groups computed significantly more unit prices for available toothpaste brands than did individuals. It may be that individuals are more likely to

simply make their decisions on the basis of brand name preferences. This may be a function of the social desirability aspects of rational information processing. That is, in groups people may feel it necessary to publically advocate unit pricing because it is socially desirable to appear to be rational in consumer decision making. Similarly, people in a group may feel it is not socially desirable to publically display brand loyalty, a presumably less than rational basis on which to make consumer decisions. On the other hand, individuals processing information alone may be less susceptible to this social influence process since in one sense their information processing and decision making activities are not public behaviors.

In addition to these considerations, the finding that groups are more likely to engage in unit pricing may be interpreted as a part of the process through which group decision emerge as superior to those of individuals. These findings may be an example, in a consumer context, of rational information processing, i.e., rational price comparisons, producing superior decisions. One measure of the superiority of these decisions would be the extent to which groups rather than individuals selected the least expensive per-unit brand of toothpaste. Another would be the extent to which they selected a brand other than the one to which they are ordinarily loyal. The present data to show that such "rational" decisions are less likely to occur when brand names are found in the arrays.

Conclusion

If these findings are replicated for a variety of products in future research and the processes producing them are delineated through "act-by-act" coding of these and other process data, the implications for unit pricing policy may be quite important. This is especially likely to be true if the present slow enactment and lax enforcement of mandatory unit pricing legislation continues. It appears from these data that unit pricing may be a more important factor in the decision process for "non-branded" or so-called generic products than it is for national and store brands. That is, consumers may be willing to "buy by brand" when brands are available, but may turn to the more "rational" practice of buying unit price when brand names are unavailable. Further, consumer advocates may wish to promote "shopping with a friend" or "shopping with your spouse", in the expectation that such group shopping efforts induce the use of unit pricing and other rational, socially approved techniques.

Clearly, more research is needed to increase the understanding of unit pricing, especially the processes involved in their computation and use by consumers. Both field and laboratory research methodologies could contribute to such an understanding. In any case, an emphasis on the information processing and other processual aspects the unit pricing phenomenon appears to hold great promise for the future.

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CHANGING PATTERNS OF CONSUMPTION EXPENDITURES

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Abstract

Results from an analysis of the relationship between family income and consumption expenditures, based on cross-sectional data for 1972-73, are examined. Changes in consumer preferences revealed in these findings are interpreted in terms of their implications for consumer welfare in the years ahead.

For a century and a quarter Engel functions have occupied an important place in the analysis of consumption expenditures. Modern versions of the propositions that have come to be known as "Engel's laws," although Engel himself specifically stated only the one about food, are well known.

- (1) As family income increases, the percentage of total consumption expenditures that goes for
 - (a) food --decreases,
 - (b) rent, fuel, light --decreases,
 - (c) clothing --increases,
 - (d) other goods and services --increases.
- (2) As family income increases, the percentage of income that goes for saving --increases.

The statistic upon which the Engel propositions are based is equivalent, of course, to the average propensity to consume (spend). In empirical analyses of the relationship between expenditures for specific items of consumption and either income or total expenditures, it is possible to indicate the sensitivity of expenditures by the elasticity coefficient, and we shall employ this convenient and informative measure since it enables us to differentiate among various goods and services with considerable precision.²

The data analyzed in this study are from the 1972-73 Survey of Consumer Expenditures and are based on information obtained through personal interviews and purchase diaries from about 20,000 families in 1972 and about 23,000 in 1973. We shall compare the results with those obtained in the 1960-61 Survey of Consumer Expenditures in which similar information was obtained through interviews with about 14,000 families.

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²See Houthakker and Taylor (1970) and Douglas (1975) for a description of the types of functions appropriate for income-expenditure analyses. Because of the variety of factors that bear a relationship to consumption expenditures, multivariate demand functions are generally preferred by consumption economists.

Consumption Expenditure Patterns

The average family and single consumer spent \$8,270 for current consumption in 1972-73, compared with \$5,053 in 1960-61, an increase of 64 percent. When corrected for changes in the Consumer Price Index, however, the increase was only 14 percent. Total annual expenditures in 1972-73 were 72 percent of reported before-tax income and 85 percent of after-tax income, compared with 81 percent before taxes and 91 percent after taxes in the 1960-61 survey. Arc coefficients show that the 1972-73 elasticity of total expenditure with respect to income was highest in the movement from the \$7,000-\$7,999 income level to the \$8,000-\$9,999 group, or at about \$8,000. As income rose up to that point, families demonstrated an increasingly strong desire to spend for consumption. Beyond that income level, rising income evoked rising total expenditures but at a declining rate of increase relative to the rate of change in income. Budget allocations by the average family in each of these surveys are shown in Table 1.

Specific Consumption Expenditures

In keeping with the current practice of using the expenditure elasticity to show the changing Engel ratio, we show in Table 2 the constant elasticity of expenditure for all items and average family size.³ These elasticity coefficients were derived from data for twelve income groups. To facilitate our interpretation of the constant elasticity coefficients of Table 2, we have also included Table 3 in which 19 specific objects of expenditure have been classified into five categories according to their overall (constant) expenditure elasticities.

Inferior goods. In the analysis of two product groups, we found negative constant elasticities--rented dwellings and tobacco, indicating that as income increased, the amount spent decreased. For tobacco, however, only the two highest income groups (those above \$20,000) spent on an average less than did those with the next lowest income. We have therefore classified tobacco as a primary good rather than an inferior good.

Primary goods. Primary goods are those whose expenditures show a low constant elasticity. For these goods and services, increases in expenditure occurred at a decreasing rate as consumption increased. These are high priority

³Throughout this study total consumption expenditure is used as a proxy for income. It is assumed that total expenditure is a surrogate for permanent income.

TABLE 1. Average Total Consumption Expenditures of Families and Single Consumers in the United States and the Percentage Allocation of Total Expenditures among Major Items of Expenditure, 1960-61 and 1972-73^a.

Item	1960-61	1972-73
	Dollars	
Total Consumption Expenditures	5053	8270
	Percentage ^b	
Total	100.0	100.0
Food, total	24.4	20.0
Food at home	19.6	14.0
Food away from home	4.9	6.0
Tobacco	1.8	1.6
Alcoholic beverages	1.5	1.4
Housing, total	28.2	31.5
Shelter, total	13.1	16.5
Rented dwellings	5.3	6.9
Owned dwellings	7.1	8.8
Other lodging	0.7	0.8
Fuel and utilities	4.9	5.0
Household operations	5.8	6.0
Housefurnishings and equipment	4.4	4.0
Clothing, dry cleaning and laundry	11.0	7.8
Transportation, total	14.8	20.4
Automobile purchases	5.9	9.5
Vehicle operation and other transportation	8.9	10.9
Health care	6.7	6.4
Personal care	2.9	2.0
Recreation	4.5	5.7
Reading	0.9	0.6
Education	0.9	1.2
Other expenditures	2.3	1.5

^aSince some expenditure categories were not precisely the same for the 1960-61 and 1972-73 surveys, this table is based on reclassifications made in accordance with information contained in U.S. Bureau of Labor Statistics, "On the Comparison of Results between the 1960-61 and 1972-73 Consumer Expenditure Surveys," xeroxed (Washington, DC, August 31, 1978). See also U.S. Bureau of Labor Statistics, "Changes in Consumer Spending Patterns," USDL News Release 77-428 (Washington, DC: U.S. Department of Labor, May 10, 1977) for a comparison based on preliminary 1972-73 data.

^bDetail may not add to total because of rounding.

Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Survey: Integrated Diary and Interview Survey Data, 1972-73, Bulletin 1992 (Washington, DC: Government Printing Office, 1978), pp. 26-32; and U.S. Bureau of Labor Statistics, Consumer Expenditures and Income-Total United States, Urban and Rural, 1960-61, BLS Report No. 237-92, Supplement 3, Part A (Washington, DC: U.S. Department of Labor, May 1966), pp. 2-12.

