

of work, savings and consumption so that a steady level of consumption can be maintained across their lifetimes. People save during prime income producing years and dissave during retirement, attempting to keep consumption constant. Thus, re-entry into the labor market after retirement would be an anomaly unless people are faced with high inflation and fixed incomes. A major weakness of this approach is that, in application, people may not have realistic expectations regarding health and longevity or adequate information on future income and prices to make a decision which optimizes over their lifetime. Uncertainty is likely to force persons, especially older workers, into making a series of short run decisions regarding work and retirement which may or may not be "optimal" in the long run.

Theory does indicate that a major motivating force behind entry into the labor market is a disequilibrium between the home wage rate (the "price" of leisure) and the market wage. The home wage rate is reflected in the level of satisfaction (or utility) of a household. Over time, prices of a fixed desired bundle of goods may rise. Because some retirement benefits are fixed (e.g., pension benefits) and others increase only gradually (e.g., Social Security cost of living increases are lagged one year), households who desire to maintain a constant level of satisfaction must trade off leisure for market work to maintain that level of satisfaction.

Therefore, the arguments in the utility function (desired levels of consumption and leisure) and the budget constraint (prices of goods and income) can act as predictors of re-entry into the labor market and level of post-retirement work. The budget constraint is influenced by financial resources (including expected retirement income) and the ability to work to earn additional income. The utility function reflects the perceived adequacy of these resources.

DATA, MODEL, AND ANALYSIS

Data for this study were drawn from a population of New York State employees offered a 3 year service credit early retirement incentive. To be eligible for the incentive, persons had to be 55 or over with at least 10 years of service in the New York State Employees Retirement System, had to apply for retirement between March and May of 1983, and had to retire by June 1, 1983. Approximately 26,000 employees were eligible for the incentive and 8,000 accepted.

In order to assure a sample size suitable for studying variables of interest and for model development, a sample of 4,000 of the 26,000 "incentive-eligible" persons were surveyed in September, 1983. The sample consisted of 1500 acceptor/retirees and 2500 persons who were eligible for the incentive but did not accept. Sampling was done on the basis on the workers' NYSERS membership number. Of the 4000, 1707 responded, with 1627 providing sufficient information to be usable. (A full description of the

sampling methodology and comparison of the sample to the population can be found in [14]).

It is important to note that acceptance of an early retirement incentive does not necessarily mean that a person has "retired." Many people accepted the incentive and continued to work at a similar job in the private sector while receiving retirement benefits from the state.

It is expected that intentions to work after "retirement" are a function of expected financial resources at retirement, the perceived adequacy of those resources, and ability to work. That is:

$$W = f(Y_i, P_i, A_i), \quad (1)$$

where

- W = measure of intention to work after retirement
- Y_i = vector of variables measuring financial resources
- P_i = vector of variables measuring perceived adequacy of the financial resources
- A_i = vector of variables measuring ability to work after retirement.

In this study, intention to work after retirement has been assessed in two ways. Respondents were asked if they expected to work after retiring from their New York State job. Those who answered "yes, definitely" or "yes, probably" were sent on to other questions asking them how many hours per week they would like to work and how many weeks per year they would like to work.² These measures of desired hours per week and desired weeks per year were used as dependent variables.

Measures of financial resources in retirement included the estimated present value of the expected pension benefit³, age (as a proxy for Social Security benefits) and housing (1=owner).

Perceived adequacy of retirement income was measured by marital status (1=married), anticipated life expectancy (1=average or longer), and anticipated adequacy of retirement income (1=adequate). The life expectancy question presented the average life expectancies for males and females age 55 to 65. Respondents were asked if they expected to live about this long, longer, or not as long as the average. Average or longer than average life expectancies were re-coded as 1, with less than average life expectancies coded as 0. Regarding retirement income adequacy, respondents were asked how adequate they thought their retirement incomes would be, with four choices ranging from "more than adequate" to "not at all adequate". The four categories were collapsed

²Respondents were given four responses: yes, definitely; yes, probably; maybe; and no. In this study we used the first two and did not include those who responded "maybe" in our analysis. Thus, our estimates are on the conservative side and may understate the level of intended post-retirement work.

into two, with the two positive responses coded 1 and the two negative responses coded 0.

Ability to work after retirement was measured by health (subjective and objective measures), education (number of years of school completed), living in an urban area (1=urban or suburban), sex (1=female), and race (1=white). Health was measured subjectively by the respondents' self assessment of their health relative to others their age (1=excellent or good). The objective measure of health was the number of days out of work in the last year due to illness.

It was expected that a large proportion of the respondents would not want to work after retirement. Thus, it was likely that the dependent variables (hours and weeks of work desired) would have a large number of cases with 0's and then a distribution of other cases ranging up to 40 hours per week and up to 52 weeks per year. Tobit analysis is a maximum likelihood technique especially suited for such data. The tobit model was estimated using SHAZAM, a statistical package available for mainframe and microcomputers.

RESULTS

Means and proportions of the variables studied are reported in Table 1, and the Tobit coefficients for both the hours and weeks models are presented in Table 2.

For the expected number of hours, the probability of a non-zero dependent variable was .16, and the expected number of hours of work (evaluated at the means) was 3.34. None of the financial resource measures were significant determinants of post-retirement work intentions. However, all measures of perceived adequacy (marital status, life expectancy, and anticipated adequacy of

³Respondents were asked for a wide range of financial information, including income in 1982, expected income in 1983 from earnings, pensions, assets, etc. Although respondents were assured anonymity, between two-thirds and three-quarters of the respondents supplied full financial information. Because of this rather large response problem, the Heckman procedure was used to estimate 1982 income from earnings. In this case, civil service grade, age, age squared, and education were regressed on income. The Heckman procedure then generates a parameter, lambda, which is used in estimating 1982 income.

Using the estimated 1982 income and respondents information on actual or expected dates of retirement, we were able to project earnings to retirement (using a 5 percent per year "raise factor"). Then the pension fund formula for calculating benefits was used to estimate pension benefits at retirement. These were projected based on the respondents' answers to a life expectancy question, and then discounted back to their present values using a 2 percent discount rate.

retirement income) were significant at .90 or better. Among measures of ability to work, living in an urban area and level of education were significant.

TABLE 1

Means and Proportions

Hours of work desired	3.74
Weeks of work desired	11.81
Present value of expected pension benefits	21576
Age	60.34
Housing (1 = owner)	.79
Life expectancy (1 = average or longer)	.76
Retirement income adequacy (1 = adequate)	.67
Marital status (1 = married)	.69
Health status (1 = excellent, good)	.80
Days out due to illness	9.37
Race (1 = white)	.87
Sex (1 = female)	.41
Area of residence (1 = urban)	.57
Education	11.82

These variables operate in the expected direction, with married persons and persons who expect adequate retirement incomes having reduced hours of work desired. An average or longer life expectancy, higher levels of education, and being in an urban setting increased the hours of work desired.

Marginal effects of the variables are presented in Table 3. While these are statistically significant, the effects are small in magnitude. Being married reduced the hours of work desired by .05 per week. Perceiving oneself as having adequate retirement income also reduced the hours of work desired by .03. Anticipating an average or longer life expectancy increased the hours of work desired by .03. Being in an urban area increased the hours of work desired by .02. Having an additional year of education increased hours desired by a small (.0006) but statistically significant amount.

For the number of weeks of work desired, the probability of a non-zero response was .33, and the expected number of weeks (evaluated at the means) was 9.8. In this model, age, marital status, income adequacy, health, education, and sex were significant determinants of the desired number of weeks of work. Again, these operated in the expected directions, with health and education having positive signs and the others having negative signs.

The marginal effects of the variables, while significant, were small. Being in good health increased the number of weeks of work desired by .08, and an additional year of education increased the weeks desired by .001. The largest marginal effects are for sex and perceived income adequacy. Being female reduced the weeks desired by .16 and anticipating adequate income reduced the weeks

TABLE 2

Tobit Coefficients (t-values in parens)

Variable	Hours Model	Weeks Model
Present value of pension	.0000006 (.452)	.0000004 (.343)
Age	-.0024 (.175)	-.0294 (2.405)
Housing	.0021 (.017)	-.0799 (.761)
Life expectancy	.2225 (1.752)	.0308 (.286)
Retirement Income adequacy	-.2164 (2.101)	-.4026 (4.599)
Marital status	-.2974 (2.623)	-.3010 (2.983)
Health status	.0025 (.019)	.2550 (2.302)
Days out	-.0014 (.616)	.0011 (.606)
Race	.0513 (.355)	-.0567 (.486)
Sex	-.0253 (.232)	-.4957 (5.065)
Area of residence	.1468 (1.452)	.0901 (1.054)
Education	.0039 (1.439)	.0035 (1.437)
Constant	-.7991	1.796
Log likelihood	-1054.04	-1852.92
N	944	930
Probability of a non-zero W*	.169	.331
Expected value of W* (at means)	3.348	9.864

*where W = hours of work or weeks of work desired

TABLE 3

Marginal Effects of Variables⁴

Variable	Hours Model	Weeks Model
Present value of pension	.0000001	.0000001
Age	-.0004	-.0097*
Housing	.0003	-.0264
Life expectancy	.0375*	.0101
Retirement income adequacy	-.0365*	-.1332*
Marital status	-.0502*	-.0996*
Health status	.0004	.0844*
Days out	-.0002	.0003
Race	.0086	-.0187
Sex	-.0042	-.1640*
Area of residence	.0247*	.0298
Education	.0006*	.0011*

*Significant at .90 or better

⁴Estimated number of hours or weeks desired = E(W)

$$\frac{\partial E(W)}{\partial X_i} = p \cdot \beta_i$$

where X_i is the independent variable, P is the probability of a non-zero response, β_i is the estimated coefficient

desired by .13. Being married reduced weeks desired by .09 and being one year older reduced weeks desired by .009.

