

Table 1. Four Year Colleges and Universities Submitting Undergraduate Program Analysis Sheets (\* indicates submission of In-depth Program Audit)

	Also listed in CERN/NoIf Directory
Auburn University-AL	yes
Brooklyn College-CUNY	yes
California Poly. State University- San Luis Obispo	no
Central Michigan University	yes
*Colorado State University	yes
*Cornell University-NY	yes
Eastern Michigan State University	yes
Florida State University	no
Hood College-MD	yes
*Howard University-District of Col.	yes
Illinois State University	yes
Indiana University of Pennsylvania	no
*Iowa State University	yes
*Kansas State University	yes
Louisiana Tech. University	yes
Miami University-OH	yes
*Michigan State University	yes
Montana State University	yes
Murray State University-KY	no
North Texas State University	no
Northwest Missouri State University	no
*(The) Ohio State University	yes
*Oklahoma State University	yes
*Oregon State University	yes
*Purdue University	yes
San Diego State University	yes
Southern Illinois University	yes
*Syracuse University-NY	yes
*Texas Woman's University	yes
*University of Alabama	yes
*University of Arizona	no
*University of California-Davis	yes
University of Connecticut	yes
University of Delaware	yes
*University of Guelph	no
*University of Houston	yes
*University of Illinois (U-C Campus)	no
*University of Kentucky	yes
University of Maine at Farmington	no
University of Maryland-Family and Community Development	yes
*University of Maryland-Textiles and Consumer Economics	yes
*University of Minnesota	no
*University of Missouri-Columbia	yes
University of Nebraska-Lincoln	yes
University of New Hampshire	yes
University of Rhode Island	yes
*University of Tennessee (no undergrad program)	yes
*University of Utah	yes
*University of Vermont	yes
*University of Wisconsin-Madison	yes
University of Wisconsin-Stout	no
*Virginia Polytechnic Institute and State University	yes

Table 2. Four Year Colleges and Universities Contacted and Responding as Having No Undergraduate Programs

	Also listed in CERN/NoIf Directory
Alcorn State University-Lorman Mississippi	no
Andrews University-MI	yes
Benedictine College-KS	no
Brighton Young-Provo-UT	yes
California State Polytechnic University-Pomona	yes
California State University-Sacramento	yes
Carson-Newman College-TN	no
Central Washington University	no
College of Saint Scholastica-MN	no
Daytona Beach Community College	no
Delta State College-Mississippi	yes
Drexel University-PA	no
Eastern Kentucky University	no
Edgecliff College of Xavier Univ.-OH	no
Freed Hardeman College-TN	no
Geneva College-PA	no
Humboldt State College-CA	no
Indiana State University	yes
Kent State University-OH	no
Kentucky State University	no
Los Angeles City College	no
Madonna College-MI	no
Mankato State University-MN	no
Mary Wood College-PA	no
Mississippi College	no
Mount Marty College-SD	no
Mount Mary College-WI	no
Northern Illinois University	no
Ohio University	yes
Peay State University-TN	no
Peru State College-NE	no
Pittsburg State University-KS	yes
Rosary College-IL	no
Saint Tereasa College-MN	no
Samford University-AL	no
School of Ozarks-MO	no
Shepherd College-WV	no
South Carolina State College	no
Southwestern College-KS	no
Stephen F. Austin State Univ.-TX	no
Tennessee Tech. University	no
Texas A & M University	no
University of Mary Hardon-Baylor-TX	no
University of Nebraska	yes
University of Nevada	no
University of North Carolina	yes
University of Southwestern Louisiana	no
University of Tennessee	yes
University of Texas-Austin	no
University of Wisconsin-Milwaukee	no
Western Carolina University-NC	no
West Virginia State College	yes
West Virginia University	no
Winthrop College-SC	yes
Xavier University-OH	no

Table 3. Unsuccessful Contacts

Four Year Colleges and Universities Contacted But Not Responding (as of March 3, 1983)	Times Contacted	Also Listed in CERN/Nolf Directory
Adrian College-MI	2	no
Butler University-IN	2	no
California State Univ.-Chico	2	no
California State Univ.-Fresno	3	yes
Emporia State University-KS	2	no
Florida International Univ.	2	yes
Fort Hays State University-KS	1	no
Georgia College	3	yes
Georgia Southern College	2	yes
Idaho State University	3	yes
Indiana State University	2	yes
Lamar University-TX	2	no
Lehman College-NY	2	yes
Loma Linda University-CA	2	no
Mansfield State College-PA	2	yes
Marian College-IN	2	no
Mercy College-MI	2	yes
Mercyhurst College-PA	2	no
Mississippi State University	2	yes
Norfolk State University-VA	2	yes
North Dakota State University	2	yes
Northeast Missouri State Univ.	3	yes
Northern Arizona University	2	no
Olivet Nazarene College-IL	2	no
Saint Catherine College-MN	2	no
Saint Joseph College-CT	2	no
Saint Vincent College-PA	2	no
Sam Houston State	2	no
San Francisco State University	2	yes
Santa Ana College-CA	3	no
Seton Hill-PA	2	yes
Shelby State Comm. College-TN	3	no
Southwest Missouri State	2	no
State University of NY-Onionta	2	yes
Texas Tech University	2	no
University of Georgia	2	yes
University of Massachusetts	2	yes
University of Rhode Island	3	no
University of Santa Clara-CA	1	no
University of Wyoming	2	yes
Utah State University	3	yes
Valpariso University-IN	2	no
Washington State University	2	yes
Wayne State-MN	2	no
Weber State College-UT	3	no
West Virginia Wesleyan College	2	no
Whittier College-CA	2	no
California State University-Northridge <sup>a</sup>	2	yes
Northern Colorado University <sup>a</sup>	2	no
Rutgers State University-NJ <sup>a</sup>	2	no
Bowling Green State Univ.-KY <sup>b</sup>	1	no
Mount Saint Mary College-CA <sup>b</sup>	1	no
State University College at Buffalo-NY <sup>b</sup>	1	yes
University of NC-Chapel Hill <sup>b</sup>	1	no

<sup>a</sup> Responded as "choosing not to participate"

<sup>b</sup> Mailings returned as undeliverable

Table 4. Summary Profile of the 51 Undergraduate Consumer Programs Identified in Table 1

Public vs. Private Funding  
46 Public    5 Private

Full-Time Equivalent Faculty

281.7 Number of FTE's\*  
23.5 to 1.0 Range of FTE/s per campus\*  
6 Number of Schools not responding to FTE question

Credits Required for 4 year undergraduate Degree  
120 to 205 (semester and quarter basis)

Enrollment

4083 total number of majors enrolled in Fall, 1982\*  
81 mean number of "majors" at 50 schools\*

Graduate Program Availability

45 Number of Universities with MS or MA programs available  
20 Number of Universities with Ph.D. programs available

Sex of Student (Undergraduate Majors)

88% Female  
12% Male

Mean Gradepoint Entrance Requirement

2.23/4.0 Minimum required for entrance to undergraduate program (based upon 16 responses, N=27 full program audit sample only)

Name Given to Consumer Majors\*\*

3 Consumer Science(3)  
10 Consumer Studies  
5 Home Economics  
9 Consumer Affairs  
9 Consumer Economics and/or Family Economics  
4 Housing  
11 Combination of two or more above  
6 Other title

\* Includes California Poly. State-San Luis Obispo. Respondent cited 23.5 FTE's and 1076 majors.

\*\* Does not total to 50 since several schools have more than one major in consumer field profiled. Also, some schools profiled more than one major on the same sheet when similar. Some schools reported Retailing majors as part of consumer science—these were excluded for ease of analysis.

Table 5. Titles of "Absolutely Required" Consumer Courses\* (offered in the Department or School of the Respondent)

Advanced Management	Family Decision Making
Advanced Personal and Family Finance	Family Economics
Allocation of Family Resources	Family Finance (Personal)
Analysis of Family and Community Resources	Family Financial Analysis
Communication in the Market Place	Family Financial Management
Community Agencies	Family Management Applications
Community Services and Welfare of Families	Family Management Theory
Consumer Analysis of Fashion	Family Resource Management (residence)
Consumer and the Law	Family Resources: Financial Management
Consumer and the Market	Family Resources: Time and Human Energy
Consumer and Society	Family Values and Resource Management
Consumer Aspects of Health Insurance	Families as Consumers
Consumer Aspects of Life Insurance	Families in the American Economy
Consumer Assistance	Financial Counseling
Consumer Behavior	Financial Planning
Consumer Behavior in an Ecological Context	Financial Problems of Families
Consumer Buyer Science	Food and the Consumer
Consumer Choice	Fundamentals of Housing Economics
Consumer Competence in a Complex Society	Home Equipment I
Consumer Credit	Home Equipment: Consumer Electronics
Consumer Decision Making	Home Management Practicum
Consumer Economic Problems	Housing
Consumer Economics	Housing and Society
Consumer Education	Housing Policy and Housing Programs
Consumer/Family Economic Issues and Public Policy	Housing Selection
Consumer Finance	Income and Wealth
Consumer Investment and Savings Decisions	Introduction to Consumer Affairs
Consumer Issues and the Market	Introduction to Consumer Interests
Consumer Laws and Regulations	Introduction to Consumer Studies
Consumer Legislation	Introduction to Design
Consumer Market Strategies	Legal Aspects of the Family
Consumer Motivation and Behavior	Macroeconomic Theory
Consumer Problems of Elderly	Management for Low-income Families
Consumer Protection	Marketing and the Consumer
Consumer Psychology	Microeconomic Theory
Consumer Relations	Personal and Family Management
Consumer Resource Management	Practicum: Textiles
Consumer Resources	Principles of Selling
Consumer Textiles	Problems in Consumer Economics
Consumer Textiles and Clothing	Research Methods
Consumers Role in Family	Selected Topics in Consumer Studies
Consumption Economics	Seminar: Consumer Affairs
Consumption Theory	Seminar: Family Management
Current Consumer Issues	Seminar and Research in Consumer Studies
Demonstration Techniques	Senior Thesis
Econometrics	Social and Psy. Aspects of Consumer Behavior
Economic Organization of the Household	Sociological Aspects of the Housing Environment
Economics of Aging	Special Topics in Consumer Education
Economics of Consumer Policy	State/Local Consumer Protection
Economics of Consumption	Textiles and Clothing Systems
Education for Consumers	The Family Economy
Energy Perspectives	The House
Energy Utilization of the Household	Women in the Economy
Equipment and the Consumer	Work Analysis and Area Planning
Family Analysis and Planned Change	You and the Consumer
Family as an Economic Unit	

\* Absolutely Required Course - any single course every student obtaining the audited degree must normally have before graduation.

\* Consumer Courses - any course offered by faculty in the least aggregated administrative unit in which respondent is a voting member - typically a department but not a school. Alternatively, any course presented from the consumer perspective and/or intended to provide learning opportunities directly related to understanding any matter affecting consumer well-being.