TABLE 2. Elasticities of Specific Consumption Expenditures with Respect to Total Consumption Expenditure and Family Size by Families at Various Income Levels in the United States, 1972-73^a.

Item	Elasticity with Respect to	
	Total Consumption Expenditure	Family Size
Food, total	0.577 ^b	0.400 ^b
Food at home	0.255 ^b	0.711 ^b
Food away from home	1.433 ^b	-0.363 ^d
Meals as pay	0.433 ^b	0.234
Alcoholic beverages	1.272 ^d	-0.244 ^b
Tobacco	-0.120 ^b	1.213 ^b
Housing, total	0.802 ^b	0.120
Shelter, total	0.685 ^b	0.197 ^b
Rented dwellings	-1.430	2.178 ^b
Owned dwellings ^e	1.951 ^b	-0.740 ^b
Other lodging	4.595 ^b	-3.556 ^c
Fuel and utilities	0.433 ^b	0.516 ^c
Household operations	0.926 ^b	0.041
Housefurnishings and equipment, total	1.506 ^b	-0.400 ^b
Household textiles	1.595 ^b	-0.588 ^b
Furniture	1.693 ^b	-0.577 ^b
Floor coverings	2.088 ^b	-0.953 ^b
Major appliances	0.654 ^c	0.509
Small appliances, housewares, misc.	1.772 ^b	-0.642 ^b
Clothing, total	1.643 ^b	-0.585 ^d
Male, 2 and over	1.811 ^b	-0.635 ^b
Female, 2 and over	1.624 ^b	-0.651 ^c
Children, under 2	0.182	0.961 ^c
Materials, repairs	1.329 ^b	-0.184
Dry cleaning and laundry	0.492 ^c	0.276
Transportation, total	1.106 ^b	0.058
Vehicle purchase (net)	1.340 ^b	-0.107
Vehicle finance charge	0.650 ^b	0.728
Vehicle operation	0.936 ^b	0.206
Other transportation	1.248 ^b	-0.702 ^b
Health care, total	0.649 ^b	0.273 ^b
Health insurance	0.411 ^b	0.587 ^b
Expenses noninsured	0.801 ^b	0.091
Nonprescription drugs and supplies	0.695 ^c	0.108
Personal care	0.997 ^b	0.005 ^b
Recreation, total	1.966 ^b	-0.868 ^b
Owned vacation home	3.994 ^b	-2.708 ^d
Vacation and pleasure trips	2.413 ^b	-1.416 ^b
Boats, aircraft, wheel goods	2.725 ^b	-1.080
Other recreation, total	1.471 ^b	-0.376
Television	0.408 ^b	0.649 ^c
Other	1.612 ^d	-0.502 ^d
Reading	1.326 ^b	-0.310 ^c
Education	3.892 ^b	-2.687 ^b
Miscellaneous	1.349 ^b	-0.221

^aBased on double logarithmic Engel functions fitted to averages for income groups, with the average total consumption expenditure and the average size of family of each income group as the independent variables. The significance of each regression coefficient is indicated in footnotes b, c, and d.

(Continued)

^b $p < 1.00$

^c $1.00 < p \leq 5.00$.

^d $5.00 < p \leq 10.00$.

^eExcludes owned vacation home.

Source: Calculated from U.S. Bureau of Labor Statistics, Consumer Expenditure Survey: Integrated Diary and Interview Survey Data, 1972-73, Total Expenditures and Income for the United States and Selected Areas, Bulletin 1992 (Washington, D.C.: Government Printing Office, 1978), pp. 24-33.

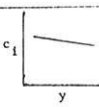
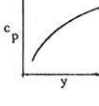
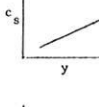
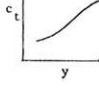
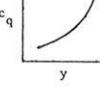
items for most families but ones for which consumption quickly reaches a saturation point that encourages additional consumption only at a declining rate of increase relative to total expenditures. Such items accounted for 28 percent of the average family's budget.

Secondary goods. Goods and services classified as secondary are characterized by expenditure elasticities equal to approximately 1.00. On an average, relative changes in expenditures for these items were in direct proportion to relative changes in total expenditures. The secondary group accounted for about 18 percent of the average family's total budget.

Tertiary goods. The third group of superior goods in Table 3 are characterized by elasticities above 1.00 and by a tendency for arc elasticities to peak at or near the before-tax break-even income level of about \$6,500, and for a secondary peak to occur near the mean before-tax income level of about \$11,400 (or sometimes at a slightly higher level). These are goods that people desire very strongly and are items whose purchases will have increased sharply as income rises up to some "optimal" or "desired" level of consumption. The physical constraints that affect the demand for primary goods are less important for these goods than are the socio-psychological factors influencing demand. Additional satisfactions from increased expenditures may be related not only to the amount consumed but also to the quality. Differentiation in the kinds and varieties of goods and services in this group makes consumption potentials greater than for the items we have classified as primary or secondary. Although the desire for these goods is high, as evidenced by the high constant elasticity coefficient, their consumption can, and is, postponed until other goods with higher priorities have been acquired. Tertiary goods account for about 39 percent of average total expenditures.

Quaternary goods. The last group we identify accounts for only 5 percent of total expenditures. The elasticity for private education was quite high, and the peak in its elasticity and in that for women's clothing occurred at an income level well above the mean income of all families.

TABLE 3. Classification of Specific Family Expenditures in the United States on the Basis of Constant Elasticities with Respect to Total Consumption Expenditure, 1960-61 and 1972-73.

Basic Pattern	Item ^a and 1972-73 Group ^b	Elasticity with Respect to Total Consumption Expenditure	
		1972-73 ^c	1960-61 ^d
	INFERIOR Rented dwelling	-1.430	.433
	PRIMARY Tobacco Food at home Fuel and utilities Dry cleaning and Laundry Health care	.120 .255 .433 .492 .649	.635 .578 .515 .276 .697
	SECONDARY Household operation Vehicle operation Personal care Alcoholic beverages	.926 .936 .997 1.272	.983 1.523 ^e .832 1.541
	TERTIARY Reading Vehicle purchase Food away from home Housefurnishings and equipment Male clothing Owned dwelling Recreation	1.326 1.340 1.433 1.506 1.811 1.951 1.966	.936 2.456 1.400 1.269 (f) 1.486 1.120
	QUATERNARY Female clothing ^b Education	1.624 3.892	(f) 2.458

^aExpenditures for these 19 items were 96.90 percent of the total consumption expenditures of the average family in 1972-73. Specific items not detailed in this table were other transportation, other lodging, meals as pay, children's clothing (under 2 years), clothing materials and repair, and miscellaneous.

^bThe five major groups are based on the rank-order elasticities for 1972-73 except for female clothing, which was classified as Quaternary because the highest arc elasticity coefficient between various income levels occurred at an income level of \$15,000 and the second-highest at \$25,000, indicating a strong demand that peaked well beyond the average income level.

^cBased on double logarithmic functions fitted to data for 12 income groups in which the average expenditure for the specific item is a function of the average total expenditures by families of that income group and the average family size of that group. One-person households are included.

^dBased on double logarithmic functions fitted to averages for seventeen total-expenditure classes and six family-size groups within each expenditure class, with one-person households eliminated in most cases.

^eUser-operated transportation; not exactly comparable to classification for 1972-73.

^fComparable data not available. The expenditure elasticity for 1960-61 for clothing (including men's, women's, children's and clothing repair) was 1.021.

Source: 1972-73 elasticities calculated from U. S. Bureau of Labor Statistics, Consumer Expenditure Survey: Integrated Diary and Interview Survey Data, 1972-73, Total Expenditures and Income for the United States and Selected Areas, Bulletin 1992 (Washington, DC: Government Printing Office), pp. 26-33. 1960-61 elasticities from Edna Douglas, Economics of Marketing (New York: Harper and Row, 1975), pp. 118-119, based on H. S. Houthakker and Lester D. Taylor, Consumer Demand in the United States (2d ed.; Cambridge: Harvard University Press, 1970), pp. 260-263.