DISCUSSION

The negative sign on the sex variable in both models may seem somewhat inconsistent with expected behaviors. Because female earnings are usually lower than those of males and because their retirement benefits are likely to be lower, it could be reasoned that they should be anticipating lower levels of retirement benefits and thus have a higher need or expectation to work after retirement. However, it is likely that among this cohort, labor force attachment is not so great that it outweighs spending one's retirement years together with one's spouse if it is at all affordable.

These results indicate that the perceived adequacy of one's retirement income is a major factor in any intentions to continue working after retirement. It follows, therefore, that people need information on retirement benefits in order to ascertain the adequacy of these benefits and make appropriate plans for retirement. Social Security and most pension plans offer estimates of benefits prior to retirement. However, it is not always clear how easily available these estimates are. And often there are limits as to how far into the future plans will project, making long range planning difficult for households. Educated consumers may begin to ask for early estimates, thus creating a demand for this information. Alternatively, future revisions of ERISA or other retirement-related legislation could make provisions for retirement benefits estimates (e.g., require pension funds to provide all workers 50 and over estimates of their pension benefits on an annual basis).

Another factor that is raised in discussions of post-retirement work is the availability of appropriate jobs for older workers. While this study did not address this issue directly, it is evident that as education increases, so does the level of post-retirement work. Finding an appropriate job may mean having the appropriate skills, many of which could be obtained through re-training or additional coursework at vocational schools or community colleges. Consumer educators and personnel professionals need to help people identify the alternatives in their communities and acquire appropriate training for their retirement careers.

It is important to remember that the intentions of persons may not match their behaviors in later years. And it is also important to note that many of the persons in this study were able to "retire" from their state jobs at age 55 and continue to work full time in a related job in the private sector.

Nonetheless, these results support the findings of other studies with regard to post-retirement work. Between 16 and 33 percent of the sample expect to work after they have retired from their New York State job. However, the anticipated levels of work

are rather low, averaging about 32 hours per year (3.3 hours per week for 9.8 weeks). Major factors affecting this decision include financial resources, perceived adequacy of retirement income, and ability to work. Specifically, age, marital status, perceived income adequacy, life expectancy, education, health, sex, and area of residence appear to be significant determinants of intentions to work after retirement. Consumer educators and policy makers can help households plan and prepare for their retirement by facilitating access to information and providing opportunities for training and education.

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Financial management research becomes ever more important for educators, counselors, policy makers, theorists, and households. Both shifts in the demographic composition of the population and the economic environment that households experience create the need for more current knowledge of the financial behaviors of households under various conditions.

The three papers presented explore very different aspects of financial management. The Dillman and Horton paper addresses the perception of stress from financial problems and coping strategies used by respondents. The Jeries and Allen paper tests the use of a Deacon and Firebaugh family systems management model to examine the satisfaction with the process of financial management of wives in college student couples. The Hogarth paper examines anticipated future employment for a population eligible for early retirement.

Dillman and Horton paper

In the Dillman and Horton paper, the purpose for comparing the two groups is unclear (one with financial problems causing the greatest stress with one where other problems caused the greater stress). One purpose could be to modify the family counselling model to better address the needs in situations where the stress is from financial concerns. Presently, the field of family counselling has a much larger base of theory and research than financial counselling. Appropriate use of that theory/research base could improve the quality of financial counselling.

Several of the variables identified as related to persons experiencing financially-related stress--younger age, lower income, rental housing (proxy for limited assets?), and unemployment may be describing control over and adequacy of economic resources. Children may create an additional demand on limited income and assets. Further research using additional statistical tools would be helpful.

The authors made assumptions regarding the productive or non-productive aspects of the strategies the respondents reported using to cope with their stresses. It would have been interesting to have the respondents' perceptions of usefulness of the strategies they used.

More information and cases would be needed to understand the situation with the unemployed. How important the respondent's employment income was for livelihood and the circumstance related to the unemployment might be explored.

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Since the sample is from the general population rather than highly stressed individuals and only 6% indicated that they sought professional help frequently, perhaps the results have implications for the development of preventative and enrichment education as well as in the improvement of counselling in remedial and therapeutic situations. Instruments might be developed for individuals to use with or without a counselor to assess stress levels related to financial management and to assist in the development of positive coping strategies. Considering the normality or non-normality nature of stressful events could be useful. Is the financial stress related to a normal event that time will ameliorate and others have experienced or will experience? Or is the stressful situation an unusual event? In this sample, these demographic characteristics describing the respondents most likely to report financially related stress and related to normality events were young, with children, lower income, and renters. Unemployment would be a non-normality event.

Jeries and Allen paper

Now, let's turn to the Jeries and Allen paper. The paper delineates the inputs, throughputs, and outputs of financial management using a systems approach. They noted their findings indicated that families may follow the Deacon and Firebaugh managerial systems model as they evaluate the effectiveness of their managerial behavior. More likely, this model is a useful tool in analyzing what families actually do that contributes to wives' satisfaction with financial management.

The dependent variable was wives' satisfaction/dissatisfaction with financial management. Since money management practices are often points of disagreement in young couples, further research may be needed to determine if these same factors contribute in the same way to husbands' satisfaction/dissatisfaction. Student families with lower income have a perception that this will be a temporary status. This makes them unique as a group and makes it difficult to generalize these findings to other lower income families.

This model along with the relevant variables identified by the research could be used as a way of assisting student families to analyze and modify present behavior to improve satisfaction of wives with financial behavior.

Hogarth paper

The findings presented in this paper are intriguing. Respondents perceived adequacy of income in retirement was a major factor in any intentions to continue working after retirement, but

the average number of anticipated hours of work per year were 32 hours in an average of 10 weeks time. This would undoubtedly be less hours in a year than respondents normally worked in a week during pre-retirement. Even with fairly high remuneration per hour, it seems unlikely that this amount of employment would contribute much to improving adequacy of income. Perhaps in the pre-retirement stage, respondents had not given thought to how all factors might relate to be able to be specific on the details.

The variable identified as ability to work uses measures describing ability to find employment meeting their desired specifications as well as their capabilities of working. Women and persons with lower educational levels may not perceive exciting, well paying job opportunities as being available to them.

The paper presented good recommendations based on the findings of the research.

Summary

All three papers add to the knowledge about financial behavior. Each has practical application aspects. Further research will be needed since each paper addresses their research questions with a fairly unique sample or situation.

DEMAND FOR NUTRIENT AND NONNUTRIENT COMPONENTS IN HOUSEHOLD PURCHASES OF
RED MEAT, POULTRY, AND FISH PRODUCTS USING A HEDONIC APPROACH

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SUMMARY

The major focus of this study was an analysis of factors affecting the demand for nutritional and nonnutritional components of red meat, poultry, and fish items by households in the United States (2). The components were: protein, food energy, iron, type of animal product, bonelessness, processing, cutting (into steaks, chops, or parts), and an adjustment for quantity purchased. The analysis was conducted in two parts, according to hedonic theory as developed by Sherwin Rosen (3) and A. Myrick Freeman (1).

The first stage functions related prices of red meats, poultry, and fish items to the components of the items to obtain implicit prices of components. A linear function was used to simplify the procedures for deriving the implicit prices. A semi-logarithmic function was also estimated.

The second stage functions estimated the influence of income, socioeconomic factors, and implicit prices of components on the quantities of the components that were purchased in the household's weekly bundle of red meat, poultry, and fish items. The implicit prices, estimated from the first stage linear functions, were used in this stage. The two-stage approach was then compared to a single-equation model that related the quantities of components purchased to income, socioeconomic variables, region, and urbanization.

The household phase of the Spring component of the 1977-78 Nationwide Food Consumption Survey (3) was used as the data base for testing the model. An observation was recorded for each red meat, poultry, fish item purchased and used by each household during one week. Households that acquired items as payment or as gifts or that produced items at home were excluded from the sample. The individual purchases were aggregated into an expenditure bundle for the second stage and the single-equation models.