Table 6. Titles of "Choose From Required"\* Consumer Courses (offered in the Respondent's Department or School)

Advanced Home Management	Families, Legislation and Public Policy
Advanced Personal and Family Finance	Field Instruction in Family Economics Management
Advertising and the Age of Mass Consumption	Finance and Economics
Advocacy	Financial Responsibilities of the Family
Analysis of Spending Patterns	Food Awareness
Apparel Analysis I & II	Food I & II
Clothing Construction	Food Laws and Regulations
Community Services and Welfare of Families	Home Interiors I
Concepts of Decision Making in Mgmt. for Fam. Liv.	Home Management Experimental Lab
Consumer and the Environment	Household Equipment
Consumer and the Fashion Marketplace	Household and Local Government
Consumer and the Law	Household Management
Consumer Aspects of Housing	Housing
Consumer Behavior	Housing and Design
Consumer Credit	Housing Conservation
Consumer Credit Finance	Housing Finance Decisions
Consumer Decision Making	Housing for Special Needs
Consumer Economics	Housing Policies and Programs
Consumer Finance	Housing Requirements of Families
Consumer Household Appliance Alternatives	Human and Consumer Advocacy
Consumer Housing Alternatives	Human Service Systems
Consumer Information	Individual and Family Management
Consumer Issues	Internship in Human Development and Cons. Science
Consumer Law and Advertising and Solicitation	Introduction to Interior Design
Consumer Legislation	Investments Analysis
Consumer Marketing Program and Policies	Management for Families with Limited Resources
Consumer Materials	Management Theory
Consumer Policy Analysis	Meal Management
Consumer Problems	Microcomputers in Home Management
Consumer Product Safety	Microwave Cooking Technology
Consumer Program and Policies	Nutrition
Consumer Protection	Policy Analysis
Consumer Relations Practicum	Poverty and Affluence
Consumer Resource Management	Practicum in Consumer Action
Consumer Socialization	Practicum in Consumer Studies
Consumer Technology: Product Standards	Principles of Food Preparation
Consumers in Society	Problems in Family, Consumer & Consumption Econs.
Consumerism and Controversy	Problems in Family Finance
Culture Society and Dress	Product Liability and Governmental Regulations
Decision Making for the Consumer	Program Budgeting
Demonstration Techniques	Resource Management
Design Processes	Resource Materials for Consumer Education
Development and Function of Family Housing	Seminar in Home Management Theory
Durable Goods	Senior Honors Thesis
Economic Status of Women	Social Effects of the Housing Environment
Economics of Food Consumption	Special Topics in Consumer Science
Economics of Poverty	Study Tour
Elderly Consumer	Textile Analysis
Family Economics	Textile Products for Apparel and Home Furnishings
Family Economics and Management Issues	Textile Structure and Design
Family Energy Consumption	Textiles for Consumers
Family Housing Issues	The Contemporary Retail Community
Family Law	The Disabled Person in Family and Community
Family Resource Management	Utilization of Community Consumer Resources
Family Resource Management Lab	Visual Merchandising
Families, Communities and the Ecosystem	

\*"Choose From Required Course" - any single course that is part of a list of single courses, some of which must be taken to satisfy a categorical degree requirement but none of which is absolutely required. (Typically important enough to be listed in published material by course title, as opposed to "concentration" defined in Table 9.)

Table 7. Titles of "Absolutely Required" Interdisciplinary Courses, (offered outside Respondent's School) (Each mentioned one or more times)

Abnormal Psychology  
 Administrative Regulation of Business  
 Advertising  
 Animals, Food, and Man  
 Architecture and Landscape Architecture  
 Basic Counseling Skills  
 Basic Reporting  
 Business Communications  
 Business Fundamentals  
 Business Law  
 Community Economics  
 Community & Resource Development  
 Computer Science  
 Consumer Behavior  
 Consumer Health  
 Consumer Law  
 Consumer Psychology  
 Current Economic Issues  
 Economic Analysis  
 Economic Statistics  
 Economics I  
 Economics of Money, Credit and Banking  
 Economics of Public Policy: Antitrust Economics  
 Estate Planning  
 Finance  
 Food and Nutrition  
 Health Education  
 Human Development  
 Intermediate Price Theory  
 Interpersonal Communication  
 Introduction to Advertising  
 Introduction to Broadcast Operations  
 Introduction to World of Business  
 Legal Environment of Business  
 Management Information Systems  
 Marketing Management  
 Marketing Principles and Organization  
 Marketing and Society  
 Mass Communications, Mass Media and Advertising  
 Mass Media Technology  
 Materials for Construction  
 Money and Banking  
 National Income Analysis  
 Personal Finance  
 Personnel Behavior  
 Physics: Choices of Energy  
 Political Science  
 Preparation & Production of Instructional Materials  
 Prices and Resource Allocation  
 Principles of Accounting  
 Principles of Economics  
 Principles of Management  
 Principles of Marketing  
 Principles of Persuasion  
 Private Enterprise and Public Policy  
 Public Communications  
 Public Relations  
 Public Speaking  
 Publicity and Public Relations  
 Radio, T.V. and Film  
 Skills  
 Social Environment of Business  
 Social Psychology  
 Social Welfare  
 Society and Government  
 Statistics  
 Theory of the Firm

Table 8. Titles of "Choose From Required" Interdisciplinary Courses (offered outside of the Respondent's School) (Each mentioned one or more times)

Accounting  
 Advertising  
 Assertiveness Training  
 Basic Photography  
 Business Communications  
 Business and Interpersonal Communication  
 Business Law  
 Buyer Behavior  
 Communications  
 Consumer Aspects of Food Science  
 Consumer Behavior  
 Consumer Protection Law  
 Consumer Psychology  
 Contemporary Problems & Ways of Knowing  
 Dynamics of Social Interaction  
 Economics Analysis  
 Economic and Political Systems  
 Editing Procedures  
 Ethical Issues  
 Evolution of Food and Drug Controls  
 Financial Institutions and Markets  
 Food Sanitation and Quality  
 General Computer Science  
 Graphic Arts, Graphic Communication  
 Group Dynamics  
 Health Care Systems  
 Human Resource Management  
 Interpersonal Communication and Self-Awareness  
 Introduction to Mass Media  
 Introduction to Organizational Behavior  
 Legal Environment  
 Legal Environment of Business  
 Legislative Processes  
 Macro Economics  
 Marketing, Marketing Management  
 Marketing Research  
 Mass Media and the Consumer  
 Micro Economics  
 Money, Credit and Banking  
 National Issues  
 Nutrition and Society, Nutrition Today  
 Oral Communications  
 Personnel Management  
 Persuasive Communication  
 Political Science  
 Principles of Finance  
 Principles of Management  
 Principles and Practices of Real Estate  
 Principles of Selling  
 Product Liability  
 Public Policy  
 Quantitative Methods  
 Radio Production  
 Real Estate, Real Estate Financing  
 Reporting I, Report Writing  
 Retail Merchandising  
 Risk and Insurance  
 Small Group and Family Interaction  
 Sociology, Social Philosophy  
 Social Psychology  
 Societal Context of Consumer Education  
 Statistics and Methodology  
 Technical Writing  
 Textiles and Clothing for Consumers  
 T.V. Production  
 Writing for Public Relations  
 Written Communications

Table 9. Interdisciplinary Concentrations (10 credits or more) in Undergraduate Consumer Degree Programs \*

Accounting  
 Adult and Extension Education  
 Advertising  
 Aging  
 Agricultural Economics  
 American Studies  
 Art  
 Business  
 Business Law  
 Child and Family Studies  
 Communication  
 Computer Science  
 Consumer Economics  
 Consumer Education  
 Design, Construction and Systems  
 Distribution  
 Economic Analysis Group  
 Economics  
 Economics of Poverty  
 Educational Psychology  
 English Composition  
 Environmental Studies  
 Extension and Adult Education  
 Family Relations  
 Family Social Sciences  
 Finance  
 Financial Counseling  
 Foods and Nutrition  
 General Home Economics  
 Home Economics Communications  
 Household Equipment  
 Housing  
 Human Development  
 Human Services  
 Interior Design  
 Journalism  
 Management  
 Managerial Economics  
 Marketing  
 Merchandising  
 Money and Banking  
 News Writing and Reporting  
 Nutrition  
 Political Science  
 Pre-law  
 Psychology  
 Public Finance  
 Public Speaking  
 Quantitative Methods Group  
 Research, Evaluation and Program Development  
 Retailing  
 Risk and Insurance  
 Rural Sociology  
 Social Psychology  
 Social Work  
 Sociology  
 Telecommunications  
 Textiles  
 Urban Sociology  
 Urban Studies  
 Vocational Education  
 Women's Studies

Table 10. "Absolutely Required" Courses in Undergraduate Consumer Programs: The "BASICS"

General Courses

28 Algebra and Trigonometry  
5 Calculus  
15 Chemistry  
42 Communications Arts or Speech  
15 Computer Science  
29 Economics  
56 English-Composition  
19 English-Literature  
7 Journalism or Mass Communication  
26 Natural Science (not Chemistry)  
25 Political Science  
44 Psychology  
42 Sociology  
23 Statistics  
26 Other Humanities

Home Economics Courses

32 "All School" or Integrative  
26 Textiles and Clothing  
40 Family Courses (NOT Family Economics)  
18 Child-Related Courses  
39 Food and Nutrition  
18 Related Art and Design  
26 Home Management Courses (not listed in consumer course section)  
29 Housing Courses (not listed in consumer course section)  
10 Home Economics Education  
3 Home Economics Journalism

\*Read: "of 61 distinct programs at 50 schools responding, 28 programs require the undergraduate student to take one or more courses in Algebra and Trigonometry."

NOTE: A copy of the 582 page National Study is being made for each of the 27 in-depth program auditors, as starred in Table 1. Funding does not permit wider distribution at this time but some "personal lending" is encouraged to facilitate dissemination and use of the data. Xeroxing encouraged—this is public information. Analysis and publication from the data base is encouraged upon contacting author of this article.