Family Size and Consumption Expenditures

We have included in Table 2 estimates of elasticity of expenditure for specific items with respect to average family size. The effect of family income (total expenditures) is held constant. Since these estimates are derived from grouped data in which the average size of family for each group was the independent variable, they are less reliable than would be coefficients based on more detailed data. Most of the results appear reasonable, however. Negative coefficients indicate those items for which larger families at a given income level spend less than do smaller families at the same income level, while positive coefficients indicate that larger families spend more than do smaller families.

Summary of Empirical Findings

The 1972-73 Survey of Consumer Expenditures showed expenditure patterns that are consistent with other estimates of Engel functions. Following are the constant elasticity coefficients for each of the major categories of expenditure:

Item	$e_{c_i c_t}$
Food	0.577
Shelter	0.685
Fuel and utilities	0.433
Clothing	1.643
Other	>1.000

These results are consistent with findings from other countries (Houthakker, 1957; International Labour Office, 1967, 1974, 1979; Lluch, Powell, and Williams, 1977) and suggest that there is considerable support for the Engel propositions at all levels of economic development.

Our analysis, however, extended well beyond these major categories of expenditure, and it is in these details that we have found some of the most interesting patterns of expenditure. These throw considerable light on the nature of consumer preferences and also raise some important questions about the directions in which consumption is likely to move in the years ahead. We are interested particularly in the social issues that may surround the further evolution of consumption activity.

Implications for Future Consumption

Consumption expenditures by the families whose behavior we have studied must be interpreted as preferences revealed within the context of the markets where consumers made apparent their expenditure choices. Our findings imply a good deal about the relative importance of various goods and services to consumers, for the expenditure elasticities we have calculated indicate how eagerly consumers allocated additional income to specific items at the prices at which those goods were available to them in 1972-73. Some economists identify as luxuries those items whose income elasticities are high and, as necessities,

those items whose income elasticities are low. We find it more meaningful to view income elasticities as a measure of the gap between consumers' aspirations and achievements--a measure, so to speak, of their unsatisfied desire. The higher the elasticity, the more eager consumers are to allocate increased income to that particular item.

The high income elasticity for automobiles and for automobile operation, for example, and particularly among low-income consumers, reflects the well-known love affair between Americans and their cars. The declining elasticity for automobiles between 1960-61 and 1972-73 indicates that cars were less of a luxury in 1972 than they had been in 1960. Television had become an even more common object of consumption, reaching an elasticity level in 1972-73 that was about the same as that for laundry and dry cleaning.

In addition to a strongly expressed desire for automobiles and automobile operation, consumers in 1972-73 showed a strong demand for housing, defined in its broadest sense to include not only shelter but also operation and furnishings, with the exception of major appliances which were obviously no longer purchased predominantly by high-income families. Home ownership was highly desired.

Another conspicuous aspiration that we can observe is recreation. This is apparent both across income levels and through time. The highest elasticity for any single item was for owned vacation homes. It even exceeded the very large coefficient for education. Also high were vacation and pleasure trips.

Of special interest are the relatively high elasticities for both men's and women's clothing. These show that as family income increased, a disproportionately larger share of the total budget was for clothing. Yet if we look at clothing expenditures across the years, we find that as average family income has risen, the proportion of total consumer spending for clothing has declined. For example, thirty years ago, clothing expenditures accounted for about 10.5 percent of total consumer spending. Today clothing accounts for about 8.5 percent. As everyone's income has risen, we spend a smaller percentage for clothing than we did when incomes were lower.

This would seem, off-hand, not to be consistent with the Engel proposition that clothing expenditures as a percentage of total expenditures increase as family income increases. We can show, however, that these two facts are not inconsistent. In showing how this seeming contradiction about clothing expenditures can be resolved, we can also make clear some of the characteristics of expenditure patterns that have important implications for future expenditures. We shall consider these trends and relationships in terms of the relative income hypothesis and show how it affects not only clothing but the consumption of other kinds of goods and services.

Relative Income and Interfamily Consumption

According to the relative income hypothesis as it applies to cross-sectional observations, consumption by a particular family is a function of the income of the family relative to the income of others who are a part of that family's social milieu (Brady and Friedman, 1947; Duesenberry, 1949). One's position in the income distribution of the community of which one is a part thus becomes a determinant of one's expenditure level. It is possible to conceive of two interactions: (1) the leveling effect and (2) the differentiating effect.

The leveling effect. There is a leveling effect when families below the mean income aspire to the consumption level of those whose income is near or at the mean, while those above the mean wish not to deviate too greatly from the norm of the other members of the community and therefore constrain their consumption to conform more closely to that of the community at large, and particularly to that of those just below them in income.

Our cross-sectional data show this clearly. Families differed far less in their spending than in their incomes. This leveling effect was particularly evident in expenditures for goods and services that have come to be regarded as necessities or, more precisely, items that carry a high priority in consumer preferences in the sense that they are purchased first and become a part of the consumption standard of most consumers. Moreover, these are goods for which there is a saturation level so that those with high incomes do not desire substantial increases in their consumption of such items. Examples are food at home, tobacco (for those who consume it), fuel and utilities, health insurance, and nonprescription drugs. If we examine expenditures for these on a per capita basis rather than a per family basis, the leveling of expenditures across the population is even more dramatic.

But the leveling effect does not dominate purchases of all goods, nor does it control some of the specific choices made within a category of goods or services. Quite the opposite objective may determine many consumer choices, and this we shall discuss under the rubric, differentiating effect.

The differentiating effect. Within the context of the relative income hypothesis as it applies to cross-sectional analysis, the differentiating effect of one's relative income position is evident in consumption that is distinctive from that of others. Consumption levels can differ in (a) the amount of all goods or of any one good consumed, (b) the quality of the good or service, (c) the relative importance of specific items, and (d) the extent of variety in the consumption mix.

The anthropologist, Mary Douglas (1979), has interpreted the consumption of goods and services as "a means of communicating socially shared meanings about ourselves." One meaning that many may wish to convey is the identification of the individual or family in terms of their position within social

space. Consumption is often regarded as a symbol of social class, and the four bases for differentiating consumption that we have identified-- (a) quantity, (b) quality, (c) relative importance of consumption components, and (d) variety--are germane to that symbolism. The well appointed candle-lit table, the distinctive and varied wardrobe, the multi-multi-channeled stereo system, the oriental rug, the manicured lawn and swimming pool, the vacation home at the lake, the high-priced four-door air-conditioned gas-saving Toyota, a son succeeding at Harvard, and a daughter aspiring at Vassar tell things about a mother and father that mother and father want everyone to know, and considerably more about mother and father than Caesar Chavez cares to know.

If we consider this kind of consumption phenomenon, it is not difficult to reconcile the high expenditure elasticity for clothing that we find when we look at cross-sectional data with the declining importance of clothing in consumer spending when we look at time series. At any one time clothing serves a differentiating function for members of society. Its symbolism is legion, and it is likely that it will continue to fill that role in society. Clothes do not make the man or woman, but they can make either of them appear distinctive. Over time, however, clothing has come to play a less important relative role in consumers' total expenditures because of changes in our life style as well as in the durability of fabrics.⁴ Both demand and supply factors have made it less important, on an average, in everyone's expenditures. Nevertheless clothing consumption continues to serve as a means of differentiating among members of society, and clothing aspirations of women, reflected in an expenditure elasticity of 1.624, are now exceeded by those of men, whose coefficient is 1.811, a higher value that appears to be related to the fact that men's expenditures begin at a lower level than those of women, probably resulting in a greater gap between achievement and aspiration.

Relative Income and Consumption over Time

Many of the dynamic aspects of consumption that are manifest over time, such as changes in tastes and habits, do not show at all in cross-sectional data. We must, therefore, be cautious in drawing inferences about the future from the relatively static situation that we have observed. Yet it is possible for us to find within the data we have examined some relationships that suggest a problem to which we have devoted much too little thought. I refer specifically to the relative income hypothesis as it is manifest in our cross-sectional data and its implications for long-run trends in consumption.