Two general findings result from this study. First, prices of individual food items purchased and used by households in eight markets were related to the quantities of components in the items. The nutrient and nonnutrient components as a group explained significantly more of the variation in prices than either nutrients or nonnutrients by themselves.

Second, households did appear willing to pay for both nutrient and nonnutrient components of food items. The demand for these components was related to the socioeconomic characteristics of the

households and to their incomes. Small variations in the implicit prices of such components had little or no effect on quantities of components contained in the purchased items, but further research is warranted.

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*This study received the 1985-86 ACCI Dissertation/Thesis Award

CONSUMER EDUCATION LITERATURE EVALUATION: A PANEL DISCUSSION

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The purpose of this session is to provide a forum for discussion of consumer education literature evaluation. The focus is on detection of bias in consumer literature--first, to define and review types of bias, and secondly, to analyze a proposed device for detecting bias and discuss ideas for revision.

The topic for discussion in this session is of interest for more than purely academic reasons. Bias in consumer education materials presents an obstacle to informed consumer choice for the following reasons. First, information presenting only one point of view or product limits alternatives to be considered. Secondly, biased information may present simplistic and incomplete solutions to complex problems. Finally, incomplete information may provide a limited understanding of problems or products.

Another set of concerns is related to the widespread use of free and low-cost materials. This can be expected to continue, given budget cuts for educational and other consumer-oriented agencies. Therefore, there is a continuing need to assist educators in evaluating materials.

This discussion is also an outgrowth of a workshop conducted by the Department of Family Resource Management in the summer of 1985. The workshop focused on concepts of consumer education, sources of consumer literature, evaluation tools, development of evaluation guidelines, and practice in evaluation. The objectives for students of the workshop were to construct or adapt an existing framework for concepts of consumer education; to recognize bias, to develop guidelines for evaluation, and to gain practice in evaluation.

As an introduction to evaluation, definition and concepts of consumer education were discussed in order to establish a framework for evaluation. The definition of consumer education chosen as the standard for evaluation is from the U. S.

Office of Consumer Education (9):

"Consumers' Education" means the process by which consumers:

- 1) Develop skills to make informed decisions in the purchase of goods and services in light of personal values, maximum utilization of resources, available alternatives, ecological considerations and changing economic conditions;
- 2) Become knowledgeable about the laws, rights, and methods of recourse in order to participate effectively and self-confidently in the marketplace and take appropriate action to seek consumer redress; and
- 3) Develop an understanding of the consumer-citizen role in the economic, social, and government systems and how to influence those systems to make them responsive to consumers' needs.

Concepts presented by Bannister and Monsma (2) were selected as appropriate for designing consumer education programs. The framework, focused on three broad areas of decision making, resource management, and citizen participation, proved to be very effective. Most students had only considered buymanship in designing educational programs; further, the emphasis in most textbooks and other materials used by the workshop participants was evaluation of goods and services for purchase. By using the Bannister and Monsma framework, students were able to see interrelationships between buymanship and resource management and how decisions are affected by external as well as personal factors.

Students also were introduced to a variety of sources of literature. For example, information on life insurance from a public source, a trade group, and a commercial source was compared. Content and possible use of each publication were discussed. The remainder of the workshop time was used to develop and evaluate criteria, practice using criteria, and develop an instrument.

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SOURCES AND TYPES OF BIAS IN CONSUMER EDUCATION LITERATURE

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Let me begin by making a clear statement of philosophy - in the best of all educational worlds, industry would not supply any materials used in consumer education. Gussow (5) provides support of this point of view with this question: "If business persons are bound to try to teach even children to buy their products, can they be ... educators?" The problem is "that even if the materials are not technically promotional, neither are they educational." The materials don't guide students toward considering alternatives--one of which may be NOT to buy certain items or to obtain the desired characteristics in other forms. Some of the alternatives may be less costly in dollars or less burdensome to the environment than are those serving the vested interest of any promoter.

A firm will undertake any activity until $MR > MC$. Consumer education materials are supplied to schools because the firm or industry perceives that the benefits will be greater than the costs.

Another source of distortion of the educational function comes to light when we examine four guidelines for consumer education offered by Joe Uhl (8):

- 1) to develop and clarify consumer values and goals,
- 2) to improve the managerial abilities of consumers,
- 3) to provide an understanding of economics, market processes and abilities to change market performance and
- 4) to improve the knowledge about markets and product alternatives.

Given the obligation of educators to include all of these areas in a carefully modulated balance, it is clear that the use of business supplied materials can distort emphasis. Business supplied materials often focus on products and on managerial skills; product information is also most popular with students. Private benefits and more easily perceived benefits come to students from this type of consumer education.

Yet Uhl states that the social benefits of consumer education are greatest in the areas dealing with identification of consumer values and goals and the impact of consumer choices on market performance. However, these returns are longer run, more intangible and often not perceived. Thus, teaching to these guidelines is more difficult.

As we are all operating in a less than perfect world which includes a far from perfect educational system, it behooves us to do the best we can. The system includes large quantities of educational materials provided by business. It also includes busy and over-burdened teachers who welcome attractive teaching materials. In some cases, these teachers do not have the skills for evaluating these materials for implicit or explicit bias.

Bias is not confined to business supplied materials. Textbooks often focus on buymanship and omit discussions of consumer issues, of goals and values or of the economics of the market. Government publications are often bland and ignore defects in the system such as toxic waste disposal, hazardous products or occupational disease and injury.

Corporate literature offers only positive aspects of the product and omits alternative solutions--such as not buying. Corporate literature may also be more overtly biased through the use of brand names or logos. Particularly disturbing may be the defense of a company viewpoint on such subjects as regulation, energy generation, or plant safety rules.

Given these many sources of bias it is necessary that the designers of corporate consumer materials and the teacher at both the secondary and college level work together to provide consumer education that is as free from bias as possible. This education should also aim toward inclusion of the four guidelines, thus providing high levels of private and social benefits to the students.

²Professor

GUIDELINES FOR EVALUATION

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A research of consumer education literature reveals a number of checklists, guidelines and other tools pertaining to developing and/or evaluating resources for use in educational programs. By no means a comprehensive listing, the AHEA (1), MMI (7), SOCAP (4) and Harty (6) materials illustrate examples of varying types and formats of consumer literature evaluation guidelines and tools. Some of these guidelines and tools focus exclusively or primarily on corporate or industry sponsored materials while others focus more generally on consumer literature regardless of source. Some include considerations for selecting and/or evaluating a wide range of resources while others emphasize developing printed consumer education material.

In its current form (copy appears in Appendix), the proposed consumer literature evaluation device represents an effort to combine features from several guidelines which were reviewed. It is organized to assist in reviewing two general types of information pertaining to the material being considered:

1. General publication information such as title, author(s), publisher, publication date, cost, etc. as well as proposed usage (audience type or grade level, reading level or whether only as teacher reference).
2. Criteria and rating scale addressing four areas related to the content and presentation of the material under review: (a) objectives; (b) ability range; (c) content and presence of bias and (d) presentation and use.

In the current version, it is possible to compile a numerical score to represent the total evaluation process. An "acceptability range" can also be established for comparison with the "total score."

⁴Extension Specialist

In addition to use by students in the summer workshop, a few limited reviews have been conducted informally with Cooperative Extension agents whose comments and questions are summarized as follows:

- Some liked the rating approach but others found the four-point scale too limited.
- A few thought it took too much time to complete the review. One person suggested that perhaps a given piece of literature could be reviewed by a "team" with each member concentrating on one section of the evaluation.
- Some questions were raised regarding the meaning of "bias." For example, is omission of some critical data or concept considered mere "inaccuracy" or is it "bias"? Perhaps the criteria relating to accuracy, methodology, etc. could be separated from those dealing mainly with bias.
- Some criteria seemed more important than others yet all are weighted the same. It was suggested that a weighting system may be useful/desirable to consider.

Since the agents had not participated in the workshop discussions, they were viewing the proposed evaluation device from a different perspective than had the students. However, if the proposed tool ultimately is to be useful to different types of educators/leaders in varied consumer education settings, the criteria must communicate common/shared meaning.

While the work thus far has been encouraging, discussion, comments and suggestions for changes are needed as a basis for refinement and eventual instrument testing on a more systematic basis.