\* Interdisciplinary Concentration—involves 10 or more credits in an academic area of study, outside the consumer area. Similar to a minor. Typically identified in published material by discipline area, with specific permitted courses obtained from an advisor or approved list. Usually related to a "major" offered in another unit of the university. 100

Table 11. Summary of Responses from 27 Program Auditors to: "List...job titles faculty in your department consider 'appropriate targets' for (your) graduates."\*

Actuary	Home Economist-Engineering
Account Representative-Stock brokerage firm	Home Economist for Public Utility
Advertising Account Executive	Housing Consultant-Government
Advertising-Copywriter	Housing Counselor
Applied Demand Analyst	Housing Design, Remodeling
Assistant Buyer-department or chain store	Human Services Specialist
Builder	Information and Referral Coordinator
Business Management	Information Specialist
Buyer for department store	Insurance Agent
Claim Adjuster (Insurance)	Investigator for Attorney General Office (State)
Claim Representative with Social Security	Job Analyst
Community College Instructor	Legal Aide
Community Organizer	Legislative Assistant or Aide
Consultant to Business on the Consumer Interest	Legislative Researcher
Consumer Advocate	Loan Officer or Counselor-Bank
Consumer Affairs-Director or Specialist	Lobbyist
Consumer Arbitration Coordinator	Management-Public Utility
Consumer Complaint Mediator or Specialist	Management Trainee-Banks
Consumer Credit Counselor	Management Trainee-Major Corporation
Consumer Educator	Marketing Executive
Consumer Hotline for TV and radio	Market Researcher
Consumer Journalist	Media Researcher
Consumer Lobbyist	Merchandiser/Designer
Consumer Newswriter	Merchandising
Consumer Ombudsman	Quality Assurance Supervisor
Consumer Product Representative	Paralegal Assistant for Law firm
Consumer Promotion Manager	Peace Corp
Consumer Protection-Specialist or Investigator (with aging agencies, attorney general offices, news organizations, business, Better Business Bureau)	Personal Banker
Consumer Researcher	Personnel Specialist or Manager
Consumer Service-Banks	Policy Research Associate-State and Federal Govt.
Consumer Writer	Pre-law preparation
Consumption Economist	Product Development Technician
Credit Analyst	Product Information Representative
Credit Card Operations Manager	Product Manager
Credit Union Manager	Product Testing
Customer Service Representative	Professor
Debt Counselor	Promotional Materials Demonstrator
Demonstrators of New Products	Public Information Officer
Department Store Sales-Housewares	Public Policy Analyst
Developer of Training Programs	Public Relations Specialist
Director of Consumer Affairs	Purchasing Agent
Energy Auditor-Utility Company	Real Estate Broker
Energy Conservation Advisor	Recruitment Administrator
Equipment Demonstrator	Research Home Economist
Executive Trainee for retail firm	Residential Consumer Advisor
Executive in Training and Development	Sales Representative
Extension Agent or Extension Home Economist	Securities Analyst
Extension Specialist-Consumer Affairs	Social Service Agency Caseworker
Extension Specialist-Family Resource Management	Statistics Analyst
Family Economist	Store Manager
Family Financial Planner	Teacher
Family Resource Management Specialist	Technical Editor
Financial Counselor or Advisor or Planner	Travel Agent
Food Technologist	Underwriter (Insurance)
4-H Agent	VISTA
Health Care Manager	Weights and Measures Investigator
Home Economics Teacher	
Home Economist	
Home Economist-Consumer Information	

\* Note: This is a comprehensive compilation of responses. Some duplication is recognized as a variety of titles may correspond to a single job.

Table 12. Selected Statements from Respondents Regarding Problems Facing the Consumer Field in Institutions of Higher Education in the 1980's\*

- Articulation of what the consumer field is.
- Improved recognition for the field's legitimacy.
- Reconciling the specialist vs. generalist perspectives within single programs.
- Expansion of research base for cohesive content and methodology.
- Incorporating quantitative methods, mathematics and computer technology into the field.
- The present redirection in the job market and student preference toward business orientation which dilutes the consumer focus.
- Employment opportunities for graduates.
- Additional instructors with graduate degrees in the consumer field, instead of related areas.
- Limited number of textbooks available.
- Insufficient funds (and classrooms) to maintain momentum of emerging field.
- Development of an integrated and synthesized set of theories that serve our needs.
- The shift in higher education to occupational and vocational education has created a feeling among students that "nothing is worth studying unless it is job oriented". Emphasis on the role of the individual and means for enhancing consumer sovereignty is not in the mainstream of student's concepts of higher education.
- The absence of a professional standard of competence and identification creates a problem for graduates. The consumer field for which they are trained remains obscure.
- Consumer science is vulnerable to absorption from other (more aggressive) areas since almost all areas can claim a consumer orientation.
- Fear on the part of administrators and teaching faculty to recrimination from representatives of the Business Roundtable and similar "free enterprise" fronts curbs the consumer scientist from taking consumer positions on such matters as funerals, term insurance, corporate mergers, utility rates, consumer credit, etc.
- It is difficult for all "consumer" programs to attract and hold qualified faculty.
- Quality of research — often our research is superficial and is not on the cutting edge.
- Confusion with General Home Economics — too many schools call these general home economics, consumer services or some similar title. This undermines the credibility of all programs. Institutions doing this must begin to recognize that these are very different areas.
- Providing opportunities for faculty to develop and maintain professional contacts important to the field. Study leaves, faculty internships, reduced teaching loads, and other means of support for professional development are crucial.
- Limited number of Ph.D.'s who have educational background and experience in the Consumer Affairs/science field. This results in weak curriculums, poor advising and unrealistic expectations. . .
- Parochialism of some faculty who refuse to update courses and curriculums to meet changing needs.
- Getting realistic information on careers out to prospective students.
- Defining the field and coming up with some core competencies; definitions; modern courses and programs; internship and placement promotion; and defining consumer issues as separate from "family" issues.
- Improve the analytical and quantitative skills of undergraduate and graduate students, respectively.
- Information overload . . . The field is so broad. . . An emphasis on process rather than content is almost essential. . .
- Recruitment of students does not take place from among students interested in the contributing disciplines, i.e., economics, political science, sociology, but rather only from the subset that elects home economics or human development. This tends to screen out students interested in the public and macro domains.
- More consumer study institutions need to see themselves as supports to other occupations and programs and not as a separate entity that needs only themselves or (are) in constant competition with all other groups.
- Academic politics . . . ideological conflicts. Agricultural colleges . . . may not want to support research hostile to the agricultural community. Education schools may feel a need to emphasize consumer education, even if there is no evidence of effectiveness. Home economics schools may feel threatened by outsiders who do not share their traditions. For all schools, a desire to place students with business may affect the independence of the research.
- It is possible that some programs may become fragmented and lose their unifying sense of purpose and thrust, by pulling together a diverse group of specialists whose primary orientation and commitment relates to their several basic disciplines and their individual career advancement . . .
- Critical Mass — in most cases, there are only a very few scholars working in consumer science in any one institution. This limits interchange and makes it more difficult to offer the range of courses necessary. It also limits leverage and visibility within the university.
- Consumer science is often perceived of as a program in buymanship and budgeting and/or advocacy of the Ralph Nader type.
- Difficulty in attracting outstanding candidates for faculty positions . . . (one aspect of this) is that one of the main "feeders", Home Economics, demands so much breadth of degree candidates that depth tends to be sacrificed.
- Obtain further understanding and support from the business community. . . We need to encourage more conservatives to adopt consumer science as a home discipline.
- Stretching the imaginations of those running consumer studies programs as to the diversity of employment opportunities that exist for graduates.
- How to balance the need for substantive research contributions by consumer scientists with the need to develop consumer science organizations and activities. The problem here is that professional organizations can tend to generate too much concern with analysis of the profession and detract from scientific advancement by the individual scholars that constitute the profession.

\* Items in this table are generally direct quotations, although selection, editing, and minimal paraphrasing was necessary.



## CONSUMER SCIENCE: IS CONCEPTUAL CONSENSUS POSSIBLE?

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Evidence from participants at the Consumer Science in Institutions of Higher Education Symposium held at Madison, Wisconsin in 1982 indicated that there is wide diversity in conceptualizing the field of Consumer Science. There appears to be a lack of consensus in working definitions of concepts, courses, curricula, and in preparation of faculty in Consumer Science.

In preparation for the symposium, the authors interviewed deans of units where Consumer Science was located [1]. The purpose was to explore the administrator's perceptions of the Consumer Science program which were then discussed at the symposium. Differences in perceptions from the study and the resulting discussion at the symposium prompted the authors to propose a set of definitions for concepts identified at the symposium. While diversity may have benefits, a discipline or field of study needs a structure which is defined in relatively precise terms. The delineation of concepts associated with Consumer Science is a first step for educators in institutions of higher education to arrive at consensus regarding the content/definition of various concepts both for curriculum development and research endeavors.

At the symposium participants identified concepts during a brainstorming session [2]. No attempt was made by the authors to edit the list of concepts except to delete duplications and alphabetize the list.

Following the symposium, an attempt was made to define each concept using Consumer Science textbooks and other reference materials. Each definition was selected by the authors after comparing definitions from various sources. If a definition was not available, the authors developed one based on the literature. These definitions are presented in the appendix for further discussion by Consumer Science professionals; numbers in parentheses identify sources.

### Future Directions

During the year 1983-84 the authors anticipate refining the definitions and working with

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professional colleagues to clarify the working definitions as they are used in Consumer Science. It is recognized that additions and deletions may be necessary in an effort to gain consensus within the field. The authors will actively solicit suggestions and welcome comments from American Council on Consumer Interests members. It is expected that consensus of concepts and clarity of conceptual definitions will strengthen the teaching, research and extension endeavors within Consumer Science.

### REFERENCES

1. Goebel, Karen P., and Miller, Nancy H. "Administrators' Views of Consumer Science: Some Empirical Findings." In Proceedings of Consumer Science in Higher Education: The National Study, Office of Consumer Education, U.S. Department of Education, Washington D.C., 1983.
2. Miller, Nancy H. "Concepts: A Basis for Consensus in Consumer Science?" In Proceedings of Consumer Science in Higher Education: The National Study, Office of Consumer Education, U.S. Department of Education, Washington D.C., 1983.

