

Economic factors were important, but not overwhelmingly so, to these parents' choice of after-school care. Economic factors were mentioned as the prime influence on choice of less than half of the sample, and cost of care was ranked lowest of nine attributes of facilities in importance to the decision. There was some evidence that economic factors were more significant to lower income families. Costs mattered relatively more to parents on lower incomes, and the maximum parents were willing to pay was lower for parents with lower incomes. Economic factors were mentioned as a prime constraint to the search process by about a third of the sample.

While a detailed discussion of noneconomic factors was not the main agenda for this paper, it did emerge that these parents regarded what were defined as child factors and program factors as important to their decision, but took little account of neighborhood factors. In addition to the quantitative data reported above, the interviews yielded a good deal of anecdotal information about a program being used or not according to a child's wishes and preferences. If this were typical of parents in general, the implication would be that program people and agency support groups who aim their marketing efforts solely at parents may well have to restructure their materials to appeal to children also.

Analysis of results was limited by small sample considerations, but the results were systematic enough to suggest that extension of the instrument (the model and its associated questionnaire) to a larger, random sample would be fruitful. With larger sample returns, estimation of demand functions combining the economic and noneconomic factors would be possible, with search factors entering recursively. Results would be of interest to policymakers, in that, by highlighting the key choice variables in after-school child care facilities, they would provide insight into why the self-care arrangement continues to thrive, and which alternatives may or may not be successful. A large scale study would also allow questions to be pursued which have only been marginally touched on here and in the literature, particularly the question of differences between choice patterns of rural and urban dwellers [18].

The search phenomenon warrants additional attention in its own right. The small amount of time and monetary resources invested in the search by parents sampled was striking, especially since almost half of parents received no outside help in their search, and few did any subsequent searching. It is hard to imagine that parents were able to find the best arrangement for their child with so little a search, even in such a modestly-sized city. That this is so may be attested to by the fact that one highly-regarded program in the city, which was priced well within the maximum parents were prepared to pay for their current arrangements, was drastically underused. While search costs are seen as the first stage in a recursive decision-making structure, estimates

of impact of search on the child-care choice might be worthy of analysis in their own right.

#### REFERENCES

1. Becker, G.S. A Treatise on the Family, Harvard University Press, Cambridge MASS, 1981. Chapter 6.
2. Behan, R. A. "Should Johnny or Janet Sit Themselves?" PTA Today, 10(6), April 1985, pp. 27-8.
3. Campbell, L.P. and A.E. Flake, "Latchkey Children: What is the Answer?" Clearing House, 58(9), May 1985, pp. 381-3.
4. Fosarelli, P.D. Children Left Alone: Latchkey Problems, Future Research Questions and Interventions. Paper Presented to the Annual Conference of the National Education Association, Washington D.C., Feb 1985.
5. Friedman, D.E. "Taking Care of the Kids: The Corporate Role in Providing Child Care." PTA Today, 10(6), April 1985, pp. 11-13.
6. Galambos, N.L. and J. Garbarino, Identifying the Missing Links in the Study of Latchkey Children. Paper Presented to the Annual Meeting of the American Psychological Association, Washington D.C., August 1982.
7. Garbarino, J. "Latchkey Children: How Much of a Problem?" Education Digest, 46(6), Feb 1981, pp. 14-6.
8. Goddard, A. and C. Smith, Do Childminders Care? National Childminders Association, Bromley, U.K., 1981.
9. Hall, J.M., "Latchkey Children: Is Anybody Home?" Illinois Teacher of Home Economics, 28(3), Jan-Feb 1985, pp. 117-9.
10. Kuchak, J. School-Age Day Care Study: Final Report. Applied Sciences Inc., Silver Springs, MD, 1983.
11. Long, L. and T. Long, The Handbook for Latchkey Children and their Parents: A Complete Guide for Latchkey Kids and their Working Parents, Arbor House Publishing Co., New York, 1983.
12. McMurray, G.L. and D.P. Kazanjian Day Care and the Working Poor: The Struggle for Self-Sufficiency, Community Service Society of New York, New York, 1982.
13. McNairy, M.R. "School-Age Child Care: Program and Policy Issues", Educational Horizons, 62(2), Winter 1984, pp. 64-7.
14. Merrow, J. "Viewpoint: Self-Care", Young Children, 40(5), July 1985, p. 8.