III. Content and Presence of Bias (continued)

	Scale				
N. Material is free of sexist and/or discriminatory language or concepts	4	3	2	1	0
O. Material promotes sex equity	4	3	2	1	0
<u>Comments</u> (on back)					

IV. Presentation and Use

A. Material is easy to use (consider requirements for special conditions or equipment for use)	4	3	2	1	0
B. Material is attractive to learner	4	3	2	1	0
C. Material is readily available	4	3	2	1	0
D. Copyright restrictions are not present	4	3	2	1	0
E. Production quality is acceptable	4	3	2	1	0
F. Reproduction quality is acceptable	4	3	2	1	0
G. Clearly stated instruction to teachers and learners are provided	4	3	2	1	0
H. Learner activities and questions are provided	4	3	2	1	0
I. Cost of material is affordable	4	3	2	1	0
J. Perishability (length of use) of materials is an acceptable length	4	3	2	1	0
K. Material will become dated	4	3	2	1	0
L. Timeliness	4	3	2	1	0
M. Figures, tables, and charts are readable and understandable	4	3	2	1	0
<u>Comments</u> (on back)					

Total Score _____

Range of acceptability _____

Sources: Bryant, Baron, Tarrant (3), SOCAP (4), Harty (6), Manning and Boals (7).

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I had been asked to react to today's presentations on tools for the evaluation of consumer education literature.

As a consumer affairs consultant, I am frequently in the position of recommending to my clients the production of consumer education materials. I've also had first hand involvement in the production of consumer education and information pamphlets and programs during my 17 years with Avon products.

From my particular vantage point, I am pleased to see that methods are being developed to evaluate consumer education materials, whether they are produced by business, government or other sources. Certainly, there are many very good materials available to teachers and community groups involved in consumer education. All too often these may be rejected out of hand just because they are produced by business. On the other hand, there are many very poor pieces that may be in use. Neither situation does much good for either the producer or the user of the programs.

Being more closely linked to the business side, I have become tired over the years of defending business-produced materials. The Sheila Harty "Huckster in the Classroom" attitude can be very discouraging to those who are serious about doing a good job.

Let me tell you about the reality of corporate produced educational materials. It may not be the way so many in consumer organizations or academia may think that it is.

1. The consumer affairs professional in business is not usually the recipient of endless funds ear-marked for a consumer education campaign to influence a "huge captive audience." The reality is that it is often a hard sell on the part of the consumer affairs professional to get the dollars to do a program.

2. The days of corporate social responsibility programs, solely for the sake of saying "corporations are good guys" are pretty much gone. Corporate boards want to see bottom-line benefits for each of their programs and expenditures.

3. It will become more and more difficult to get corporate funding for programs unless corporate identity is a part of it, or the program in some way relates to the product or service of the company.

4. Although there have been studies indicating

that consumer education programs have bottom line benefits for corporations, the quantification of these benefits is still not easy to come by. Therefore, it is easier to get corporations to spend money on advertising than it is for consumer education/information programs.

5. The production of consumer education programs and materials can be a very frustrating experience for corporations. Working with government agencies, consumer groups and some academics can make what set out to be a simple program ... a virtual nightmare. In trying to satisfy the requirements of all parties, the needs of no-one are met. After several such frustrating experiences, the willingness of a corporation to do yet another program is greatly diminished.

If we are to accept the premise that good consumer education materials can be produced by business, and that there is a need for them, then we must also accept the following:
-bias exists and must be recognized;
-the possibility of producing more acceptable materials is greater if these projects could be carried out cooperatively.

I don't think that we need still yet another set of evaluation guidelines. There are many already. Certainly we're all familiar with the SOCAP guidelines; and last year Peggy Haney of American Express presented the guidelines resulting from a Consumer Federation of American committee she was on. This was written up in your ACCI Proceedings³ last year.

I also don't think that we want to perpetuate the belief that all corporate produced materials are bad, and therefore, we need to keep producing new evaluation instruments to keep business honest. I point to the Avon report on its conference "Should There be a National Agenda for Consumer Education" as an example of about as unbiased and impartial a piece as any I've come across.

Based on the experiences that I have personally had I would like to propose that the problem be looked upon, not as a problem, but as an opportunity. An opportunity to produce more and better consumer education/information pieces that will be funded by business and satisfy more - not all - of the needs of both parties.

1. I would like to suggest that we in business would appreciate a clearinghouse function that would provide listings of topics that teachers would like to see developed into educational programs. Similarly a listing of topics already done, and by whom, would be helpful. Stewart Lee's "Consumer Education Resource Kit" is a step in this direction.

³President

2. I would like to see a pool of educator/consultants who would be available to work with business in the development of materials on the listed topics. It is often difficult to find the right people to work with who have the respect of the educational community and an understanding of the needs of business.

3. I would like to see more teacher-training on the use of corporate sponsored materials. Here is where evaluation techniques should come into play. Teachers should be aware of what is available, what is good about it, what is bad about it, how it can fit into their class programs.

4. I would like to see more consumer education resource centers at universities around the country. I remember when at Avon perhaps ten years ago I was involved in the development of a school program for Avon. Bill Johnston had a research center in New Jersey where we were able to do focus group sessions with high school teachers in the early planning stages of the program. We were able to meet with students to get their reactions to materials during development. We were able to get evaluations of the finished product. We were able to get suggestions for product improvement. We were able to get ideas for distribution.

5. I would like to suggest that all of the above functions could be carried out through consumer education resource centers--including your resource people, training and materials.

It is my feeling that good consumer education materials can be of tremendous value to schools, as well as business. It is in the best interests of both sides to work together to produce

the best materials possible. It is definitely in the best interests of all to have the materials used properly.

If we get no further than the development of evaluation instruments for materials, at least let those producing the materials know the criteria by which our programs will be judged. Is there a way to pull together all of the guidelines and consolidate them into one "bible for all to follow? Is there a way to communicate the rules to all who are involved?

I would like to close with the usual disclaimer that the ideas presented here today are solely those of Williamson International and do not represent the opinions of any clients or consumer groups or educators I have worked with in the past.

If I have any reputation in the field, it is that I tend to be a very practical person who usually tells it like it is. I strongly believe in the benefits of consumer education, and believe that business can have a very significant role to play in the development of these materials. The business world can provide a very practical side and a very technical side to consumer problems. Through cooperative ventures, and a system that makes such ventures possible, practical and easy, we can expect to see more and better materials being produced.

Without cooperation, I would predict that we will continue to develop still additional guidelines for evaluation - after the fact. What we need now is practical guidance at the beginning - and during development - rather than criticism at the end.

CONSUMING UNITS AROUND THE WORLD

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BACKGROUND

Culture-centric predicament is defined as a person's "unconscious emotional attachment to his own culture" [1]. According to Hoyt [1], individuals and groups choose (albeit unconsciously) to believe and express that ideas or convictions of their own culture are valuable and fail to perceive the different values of others.

In the early stages of its development, culture-centric predicament has a positive effect on a society. However, as the world becomes smaller through communication and more contact among individuals from different cultures, the culture-centric predicament can inhibit the exchange of ideas and can tend to keep people believing their own culture is "best." This can inhibit understanding of other cultures and world development.

One way it is possible to escape the culture-centric predicament is by using the scientific method (especially statistics) to obtain and present facts significant in making comparisons of well-being [1]. Therefore, it is the objective of this roundtable, insofar as possible, to present data on consuming units from several different countries to make meaningful comparisons on well-being among these cultures.

OBJECTIVE DATA SELECTED

The most important data to use in comparing well-being across cultures is not only the size and security of income but the age, sex, and family status of contributors and claimants to family income [2]. Therefore, data on sex and age of money-income recipients are presented for different countries as close to the same point in time as possible. In addition, data on the family status of the different populations in five countries are presented, and some discussion of how consuming units in these countries support any relatives not living with them and provide for child care are included.

Other information, our roundtable group decided was related to consuming unit behavior, includes geographic location and climate, major types of goods imported and exported, education, life expectancy at birth, per capita Gross National Product, type of government, residential location, and labor force participation. The

objective data presented are not exhaustive. There are many additional factors that could be included.

SUBJECTIVE DATA SELECTED

More subjective data on consuming unit customs and values are discussed in individual papers. Sources for information are included, but some reflect the observational expertise of authors who come from the countries they discuss. The actual choice of data for discussion, of course, is considered a limitation of our roundtable presentation.

CONCLUSIONS AND IMPLICATIONS

Data presented and discussed in this roundtable clearly indicate that consuming units in Indonesia, Korea, Nigeria, Puerto Rico, and the United States have similarities and differences that have an effect on their well-being. Several factors that are related to consuming unit behavior have been presented, but we have just begun to examine consuming unit well-being in different parts of the world.

Consuming unit behavior in different parts of the world is a fertile area for consumer research, one that several graduate students in Family and Consumption Economics at the University of Illinois are pursuing. The choice made to collect data on consuming unit behavior and to observe this behavior at several levels of development in different cultures around the world is one that Hoyt would have wanted family and consumer economists to pursue. It is the hope of members of this roundtable panel that many others will join in the search for meaningful data to use in comparing consuming units around the world.