### APPENDIX

#### Concepts and Definitions

Budget--A plan-mental or written, and general or specific - that indicates how (quality/quantity) and when (sequence) to allocate available financial resources among various needs and wants. (4)

Caveat emptor--Let the buyer beware. (16)

Circular flow of money--The flow of payments from businesses to households in exchange for labor and other productive services and the return flow of payments from households to businesses in exchange for goods and services. (16)

Cognitive dissonance--The theory of the process of dealing with a disequilibrium between two pieces of knowledge. The amount of dissonance varies with changes in the positive and negative attributes of both the selected and rejected alternatives and with the degrees of commitment and volition in the choice. (3)

Communication--The exchange of information. (8)

Comparative advantage--If two nations (cities, individuals) have different opportunity costs of producing a good or service, then the nation (city or individual) with the lower

opportunity cost has a comparative advantage in that good or service. (16)

Competitive markets--A market in which a very large number of small buyers and sellers trade independently, and as such no one trader can significantly influence price. (12) Perfect Competition - a market with many buyers and many sellers, with no single buyer or seller having noticeable influence on price. (16)

Conceptual framework for decision making--Diagrammatic presentations of clusters of interrelated but not necessarily interdefined concepts relating to a particular set of behavioral phenomena. (3)

Cost-benefit analysis--The calculation and comparison of the benefits and costs of a program or project. (16)

Consumer--Any economic agent responsible for the act of consuming final goods and services. Typically, the consumer is thought of as an individual but in practice consumers will consist of institutions, individuals and groups of individuals. In the last respect, it is noteworthy that the consuming agent for many decisions is the household and not the individual. (13)

Consumer advocacy--The act or process of recognizing, promoting, and protecting the cause or interests of consumers. (2)

Consumer behavior--The behavior of individuals, families and groups as they take consumer roles in individual and group decision making or problem solving processes related to buying and to using products and services. (3)

Consumer choice--Implies availability of meaningful alternative selections and the ability of consumers to decide freely among them. (2)

Consumer citizenship--Citizen participation - understanding and taking actions to influence the environmental settings within which consumer decisions take place. (2)

Consumer demand theory--That area of economics which defines testable theories of how consumers behave in response to changes in variables such as price, other prices, income changes and so on. (13)

Consumer education process--Consumer education is the process of gaining the knowledge and skills needed in managing consumer resources and taking actions to influence the factors which affect consumer decisions. (2)

Consumer interest--Consists of policies that enhance the attainment of consumer sovereignty and enjoy the support of most understanding, fully informed consumers. (11)

Consumer need--Needs are those things considered essential to human existence or fulfillment. (2)

Consumer price index--A monthly measure, compiled by U.S. Bureau of Labor Statistics, of changes in the prices of goods and services consumed by urban families and individuals. (10)

Consumer protection--Public and private services, agencies, or policies, including laws and regulations which are designed to protect consumer rights and enhance consumer interests. (2)

Consumer redress--Consumer redress is the result of performance failing to match reasonable standards or failing to work at all. (11)

Consumer representation--The selection of people to speak on behalf of consumer interests in official capacities, such as on advisory boards, regulatory commissions, or boards of directors. (2)

Consumer responsibilities--The obligations which are a part of an appropriate consumer role. (2)

Consumer rights--Powers, privileges, or protections to which consumers are justly entitled or which have been established by law. (2)

Consumer sovereignty--Consumers, by the pattern of their purchases or the way in which they cast their dollar votes, dictate to producers which goods will be produced. (15)

Consumerism--A social movement seeking to augment the rights and power of buyers in relation to sellers. (11)

Consumption--

a) The purchase of consumer goods and services.  
b) The act of using goods and services to satisfy wants.

c) The using up of goods. (16)

Countervailing power in the market place--

Power in one group which has grown as a reaction to power in another group. (16)

Credit--Consumer credit is defined by the Federal Reserve Board as "short-and intermediate-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts incurred for such purposes." (7).

Diffusion of innovation--Rates of acceptance by individual and groups. To be accepted as an innovation, a novelty must: (a) have meaning for the potential acceptor, in the sense of being understandable and related favorably to previous experience; (b) satisfy a want better than some existing means; (c) be congruent or compatible with valued cultural patterns with which it is to be linked; (d) be sufficiently divisible so that tentative trials may be made; and (e) be communicable from one person to another. (3)

Discounting NPV (net present value)--The process by which the present value of one or more future payments is calculated using an interest rate. (16)

Distributional equity--Justice or fairness in the manner in which the economy's output is distributed between individuals. (13)

Economize--To make the most of limited resources; to be careful in outlay. (16)

Economic system--The organization or structure of the production, distribution, and consumption of goods and services in a society. (2)

Economies of scale--Reductions in the average cost of a product in the long run, resulting from an expanded level of output. Also known as long run increasing returns. (13)

Elasticity of demand--Usually taken to refer to the (own) price elasticity of demand, but care should be taken to specify which

elasticity of demand is being discussed. (Price Elasticity of Demand, the responsiveness of the quantity demanded of a good to its own price. To avoid the measure of elasticity being sensitive to the units in which quantities and prices are measured, the elasticity of demand is expressed as the percentage change in demand that occurs in response to a percentage change in price). (13)

Family (as a unit of society)--A statistical concept that attempts to measure the number of households composed of individuals related by blood, marriage, or adoption and residing together. The consuming unit may be one person or a family living together in a household. The household is defined as people living together and supported by the common pool of income. (3)

Financial management--The establishment of goals and procedures for the use and conservation of financial resources. (2)

Financial policy--The deliberate use of the government's revenue-raising and spending activities in an effort to influence the behavior of such macro variables as the GNP and total employment. (9)

Flow and stock resources--All processes within the managerial system contribute to the flow of resources and involve some change in their value. Resources may be developed or gained by the family system and kept for later use, thus they become a part of the family's "stock" of resources. Through managerial decisions and actions, resources are added to the stock or are taken from the stock. (4)

Goals--Specific aims or objectives which reflect a set of values. (2)

Human capital--The capitalized values of productive investments resulting from expenditures on education, training, and health improvements. (9)

Income--The amount of funds, goods or services received by an individual corporation or economy in a given time period. (13)

Inflation--A persistent upward movement in the general price level. It results in a decline of purchasing power. (10)

Information--Knowledge obtained through investigation, study, instruction, or communication. (2)

Insurance--Insurance is a cooperative device for sharing risks. It is a device that assures a sum of money with which to meet the uncertain losses resulting from damage to, or destruction of, life or property. Insurance transfers the risks of many persons to an insurance company. Insurance permits individuals to exchange the risk of a large loss for the certainty of a small loss. (13)

Interest rates--Interest is the price paid for the use of money over time. It is usually expressed as a rate charged or earned per period, hence interest rate. In turn, interest rates are typically expressed as a percentage of a principal (initial amount) borrowed or loaned. (7)

Levels of living (or consumption)--The combination of wealth and services actually experienced, enjoyed or suffered by the individuals or group. (3)

Management process--Planning, organizing and controlling action; and evaluating the results of action. (5)

Marginal analysis--The emphasis on the last or marginal unit as in marginal cost, marginal utility, etc. Mathematically, the rate of change of one variable with respect to another.

Marginal propensity to consume (MPC)--The change in consumption divided by the change in income that brought it about (mathematically, the rate of change of consumption with respect to income.) (9)

Market power--The ability of a firm or individual to influence the terms of trade through their action. In a perfectly competitive market there is no market power.

Market structure--Characteristics of market organization likely to affect behavior and performance of firms, such as the number and size of sellers, the extent of knowledge about each other's actions, the degree of freedom of entry, and the degree of product differentiation. (9)

Maximizing behavior--The assumption that each economic unit will act rationally and in a logical manner; if an item is available at two different prices it is expected that, other things being equal, a buyer will buy the lower-priced one. (12)

Mediation--Efforts by a third party to help resolve a dispute. (12)

Mixed economy--Economy in which some decisions are made by firms and households and some by central authorities. (Most real world economic systems are mixed.) (9)

Monetary policy--Central bank policies aimed at changing the quantity of money or credit conditions; for example, open market operations or changes in required reserve ratios. (16)

Money income--Income measured in dollars or, in another country, income measured in the currency of that country. (16)

Morality--The evaluation of or means of evaluating human conduct, as a set of customs of a given society, class, or social group which regulate relationships and describe modes of behavior to enhance the groups' survival. (1)

Nonprice competition--Competition by sellers by means other than price cutting. Advertising, product differentiation, trading stamps, and other promotional devices are examples. (9)

Open market--Market with free or easy access to all potential participants.

Opportunity cost--The cost of using resources for a certain purpose, measured by the benefit or revenues given up by not using them in their best alternative use. (9)

Persuasion--The act of winning over (someone) to a course of action by reasoning or inducement. (1)

Planning--Series of decisions concerning future standards and/or sequences of action. (4)

Political system--The organization or structure of government and those forces which influence public policy in a society. (2)

Preference--Refers to choice or ordering of choices among two or more alternative products in a given environment by a consumer or group of consumers. (3)

Present value (PV)--The value now of a sum payable at a later date or of a stream of income receivable at future dates. PV is the discounted value of future payments. (9)

Problem-solving--Involves the decision-making process in special situations requiring action. (4)

Product standard--A physical, written, graphic, or other representation of a product or a procedure established by authority, custom, or general consent with which other products or procedures of a like nature are compared for identification or measurement or to which they are made to conform. (6)

Productivity--Output produced per unit of input; frequently used to refer to "labor productivity", measured by output per hour worked. (9)

Pure public good--A good (or service) with benefits that people cannot be excluded from enjoying, regardless of who pays for the good. (16)

Quality - price relationship--Recognition that the price of a good is an incomplete description of the terms of trade unless accompanied by some description of the goods' relative characteristics.

Quantitative analysis--The use of statistical or mathematical models and measurement.

Rate of return--

(a) Annual profit as a percent of net worth. (b) Additional annual revenue from the sale of goods or services produced by plant or equipment, less operating costs (labor, materials, etc.) and depreciation, as a percent of the depreciated value of the plant or equipment. (c) Discount rate at which the present value of future returns (additional revenues less operating costs) from new plant or equipment equals the acquisition price of that plant or equipment. (16)

Rationality--The quality or condition of being based on reason or logic. (1)

Rate of substitution--Marginal rate of substitution (MRS) (a) In consumption the slope of an indifference curve, showing how much more of one commodity must be provided to compensate for the giving up of one unit of another commodity if the level of satisfaction is to be held constant. (b) In production, the slope of an isoquant, showing how much more of one factor or production must be used to compensate for the use of one less unit of another factor of production if production is to be held constant. (9)

Real income--A household's income expressed in terms of the command over commodities that the money income confers; money income corrected for changes in price levels, thus the purchasing power of money income. (9)

Regulation--A principle rule, or law, designed to control or govern behavior--a governmental order having the force of law. (1)

Relative price--The price of one good or service as compared to the price of another good or service.

Resources--Means that have characteristics capable of meeting demands. (4)

Risk--The hazard or chance of a loss, that is, a negative event. (4)

Savings--Loosely but commonly, disposable personal income less consumption expenditures. More strictly, disposable personal income less consumption expenditures less payment of interest on consumer debt. (16)

Scarcity--Scarcity and abundance are relative, and vague, descriptions of the availability of useful resources for human purposes. Any resource which commands a price in economic transactions--resources as diverse as fertile soil, machines, or human talent--may be called scarce. The rationale for this market-oriented definition is that at a lower price some economic agents would desire to employ more of the particular resource. In other words, when a resource commands a price in the market, some potential users will be induced to forego rewarding applications of the resource. (7)

Scientific method--Generally taken to include rules for concept formation, conduct of observations and experiments and validation of hypotheses by observations or experiments. (1)

Sector (private)--That portion of an economy in which principal decisions are made by private units such as households and firms. (9)

Sector (public)--That portion of an economy where production is under control of the central authorities or bodies appointed by them, including all production by governments and nationalized industries. (9)

Social system--The structure of relationships among human beings in a society. (2)

Standard of living--Quantity and quality of goods and services that an individual or group desires. (4)

Standards--Measures of quantity and/or quality that reflect the reconciliation of resources with demands. (4)

Taxation equity--The extent or degree to which particular tax burdens are distributed relative to income, wealth, or ability to pay.