⁴We are referring to the importance of clothing relative to all other goods and services over time. A declining percentage of an increasing total does not necessarily mean either smaller absolute amounts or lower quality, however.

As more and more consumers acquire the necessities that are means to physical, social, and psychological survival in the most basic sense, the stronger the pressures become to acquire differentiating goods--those kinds and qualities of goods and services and consumption mixes that will enable consumers to differentiate themselves from others in their social milieu.⁵ Yet, as it becomes possible, through higher incomes, for more people to express these aspirations in consumer good markets, realization of those aspirations can only drive the prices of those goods and services up, for not only do we face resource constraints, of which we are becoming increasingly mindful. We are also faced with a spiraling impossibility. If our aspirations to be different are rank-order aspirations, their realization is impossible. Not everybody can be in the top 20 percent. As Fred Hirsch has pointed out, if everyone stands on tiptoe, no one can see better.

Many of the goods to which we aspire do not make us very happy if everybody else has them. Recreation, for example, ranks high in the aspirations of most Americans. One of the kinds of recreation that we most want is to get away from it all, to enjoy ourselves in the openness and quietness of nature. But as more people want and can have vacation homes, the harder it becomes to find seclusion and privacy. As more people walk our beaches, backpack in the wilderness, fish in our lakes, and travel our highways, the more crowded it becomes, the less pleasure it brings us, and the less inclined we are to seek it. As Yogi Berra once said, it was so crowded, nobody came.

Americans have also aspired to have more and better educational opportunities. Much of the desire for more education is to improve one's position in the labor queue so that the individual can get a more desirable job and a higher income. As more people obtain more education, however, the labor queue becomes more crowded and one's relative position is not improved.

Is there a solution? One possibility would be asceticism--to derive pleasure from nonconsumption of goods and services and to substitute activities, such as artistic, intellectual, and religious endeavors that involve utilization of resources that are constrained but not in quite the same way as are physical resources. But even that kind of world is not likely to be devoid of rank-order aspirations and a consequent rank-order

⁵Roy Harrod (1958) refers to "democratic wealth" and "obligarchic wealth." In our terminology these would be "leveling goods" and "differentiating goods," although we have carefully referred to a "leveling effect" and "differentiating effect" instead in order to draw attention to the fact that any one good may entail both attributes. Fred Hirsch (1976) employs a similar categorization when he refers to "material goods" and "positional goods." See also Harvey Leibenstein (1976) who also considers classifications related to social ranking.

spacing of individuals, for the pecking-order tendencies of intellectuals and artists and even moralists is well known, though not inevitable.

Perhaps the solution that offers the greatest potential is the refocus of personal and social values upon diversity, not in terms of linear space but in terms of spherical space. Instead of seeking rank-order position, seek a position within a sphere. A point within a sphere is on many lines--as many as we choose to contemplate. But every point is unique, and the number of potential points is far greater than for any linear ranking.

Translating this in terms of consumption, what we suggest is not rank-order diversity but multi-dimensional diversity--diversity in all possible directions. We cannot have a society, of course, in which each goes his own way without some commonality of rules. Nor can we have the benefits of certain economies of scale in production without some degree of standardization. But an orderly society can be guided by rules of procedure as well as by rules of achievement and by permissive rules as well as by constraining rules. Economies of scale have long since been exceeded in many of our industries and markets. So perhaps it is time for individuals and families and consumer specialists to raise some hard questions about what it is we want out of this mass of consumption. How can we best realize the potentials within ourselves? Where does the use of goods and services fit into our aspirations? How essential is it to have more and more? Can we find satisfaction in being truly different? And dare we consider the possibility of incorporating into our personal welfare functions the well-being of other humans in our own society and in the rest of the world, to many of whom the concept of an affluent society is enough food, shelter, and clothing to live without pain? Were our concern for consumer well-being to evolve into a concern for human welfare, we might be able to do a better job of incorporating consumption into the totality of human experience.

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PROVIDING PRODUCT INFORMATION TO CONSUMERS AT THE POINT OF PURCHASE:
PAST PROBLEMS AND FUTURE NEEDS¹

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Abstract

The experience of American consumers with product informational aids in retail stores in the 1970's is briefly reviewed. Lessons to be drawn from the experience are discussed and several ideas are proposed for computerized information systems to serve supermarket shoppers in the 1980's.

The consumer experience of the 1970's with new kinds of product information made available at the point of purchase has provided scholars and practitioners with opportunities to better understand consumer informational needs and usage patterns. In what follows, this experience is briefly reviewed, some lessons learned from it are articulated, and their import is examined for shoppers and shopping environments of the 1980's.

Consumer Aids in Supermarkets in the 1970's

Most of the new informational aids of the 1970's (unit prices, open dates and nutritional labels) were developed to serve supermarket shoppers. Despite recent findings of continued consumer interest in these aids (Greenwald, 1977; *Progressive Grocer*, 1975) and limited indications of more frequent shopper use of unit pricing and open dating (*Progressive Grocer*, 1975), the preponderance of the evidence suggests that few consumers became regular users. One factor which may have contributed to this low level of usage is the record of serious deficiencies in aid design and implementation which was uncovered in a recent review of the research literature (Friedman, 1977).

While the sources of these deficiencies are not altogether clear, it now appears that both psychological and sociological factors were significant influences. With regard to the former, it would seem that the designers of the aids failed to fully consider relevant behavior research findings on human information processing in general and consumer information processing in particular. From an examination of this rapidly expanding research literature, it already seems clear that the general-purpose, non-

individualized information displays of the 1970's, whether appearing on package surfaces, shelf rims or attached lists, will not be able to do the job of communicating the amount and complexity of information expected in the 1980's. This is especially so if, as anticipated, many consumers decide to allocate less time to supermarket shopping.

That sociological factors also played a role in accounting for the deficiencies in display design and implementation becomes apparent when one considers the theoretical formulations of Black (1976) and Coleman (1974) and the empirical findings of Fornell (1976) and Andreason and Best (1977), which taken together strongly suggest that consumers and corporate officials can be thought of as representing two separate sub-cultures differing markedly in values, power and patterns of communication. A systemic gap in communications would appear to be the state of affairs emerging from this analysis. And this finding in combination with the other emanating from the psychological analysis seriously questions whether corporations possess the will or the way to effectively communicate product information to supermarket shoppers.

Computer Systems to Serve Consumers

As futurists Schwartz, Teige, and Harman (1977) have noted in their analysis of the post-industrial era, a critical problem which society is likely to encounter is a "growing sub-culture of the information-poor." If the consumers of the future are to avoid membership in this subculture, bold new initiatives may have to be taken. Two such proposals would make extensive use of computer information systems. The first would draw upon automated checkout system capabilities in supermarkets to provide shoppers with individualized purchase advice for product-by-product selections or for the planning of daily menus or weekly diets. The second proposal is for a watchdog information system designed and operated by consumer organizations. The system would monitor the marketplace on a continuing basis identifying new developments which could affect consumers adversely. These developments would be communicated to shoppers and to the news media in an effort to counteract their negative effects.

The proposals have been set forth not as the solutions to the problems identified but as possible catalysts to a serious discussion of the issues likely to be confronting consumers in the next decade. If they succeed in stimulating such a response they will have served their purpose.

¹An earlier and fuller version of this paper was presented at the Corporate Social Concerns and Public Policy Conference held in Norway in 1978 under the auspices of the Norwegian School of Economics and Business Administration

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CONSUMER SCIENCE IN AMERICAN HIGHER EDUCATION:
DESCRIPTION, EVALUATION, AND RECOMMENDATIONS

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Abstract

This paper is a product of a short conference held in Utah in 1979 that had as its objective the evaluation of the present state of the art of consumer science in higher education and the making of recommendations for change in the content of consumer science. The purpose of this paper is not to be the definitive work on consumer science in higher education but it is intended to be a base point and catalyst for further discussion by professionals in the field.