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Indonesia extends over part of the world's largest archipelago between two countries, Asia and Australia. Indonesia has a land of 735,354 miles, of which over half is forest and a significant amount is mountainous and volcanic. The republic is made of some 13,700 islands which stretch 3,200 miles from east to west. Most of Indonesia lies along or just below the equator. The country has a tropical, monsoon-type climate, featuring slight changes of seasons and temperature, low winds, high humidity, and periodically heavy rainfall. [2]

The government of Indonesia is based on a 1945 constitution, the year Indonesia declared its independence from the Netherlands. The constitution vests the highest authority in the People's Constitution Assembly and provides for the establishment of four independent branches: President, House of People Representatives, Supreme Audit Board, and Supreme Court.

Indonesia is the fifth most populous nation in the world, exceeded only by China, India, the Soviet Union, and the United States. In 1980, the census [2] estimated Indonesia's population as 147 million (33 million urban and 114 million rural).

The Indonesian population is predominantly youthful with more than one-half under 20 years of age. The age composition has a pyramid shape which indicates that the birth rate is high (40.3 per 1000) and life expectancy is about 50 years for males, 53 years for females. The death rate is 19.9 per 1000 people. Indonesia's population growth rate is estimated at 2.3 percent per year. It is expected that the population will rise to about 225 million by the year 2000. The government has undertaken a comprehensive family planning program designed to reduce the annual growth rate. [2]

Census data reveal that the population of young people with a primary education is greater in urban than rural areas. A large proportion of young urban population, both males and females, have a senior high school education or above. On the other hand, the young rural population continues to be small. [2]

Figures show that female labor force participation rates are higher by approximately the same percentage in the rural as opposed to urban areas for all age groups; but for males, the rural-urban deviation occurs mainly at age groups below 30 and above 40. [2]

In the decade prior to 1978, gross domestic product (GDP) increased, in real terms, at an

average rate of approximately 7.3 percent per year, in contrast to approximately 2.0 percent per year between 1960 and 1967. During 1981, Indonesia had one of the highest growth rates among the developing countries in terms of real gross domestic product--7.6 percent. During this period, per capita GNP was \$520. Total exports for the year were \$22,260.3 million as compared with \$21,908.9 million in 1980. Oil and liquid natural gas continue to be the leading exports. Imports for the same period were \$13,272.1 million versus \$10,834.4 million in 1980. The leading imports were capital goods. [4] The Indonesia government is trying to increase export of non-oil commodity goods due to the falling price of oil. In the most recent fiscal year, Indonesia's overall balance of payments in terms of change in net international reserves showed a surplus of \$10.7 billion. [1]

Rice is one of the main foods for the Indonesian people. For almost 130 years, Indonesia imported rice to feed its people. In 1984, Indonesia had succeeded in producing more rice than needed. Indonesia, as a developing country, became a nation with surplus food over and above enough to feed its people. On November 14, 1985, the Food and Agriculture Organization complimented the Indonesian government for this success.

Chernichovsky and Meesook [3] compared the consumption patterns of poor, better off, and rich households in urban and rural areas of Java and the Outer Islands. The poor people spent approximately 73 percent of their income on food, compared with 44 percent for the rich. They also spent 4 percent on clothing and 0.7 percent on durable goods compared to 8 percent and 16 percent, respectively, for the rich. According to Chernichovsky and Meesook, the poor in urban areas allocated a slightly higher proportion on expenditures relating to schooling; in rural areas, they spent a smaller proportion. With respect to expenditures relating to health care, the poor clearly spent a smaller proportion of their budget than the rich.

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CHARACTERISTICS AND ENVIRONMENT OF CONSUMING UNITS IN KOREA

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GEOGRAPHY AND CLIMATE

Korea consists of a mountainous peninsula jutting out from Manchuria and 3,579 contiguous islands. The total area is about 85,000 square miles, about the size of the British Isles [3].

Influenced by monsoons, climate in Korea shows wide variations and differences. It has four distinctive seasons. The average temperature throughout the year is 55.4°F. The temperature extremes range from -18.4°F in the winter to a maximum of 104°F in the summer [3].

POPULATION

The country's total population stood at 37,436,315 in 1980, 18,767,201 males and 18,669,114 females, recording a sex ratio of 100.53 males to 100.00 females. The growth rate was 1.57 in 1980, yet the rate has been falling according to the Economic Planning Board estimations [3].

Due to the success of the Government's population control policy, the birth rate has declined rapidly in recent years to 23 per 1000. The mortality rate has shown the same tendency of decrease owing to the improved medical facilities and increasing concern of public welfare, recording 7 per 1000 in 1980. The average life expectancy increased from 62.7 years for men and 69.1 years for women in 1980 to 64.2 years for men and 70.6 years for women in 1983 [2].

HOUSEHOLD CHARACTERISTICS

The total number of households in 1980 reached 7,969,201, up 19.9 percent from the figure 6,646,539 of 1975. The number of family members per household decreased from 5 persons in 1975 to 4.6 persons in 1980, reflecting a growing nuclear family. This structural transition is relatively conspicuous among the urban population while traditional extended family structure is rather prevalent among rural population [3].

The family is the primary social unit in Korea and family relationships have a powerful influence in Korean society. In 1981, the rate of marriage was 8.3 per 1000 and average age of

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marriage was 25-29 for men and 20-24 for women. Incidentally, divorce was regarded as taboo until a few decades ago in Korea. Following from this is the divorce rate as low as .52 per 1000 in 1981 [2].

EDUCATION

Education has been always stressed throughout the history of Korea. As a result, the literacy rate in Korea is 90 percent, one of the highest in the world. With the compulsory primary education, there are over 10 million students including about 1 million college students [1]. The mode was high school graduation both for males and females in the younger generation (under 45 years) in 1983 [3].

ECONOMY

During the 20 year period from 1962 to 1981, Korean economy maintained an average annual growth rate of 8.6 percent, more than double that of the world's major industrial nations. Spurred by the steady growth in commodity exports, per capita Gross National Product (GNP) has risen to \$1,877 in 1983. The nation's exports in 1984 totaled more than 29.21 billion dollars, 5.0 percent of which was accounted for by primary products and 95.0 percent of which was accounted for by manufactured goods. Imports in 1984 came to more than 30.6 billion dollars; imports of raw materials, capital goods, and consumer goods occupied 13.2 percent, 29.4 percent, and 4.3 percent respectively [1].

With 78.9 percent propensity to consume, consumption expenditures were 30 million dollars in 1982. The average monthly expenditure was \$317 for urban households in 1983, \$302 for rural in 1982. The per household average monthly income of urban workers in 1984 was \$729.18 while monthly earnings of a rural household averaged \$578.02 [3].

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CONSUMING UNITS IN TRANSITION--THE NIGERIAN EXPERIENCE

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INTRODUCTION

Nigeria is situated on the West Coast of Africa. With a population of about one hundred million, it provides a large market which attracts salesmen from all over the world. [5]

Prior to the discovery of mineral oil, agriculture was the mainstay of the economy with over 70 percent of the workforce in this sector. [5] Then, life was simple with all grown up members of the family contributing to the family income, while consumption was limited to the basic necessities of life. The increased revenue from mineral oil facilitated modernization, particularly of the market sector. This, coupled with the rapid increase in literacy, triggered a dramatic change in consumption.

CONSUMING UNITS IN NIGERIA

The Consuming units in Nigeria include the family as well as the household but mostly the later, in view of the predominance of the extended family system. In the Urban areas, the nuclear family seems to be on the increase.

Life expectancy in 1965-66 was 37.2 years for males and 36.7 years for females, but by 1975-80 it had risen to 45.9 years for males and 49.2 years for females [3]. This substantial gain reflects improvements in health care, and the development of a healthier and more consumption oriented society. In fact, there were just over 4,000 medical practitioners in Nigeria, or 1 to 19,000 persons in the late 1970s, but this ratio was expected to drop to 1 to 10,000 at the rate of influx of foreign doctors, [5] and with the expansion in the number and scope of medical schools.

Consumption decisions among the consuming units depended on the item for consumption. Food consumption decisions, for instance, was the prerogative of the wife, while decisions about housing, transportation, education and health care were for the husband. This pattern of decision making remains true of the rural consuming units, while in the urban centers, consumption decisions have evolved into a joint endeavor, particularly with the increasing participation of women in the labor market.

EDUCATION AND INCOME

A major factor in the change in consumption is the rapid increase in literacy. In 1963, there were 11,000 students who sat for the high

school diploma. In 1967, the number increased to 27,000; and by 1976, it jumped to 161,000.[1] With the improvements in literacy and health conditions, average productivity and hence income increased. Thus, while the wage rate in the manufacturing sector averaged 1.42 Naira or 2.2 dollars per day in 1973; by 1979, it had risen to 3.3 Naira or 5.9 dollars.[4]

CULTURAL CHANGE AND CONSUMPTION BEHAVIOR

Part of the colonial legacy in Nigeria is what might best be described as "Colonial mentality." This was a cultural infusion by Britain, which came to regard all local products as inferior and all imports as superior.[2] The influx of foreign investors and salesmen, at the peak of the Nigerian oil wealth, also contributed to the infusion of foreign culture. Nigerians soon began to associate modernity with conspicuous consumption and success with the power of consumption. So high was the craving for imports that the nation spent \$20.9 billion on imports in 1981 while a decade earlier (in 1970) it spent approximately \$1.1 billion [4].