15. Mills, B.C. and E. Cooke, "Extended Day programs: A Place for the Latchkey Kid", Early Childhood Development and Care, 12(2), Sept. 1983, pp. 143-51.
16. Minneapolis Interagency Child Care Work Group, Improving the Child Care Delivery System in Minneapolis, Minneapolis, Minnesota, Jan 1981.
17. More, J.C., Parent Choice of Day Care Services A Statistical Study of the Amount and Type of Care Used. Ph.D. Dissertation, Catholic University of America, 1980.
18. Olsen, G.W. Rural and Urban Differences in Day Care, Masters Thesis, University of Wisconsin-Madison, 1977.
19. Owens, B.L. "Marketing a Proprietary Child Care System." Journal of Children in Contemporary Society, 17(2), Winter 1984, pp. 91-107.
20. Pecoraro, A., "What Home Economists Should Know about Latchkey Children", Journal of Home Economics, 76(4), Winter 1984, pp. 20-2.
21. Perry, K.S., Child Care Centers Sponsored by Employers and Labor Unions in the United States, Women's Bureau, Dept. of Labor, Washington D.C. 1980.
22. Powell, D.R. and J.W. Eisenstadt, "Parents' Searchhes for Child Care and the Design of Information Services", Children and Youth Services Review, 4, 1982, pp. 239-53.
23. Powell, D.R. and J.W. Eisenstadt, "Predictors of Help-Seeking in an Urban Setting: The Search for Child Care", American Journal of Community Psychology, 11(4), 1983, pp. 401-21.
24. Robinson, V.M., "5,000,000 Latchkey Children", PTA Today, 8(7), May 1983, pp. 13-5.
25. Rodes, T.W., National Childcare Consumer Study 1975, Volume III: American Consumer Attitudes and Opinions on Child Care., Unco inc., Washington D.C., 1975.
26. Rooney, T. Whi Is Watching Our Children? The Latchkey Child Phenomenon, Senate Office of Research, California State Legislature, Sacramento CA, 1983.
27. Rothman, S.L., "Latchkey Children: A Bibliography", Education Libraries, 10(1), Winter 1985, pp. 12-6.
28. Rothschild, M.S. Public School Center vs. Family Home Day Care: Single Parents' Reasons for Selection. Masters Thesis, San Diego State University, 1978.
29. Rubin, V. and E.A. Medrich, "Child Care, recreation and the Fiscal Crisis", Urban and Social Change Review, 12(1), Winter 1979, pp. 22-8.
30. Scofield, R.T. and A.C. Page, "After-School Child Care and the Public Schools", Tennessee Education, 13(1), Spring 1983, pp. 40-7.
31. Strother, D.B., "Latchkey Children: The Fastest-Growing Special Interest Group in the Schools", Phi Delta Kappan, 66(4), Dec 1984, pp. 290-3.
32. Stroman, S. and R. E. Duff, "The Latchkey Child: Whose Responsibility?" Childhood Education 59(2), Nov-Dec 1982, pp. 76-9.
33. Turner, P.H. and R.M. Smith, "Single Parents and day Care." Family Relations, 32(2), April 1983, pp. 215-26.
34. Zigler, E. and S. Hunsinger, "Day Care Policy: Some Modest Proposals." Day Care and Early Education, 4(5), May-June 1977, pp. 9-11.

FOOD SAFETY INFORMATION AND REGULATION:  
ARE THESE SUBSTITUTES OR COMPLEMENTS?

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ABSTRACT

Consumer attitudes, knowledge and practices regarding food safety, information and the role of government in food safety assurance were explored in a survey of Kansas consumers reported here. Consumers indicated strong support and a willingness to pay for food safety label information along with support for continuance of governmental regulatory activities.

INTRODUCTION

Safe food supplies are an important goal of U.S. consumers. As the U.S. food system continues to increase in commercialization and complexity, consumers rely less on their own devices to ensure the safety of foods and more on others. The government does many things to assure the safety of the food supply including establishing laws and regulations and providing consumer information. Economists have traditionally favored information to rectify market imperfections while encouraging choice. At the same time, regulation is extensively used in the food safety system, in many cases mandated by law. Food safety regulators and the food industry experience uncertainty about consumer preferences for food safety since they are not explicitly expressed in the market. This paper presents some results of a consumer survey in which attitudes, preferences, and knowledge about food safety and government roles in food safety assurance were explored. One summary observation is that while consumers indicate preference for food safety choice in the market, on the whole they appear to wish to exercise that choice among fundamentally safe products. Consumers express preferences for a strong regulatory role for government.

Food safety is a relative rather than an absolute concept and it has economic dimensions. Some food safety hazards present high risks to many while others vary broadly across individuals. Frequently, different individuals make varying judgements about the acceptability of risk as well as the amounts they would be willing to pay as a consumer or as a taxpayer to assure a given level of safety.