Time as a resource--Time and the energies and abilities of members of a family or household are resources which can be used to obtain goods the members desire. (5)

Time preference--The desire to have goods now rather than in the future. The amount by which goods now are preferred over goods in the future. (16)

Values--Meanings relating to what is desirable or has worth. Ideas and principles which an individual, group, or society consider desirable, or important. A system of values or value orientation is an integrated structure of needs, attitudes, interests, accepted models of conduct, and generalized ends which motivates or restricts behavior in all aspects of life. (5)

Value clarification--Process that involves weighing alternatives to decide just what is important to each of us as individuals. (14)

Well-being--State of being happy, healthy, or prosperous. (1)

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THE CHANGING LANGUAGE OF A MASS CONSUMPTION SOCIETY:  
A PRELIMINARY STUDY OF BRAND NAME USAGE IN  
BEST-SELLING AMERICAN NOVELS IN THE POST-WORLD WAR II ERA

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ABSTRACT

This study constitutes a first attempt to understand the influence of commercial practices, such as advertising, on American popular language. The method of content analysis was employed to examine the usage made since World War II of brand names in the texts of 31 best-selling American novels. Dramatic increases (over 600%) were found for two measures of usage over the 30-year period of study (1946-75).

This study is the first in a series of research efforts to determine the extent to which language in America has been influenced by advertising and other commercial practices over a 30-year time span. The period of study is 1946-75 and the focus of examination is the use of brand names (associated with consumer products and services) by 31 authors of best-selling American novels. A distinguishing characteristic of the study is its use of a social scientific approach to address a topic not usually considered amenable to such rigorous analytical treatment.

STUDY BACKGROUND

By way of background it should be noted that advertising, the commercial practice of primary interest to the study, has been a source of controversy in the United States for over fifty years. In their 1927 classic, Your Money's Worth, Stuart Chase and F. J. Schlink concluded that, "We are Alices in a Wonderland of conflicting claims, bright promises, fancy packages, soaring words, and almost impenetrable ignorance" (p. 2). Similarly harsh sentiments continued to be voiced through the last few decades with the publication of Vance Packard's Hidden Persuaders in 1957, John Kenneth Galbraith's New Industrial State in 1967, and Stuart Ewen's Captains of Consciousness in 1976.

In each of these works the rapidly growing size and power in America of advertising and other commercial practices have been represented as a worrisome development. Of particular concern is the dramatic rise in advertising expenditures since World War II, from \$2.9 billion in 1945 to \$28.1 billion in 1975, an almost tenfold increase in the space of 30 years. This development has led critics to decry what they see as the general debasement of American society throughout the commercialization of its language and culture.

Since these charges have typically been viewed as incapable of operationalization, their expressions

have remained largely limited to the subjective and the impressionistic. It is this situation which stimulated the objective approach assumed herein. The current study is a first attempt to generate an historical data base which may permit a more meaningful discussion of one aspect of the commercialization problem, namely the uses made over time of brand names associated with consumer goods and services in the popular language of America.

Of special interest is the major hypothesis of the study. Since a primary objective of most consumer-oriented advertising is the identification and subsequent purchase by consumers of a particular brand-named product (Don't say beer, say Bud"), it seems reasonable to hypothesize that success in reaching this objective for thousands of business firms over the years has been accompanied by an elevation of the level of consumer familiarity with, and usage of, brand names in everyday language. In light of the unavailability of a representative sample of transcripts of telephone conversations or records of written correspondences between friends or relatives over a substantial period of time, it was decided to explore this hypothesis by examining a surrogate. Best-selling novels were selected as the surrogate since they are available over the 30-year period of interest to the study and their popular success with the American public (McElroy, 1968; Sharon, 1973) strongly suggests that the language used in these books was appropriate for the times in which they were published.

THE STUDY SAMPLE

The study sample consisted of 31 fictional best-sellers published between 1946 and 1975. They were selected using several criteria. To assure that each book in the sample reflected the events and circumstances of its time of publication, only books set (at least in part) in contemporary America were selected for study. It was also decided that each of the books selected would be the product of an American author writing at an early stage of his or her career as a novelist; and indeed, almost all of the books selected were first novels. (The latter criterion was employed to exclude the products of "formula writers" such as Erle Stanley Gardner who, over a series of decades, penned dozens of best-selling Perry Mason mysteries each of which was deliberately designed to avoid being tied to a particular time period.) Application of the above-mentioned criteria to the total population of several hundred best-selling American novels published in the 1946-75 period led to the 31 eligible entries which constituted the study sample.

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## THE MAJOR FINDINGS

A content analysis of the contemporary American segments of each of the 31 books (the whole book in most instances) revealed that the total number and variety of brand names (per 10,000 words of text) had each undergone a striking exponential rise over the 30-year period of study. In particular, the books published in the 70's were more than 600% higher than the books published in the 40's on each of two measures of brand name usage (total number and varieties). Additional data were secured and analyzed to test the generalizability of the study findings from brand names to their generic counterparts, and from usage in popular literature to usage in popular language (as reported by American college students).

Taken together the various findings lend support to the charges of increasing commercial influence in the American popular language of the post-World War II era.

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# THE CONTINUING ARMS RACE: A DIRECT ROUTE TO 1984?

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## ABSTRACT

Analysis of the arms race as an oligantipaly game suggests that the US and the USSR are already partway to the economic stagnation predicted by Orwell in his classic, 1984. Casual empiricism supports that suggestion. The research agenda implied by this dismal view of future consumption prospects includes examination of the implications of the oligantipaly model from both a welfare and a production - relative price (or GNP) point of view.

In 1949, George Orwell envisioned the year 1984 to be one in which military expenditures and perpetual wars among the three world powers effectively limited the growth of real consumption; perpetuating the existing class structure and the status quo in each of the world states [17]. Although we don't yet match his conception (for example, Western Europe is still independent of the USSR, and China doesn't yet qualify as the military and economic equal of the two super powers), there is some evidence that the Orwellian theme is being played in altered form. That evidence suggests a stagnancy in the growth of consumer welfare in the near term - at least in the USSR and the US.

Recent press and scholarly reports suggest that real income, real income per capita, and real disposable income per capita are not growing or are growing rather slowly in the US and the USSR. Census Bureau data indicate, for example, that real family income in the US was virtually unchanged from 1970 to 1980 [10]. Similarly, Soviet consumption growth has slowed markedly in recent years [12]. Overall Soviet growth has been gradually declining during each successive five year period, and the growth of (total factor) productivity in 1971-79 was zero or negative [8, pp. 106-7]. The growth problem continued into 1982 [7, pp. 283-94]. Other data show slow growth rates in American and Soviet real GNP and real GNP per capita in recent years in contrast to faster rates in nations like Japan, Yugoslavia, Romania, France, West Germany and the European Community in general [15, pp. 28-9 and 30-1 respectively]. Even with the usual difficulties, concerns and caveats surrounding international comparisons, the crude data indicate that both of the super powers are experiencing growth problems. The fundamental question entertained by this paper is:

"To what degree might these growth or stagnation problems be traceable to the continuing arms race?"

The emphasis in addressing that question in a preliminary way and developing a related research agenda is on the economics of the question, not on comparisons of military might.

## OLIGANTIPALY AND NEGATIVE SUM GAMES

George Orwell's predictions, of course, were imperfect. The world of 1983 does not consist of three equally powerful world states which exhibit no "genuine ideological differences," are at perpetual war with each other, and are each governed by inner party apparachiki. Our current state is better described by a model that predicts some, but not all, of Orwell's results. That model of oligantipaly (few rivals) articulates rather well with what we are now observing and has strong implications for future levels of consumption.

The oligantipaly model characterizes the US and the USSR as being involved in a strategic struggle (or game) at least since 1946-48 (I use the death of Jan Masaryk in February 1948 as my reference date). In all such rivalries, each party plays to gain an advantage over the other party (or parties) or to counter the strategic moves of the other parties. Each party recognizes that he can lose points, positions, or the entire game if another party counters an initiative by a successful strategy of his own. In one subset of game theory, no major participant can withdraw or reduce his activity once the game has begun without risking major losses. That may be true even if every player is bearing net costs by continuing to play. See [14, p. 5]. Succinctly stated, the game may be a negative sum game, but the game goes on.

The best nonmilitary, nonpolitical analogy I know of is that of advertising and brand promotion in the cigarette industry [9]. Given the power of promotional techniques to alter consumer preferences among brands, but not to change significantly the demand for all cigarettes, each firm has a strong incentive to increase its market share by advertising and the like. With equally effective advertising skills available on the open market, however, other firms can counter the negative impacts of their rivals' ads. The market shares and total cigarette sales may change little, but each firm (and therefore the industry) experiences sizeable promotional expenses. No firm, however, can unilaterally stop or substantially reduce its promotional activity without risking very major losses. Obviously, the game is a negative sum game for cigarettes companies, but the advertisers (as a whole) win. The general position of the US, the USSR, and to a lesser degree China is quite analogous to that of the cigarette companies.

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Note also the close linkage between the Orwellian scenario and the oligantipaly model. Orwell postulated three super powers plus some weakly organized and contested areas of the globe. Oligantipaly games are reasonable models only when each of the limited number of players is large enough to seriously damage the other(s) by independent action and when the damaged party knows from whence the damage came. The game itself is rooted in the power (or economic) structure.<sup>2</sup>

#### FINANCING THE MILITARY BUILDUP

The manner in which military expenditures are financed by the parties is of importance to the impact of the arms race on consumption and investment. The decades of the 1960's and 1970's provide a useful illustration.

As the period began, the world knew and the super powers knew a fortiori that a nuclear standoff existed and that any major nuclear confrontation, with high probability, would destroy the parties and civilization as we know it. Yet, as the oligantipaly model predicts, the struggle between the two major powers continued unabatedly. Strategic moves were made on the periphery of their respective spheres of influence and in underdeveloped areas.

For all its anticolonialist and nationalist overtones, Vietnam represented one of those strategic theaters. In that confrontation, the US found itself unable to negotiate a satisfactory settlement, unable to win via the special forces so dear to President Kennedy's heart, and unwilling to escalate the conflict to the level some felt necessary for a military victory. The political-psychological impact of that perceived debacle, the post-Vietnam malaise, pervaded the entire domestic and foreign policy scene and led to a scaling-down of the growth and level of US military preparedness. See [16] for a dollar cost comparison of US and Soviet expenditures from 1965-1980. Such a "mind set" would have forced any democratic government to scale back military expenditures even without the obvious political "need" to finance the "War on Poverty" and its legislated extensions and amendments.