CONCLUSIONS

Conspicuous consumption in a nation that produces little and, even at that disregards its own products, means having to spend enormous amounts of foreign exchange on imports. While the government strives to discourage the import of luxury items, it will take nothing short of cultural revival to put this potentially rich African nation back on the road to development.

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PUERTO RICO: CONSUMING UNITS AND CUSTOMS

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INTRODUCTION

The island of Puerto Rico is located between the Atlantic Ocean and the Caribbean Sea, approximately 900 miles south of Florida and 350 miles north of Venezuela. It is a tropical island with temperatures fluctuating from 65 degrees in the mountains to 95 degrees on the coast, with little variation during the year.

Puerto Rico was "discovered" by Christopher Columbus in 1493. Inhabitants at that time were the taino indians. From 1493 to 1898, the island was part of Spain from which it got, among other things, the language, religion, and particular type of family structure. After the Hispanoamerican War of 1898, the island became part of the United States. Puerto Ricans have been U.S. citizens since 1917. They share the United States currency, postal service, and defense. The political status of Puerto Rico is a commonwealth of the U.S. Because of this political and economic linkage, anything that affects the U.S. economy also affects the economy of Puerto Rico.

MACROECONOMIC VIEW

Puerto Rico's gross national product in 1983 was \$12,933; net income, \$10,390; and personal income that year was \$12,726. Disposable personal income was \$11,967, and personal consumption expenditures were \$12,991, meaning that consumption expenditures exceeded disposable personal income by \$1,024. Net income by industrial origin was: agriculture, \$435; manufacturing, \$5,765; trade, \$1,701; commonwealth and municipal government, \$2,021; Federal government, \$343; other, \$125. (All figures in millions.)

Exports to the U.S., the Virgin Islands, and Foreign countries sum to \$8,521 and imports were \$5,209 in current 1983 dollars. The consumer price index (1967=100) was 246.4 for 1983. [2]

THE FAMILY AS A CONSUMING UNIT

The population of Puerto Rico in 1980 census was 3.2 million. There were 757,645 families. Seventy-seven percent of these families were formed by married couples; approximately 19 percent were headed by females, no husband present; and approximately 4 percent by males, no wife present. Average size was 4.01 persons.

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The birth rate in 1982 was 21.2 and the death rate was 6.6 per thousand. Life expectancy is 73.11 years. The median age is 24.6 years for males and 25.5 years for females. The mean income in Puerto Rico in 1980 was \$8,271. About one-third of persons 3+ years are in school. [1]

Persons 16 years of age and over represent 69 percent of the population. Of those, 41 percent are in the labor force; 77 percent employed and 23 percent unemployed. The 59 percent, not in the labor force, is comprised of 11 percent in school, 32 percent keeping house, and 15 percent retired, incapacitated, or voluntarily idle. [1]

CONSUMING CUSTOMS

U.S. influence mainly through television advertising and national firms established on the island is very strong. Puerto Ricans tend to imitate or emulate U.S. consumers, but lack the same purchasing power. Two other variables that affect consumer behavior are mild climate and Spanish heritage. Families are becoming more involved in shopping together due to the presence of shopping centers in major cities.

Food purchases are made in grocery stores, usually large U.S. or native supermarket chains. But the Plaza de Mercado (open air markets) is still the place to look for fresh vegetables, fruits, seafood, and meats. Venders here buy directly from farmers who bring produce to the market to sell. Street venders also are common. Clothing consumption consists of "summer" type the year around. There is no tendency to buy seasonally. The only similarity to seasonal buying is at holidays and before school starts.

In homes in Puerto Rico electricity and running water are the norm. Air conditioning is in most middle and high income family homes. Houses for the last four decades have been made of cement due to the rise in the level of living and fear of tropical storms. Although a recent tendency is to go back to wood houses, especially affordable manufactured wood houses.

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DESCRIPTIVE CHARACTERISTICS OF CONSUMING UNITS IN THE UNITED STATES

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Relatively few nations have as diverse a population as the United States. Differences spring from histories, racial mix, ethnic background, and life styles of inhabitants and are reflected in family and household structures. While pressures to conform exist, groups maintain unique patterns of behavior and custom hidden in aggregated data. Various population components are examined and observations about the impact of these groups, and the consuming units they maintain, on consumption are discussed.

URBAN AND RURAL CONSUMING UNITS

In 1980, 74 percent of the population, 167 million, lived in urban and 26 percent, 59 million, in rural areas [1]. Even as late as the 1920's, the rural population was larger than the urban, so one of the main changes in consuming unit characteristics has been the rapid growth of those in cities. In 1982, about 57 million households were in metropolitan and 27 million in non-metropolitan areas [2]. Mean 1981 income of metropolitan households was \$24,355, whereas income of those in other areas was \$19,435 [3].

Farm population declined from about 25 percent of the 1930 population to 3 percent of that in 1982 [4]. Average family size for non-farm and farm families was 3.25 and 3.27 persons, respectively [2]. Married couples headed 93 percent of farm families in 1982. Three percent were male householders, no wife present; 4 percent were female householders with no husband. This compares to 81 percent of non-farm families headed by married couples, 3 percent by males and 16 percent by females alone. Median family farm income in 1981 was \$17,082 compared to \$22,554 for non-farm families. Twenty-seven percent of farm families had incomes under \$10,000 and 29 percent had incomes over \$25,000 [3]. This compares to 17 percent under \$10,000 and 44 percent over \$25,000 for non-farm families. Per capita personal income of the farm population in 1982 was \$8,704, however only \$3,297 of that was from farm sources [5].

IMPACT OF RACE AND NATIONAL ORIGIN

As of 1982, 86 percent of the population was white, 12 percent black, and 2 percent other races. Characteristics vary considerably. In 1982, 38 percent of whites over 25 had completed high school. Of the 53 million families, 49 percent had own children. Twelve percent of households had female heads; 7 percent were female headed with children. Median income for

white families was \$23,517; 11 percent were below the poverty line; 70 percent lived in owner-occupied housing; 30 percent rented [2].

In 1982, 32 percent of the black population completed high school. There were 6 million black families of which 61 percent had own children; 55 percent were married couples; 41 percent had female heads. Median family income for black families was \$13,267; 34 percent were below the poverty line. Forty-seven percent lived in owner-occupied housing; 53 percent rented [2]. Among the 4 million families of Spanish origin in 1982, 69 percent had own children; 22 percent had female heads; 27 percent had completed high school; 26 percent were below the poverty line; 47 percent lived in owner-occupied housing; 53 percent rented [2]. Of black households, 78 percent lived in metropolitan and 22 percent outside metropolitan areas. Of Spanish households, 86 percent lived in metropolitan and 14 percent in nonmetropolitan areas. Unemployment among black and Spanish households in 1982 was 8 percent, but among all households, it was 5 [2].

CONCLUSIONS

Data suggest black and Spanish origin households have fewer resources for consumption. Further, because of lower education levels, efficiency in consumption may be lower in minority households. White households tend to spend more on home ownership. Minority families have a higher percentage of families with children, and thus spend a higher percentage of income on child-related goods and services. Using these and other variables (e.g., geographic region, occupation, and cultural and social groups), the diversity in one culture can be compared to others.

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DESCRIPTIVE CHARACTERISTICS OF HOUSEHOLDS IN THE UNITED STATES

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In 1953, Kyrk discussed the family as the basic consuming unit in the United States, describing people who live in the same household as being "those most closely related and those whose claims upon and responsibilities for one another are prior to those upon and for others" [1]. Even today, some 30 years after those "baby boom" days, many still think of the nuclear family--two parents, children--as the typical consuming unit in the United States. However, what people think, and even what they observe with a casual glance, is not necessarily a representative description of the consuming units in this country. From descriptive data, it is possible to estimate what the average household in the U.S. is really like.

INDIVIDUALS IN THE U.S.--TRENDS

The first thing found is that the median age of the U.S. population increased from 30 years in 1980 to 31.2 years by 1984. One of the fastest growing segments in the U.S. population between 1980 and 1984 were those aged 85 and older [4].

People in the U.S. are also living longer. Life expectancies have been increasing ever since the beginning of the century, which is part of the reason for the aging trend in the population. A white male child born today will live, on the average, to be over 70 years; a white female child will live to be over 75. The life expectancies of black children born in the U.S. are about 7 years less (males living to 63.7 and females to 72.3 years) [6].

Birth rate in the United States in 1980 was 15.7 per 1000 people, while the death rate was 8.8 per 1000. Males had a higher death rate than females (9.8 per 1000 for males; 7.9 per 1000 for females). This indicates a natural increase in the population of 7.1 per 1000 people [6].

HOUSEHOLDS IN THE U.S.