A description and evaluation of the state of the art of consumer science in higher education has not been reported up to the present time. While some efforts have been made to list consumer science programs offered by various colleges and universities and to describe these programs (Burton, 1975 and 1976), and a few other studies have appeared in the literature that make a tangential analysis of consumer science programs (Green, 1978; McKittrick, 1976; Roberts, 1978), none describe, analyze and make recommendations for content of consumer science in higher education.

The project reported here is PART II of a larger project that was funded under a contract from the Office of Consumer Education, HEW. PART I had as its purpose to identify, list, and describe consumer science programs in higher education in the United States. PART I is reported in A List and Descriptions of Consumer Science Programs in Colleges and Universities, which will be available from CERN. The objectives of PART II were to determine the following about consumer science programs:

1. Strengths and weaknesses
2. Growth and direction
3. Commonalities and diversity of offerings, objectives and philosophies
4. Recommendations appropriate for change in college consumer science programs

Methodology

The data base for this study consisted of consumer-available information. This information was gathered by sending letters requesting information to schools identified as having consumer science programs as listed in Educational and Career Opportunities in the Consumer Field

(Burton, 1976), to consumer science and related departments in Land Grant Colleges, and to schools which did not appear on the aforementioned lists but were identified by third parties as having a consumer science program. The information requested was what is normally supplied to persons who wish to enroll in a consumer science program of a particular school, i.e., college catalogs, departmental brochures, and other printed matter relevant to the program.

It may be argued that the data base used is not adequate for the attainment of the objectives. While more precise data collection such as making on-site visitations, and/or requesting that each school complete comprehensive questionnaires have some advantages over the method used here, such methods were far beyond the resources of this project. In addition, current Federal policy discourages the solicitation of information by questionnaire for Federally funded projects when other methods of data collection are available.

In PART I of the project, program descriptions written by the Project Director from the materials provided by the colleges and universities were sent to each responding school for possible corrections and additions. Ten schools did not submit any changes. Twenty one of the thirty two schools responded with minor changes. Only one school had substantive changes to the extent that the original description was deemed invalid. Most of the changes concerned adding of new courses, deleting of courses and changing of program and course titles.

A review committee was chosen by the Project Director to review and analyze the data and make recommendations. This committee represented the major disciplines of consumer science - economics, home economics, business, and education. The Project Director also acted as a reviewer.

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The evaluation process began with the formulation of criteria by the Project Director upon which to evaluate the content and objectives of the consumer science programs. These criteria were forwarded to the other reviewers for their suggestions. In February 1979, the reviewers met for two days at the University of Utah in Salt Lake City to accomplish the objectives of this study.

Findings and Recommendations

The examination of the consumer-available information resulted in the identification of 32 colleges, 30 bachelor programs, 24 master programs, and 14 doctoral programs. These are the programs that are the basis for the findings and recommendations of this report.

Section I: Strengths and Weaknesses of Consumer Science Programs

The programs reviewed contained a variety of strengths and weaknesses. The evaluation was not designed to cite individual program's strengths and weaknesses, but to pinpoint the most common strengths and weaknesses for the aggregate of programs.

The most apparent strength as exhibited in the consumer available material was the interdisciplinary nature of the programs. In comparison with programs of other disciplines, consumer science programs contain few consumer courses and rely substantially on courses from other disciplines. The better programs appear to be truly interdisciplinary, that is, they have a conceptual framework in which the consumer and other related courses are combined into a pattern that meets the objectives and philosophy of the program. However, some programs seem to be merely multidisciplinary, that is, they appear to contain courses from other academic areas in order to provide a sufficient number of courses to constitute a program. It often appears that these other courses were chosen randomly rather than purposefully as no conceptual framework holds them together or offers a focus for synthesis.

Although it is imperative for the consumer of an education program to be knowledgeable of the objectives of the program, there was a lack of clarity and conciseness in the statement of objectives in many of the materials reviewed.

The objectives were often not stated, or when stated, were often void of any meaningful information even though they included the appropriate jargon. Some were too specific while others were overly general. Only six of the 32 schools were considered to have clearly stated objectives oriented toward consumer welfare. These six schools provided a comprehensive description of the objectives and a philosophy of the program and a realistic listing of career opportunities available for graduates of the program.

Several schools, especially those not included in the selected 32, were judged to lack a sufficient number of consumer courses to constitute an adequate core for a consumer science program, even though they claimed to have such a program. Consumer science courses were defined by the review team as those relating to:

- Decision Making (Management)
- Consumer Behavior (Consumer perspective)
- Family Economics (Not personal finance)
- Home Management
- Housing (Social, economic and psychological)
- Consumer & the Marketplace (The relationship between)
- Family Finance or Family Financial Counseling
- Consumer Protection, Law, or Legislation
- Consumer Problems, Issues (Societal problems of the consumer)
- Consumer Economics (Economic perspective)
- Household Equipment (Consumer perspective)
- Field Experience or Internship

The number of consumer courses offered by each of the 32 schools ranged from 4 to 34 with most (20) offering between 9 - 14 consumer courses. The mean number of courses was 13.7.

With respect to career opportunities, some programs offered all things to all people - to prepare persons for government, business, education, public policy makings, financial counseling, and other opportunities. In many cases the course offerings were not broad enough to warrant such optimism. The objectives of a few programs appeared more producer-oriented than consumer welfare-oriented.

There are also weaknesses that can be attributed to the whole field of consumer science, most noticeably, a lack of consistent definition of what constitutes a consumer program. Except for the North Central Regional Technical Committee of Family Economics Research (NCR-52) which has given some attention to defining the areas of Family Economics, Consumer Economics, and Consumption Economics, the profession has done little to define the philosophy, objectives, content, or titles of courses used within consumer science programs. Consumer economics in one school may mean buymanship; in another, it may be a course in micro-economic theory.

Section II: Growth and Direction of Consumer Science Programs

The growth and direction of consumer science programs is somewhat difficult to ascertain since no previous descriptive studies of consumer science programs have been reported. Therefore, this section is necessarily subjective since it relies upon the reviewers' impressions of what consumer science was in the past in comparison to what the available materials indicate it is in the present. The use of the comparative words in this section (i.e., more) are therefore used to indicate what the reviewers have perceived to be a change in the state of the art in consumer science.

While it is not evident in all the 32 schools that have graduate and/or undergraduate programs in consumer science, there is an emerging consensus about the major course content for a consumer science program. Table I shows the frequency of consumer courses offered in the 32 schools which offer consumer science programs.

There seems to be a greater emphasis on the public policy aspects of consumer science, as represented by an apparent growing number of courses in that area. Only six of the 32 schools indicate not having some public policy course as part of the program requirements. Table II shows the public policy requirements of consumer science programs.

Increased emphasis on quantitative methods and research in this consumer field is another feature of the present programs. Of the 30 schools that have undergraduate programs, 17 have course requirements in some form of research methodology, quantitative methods, and/or statistics. Of the 24 schools that have graduate programs, 10 indicate such requirements. In actuality, there are probably more research course requirements on the graduate level than were indicated in the published requirements since such requirements are often suggested by individual advisors.

TABLE I

Frequency of Consumer Course Offerings in the Schools with Consumer Science Programs

Below is a list of how many of the 32 schools offer each of the consumer courses. The title in the catalog or other materials may not be the same as the course topic listed below since there is little standardization of course titles in this field; however, catalog descriptions assisted in the classification. Where there was overlap among the courses, it was listed under the title that indicated the substance of the content.