Given our unilateral de-escalation, the Nixon and then the Ford Administration sought to counter the prevailing political-psychological limits on our ability to play the game by emphasizing a strategy akin to the old balance of power techniques. Such a strategy was a "natural" for specialists in geopolitics like Henry Kissinger and William (Bill) Hyland. As the British and the central powers of Europe demonstrated throughout history, such techniques - if successful - can be very cost effective. Suffice it to say that many of these geopolitical plays; e.g.,

<sup>2</sup>Economists will recognize these principles from oligopoly theory and that such conditions do not exist in competitive markets. Oligopoly (few sellers) is a subset of oligantipaly, as is oligopsony (few buyers) and bilateral monopoly.

those in Egypt, China, and even Iran (for a time), were quite successful - altering the locus of pressure on the USSR and relaxing its influence in some Moslem lands. The moves permitted the US to compensate for reduced military spending - thus making the best of a "bad situation" brought on by domestic politics and the psychological reaction to Vietnam.

It is not yet possible to say definitively whether Presidents Nixon, Ford, or Carter expected the USSR to match or follow our de-escalation. By the usual rules of the oligantipaly game, one might have expected them to seize upon the US political situation as a target of opportunity, and they did so. According to CIA, the USSR spent 11-13 percent of their GNP on military goods and services each year from 1965 through 1978. That share grew to 12-14 percent since 1978 - as the Soviet economy slowed. Throughout the entire period, Soviet military expenditures grew 4-5 percent per annum [8, pp. 137; 20, p. 7].<sup>3</sup>

The continued Soviet expenditures, the consequent shift in the balance of military strength, and the Soviet willingness to use the new "muscle" around the world led to a cessation and then a reversal of American de-escalation. Indeed, beneath the facade of political rhetoric, both the Carter

TABLE 1. Rate of Growth of Federal Expenditures: Compounded Annual Rate of Growth

Terminal Quarter	(1)	(2)	(2) > (1)
	Nondefense Federal Expenditures	Defense Federal Expenditures	
2/77	10.8	7.3	-
3/77	20.5	1.7	-
	Revised Series		
4/77	12.4	4.3	-
1/78	4.3	3.4	-
2/78	1.8	19.8	+
3/78	15.0	8.3	-
4/78	16.4	11.0	-
1/79	3.5	8.7	+
2/79	3.3	9.3	+
3/79	23.6	14.3	-
4/79	16.0	24.3	+
1/80	18.2	28.9	+
2/80	18.6	10.5	-
3/80	26.0	1.5	-
4/80	14.7	25.4	+
1/81	12.3	15.3	+
2/81	0.3	22.3	+
3/81	22.4	10.8	-
4/81	12.9	36.5	+
1/82	1.1	- 1.7	-
2/82	- 1.2	26.3	+

Source: Federal Reserve Bank of St. Louis, Monetary Trends. Issued March 25, July 30 and October 26, 1982. National Income Accounts Budget data.

<sup>3</sup>These figures are in dispute. Steven Rosefielde argues that methodological errors by CIA lead to an understatement in the "size, growth and momentum of the Soviet arms buildup." [19, p. 256].

and the Reagan Administration sought to change the emphasis on military versus nonmilitary expenditures (See Tables 1 and 2). Nevertheless, the Carter and the Reagan Administration differed in the way each financed the buildup.

Simply stated, the Carter Administration financed the increased defense expenditures toward the end of its term by monetizing those expenditures - just as it financed much of the increased expenditures on social service and entitlement programs. Because the FED's monetary policy was not too stringent for most of Carter's term, inflation rose as did deficits and money income. As inflationary expectations increased, interest rates rose apace. Because spending on social services continued to grow and because many of these programs were explicitly or implicitly indexed, the weight of the military and nonmilitary expenditures rested on the middle and upper middle income groups. They were taxed *via* "bracket creep" and *via* decreases in the real value of their incomes (or more precisely, their cash balances). As a consequence, much of the impact of the increased (defense and nondefense) spending was on real consumption with some impact on real investment as interest rates rose.

TABLE 2. Rate of Growth of Federal Expenditures Since Third Quarter 1977: Compounded Annual Rates of Growth

Terminal Quarter	(1)	(2)	(1)-(2)
	Federal Nondefense Expenditures	Federal Defense Expenditures	
4/77	12.4	4.3	8.1
1/78	8.3	3.9	4.4
2/78	6.1	8.9	- 1.6
3/781	8.3	8.8	- 0.5
4/78	9.9	9.2	0.7
1/79	8.8	9.1	- 0.3
2/79	8.0	9.2	- 1.2
3/79	9.8	9.8	0.0
4/79	10.5	11.3	0.2
1/80	11.2	13.0	- 1.8
2/80	11.9	12.7	- 0.8
3/80	13.0	11.8	1.2
4/80	13.1	12.8	1.5
1/81	13.1	12.9	0.2
2/81	12.2	13.5	- 1.3
3/81	12.8	13.4	- 1.9
4/81	12.8	14.6	- 0.6
1/82	12.1	13.6	- 1.5
2/82	11.4	14.3	- 2.9

Source: Federal Reserve Bank of St. Louis. Monetary Trends. Issued October 26, 1982. National Income Accounts budget data (Revised series).

By contrast, the Reagan Administration has operated largely under a strict monetary regimen - one generally supported by the Administration. And - as expected by all good economists - inflation has declined in response to the monetary restraint. As Nobel Laureate James Tobin notes however, "Reaganomics" (as originally defined) is not a consistent policy [11, pp. 46-47]. The

initial tax adjustments - both for individuals and especially for corporations - substantially exceeded the adjustments in actual and planned expenditures; resulting in larger deficits. Those deficits, of course, were exacerbated somewhat by the 1981-82 recession. Financing the continuing and growing federal debt required the Treasury to "crowd out" private investment from the financial market(s). Any positive "supply side effects" - likely to be small in the short run - were swamped by the crowding out phenomenon. Thus, although some part of the increase in defense expenditure has been financed and will be financed *via* reductions in entitlements, social services, revenue sharing, and the bureaucracies administering those programs, the bulk of the financing has been *via* the financial market. Moreover, the failure of the executive and legislative branches to reach any broad consensus on the incidence of the expenditure burden heightens the level of uncertainty in financial markets.<sup>4</sup> Despite the partial legislative-executive accord in late 1982 and the interest rates reductions, interest rates can be expected to remain high by historic standards as will the need for government financing of the deficit. It follows that the Reagan Administration has financed and probably will continue to finance much of the arms buildup out of investment.

Interestingly, the USSR has a similar problem in financing its continuing military buildup. Historically, the USSR has avoided the inflation which might have accompanied its spending for military and investment purposes by wage controls and turnover (excise) taxes on consumer goods - adjusting the taxes to the appropriate level [6; 1]. If the Soviet leadership intends to preserve what it has gained in relative strength over the past 10 to 12 years, they must maintain or increase their military expenditures. Either of these is difficult. According to CIA, maintenance of the historic growth rate of military expenditures could absorb 50 to 75 percent of the expected annual increment in GNP as early as 1985 [8, pp. 137-8]. Note that, despite awareness of serious production problems in Soviet agriculture, capital investment in that sector has leveled off. Anton Malish of the US Department of Agriculture says that the Soviet leaders appear:

"to be counting on more efficient use of existing resources with the hope that the 3-year spell of miserable weather is over" [4, p. 10].

Even the 11th Five Year Plan calls for capital investment to grow more slowly than consumption [20, p. 3]. Included in the overall plan, of course, are the expected military and nonmilitary "needs" of the client regimes in Poland, Cuba, and Afghanistan as well as the direct military drain of the Afghan War. It seems quite likely

<sup>4</sup>John Seater, NCSU, initially called my attention to this effect. My thanks also go to Martin Bronfenbrenner, Duke University, Solomon Polachek, UNC(CH), and two anonymous referees for helpful comments.

therefore, that Soviet military spending is now impacting Soviet investment as well as (or perhaps more than) Soviet consumption.

Unless the financing problems are resolved, both the US and the USSR appear to face a period of economic doldrums in the near future. The US, of course, could avoid a portion of that prospect by further adjustments in nondefense spending, by increasing taxes, by a stretch-out of defense spending, or some combination of the three. Alternatively, one might expect (in a number of guises) a return to financing *via* inflation. There were certainly both White House and Congressional pressures in that direction during 1982 [5]. Indeed, as Arthur Burns argues, conflicts between monetary and fiscal policies (in Western democracies) are usually won by the political forces encouraging the deficits [2]. Such pressures on the monetary authorities are exacerbated by fears and prospects of international liquidity deficiencies if "adequate liquidity" is not "made available." Thus, if political support for a stable monetary policy erodes, "Volckerism" could fade away without the fanfare or the retreat parade usually accorded to brave warriors.

#### THE NEGATIVE SUM GAME AND FUTURE CONSUMPTION LEVELS

If the oligantipaly analysis is not too wide of the mark, it is in the interests of both the US and the USSR to negotiate mutual reductions in forces so as to free up resources for investment (and current or future consumption). These hopeful prospects, however, must be welcomed with an understanding of the schizophrenia endemic to most (if not all) oligantipaly situations. Although it may pay each party to negotiate mutual (and verifiable) force reductions, it simultaneously pays each party to exercise other strategic options (say, in the Middle East) and even to cheat on negotiated agreements. That apparent anomaly is built into the nature of the game.

Even as the game is being played, the free riders and fellow travelers of the world - nations like Japan, Romania, perhaps Sweden - can be expected to gain trade advantages and to increase their relative market shares and income levels. Others, like China and the Palestinians, are apt to find it in their interest in the short run to negotiate with both sides. Indeed, if "all-out" war between the super powers is avoided and if negotiated scaledowns are small, the super powers, ceteris paribus, stand gradually to lose their preeminence among nations - as they starve their civilian economics, their education, their basic sciences, and their R & D to support the arms buildup, engage in foreign military sorties, or counter insurgencies. Occasional technological "peeloffs" from military R & D would, of course, forestall their relative decline, but probably could not prevent it. Similarly, the wealth creating potential of new technology - microelectronics, robotics, production in space etc. - would help to offset the relative decline; provided that the financial climate and interest rates are favorable

to such ventures. Clearly, the growth of real consumption worldwide will be smaller than it could have been in a world less well armed, but some nations - those that eschew military expenditure (not necessarily military production) and emphasize investments in human and nonhuman capital - can be expected to gain absolutely and relatively. The gains for these "competitive fringe" nations will be accompanied, however, by the risk that their increasingly comfortable lives may be ended abruptly by unilateral actions of the major powers.

#### OLIGANTIPALY AND THE RESEARCH AGENDA

With this reformulation (or updating) of Orwellian analysis as a framework, a spate of testable hypotheses emerge for both economic and multidisciplinary research. Those hypotheses can be conveniently divided into two sets: (A) the actual or potential welfare effects and (B) the production - relative price effects of the rivalrous conduct.