What do households in the U.S. look like? It appears there is no clearly typical household. The average household is most likely to be located in an urban rather than a rural area--73.7 percent of households are located in urban areas [2]. The median size of a household was 2.75 people in 1980, down from 3.14 in 1970. Black households tend to be larger, with an average of 3.65 people per household in 1980 [3]. The composition of households varies greatly from the "nuclear family" assumption made earlier. For example, those without

children were 29.9 percent of households in 1980. Over 17 million people lived in single-person households--22.7 percent of all households. Single-parent households made up another 7.3 percent of households, and 19.3 percent of those households with children under 18 present. (This trend was even more pronounced in the black population, where 48.8 percent of families with children had only one parent present.) Over 90 percent of single-parent families were headed by women [4]. About 5.4 percent of 1980 families were "extended" family households. Only 31.7 percent in 1980 were the "nuclear families" mentioned earlier in this paper.

How well are these consuming units faring? Median income in the U.S. was \$26,433 in 1984, with almost one-fifth in the \$25,000-34,999 income range. However, about 14.4 percent of people in the U.S. are below the poverty level. Families maintained by women were 48 percent of all poor families in 1984 [5].

IMPLICATIONS

In looking at data and drawing some conclusions about the average consuming unit of the U.S., it does not resemble what many consider the traditional family structure. By examining data on households in the U.S. as they are, it is possible to provide insight into consuming units as they exist in the United States. This provides a basis for comparing characteristics of U.S. consuming units with those of other countries.

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RATIONALIZING FOOD BUYING FOR INDUSTRIAL SOCIETY:
THE ROLE OF CONSUMER EDUCATORS

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ABSTRACT

Through an examination of messages and motivations of change agents around the turn of the century, this paper argues that consumer educators have been partially responsible for the poor nutritional quality of contemporary U.S. diets. This is so because we have taught consumers to adapt to changes and survive in the marketplace rather than to resist detrimental changes.

Contemporary U.S. dietary patterns are frequently cited as the cause of poor health status for the population as a whole. But, rather than focus on the traditional problems of dietary deficiencies, medical professionals and nutritionists have increasingly been concerned with dietary excesses. Aggregate figures show the trends since the late nineteenth century of increased consumption of potentially harmful ingredients such as sugar, fats, and salt and the epidemiological consequences associated with those consumption changes (e.g. diabetes, obesity, cancer, heart disease, and hypertension). (15) For example, one source estimates the annual health costs of poor nutritional status to be \$40 billion. (14,p 2)

Altered dietary habits in the U.S. are generally attributed to changing lifestyles made possible by technological advances and rising per capita income. And on the surface, this explanation appears to be adequate. For example, the amount and variety of food available to American consumers would be impossible without mechanization, added chemical inputs, preservation, and transportation systems--all products of our technological revolution. Nor would women have been able to enter the workforce at the rate they have this century were it not for the built-in convenience of new products. Conversely, convenience foods and restaurants have enjoyed greater demand as women have changed the location and circumstances of the work they perform. Thus, it appears that consumers have "voted" for the production changes that manufacturers have provided.

But this theory is somewhat facile, lacking explanatory power for a number of phenomena. For example, because technological progress and rising income should permit greater ranges of choice, why have lifestyles changed so uniformly? Has the impetus for change been rooted in individual consumers, as the consumer sovereignty theory would posit, or in some larger socio-economic changes over which consumers had little or no control? I have argued elsewhere (5) that the needs of production associated with specific stages of capitalist development have been more important determinants of dietary changes than

have heretofore been given credit.

In this paper, I will focus on the role of change agents, that is, educators and helping-professionals who, from the late nineteenth century through the 1920s, aided in the radical process whereby women were socialized for their new role as family consumers. The analysis will examine the needs for and means by which socialization for market consumption and rationalization of homes to be more compatible with industrial conditions were effected. The socialization and rationalization processes will be applied to altered food consumption habits as well as to the motives of change agents who advocated and taught incremental changes which I believe led to our present dilemma of being highly dependent on the industrial and commercial sector for our food supply.

MANUFACTURING CONSUMERS

During the second half of the nineteenth century, greatly increased productivity of labor coincided with an abnormally rapid natural growth in population providing ever widening horizons for capital investment and profit accumulation. Investment opportunities included markets for production goods for manufacturing, transporting, and distributing consumption goods. However, the market for the latter was limited by the size of the population that had the means to purchase commercially produced goods. Initially, the increase in the working class was sufficient to allow growth in markets for consumer goods. Inevitably manufacturers and sellers would conclude that increases in purchasing power and incentives to consume rather than save would be necessary for further market expansion.

Examination of industrialists' attitudes and actions around the turn of the century reveal their stake in encouraging workers to consume. Contrary to accepted wisdom, I would argue that producers have attempted to gain as much control over the realm of consumption as that of production. Ewen makes such an argument in his analysis of advertising and the development of a consumer culture. (9) He claims that similar to corporate welfare programs for safety, recreation, and education, the use of advertising to superimpose new notions of what individuals wanted to attain was seen as a means of increasing worker productivity and better maintain social order. Others have claimed that by promising the potential for a more materially comfortable and entertaining leisure and home life, industrialists had more leverage in the struggle for a disciplined work force. (13) Not only were wages necessary to take part in the "good life," but consumption was touted as consolation for the unpleasantness of work. (12) Thus, "The development of an ideology of consumption responded both to the issue of

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social control and the need for goods distribution." (9,p 19)

Printers' Ink, a major trade journal for advertisers, expressed this felt need for social control during the 1920s.

'Modern machinery . . . made it not only possible but imperative that the masses should live lives of comfort and leisure; that the future of business lay in the ability to manufacture customers as well as products.' (Quoted in 9,p 53)

This manufacturing of customers was a part of the larger process whereby household life was transformed to be more compatible with industrial conditions -- an important goal of the domestic science or home economics movement.

Rationalizing the Home

Simultaneous to the spread of Taylorism in industry, attempts were made to "modernize" household work as well. Many observers have argued that Taylorism's emphasis on exclusive control by management of all decision-making merely attempted to increase productivity by seeking the "best ways" to do work. From another perspective, scientific management sought to control laborers optimally by denying them the right to make any decisions about work. Instead, all problems were to be solved by central management whose policies were then used uniformly by all laborers. (3) Whether one believes that Taylorism was a progressive or oppressive movement, it is evident that central control by educated professionals could improve efficiency of operations while reducing undesirable and unpredictable errors. Thus, the theory and practices of rationalizing the work process were advocated for the home for obvious and covert reasons.

According to Strasser (16), there were three major thrusts of the home rationalizing process in its early stages, all of which are relevant to socialization for market consumption. The mainstream was represented by attempts at domestic education.

In their emphasis on following the "laws of progress," home economists made no effort to return production to the home, or otherwise reverse the trend from production to consumption. Instead, they put considerable emphasis on teaching women how to be good consumers. (16,p 149)

It should be pointed out, however, that home economists did not advocate full scale adoption of commercially produced convenience since it was often too costly for poor families. At that point, convenience was still a luxury even though it was progressive. Emphasis of consumer education was on getting the most and/or best food for a given unit of money. For example, they taught that the most economical and sensible diets were those whose cost per pound were low relative to their yield of protein and calories. Unfortunately, the use of that criterion rendered fruits and vegetables poor buys because they were relatively expensive and

knowledge of vitamins and minerals was in its infancy. (6)

While domestic education represented the mainstream of attempts at integrating the household with the rest of the economy, the right and left wings of the home economics movement had important influences as well. Strasser designates Christine Frederick as the head of the right wing whose major goal was the adaptation of scientific management to the home in order to apply capitalist social relations to the household. In other words, rather than leave household work procedures and timing to numerous individual women, scientific management strove for uniform standards of cleanliness and quality, time and energy-saving efficiencies, and the adoption of new appliances and/or techniques which "the experts" had pronounced as best.

One could argue that Frederick was a rather convenient agent of change for the forces of production, regardless of her personal motivations. Because family privacy and leisure for homemakers were deemed important at the turn of the century, scientific management not only represented a means for reproducing business relations within homes, it also provided a rationale for the consumption of labor saving consumer goods as well as prepared foods. (9, 16) In 1920, Frederick wrote:

Today even the good housekeeper finds it profitable to buy many articles prepared in a "food factory," some clothing that is "ready made," and to avail herself of countless articles which make for comfort and sanitation which are produced commercially. (Quoted in 16, p 157. Emphasis added.)