Course Titles (approximate)	Number of Schools Offering Consumer Courses						
	0	1	2	3	4	5	5+
Home Management*	7	9	6	5	4	1	
Family Economics	9	14	4	4	1	1	
Household Equipment	10	9	8	2	2	1	
Housing	13	7	4	6	2		
Consumer Economics	14	11	1	4	1	1	
Consumer Problems and Issues	15	12	2				3
Family Finance	15	16	1				
Field Experience and/or Internship	16	15	1				
Consumer and the Marketplace	20	9	3				
Consumer Law	21	9	2				
Decision Making	22	9			1		
Personal Finance	24	8					
Economics of Consumption	24	8					
Consumer Behavior	25	6		1			
Personal and Family Finance	25	6	1				
Consumer Education	27	4	1				
Consumer Protection	28	2	2				
Consumer and Society	28	4					
Consumer Buying	29	3					
Consumer Technology and Standards	30	2					
Elderly Consumer	30	2					
Families as Consumer	30	2					
Financial Counseling	30	1	1				
Public Policy and Consumer Economics	30	2					

*Read: "Seven schools do not offer Home Management, nine schools offer one course in Home Management, six schools offer two courses"

TABLE II. Public Policy Course Requirements of Consumer Science Programs

Listed below are the number of schools that have public policy courses required as part of their programs and the number of public policy courses required by the program. These courses may be offered by the consumer science department or by another academic area. The determination of whether a course has a public policy orientation was based on the course title and/or description.

<u>Number of Schools</u>	<u>Number of Courses</u>
6	0
12	1
11	2
0	3
2	4
1	5
<u>32</u>	

There appears to be a growing consumer science identity separate from that of other academic areas. That is, contrary to being combined with another program, i.e., consumer science-home management, it may now be called consumer science. Where there is a combination with other programs though, consumer science may be combined with Family Economics (Burton, 1975), Family Economics and Management (Burton, 1975), Housing (Burton, 1975), Management (Burton, 1976), or Management and Housing (Burton, 1976). Consumer science may be thought of as a branch of "home economics" on some campuses, but on many others it has assumed its own identity.

At the same time that consumer science is assuming this identity, it is under a growing influence from areas external to home economics, such as economics, marketing, and communications. This is an indicator of the interdisciplinary direction of the programs discussed in Section I. The number of consumer-related courses that are required from outside the consumer science department is shown in Table III.

Section III: Commonalities Among Consumer Science Programs

The most apparent commonality among the various schools that offer consumer science programs throughout the country is that in fourteen of them, consumer science is based in a college with the name Home Economics. Several other programs are in colleges that appear to be closely related to Home Economics but are called by a different name. Only one program did not appear to be housed in a home economics or agriculture-related school.

Another significant commonality is the interdisciplinary or multidisciplinary nature of the programs. As discussed earlier, the broad nature of consumer science programs and the lack of variety of consumer courses offered in many departments is a prime reason for crossing departmental and college lines. A related characteristic is that in most consumer science programs, the student is afforded a wide range of

interdepartmental choices in course selection. In some cases this appears to be the result of the desire for flexibility and/or a philosophy that consumer science is an interdisciplinary topic. In other cases, this wide choice may arise because there are so few consumer courses offered.

Although many of the courses in consumer science serve as service courses to related programs, most courses and programs are oriented towards preparing students for jobs as consumer affairs professionals in business and/or government. A total of 49 career claims is made by 24 of the 32 schools which made mention of program career purposes. Often, schools made similar career claims for both the graduate and undergraduate programs. When specific fields were designated, the most frequently mentioned were: Cooperative Extension (10), Social Welfare (8), Financial Institutions (9), Family Financial Counselor (7), College Teaching and Research (7), and Utility Home Economist (6).

Section IV: Recommendations for Change

Recommendations concerning the content of consumer science programs and of the direction of the field of consumer science, are based upon the findings reported in the previous sections and the discussions of the review team during the two-day Salt Lake City conference. The recommendations are as follows:

1. Continue the emphasis on the interdisciplinary nature of the programs. The nature of consumer science itself makes its reliance on economics and other areas necessary. The lack of resources, mostly in the form of quantity of faculty, restricts consumer science programs from offering a wide range of course content and viewpoints, therefore it is necessary for the program core to be supplemented with coursework from other academic areas.
2. Academic units offering programs should recognize their limitations and lack of resources. Too often it appears that programs try to be all things to all people. Each school should recognize what it can do best and allocate its energies in that direction. Also, there is no necessity for all programs to be large; small programs with two or three faculty may be viable programs if the limits of their scope are recognized and their focus is clear.
3. Consumer science programs should continue their efforts toward a greater public policy orientation and to place more emphasis on research methodology and quantitative methods. These thrusts will not only increase the academic credence of the programs but will prepare students to deal with the demands of their profession.
4. Consumer science programs should continually evaluate their objectives and the degree to which these objectives have been accomplished.

TABLE III

Related Courses From Other Departments

Listed below are the number of courses that are included in the requirements for consumer studies majors and help make up the interdisciplinary nature of the program. They are listed by the frequency of schools which offer each type of course and the number of each type of course available at each of the 32 reporting schools and include both graduate and undergraduate.

Name of Courses	Number of Schools		
	Number of Courses Required		
	1-2 courses	3-5 courses	over 5 courses
Marketing*	14	1	
Economics	22	5	1
Business (Includes management, finance, accounting, etc.)	10	4	
Communications	13	2	
Home Economics (other than food & nutrition, clothing & textiles, child & family)	10	5	1
Family and Child	10	3	
Clothing and Textiles	7	2	
Food and Nutrition	13	2	
Agriculture	2		
Law (business, family and other)	14		
Psychology	11		
Sociology	13	2	
Political Science	10	3	

*Read: "Fourteen schools require one to two courses in Marketing for consumer studies majors, one school requires three to five courses."

5. Academicians in consumer science need to define a core of knowledge for their field. The formulation of a core would not only be beneficial in the education of consumer science students but would also provide an identity that would help in building academic prestige for consumer science. Once this core has been established, the designers of individual programs will have a model to aid in the design of their own programs. This core should include the basic knowledge of the general common core with provisions for modification to meet the special goals of the individual institution.

6. Comprehensive and up-to-date study of career opportunities for consumer science majors should be undertaken; available studies are either outdated or superficial. As stated earlier, many programs are making career claims without adequate data to substantiate the claims. Also, in order to keep the programs current with the career needs of the students, follow-up studies should be made to determine the student's career success and opinion of the program. Roberts has done this for persons with a Ph.D. (Roberts, 1978), but it is equally important to gather information on the greater number of graduates with a B.S. or M.S.

7. Consumer science needs to bring about definition to the field. There is little consistency as to the course titles or program names among institutions offering consumer science programs. This lack of definition creates confusion

and detracts from the professional image of the field of consumer science.

8. A dialogue needs to be initiated among the consumer science educators. For too long each of the programs have been developed in a vacuum. This dialogue could take the form of "Statements of Positions" and the form of "Reactions to the Positions" published in a professional consumer journal such as the Journal of Consumer Affairs. This dialogue could also be the focus of special sessions at the annual conferences of the American Council on Consumer Interests. Some attempts were made at this when Gwen Bymers chaired a session on Graduate Study in the Consumer Field at the Dallas meeting of ACCI in 1972 (Bymers, 1972).

9. Further study is needed concerning the state of the art of consumer science. It is recommended that a conference be convened with representatives from the recognized consumer programs, and those interested in establishing a program. The purpose of this conference would be to begin work towards the following goals:

- Determining the academic core of consumer science.
- Agreeing upon definition for course and program titles.
- Discussing the need for consumer science programs and formulating a rationale, if one exists.
- Discussing career opportunities with provision for regular updating.

Discussion

It is hoped that this report will be a base point and catalyst for future substantive discussion by many more consumer science educators and consumer affairs professionals. While some may disagree with the analysis and recommendations of this report, the disagreements and subsequent discussion, even if of a combative nature, can bring about action that will improve the state of the art of consumer science.

The limitations of this project are obvious. The data base is somewhat narrow and limited. The review process was accomplished during a short time frame and by a small group of persons. The judgements stated are limited to the experience, expertise and objectivity of those reviewers. More time and/or a different panel of consumer science professionals may have made different interpretations, analyses, and recommendations. However, this is not intended to be the definitive work on consumer science programs. It is a much needed beginning and may in a significant way fill part of the void in this area.