First, there may be a substantial welfare loss from continuous or escalating military expenditures even if each oligantipalist remains on his production possibility frontier (i.e., at full employment) and finances all the military expenditures *via* a tax on consumption (pay-as-you-go-financing). Even though one might reasonably expect "national security" or "protection from foreign aggression" to enter with positive weight into the utility function of the average citizen in each nation, it is unlikely that such expenditures will add much utility at the margin under oligantipaly. GNP (at factor costs) could grow *via* the military buildup with no addition or even a reduction in the perceived welfare of most or all individuals. Certainly, after years of military rivalry, the perception that the multitudinous expenditures have not raised security will tend to grow. Given the nature of the oligantipaly game, that perception need not be inaccurate. Note that this point is not equivalent to the old public goods (and free rider) phenomenon, but they are obviously related. Even without defining (or conceptualizing) a social welfare function, the oligantipaly analysis suggests alterations in consumer behavior over time including growing tax avoidance, draft avoidance, calls for unilateral disarmament, and an intensification of the usual free rider problems. The growth and estimation of the magnitude of such responses are obviously questions of concern to those studying consumption, the "underground economy" and the like.

In my view, it is just such a perception which underlies the "peace movement" - a statement that is itself a testable hypothesis. It would appear, however, that neither the "doves" nor the "hawks" fully comprehend the dynamics of oligantipaly. If the model employed here has any predictive power, the actions usually proposed by "doves" can easily create conditions that induce the other side(s) to pursue short run targets of opportunity; leading in Hegelian fashion to the

inevitable hawklike reaction. Similarly, the actions pursued by "hawks" simply exacerbate the underlying rivalry; inducing reciprocal military expansion in the rival's camp. On net balance, then, actions by both "hawks" and "doves" may increase the real losses experienced by one or both sides. Indeed, the schizophrenia noted above together with the actions and the "double-think" it engenders require extensive evaluation. If such conditions necessarily prevail under oligantipaly; that is, if broad coalitions and agreements cannot be formed and maintained, then "detente" as we generally use the word simply cannot exist as long as the oligantipalistic structure exists. Oligantipaly implies that it is "not in the cards" or, more accurately, not in the game for there to be a general relaxation (as distinct from precisely defined and enforced mutual relaxations in specific areas). The research agenda also includes examination of the attempts to construct coalitions around specific interest areas.

Research area "B" - that dealing with production and relative price effects - includes several topics. Perhaps the most active of these is the attempts to measure the consumption and investment tradeoffs implied by military expenditures or shifts in such expenditures. The work of DeGrasse and Murphy on "The High Costs of Rearmament" is one example. They concluded that:

"By decreasing government aid and hoping that economic growth will provide jobs for the poor, Reagan's (defense) policies could dramatically restrict ways for the poor and middle class to raise their standard of living" [3, p. 22].

One assertion of their research effort is that expenditures for military goods and even military R & D have come at the cost of civilian R & D; slowing technological progress. Another approach is represented by an important staff study for the Joint Economic Committee [13]. Among its conclusions are several warning of the inflationary potential and the "bottleneck" problems of the military buildup. The Independent Commission on Disarmament and Security Issues (ICDSI) is also conducting research in this area. The ICDSI concludes that:

"The increase in military spending now underway threatens the economic security of all countries" [18, p. 5].

These recent studies, among some others, represent the first in what should become a large number of inquiries into these areas of concern. Some of these analyses, such as that by the ICDSI, may well be challenged as reflecting, simply, the policy position(s) of the sponsoring organization(s). Hence, there is a need for the widest possible discourse on these issues so as to assure scholarly objectivity and understanding of the tradeoffs we face.

Research area "B" also includes examinations of product and factor market prices. The JEC study noted above [13] also deals (in a preliminary way) with the impact of military expenditures on some

prices. Other examinations might reasonably include the impact of military spending on the regional distribution of employment and unemployment and on the matrix of consumer goods prices. Clearly, in recent months, military expenditures appear to have created several bright spots in the mosaic of high area unemployment rates across the nation. The more difficult research question is the degree to which the alteration in government expenditure patterns has helped to resolve or exacerbate the structural transformation problems being experienced in several parts of the nation.

Also included in "B" is an examination of the effect(s), if any, of military expenditures on economic growth. As noted above, any such effect may be closely connected to the method for financing the military outlays. Also mentioned above are comparisons and detailed analyses of consumption and investment growth patterns across player and free rider nations - so as to test the hypothesized gradual decline in the economic position of the major players and to assess any implications of the game on international exchange rates, trading patterns, international investment patterns, and the like. Given the close relationships among the world's trading nations, however, this area of analysis is both difficult and hazardous. As Herbert Stein has noted [2], the relatively slower growth rate for the US in recent years is mirrored to some degree among our trading partners. The "macro" nature of interrelationships among the trading nations plus the heavy influence of US interest rates on exchange rates, currency values, and the economic health of other nations makes it difficult to isolate the underlying cause(s) for different growth patterns and assess the impact of the arms race on these growth patterns in each nation. As noted above, US interest rates can be expected to be influenced by both our monetary and our fiscal policies.

#### SUMMARY

Although we appear to be taking a different route to 1984 than that described by Orwell, the oligantipaly model suggests that the two super powers are already partway to the economic stagnation he predicted. Until we test the hypotheses suggested by that model and assess carefully the consumption and investment tradeoffs associated with the arms buildup, we have little assurance that Orwell was wrong about the levels and trends in real consumption in 1984 and beyond.

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THE EFFECT OF CONSUMER'S SOCIAL CHARACTERISTICS ON  
PSYCHIATRIC DIAGNOSES AND MEDICATION RECOMMENDATIONS

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ABSTRACT

The study examines the effects of a consumer's social characteristics on psychiatric diagnostic and medication decisions. It is argued that decisions based on irrelevant consumer characteristics will generate consumer dissatisfaction with health services. Results indicate psychiatrists base their decisions on the consumer's behavior rather than irrelevant social characteristics. It is concluded that psychiatrists are adopting a more consumer-oriented approach in their decision making.

The present study examines the effect of a consumer's social characteristics on psychiatric diagnoses and drug treatment recommendations. The psychiatric perspective maintains that diagnoses and medication prescriptions are based on a consumer's behavior or symptoms [15, 16, 17, 18, 34, 48]. Labeling theorists argue that psychiatric diagnoses and medication decisions are differentially applied to health service consumers based more on their social characteristics than their actual behavior [48, 2, 9, 37, 38, 45, 46].

Psychiatrists violate the marketing concept when irrelevant consumer characteristics influence their diagnostic and treatment decisions. According to the marketing concept, their decisions should be based on the consumer's behavior in order to generate consumer satisfaction. The diagnosis is used as the basis for deciding what health services a consumer will receive. An incorrect diagnosis could lead to an inappropriate treatment which can stimulate consumer dissatisfaction with psychiatric health services.

Consumer satisfaction is an important outcome of psychiatric health services for a number of reasons. Consumer satisfaction leads to continued use of health services which is necessary for the economic viability of the practice [34]. Satisfied clients are less likely to sue for malpractice, which is a growing economic burden on physicians [35]. Satisfied consumers are also more likely to cooperate and comply with the physicians' directions [34, 31]. This should lead to an improvement in the consumer's health.

A great deal of research has indicated that psychiatric diagnoses were unreliable [19, 48,

43, 22, 24, 25, 26, 27, 28, 36, 42]. These studies have used various diagnostic classifications and did not study the relative influence of psychiatric versus social factors on diagnostic decisions. Other research has shown that suggestion effects influenced psychiatric diagnoses [8, 47] as well as the bleak biographical experiences of consumers [33].

It is difficult to assess the relative influence of a consumer's social characteristics on the diagnostic process. Confusing and conflicting results have been reported in this literature. Some research has found the effect of the consumer's sex to be minimal [1, 40] whereas other research has found that sex influenced a consumer's diagnosis [49, 14, 7, 20, 13].

There has been research on the effect of a consumer's race on psychiatric diagnoses. Some research has found minimal racial bias in diagnoses [3, 49, 39, 40] whereas other research has found that race influenced the consumer's diagnosis [4, 44, 10, 50, 11, 12, 41, 20, 51]. When we look at social class effects on diagnosis we find that some research has reported that social class had not influenced diagnosis [3, 14] while most of the research has found that a consumer's social class influenced the diagnosis [32, 5, 30, 21, 23, 6].

One explanation for these conflicting findings is that these researchers relied on the DSM-II or some other unreliable classification system which in turn produced inconsistent results. The majority of the research has indicated that a consumer's social characteristics had influenced a psychiatrist's diagnosis to some extent.

This bias should have also influenced medication decisions, even though the relative influence of social factors on this decision process was not addressed in the previous research. The present study will examine the effects of a consumer's level of educational attainment and occupational prestige on psychiatric diagnostic and medication decisions based on the DSM-III.

HYPOTHESES

The following hypotheses will be tested based on predictions of the labeling perspective regarding psychiatric decisions. For participants in both the mildly and severely impaired conditions:

Hypothesis 1: A psychiatrist's perception of a consumer's occupational prestige will be more

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strongly related to their diagnosis than their perception of the consumer's behavior.

Hypothesis 2: A psychiatrist's perception of a consumer's level of educational attainment will be more strongly related to their diagnosis than their perception of the consumer's behavior.

Hypothesis 3: A psychiatrist's perception of a consumer's occupational prestige will be more strongly related to their medication prescription than their perception of the consumer's behavior.

Hypothesis 4: A psychiatrist's perception of a consumer's level of educational attainment will be more strongly related to their medication prescription than their perception of the consumer's behavior.

## METHODS

### Participants

A total of 48 residents in psychiatry and medical students on their psychiatric rotation participated in the study. Twenty-four participants were attending a southwestern medical school and twenty-four were attending an upper middle western medical school. Data was generated from groups of three participants in a seminar room during two days at their respective universities. Each participant was randomly assigned to a single experimental condition with a total of six participants for each of the eight experimental conditions. There were 31 males and 17 females ranging in age from 23 to 51 with an average age of 28.2 years.

### DESIGN AND VIDEOTAPES

A 2x2x2 orthogonal factorial design experiment was conducted in which the occupational status, educational status, and level of impairment of a white male in a psychiatric examination was manipulated on a videotape which lasted 15 minutes. The dependent variables were the diagnostic decision and the medication decision. The consumer and psychiatrist on each videotape were the same two male, professional actors.

The videotapes were based on fixed transcripts for two different scenarios. In one scenario, the consumer's severity of impairment was mild while in the second scenario the severity of impairment was severe. The examinations were held constant by editing the previously recorded examination onto tapes on which the status resources of the consumer were varied. Educational status was varied in the examination by presenting a person who either had a masters degree in marketing or who had a high school diploma. Occupational status was varied by presenting a person who was a janitor or who was the head of the branch office of a large firm that sold calculators. A different videotape was made for each of the four possible combinations

of these two status characteristics for both the mild and severe conditions.