The question of why homemakers should desire more leisure time was not left to the individual to answer. By reducing the time spent on the necessary "mechanics of living," women could: provide a stimulating, comforting, and educational home atmosphere; develop themselves as women and as human beings; and, devote time to being good neighbors, civic workers, and loyal citizens. The fact that Frederick and her like-minded colleagues did not consider paid employment an appropriate use of additional leisure suggests that such an arrangement would ensure that new generations of workers (and their wives) would be born and socialized in homes valuing efficiency in the economic sphere as well as private ownership of consumer goods. But such social relations would also produce contradictions, not the least of which was the eventual need for wives to earn supplementary wages in order to participate in the exchange of increasingly costly consumer goods and services. (5)

Another contradiction surfaced in the goals of the left wing of the household rationalizing movement. This group, led by Charlotte Perkins Gilman, advocated the industrialization of household work. In one sense, the abdication of household work to the commercial sphere can be seen as the ultimate stage of efficiency in that there would be a division of labor, no wasteful duplication

of capital equipment, and a profit motive.

However, Gilman's work was not based on capitalist ideology but on feminism and a belief in evolutionary progress. This latter value was not equated with natural selection or a *laissez faire* doctrine, but rather with society consciously directing its evolutionary development. Her object of progress was to be the emancipation of women as she wrote in 1898, "We are the only animal species in which the female depends on the male for food, the only animal species in which the sex-relation is also an economic relation." (Quoted in 16, p 158)

The main reason that Gilman's ideas were not considered socialistic or threatening had to do with the specific solutions she advocated. Rather than calling for the overthrow of capitalism, she recommended that women utilize its best features for their advancement as well as that of society. And, rather than communal feeding or cooperative housekeeping, Gilman argued for families separately patronizing commercial sector goods and services whose production would eventually be totally removed from their homes. Thus, the means for accomplishing a seemingly radical goal would further help to institutionalize market consumption.

EDUCATING FOR MODERN FOOD BUYING

While the domestic education, scientific management, and feminist movements were rooted in disparate motivations for change, they all had a similar outcome for household food provision. Whether the representatives of these movements desired optimal buymanship, privatized ownership and use of household tools and appliances, or socialized means for sustaining human needs, they all sought to rationalize homes. This would serve as a foundation for an inevitable process whereby homemakers would become increasingly dependent both on market goods and services to manage their homes and on expert advisors to teach them what was modern, best, or efficient. This is especially evident in food products.

Because new food products are introduced so frequently today and because each so-called "improvement" represents a minute increment of change, we are generally unaware of the larger change process in our dietary habits. Indeed, the attempts by food manufacturers to entice consumers to try and adopt new products are familiar and accepted parts of our mass culture and are seemingly innocuous. I have found that by looking back over a longer period of time, a different impression of such changes emerges. For example, according to historical accounts of changes related to new food processes, manufacturers of white flour and its products as well as sugar refiners undertook large scale campaigns to convince homemakers that "white" was superior. This quality rating was applied to various criteria such as keeping quality, product results, prestige value, and safety. In reality, the sale of white flour products and white sugar meant greater profitability

so it was in processors' economic interests to convince consumers of the rationality of change. Consider the advertising campaign launched by sugar refiners around 1898 in which a highly magnified illustration of an insect was described as:

. . . a formidably organized, exceedingly lively and decidedly ugly little animal. . . The number of these creatures found in raw sugar is exceedingly great and in no instance is raw sugar quite free from either the insects or their eggs. Brown sugar should never be used. . . . It is fortunate to note, however, that these terrible creatures do not occur in refined sugar of any quality. (Quoted in 14, p 232. Emphasis added)

Other examples of industry originated performance criteria are plentiful but limited space precludes their inclusion here. They are generally depicted as the advantageous and unarguable consequences of scientific progress. And change in the name of science would eventually become very difficult to argue with due to its ascendance in our culture. For example, although food fadism dates back several centuries, the phenomenon of experts advising consumers was greatly impelled by the "liberating" force of science.

Science had once attacked entrenched authority, but the new scientific expert became an authority himself. His business was not to seek out what is true, but to pronounce on what is appropriate. (8, p 26)

White sugar and more importantly, white flour were eventually adopted by all classes of consumers. But it wouldn't be until World War II that flour and cereal products were voluntarily enriched by millers in response to the Federal government's war time enrichment program. Although I will concede that the adoption of enrichment standards did greatly improve the nutritional value of processed grain and was dependent on industry cooperation, it obviously benefited producers as well. Prior to flour and grain enrichment, millers had expressed concern about the inelasticity of demand for food in general but a decline in flour and cereal consumption. By proposing what was a new performance criterion for the milling and baking industries at that time--nutritional value--firms managed to provide new opportunities for sales growth. At the same time, they defused criticisms about the wholesomeness of their products and apparently won over nutritionists and home economists who had been critics.

A major reason that the enrichment and fortification of processed foods have been perceived as progressive has to do with what Joan Dye Gussow, a contemporary nutritionist, labels the scientificification of food. According to Gussow, the process began with the early domestic science professionals led by Ellen Swallow Richards.

And those of us who should have been watching over the food supply were so concerned lest we be considered unscientific women, that we acquiesced in the process whereby

the value of food was reduced to the value of nutrients. And in an ever accelerating process we allowed ourselves to be moved from foods to food groups to nutrients to nutrient labeling (since after all there were so many foods that didn't fit the food groups) to the notion that we must teach not foods, but nutrients. (10, p 4)

It is Gussow's conclusion, then, that the professions most concerned with consumer/nutrition issues have played into the hands of manufacturers by "trivializing" food. As long as highly processed foods are advertised and labeled as enriched, fortified, or merely retaining some naturally occurring nutrients, they will be acceptable and assumed to be wholesome. It is for this reason that: chocolate milk is considered a substitute for regular milk; fortified fruit drinks replace fruit juices; fortified ready-to-eat cereals are seen as superior to "old fashioned" cooked cereals; and, fortified snack cakes or even candy bars are justified on the basis that they are not just empty calories. The problem with this trivializing process and its outcomes is two-fold. First, when we rely on commercial producers, we lose control over and information about the composition of the food we eat. Second, for a number of reasons, commercially produced processed convenience and restaurant foods tend to be high in sodium, fat, and caloric sweeteners and low in fiber -- the very nutrients implicated in contemporary diseases. (4, 15)

What Was in it for the Change Agents?

An interesting question is how or why this trend, though resisted by many of the professionals today, was clearly supported in its early stages. Some of those change agents were direct emissaries of the producers and sellers, while others represented groups with liberal goals for modernization through science.

For example, in her analysis of the advance of nutrition science through entrepreneurial strategies, Aronson (2) argues that Wilbur Atwater and other applied researchers managed to define nutrition as a social problem by tying it to labor reform. The strategy was one which enhanced personal careers by opening new sources of funding for scientific research while also pioneering a new field. Aronson writes that during the last quarter of the nineteenth century:

Perceiving themselves as a disinterested party, neither capital nor labor, the liberal economists and statisticians hoped to end class conflict by developing objective criteria for the adequacy of wages. . . . At this point the questions of political economy and nutrition research coincided: what were the nutritional requirements for human subsistence? (2, p 477)

Specifically, the two claims made by Atwater were that optimal nutrition would increase workers' productivity and the application of sound nutritional principles would reduce worker expendi-

tures for food. The result would be higher standards of living since the productivity would increase profits which could be shared between the classes and the lowered food expenditures would permit workers to divert wages to purchase other things, thus permitting market growth for more consumer goods. But the professionals who were to carry out the work of teaching wives the applications of nutrition research--how to shop economically--also had vested interests in the changing political economy of food. The social workers, home economists, and public school teachers were predominantly middle-class women, a segment of the population that had been displaced by the commercial expropriation of household production. Thus, they had leisure time; education and religious backgrounds which supported the application of science to improve life; and, problems of low or ambivalent prestige. (17)

As a result of the various campaigns to redirect the work of women, they were designated as responsible for the work of consuming rather than producing.

Women, while like men producers in outside industry, have in addition three unique economic functions, first, as producers within the home in house-keeping and in family management, second, as controllers of retail demand in the spending of family and personal income, and third, as directors of the family's consumption. (1, p 41)

However, since they were new to the task and knew very little about raw materials, workmanship, and their effects, consumer education was one service the new "helping professionals" felt it was necessary to provide. "How to buy, then, is one of the newer subjects which education must teach as it is to society's advantage that the housewife buy intelligently." (1, p 42) Thus, women have been admonished to spend a good portion of their time comparison shopping and/or seeking and applying product information in order to make consumer sovereignty meaningful and effective.

It is interesting to note that while home economics has the reputation of teaching people to cook, John Hess, a former food editor of the New York Times, asserts that rather than teaching their clientele to prepare high quality food on their own, home economists have embraced processed convenience foods. (11) The professionals' problem with image (17) has probably had much to do with this trend. As long as home economists clung to teachings that valued household production, they were considered regressive and anti-feminist. This was so because the do-it-yourself stance seemed to perpetuate traditional sex roles and stood in the way of rationalizing the home in its later stages. In sum, the facts that household production had acquired such negative social evaluation and convenience seemed such an obvious step forward in relieving tedious, repetitive work, made acceptance and advocacy of convenience foods by home economists perfectly understandable.