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AN ECONOMIC CONCEPTUAL BASIS FOR CONSUMER EDUCATION:
BRINGING IT ABOUT

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Abstract

To prepare students adequately to be wise consumers during their lifetime requires a grounding in a decision-making process which can withstand the changes of time and circumstance. An economic conceptual base for consumer education provides this decision-making process. This approach is found in both a new publication and an award-winning high school consumer economics course discussed in this article.

The Economic Conceptual Approach

We are living in an age of economic change and uncertainty. Soaring prices, sinking dollars, energy shortages, tight money, rising interest rates, lower productivity, and higher taxes are a few of these phenomena. These rapid changes leading to unprecedented inflation challenge consumer educators in preparing students not only for the present, but also for an uncertain future. Few of us thought fifteen to twenty years ago that we would ever be standing in gas lines for hours on end. Even two years ago, most of us refused to believe we would be paying more than \$1 a gallon for fuel. Ten years ago few would have predicted that a \$30,000 home would be worth nearly \$80,000 today.

With these types of changes, consumer education needs to stress more than techniques for comparative shopping, more than formulas for budgeting, more than the 3 C's of credit and the rule of 78's. To prepare students adequately to be wise consumers over an average life span of 65-75 years requires a grounding in the decision-making process which can withstand the changes of time and circumstance. A basic knowledge of economics is necessary in order to understand their world. An understanding of basic economics assists students in comprehending the inter-relationships among one's roles as wage earner, consumer, and citizen.

Consumer Economic Publication

The Joint Council just completed a publication pertaining to the consumer education course or units of study. Master Curriculum Guide (Part II), Strategies for Teaching Economics: Consumer Education and Basic Business includes 18 activities, many of which can be integrated into existing

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units found in the consumer education course. The activities focus on the various roles assumed by all individuals and show how economic concepts can be used to analyze types of consumer dilemmas and situations. One activity included in the publication is found in Appendix A. This particular activity, "To Paint or Not to Paint," focuses on the work/leisure trade-offs. It also looks at how tax considerations can affect work/leisure decisions. The lessons deal with many of the concepts delineated in Master Curriculum Guide (Part I) which provides the framework for economic education.

An Award Winning Course

The economic conceptual approach to teaching consumer education is exemplified by a course developed for the high school level by one of the authors, Dr. Womer. The outline for the course and suggested teaching strategies received first place in the 1978-1979 National Awards Program for Teaching Economics in the Classroom. The Program is sponsored by the International Paper Company Foundation and is administered by the Joint Council on Economic Education. Over 76 entries were submitted for the high school competition during 1978-79. The judges consist of leading experts in the fields of economics, education, and curriculum development. Background information, the objectives for the course and the sequence of units follow.

Background of Course

There are certain rudimentary economic concepts which can be successfully taught to nearly all students. These, then, should be the core learnings within a course in consumer economics at the high school level. This course is designed to make economics immediately useful to high school seniors who are about to enter college or the work-a-day world. By approaching economics from the consumer's point of view, the subject becomes an exciting experience for the students and their teacher.

During the first few weeks, the class deals with basic economic values, principles and theories. The balance of the course provides a practicum in consumer economics with the students paired, by computer, in simulated marriages. The purpose of the simulated "families" is to enable the students to learn how to design proper goals and satisfactions for their lives together. Each student learns how to adjust his or her economic values to many of the unexpected and unforeseen circumstances of life. As a result, the student begins to develop wise economic decisions and wise spending habits.

Economics is defined in human terms as the social study of how people make the best use of human resources to relieve the greatest amount of "felt-uneasiness" (that is, to attain the greatest amount of satisfaction) with the least sacrifice of "life-time" (the months, days, and hours in one's lifetime spent coping with one's insatiable wants). The primary goal of the course is to develop self-knowledge. Each student learns how to identify personal strengths and weaknesses in order to exchange the least amount of "life-time" for the greatest relief of "felt-uneasiness." "Life-time" and "felt-uneasiness" are unfamiliar terms to most high school teachers, but they are useful for describing accurately the emotional and psychological aspects of our work and personal lives as individuals and as members of families and other social groups.

Objectives

By the end of the course, students should be able to:

1. Define what money is, and how the behavior of consumers affects its value (purchasing power).
2. Explain the relationship among demand, supply, and price in our market oriented economy.
3. Explain how our mixed economy differs from other economic systems.
4. Identify personal, present, and future goals compatible with one's personality, behavior, and abilities.
5. Explain how every value judgment in life requires a social, physical, emotional, material, and/or economic cost.
6. Identify various methods to plan for future and emergency expenditures of "life-time" with limited available resources.
7. Name the various public and private agencies established to protect the consumer along with defining their responsibilities.
8. Name and define techniques used by businesses and governments to influence consumer demand.
9. Explain how all societal units, whether a family, a city, a state, or a nation, must exchange social life-time for the relief of social felt-uneasiness; that it is the responsibility of each member of these societies to participate in the design and execution of such required exchanges.
10. Make decisions about the costs of living which are more fixed in nature such as: taxes, housing, utilities, insurance and transportation.
11. Identify value judgments which come into play when making decisions regarding "living" costs: household furnishings and decorations, appliances, foods/beverages, clothing, miscellaneous goods and services, total baby care, and personal expenditures.

12. Explain why economics involves much more than money; that economics is the social study of how people make the best uses of human resources to relieve the greatest amount of felt-uneasiness.

Units and Activities

Unit I: "Getting Started -- The First Day in Class" is devoted to orientation and basic routine. The students are welcomed to "the most practical class on campus, a class where they will learn to save a minimum of \$10,000 over a lifetime of work until the age of retirement." The students are acquainted with the teacher's requirements regarding (1) attendance, (stressing the need for both "spouses" to be present every day); (2) notebooks (used to record students' impressions of AV and guest speaker presentations as well as notes on their "marriages;" these will be useful in later life as a source of information when the real challenges of living arise); (3) individual research (into areas of personal interest within the American economy and personal shopping adventures); (4) class participation (with each student expected to share his/her values with others in the class); and (5) objective and essay examinations.

In Unit II, the students, individually and in groups, set up "ladders of economic goals," culminating in retirement before they learn by experience the real economic cost of each. As students share their ideal goals with others, they become more aware of the great variety of goals which exist among different people, new goals which they never considered on their own and a realization that some goals are not realistic or attainable. The students then look at the cost of each goal in the amount of "life-time" spent in its attainment.

In Unit III the students are introduced to such basic economic concepts as the economic problem (scarcity), growth, the principle of diminishing returns, economic systems with emphasis on how the market system functions, the laws of demand and supply, price determinants, the market as a whole, and how aggregate output is determined.

In Unit IV, "Career/Vocation -- Money Value of Life-Time", the teacher begins by administering an inventory test, such as the Kuder General Interest Survey (Series E), to help students gain insights into their proper vocational or career goals. Each student then researches each of three possible occupations including available job opportunities, amount of education/training/experience required, and beginning gross income. (If available, the resources of the career guidance center should also be fully used.) In this unit, the students are exposed to the basic concepts of income determination and reasons why income varies from one occupation to another.

Unit V calls for pairing the students in simulated marriages (or as single heads of households, if the sexes are not equally balanced in a particular class). The creation of a "society of three" (each couple has at least one simulated child under the age of one year), requires students to

use the same basic economic principles, theories, and concepts to make the "families" function efficiently as our national society of nearly 215 million must use. The students fill out a Marriage Compatibility Questionnaire, and are paired on the basis of their religious affiliations, economic and social aspirations, leisure-time activities, values, economic assets, liabilities and encumbrances either by the computer or by the teacher (if a computer is not accessible.) The students learn that marriage is a legal contract, take part in a simulated marriage ceremony, and are now ready to role-play the economic activities and functions of a family with a semblance of reality.