The examinations presented on the tapes were a reconstructed synthesis of several actual psychiatric examinations. The information presented by the consumer about his "symptoms" included a wide range of behaviors so as to maximize the uncertainty and ambiguity of the psychiatric examination. The intention of this procedure was to allow for the application by the clinician of various diagnostic labels and to introduce uncertainty in the medication decision. Researchers have noted that ambiguity frequently exists in actual psychiatric practice [47, 32].

The consumer in the mild impairment condition had been brought to a hospital by ambulance for having taken an overdose of drugs at a party. After having his stomach pumped, he denied he was suicidal and insisted on his release. His wife had expressed concern about the recent purchase of a gun. He claimed he used the gun for hunting and protection. He argued it wasn't a safe world and he would have killed criminals if provoked. He recently lost 15 pounds, spent a lot of money, and moved from a small town to a large city. He claimed his home town was boring and everybody ganged up on him and watched him. He also recounted sleeping and occasionally drinking on the job as well as not getting along with his boss. He reported a change toward sloppiness in his personal hygiene habits and a slight loss of sleep and interest in sex due to nervous tension. He did not have hallucinations or delusions. He offered reasonable accounts to the psychiatrist for each accusation that had been made and had no previous history of mental illness nor brain damage.

In the severe impairment condition, the consumer was released to the psychiatrist by a dermatologist for injecting his groin area with his own feces in order to avoid having sex with his wife. He reported being victimized by neighborhood children who vandalized his home. He had shot a gun in the air and made threats while drunk to get his neighbor's attention. He argued that he had wanted to only scare the children and insisted he would not have really hurt anyone. He stated that he had written eight to ten letters a day for two weeks to the city council in order to get his neighbors to mow their lawns according to his schedule. He had recently joined a new fundamentalist church where he had spoken in tongues. He reported placing clothing on the roof of his house so that God would bless them. He admitted starting a fire in his garage by accident during a church meeting when he had knocked some candles over while speaking in tongues. He reported he had spent large sums of money on the church, was running for political office to restore old fashioned morals, and had destroyed a television and radio because only cheap sex shows were on. He reported sleep and weight loss. He had not hallucinated, had no brain damage, and had not been to a psychiatrist before.

PROCEDURES AND MEASURES

Upon arrival at the seminar room, participants were informed they were taking part in a study of psychiatric decision making. They were told that after viewing the videotape, they would be asked to fill out a short questionnaire which contained items that required them to make various decisions about what they had seen and to give information about their backgrounds.

The participants were asked to make an official diagnosis from the third edition of the Diagnostic and Statistical Manual of the American Psychiatric Association. The diagnosis was coded as follows: 1 for bipolar disorder: general; 2 for bipolar disorder: manic; 3 for bipolar disorder: depressed; 4 for personality disorder; 5 for paranoid schizophrenia; 6 for depressive disorder. The participants were asked to rate the consumer's severity of impairment on a 7 point scale as follows: 1 for no mental disorder; 2 for possible mental disorder; 3 for mild impairment; 4 for moderate impairment; 5 for marked impairment; 6 for severe impairment; 7 for among the most extremely ill.

In the next part of the questionnaire the participants were asked if they thought the consumer was treatable, if they thought the consumer could have made responsible decisions regarding his treatment, and if they thought the consumer would inflict severe emotional injury on those unable to avoid contact with him. The response categories to these 3 items were coded as follows: 1 for definitely yes; 2 for probably yes; 3 for probably no; 4 for definitely no. The participants were asked what specific treatment or medication they would recommend for the consumer. The responses to this question were coded as follows: 1 for lithium carbonate; 2 for neuroleptics such as haldol or thorazine; 3 for tricyclics; 4 for behavior modification; 5 for psychotherapy. They were asked if they thought the consumer would physically injure himself or others. This was coded 1 for yes and 0 for no.

RESULTS

General Overview and Description of the Data

While some independent variables are measured at an ordinal level, they are, for purposes of analysis, considered to be interval level. Assuming interval level measurement with ordinal level variables does not cause serious statistical or measurement errors [29].

Table 1 displays means and standard deviations for the behavior variables for the total group and medical school subgroups. There are no statistically significant differences between medical school subgroups for any variables. Both universities are combined into one group for purposes of analysis.

TABLE 1. Total Group and Medical School Subgroups: Means and Standard Deviations.

Variable Name	Total Group			Midwestern Univ.			Southwestern Univ.		
	Mean	S.D.	N.	Mean	S.D.	N.	Mean	S.D.	N.
Severity of Disorder	4.458	1.184	48	4.333	1.239	24	4.583	1.139	24
Consumer Treatable	1.688	.512	48	1.708	.464	24	1.667	.565	24
Consumer Responsible Decision	3.208	.617	48	3.292	.550	24	3.125	.680	24
Consumer Hurt Self/Others	8.33	.376	48	.917	.282	24	.750	.442	24
Emotional Harm Others	2.00	.715	48	1.833	.637	24	2.167	.671	24

The majority of participants diagnose the consumer as having a bipolar affective disorder (N=31; see Table 2). Nine students diagnosis the consumer as having paranoid schizophrenia while six others diagnosis the consumer as having a personality disorder. In terms of medication, the participants tend to prescribe lithium carbonate (N=25) or a neuroleptic such as thorazine, mellaril, haldol, or prolixin HCL (N=14).

TABLE 2. Percentage Distributions of Diagnosis and Medication Decisions by Consumer's Education and Occupation.

Variable Name	Consumer's Education		Consumer's Occupation	
	Low	High	Blue Collar	White Collar
<b>Diagnosis</b>				
Bipolar Disorder: General	26.1	16.7	13.0	29.2
Bipolar Disorder: Manic	30.4	33.3	34.8	29.2
Bipolar Disorder: Depressed	8.7	16.7	17.4	8.3
Personality Disorder	13.0	12.5	17.4	8.3
Paranoid Schizophrenic	17.4	20.8	17.4	20.8
Depressive Disorder	4.3	0.0	4.2	0.0
	(LAMBDA = 0.0)		(LAMBDA = 0.0)	
<b>Medication</b>				
Lithium Carbonate	54.2	50.0	58.3	45.8
Neuroleptics	25.0	33.0	20.8	37.5
Tricyclics	8.3	4.2	4.2	8.3
Behavior Modification	4.2	4.2	8.3	0.0
Psychoanalytic Therapy	8.3	8.3	8.3	4.2
	(LAMBDA = 0.0)		(LAMBDA = 0.0)	

N = 48

The participants definitely think that the consumer is treatable ( $\bar{x} = 1.688$ ) and that the consumer is probably not capable of making responsible decisions with respect to his hospitalization and treatment ( $\bar{x} = 3.208$ ; see Table 1). The participants think that the consumer has a definite mental disorder ( $\bar{x} = 4.458$ ) and that he is likely to physically injure himself or others and cause severe emotional harm to those who are unable to avoid contact with him.

Test of Hypotheses

The results do not support hypotheses one and two. An examination of the lambda coefficients in Table 2 indicates that knowledge of a



psychiatrist's perception of a consumer's occupation and level of educational attainment does not improve our ability to predict a consumer's diagnosis. Hypotheses three and four are also not supported. Knowledge of a psychiatrist's perception of a consumer's occupation and level of educational attainment does not improve our ability to predict medication decisions.

The lack of relationships between diagnostic and medication decisions with a consumer's social characteristics serves as further support for the viability of the psychiatric position toward consumer satisfaction with health services. The question remains of the overall and separate impact of psychiatrist's perception of a consumer's behavior versus their perception of the consumer's status resources on diagnostic and medication decisions. In order to address this question the next section of the results presents each of the sets of variables separately and combined into a full model regressed on the diagnostic and medication decisions.

#### REGRESSION ANALYSIS OF INDEPENDENT VARIABLES ON DIAGNOSTIC AND MEDICATION DECISIONS

In order to qualify for inclusion in any model, the independent variable has to correlate with the dependent variables at .10 or better, not correlate with any other independent variable above .50, or be a status resource variable.

The matrix of zero-order correlation coefficients indicates that a total of five behavioral variables qualify for inclusion in the models. The behavioral model for the diagnostic decision is comprised of the variables of whether the consumer will cause emotional harm to those unable to avoid contact with him, whether the consumer can make a responsible decision regarding his treatment and hospitalization needs, and the severity of the consumer's disorder. The behavioral model for the medication decision is comprised of the variables of whether the consumer is treatable, the severity of the consumer's disorder, whether the consumer can make a responsible decision regarding his treatment and hospitalization needs, and whether the patient will physically injure himself or others. The status resource model is comprised of the education and occupation variables.

Table 3 presents three models regressed on the diagnostic decision. An important finding from the regression analysis employing the full model is that the behavior variables are the most powerful predictors of the consumer's diagnosis and the status resource variable of occupation is the least powerful predictor. Psychiatrists focus on the emotional harm that a consumer will cause others, the inability of a consumer to make a responsible treatment decision, and the severity of a consumer's disorder when they make a diagnosis.

TABLE 3. Standardized Coefficients for Stepwise Regression of Three Models on Diagnostic Decisions.

Independent Variables	Full Model	Status Resource Model	Behavioral Model
	Beta	Beta	Beta
Emotional Harm	.286		.278
Responsible Decision	.397		.383
Severity of Disorder	-.262		-.265
Education	.097	-.030	
Occupation	-.032	.054	
Multiple R =	.432	.062	.419
R <sup>2</sup> =	.186	.003	.176

N = 48

Comparing the two reduced models in terms of their ability to explain variation in psychiatric diagnoses, it is clear that the behavior model ( $R^2 = .176$ ) explains more variance than the status resource model ( $R^2 = .003$ ). In terms of the relative effects of each independent variable in the reduced models, whether a consumer can make a responsible treatment decision is the most important predictor of diagnostic decisions in the behavior model. The perception of a consumer's occupation is a better predictor of diagnoses than the perception of a consumer's education.

We find a similar pattern of results when we examine medication decisions in Table 4. Table 4 presents three models regressed on the medication decision. It is clear that the behavior variables are a better predictor of psychiatric medication decisions than the status resource variables. Psychiatrists base their medication decisions on their perceptions of the severity of a consumer's disorder, how treatable a consumer is, and whether a consumer can make a responsible decision regarding his treatment. When we examine the reduced models we see that the behavioral model ( $R^2 = .248$ ) explains more variance in medication decisions than the status resource model ( $R^2 = .002$ ). In terms of the relative effect of each independent variable on medication decisions in the reduced models, the psychiatrist's perception of the severity of the consumer's disorder is the single best predictor of medication decisions. The psychiatrist's perception of a consumer's occupation is a better predictor of medication decisions than their perception of a consumer's education, even though these effects are extremely weak.