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Two departures from the perfectly competitive market have led to governmental involvement in food safety assurance: information imperfections and external effects. Not only may market participants not know the safety of their purchase (imperfect information) but, consumption of an unsafe product may result in costs to the consumer and others not included in the economic calculus of the producer.

Improved food safety may be accomplished in different ways using various policy tools. These include setting product standards, product inspection, setting manufacturing process standards and plant inspection, providing information and pecuniary measures<sup>3</sup> (Kramer, 1982). Fundamental food safety policy questions at any point in time concern the minimum levels of safety tolerable in the market, the combination of means used to assure them, the methods by which informed consumer choice in the marketplace can be optimized, and finally, methods by which food safety externalities can be minimized.

FOOD SAFETY RISKS

The Food and Drug Administration (FDA) ranking of food safety hazards in descending order of public health importance was stated around the mid-seventies and has remained substantially the same: 1) microbiological contaminants; 2) malnutrition; 3) environmental contaminants; 4) toxic natural constituents of foods; 5) pesticides; 6) food additives (Schmid, Wodicka).

Prioritizing public health hazards is clouded by numerous uncertainties including severity of effect, extent of exposure, exposure of vulnerable groups, rapidity of onset of symptoms (Lowrance). However, the categories and general ranking by food safety experts are substantially stable and provided one construct upon which the consumer survey was constructed.

KANSAS CONSUMER PERCEPTIONS OF FOOD SAFETY  
AND GOVERNMENT POLICY  
CHOICES

This section presents selected results of a 1983 survey of Kansas consumers, the sample chosen to be representative in important respects of the adult, non-institutional Kansas population. Survey objectives were to seek understanding of consumer attitudes about food safety,

<sup>3</sup>By pecuniary measures we refer to taxes, subsidies, fines or awards under the tort system.

governmental roles in food safety assurance, and various forms and sources of food safety information. The perceived impacts of common chemical technologies on abundance, cost and safety of food were also explored but will not be reported here. Questions about meat products were emphasized. Description of survey methodology and sample characteristics is contained in Appendix 1 (see preliminary report of this research Penner, Kramer and Frantz, 1985).

#### General Government Role

Several items asked consumers about the proper role of government in food safety assurance. Survey question 3 asked for degrees of agreement or disagreement with the five statements shown in Table 1. In general, consumers confirmed their support for government placing high priority on food safety assurance (89.8 percent) and working

to eliminate all risk from the food supply (63 percent). Only 27.2 percent of respondents agreed or strongly agreed that the government should not try to eliminate all risk from the food supply. Over two-thirds of consumers responding were absolutist in their views of carcinogens; 70.5 percent agreed or strongly agreed "the government should not permit any cancer-causing chemicals in foods." Eighty percent of consumers questioned indicated that the federal government should require health risk information on food labels to let consumers choose. Finally, a majority (56 percent) of respondents felt that the food industry could not be relied on to produce safe food products on its own, while nearly a quarter (23.7 percent) were unsure. Chi-square analysis of differences in patterns of response to these questions by socioeconomic characteristics demonstrated some age differences: those 56 and over were more

Table 1: Question 3 "How much do you agree or disagree, if at all, with the following statements about the Federal government's role in keeping the food supply safe?"

Response	a. Keeping food safe should be a high government priority		b. The government should <u>not</u> try to eliminate all health risk from the food supply		c. The government should not permit <u>any</u> cancer-causing chemicals in foods		d. The government should require health risk information on food labels and let consumers choose		e. I think food producers and manufacturers can be relied on for safe food products	
	no.	%	no.	%	no.	%	no.	%	no.	%
strongly disagree	6	1.5	112	28.2	11	2.8	12	3.0	81	20.0
disagree	12	3.0	139	35.0	46	11.5	30	7.5	143	36.0
not sure	23	5.7	38	9.6	61	15.2	36	9.0	94	23.7
agree	195	48.5	89	22.4	120	30.0	176	43.9	62	15.6
strongly agree	166	41.3	19	4.8	162	40.5	147	36.7	17	4.3
Total	402	100.0	397	100.0	400	100.0	401	100.1*	397	100.0

likely to agree that the government should not try to eliminate all risk, while the converse was true for those aged 27-37. The youngest group of respondents (age 19-28 years) was less absolutist with respect to banning carcinogens from the food supply than expected. Consumers were asked how they evaluated relative government safety priorities comparing government involvement in food safety with: environmental safety; auto

safety; consumer product safety; and occupational safety (Table 2). Analysis indicated that consumers as a whole evaluate food safety and environmental safety efforts relatively equally and slightly more important than consumer product safety and occupational safety. Men were more likely than women to discount the importance of consumer product safety and job safety involvement of government.