Unit VI: "Budgeting" introduces the simulated families to the concept of a working budget. It treats such matters as federal and state taxes withheld, housing costs (renting vs home ownership including property taxes, mortgages, insurance, etc.), utilities, transportation, charities, food and clothing, savings and investing, recreation, and child care. It discusses those expenses which are relatively fixed and those which are more variable in nature.

In Units VI and VII, the students are introduced to the role of government in the economy, including monetary and fiscal policies and controls and the workings of the Federal Reserve System. Their impact upon interest rates and credit availability are covered, as well as the cost of credit. The Keynesian concept of the multiplier is presented when students consider their budget allocations for savings/investment in Unit VI.

Unit VII: "Contract Law" is best introduced by having an attorney (father, relative or friend of one of the students) come to class to talk about making contracts. After the attorney's presentation, have the students write a simple contract for the sale of some personal property, perhaps a car. Go around the class, and have the students discuss the legality or illegality of the contracts.

Unit VIII, "Living Expenditures," deals with consumer decision making in the planning for and purchase of such items as household furnishings, appliances, food and clothing, miscellaneous household goods and services, and baby care. Students must learn to distinguish between luxuries and necessities and apply the concept of opportunity cost to the choice-making process. Comparison shopping can be taught by a fieldtrip to two local markets close to the school and accessible within a class period. Decisions in living expenditures are made within the framework of the "family" budget.

Unit IX: "Consumer Services and Protection" includes emphasis on the services of private and government consumer protection agencies, along with the consumer services offered by television networks.

Unit X discusses "Disasters." After students have determined their final personal and family budgets, it is time for a simulated taste of reality. Unplanned and often unpleasant events will always occur, and each such event will require an additional exchange of "lifetime". The disasters should be written on individual pieces of paper and drawn from a hat or box. Students are asked to write on notebook paper the precise steps they will take in handling the disaster. As the pinch comes, the students must weigh the opportunity costs in seeking a solution to their problems.

Overall Observations About Course

Marriage counselors point out that young married couples, and many older ones as well, experience marital unhappiness and discord because of poor money management, that is, failure to budget sensibly and to live within their means. A consumer economics course, based on simulated marriages and simulated families, is an ideal way to prepare for the inevitable economic problems which every marriage encounters. This consumer economics course is first and foremost a course in economics; it is also a practicum on the economic aspects and the problems of marriage and the family, which applies economic principles and concepts to the everyday challenges and frustrations of living.

The academic quality of students who enroll in this course covers a broad spectrum. Each student appears to learn something which no other student learns; the class becomes a very personal experience for each student. Yet, from the response of the students to the proposed question, it is exciting to observe the fact that all students have learned some basic concepts of economics, concepts which are real, meaningful, and pertinent to them at their age and experiential levels.

Appendix

Lesson 3: To Paint or Not to Paint

TIME REQUIRED: Two or three class periods plus time to collect price estimates.

RECOMMENDED GRADE LEVEL: 9-12

MAJOR CONCEPTS: Opportunity cost
Taxation
Gross income
Work-leisure trade-off

RELATED CONCEPTS: Productivity
Marginal tax rate

Instructional Objectives: Students will

- Choose intelligently between hiring someone to do a needed task and doing it themselves;
- Understand the impact of taxes when determining the gross income required to pay for an item;
- Justify their choices in terms of the benefits compared to the opportunity costs.

Rationale for the Activity: In the American economy the costs of services and of producing goods and services which require much individual labor have often increased sharply because the rate of productivity increase has been slower in labor-intensive industries than in capital-intensive industries. For example, even with better rollers and newly designed spraying equipment, it takes almost as many hours to paint a room today as it did twenty years ago. Though the work performed per hour (labor productivity) has remained about the same over the years, painters' wages have risen along with the general increase in wages. This phenomenon has resulted in many people's becoming do-it-yourselfers around the house.

Lesson 3 gives students an opportunity to think systematically about such consumer choices. Does it pay to do it yourself? That depends upon how people value their spare time and the amount of satisfaction they gain from personal accomplishment. It also depends on the income tax bracket of the individual. For example, as incomes increase, tax rates rise because of the progressive nature of the federal income tax. The activity shows how tax rates can influence a do-it-yourself spending decision.

Materials: One copy of Handout 3-1 for each student.

Procedure:

1. Give each student a copy of Handout 3-1.
2. Ask students to select a project that they could either do themselves or could hire someone else to do for them, for example, painting a room, changing an automobile muffler, cooking a meal, cleaning rugs and carpets, making clothes, baking a cake, fixing a faucet, or building book shelves.

Have students fill in the appropriate blank on the worksheet. (NOTE: In selecting a project, students should assume that they can do about as good a job themselves as if they hired someone else.)

3. Have students make estimates of the outlays needed in each approach in order to complete the project. Give students time to collect cost estimates from stores, repair shops, etc., before completing Part I of the worksheet. This may require time outside of class unless you have an extensive collection of newspaper ads, catalogs, and other sources of information students can use in class.
4. Have each student complete Part II of the worksheet in class. This requires calculating the gross income required to pay for his/her project. Explain the formula to be used as follows: If the marginal tax rate (MTR)--the amount paid on the last dollar of income earned--is assumed to be 25 percent, then the family must earn \$4 in order to have \$3 left after taxes. If the family falls into the 50 percent tax bracket (MTR) then it would need \$200 of income, at the margin, to pay out \$100 for a room to be painted. Go over formula.

$$\frac{\text{Cost of services or materials}}{1 - \text{Marginal tax rate (MTR)}} = \text{Income required}$$

Example:

If the cost is \$100 and the tax rate is 25 percent, the gross income required will be:

$$\frac{\$100}{1 - .25} = \frac{\$100}{.75} = \$133.33$$

If some students have great difficulty using the formula to make their own calculations, assign more capable students, perhaps equipped with a pocket calculator, to give assistance.

5. Have students complete Part III. Small groups (two or three students) can work out the answers together in class or the assignment may be given for homework. Discuss the answers. (NOTE: Make sure students understand why the answers to Part III should be in terms of hourly earnings before taxes, not total income before taxes.)
6. After all parts of the worksheet have been completed, conclude the lesson by asking students which of the alternatives they would choose and why.

Evaluation:

1. Review quality of student responses to the worksheet. Individual student responses will vary.
2. Assess quality of student class discussion associated with procedures 5 and 6.

HANDOUT 3-1

SHOULD I DO IT MYSELF WORKSHEET

Name of student _____

Project selected _____

Part I. Cost Estimates

1. Estimated dollar cost to hire someone else to do the entire job _____

Source of information _____

2. Estimated dollar cost to do the same job yourself (cost of materials) _____

Estimated amount of time to do the project yourself _____

Part II. Calculations

1. How many dollars do you have to earn to pay the costs of this project if your tax bracket is 25%?

Hiring someone _____ Doing it yourself _____

Formula for calculation:

$$\frac{\text{Cost of services or materials}}{1 - \text{Marginal tax rate (MTR)}} = \text{Income required}$$

2. How many dollars do you have to earn to pay the costs of the project if your tax bracket is 50%?

Hiring someone _____ Doing it yourself _____

Formula for calculation:

$$\frac{\text{Cost of services or materials}}{1 - \text{Marginal tax rate (MTR)}} = \text{Income required}$$

Part III. Questions

1. If you do the job yourself, what do you estimate your hourly "rate of pay" is equivalent to?

What is then the total cost? _____

2. If you hire someone else to do the job what will be the opportunity cost to you?

3. If you hire someone else to do the job what will be the benefits to you?

4. Would high-tax-bracket persons be more or less likely to do the job themselves?

_____ Explain your answer _____

5. Why might persons with very high incomes nevertheless choose to do the job themselves?

From Master Curriculum Guide for the Nation's Schools, Part II, Strategies for Teaching Economics: Basic Business and Consumer Education (Secondary), 1979. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.