Table 2: How would you compare the importance of governmental involvement in food safety compared to other areas of safety?

	less important		just as important		more important		Totals	
	no.	%	no.	%	no.	%	no.	%
auto safety is	94	23.5	278	69.5	28	7.0	400	100
consumer product safety is	98	24.4	273	68.1	30	7.5	401	100
environmental safety is	51	12.7	284	70.8	66	16.5	401	100
occupational safety is	100	27.5	258	64.5	32	8	400	100



## Consumer Assessments of Hazards

Respondents were presented with items from the Food and Drug Administration list of food safety hazards excepting malnutrition and toxic natural constituents of foods but including animal drug residues, and asked to rank them in the order of their own concern. Consumers indicated highest concern about environmental contaminants ("such as mercury, PCBs, and dioxin"). Microorganisms top the expert's list. Consumers did rank disease-causing organisms and parasites second in order of concern. Third they ranked pesticides, described as "chemicals used to kill insects, other pests." Experts ranked pesticides next to last in terms of food safety concern. Kansas consumers ranked "residues of animal drugs or hormones in meat," and "food additives" fourth and fifth, respectively, to complete their list of food safety concerns.

When asked to rank food groups in order of food safety concern, consumers identified perishable protein products: red meats, poultry, and dairy; first, second, and third, respectively. Intermediate were fruits and vegetables and fats and oils. Of least concern were dried staples such as flour, rice, beans, and pasta; and sugars, syrups and sweeteners.

Consumers were asked to identify the stage in the meat products production and distribution chain where they felt food safety problems were most likely to occur. They ranked the food processing plant as most problematic, followed by livestock feedlots. The feed manufacturing plant and the warehouse were ranked next. The farm and the home were ranked as least problematic. Grocery stores and restaurants were intermediate at ranks of fifth and sixth. This ranking is interesting in several respects. One obvious discrepancy is the low ranking given the home, the restaurant, and the grocery store in light of the experts' assessment of microbiological contamination as the number one food safety public health problem. Many microbiological problems result or are exacerbated by time or temperature abuse of foods that occurs in restaurants, homes and grocery stores. In a sense, the final preparation site is also the final line of protection against health problems from microbiological contamination in those many cases where organisms can be killed by proper cooking. In several questions related to home food handling under diverse conditions, respondents indicated lack of knowledge of safe handling practices (Penner, Kramer, Frantz). One third of respondents agreed or didn't know whether to agree with the statement: "Meats and poultry products bought at a grocery store do not contain bacteria or other microorganisms." Age groups differed in their responses with the youngest and oldest groups more likely to erroneously agree.

When asked whether they had ever not bought meat products due to food safety concerns, over one-half of respondents answered affirmatively. Highest frequencies of reasons for non-purchase were: too much fat (66.8 percent) and untidy meat departments (63.8 percent). About 48 percent stated that colors or chemical ingredients were reasons.

When consumers were asked to identify kinds of information if any they would like to see on meat labels, the highest frequency of response was "guaranteed free of traces of animal drugs, hormones" (69.3 percent) followed by "guaranteed free of traces of other chemicals" (67.4 percent). The third most frequent response was "additives." "Nutrient content" was fourth; and cooking and handling information was fifth. Surprisingly, "cholesterol content" ranked next to lowest (sixth) as a label concern. Significant differences existed between response patterns of different age groups, and by sex. Nutrient content on labels was preferred by 56.9 percent of the youngest group (ages 19-28) but only 35.1 percent of those 56 or older. Women were considerably more supportive of label guarantees of "drug-" and "chemical-free meat" than men.

When asked in qualitative terms how much they would be willing to pay for desired food safety information on meat labels, the modal response (67.4 percent) was "I would pay slightly more." While 26.9 percent said they would not pay more. In quantitative terms, more consumers stated they would pay from 1-3 cents per pound of beef to have desired safety information on labels than any other amount. Subsequent analysis using simple and multiple correlation techniques shows differences in willingness-to-pay by socio-economic characteristics (Penner, Kramer, Frantz; Pope).

## Consumer Assessments of Government Food Safety Activities and Food Safety Information

Consumers were asked to evaluate thirteen food safety activities the government now undertakes (Table 3). Inspection activities, especially of meat, poultry and dairy products, were rated as extremely important. Ninety-two percent, 96.7 percent and 88.5 percent of respondents indicated high or moderate support for inspection of livestock and poultry at slaughter for animal drug and chemical residues; disease; and inspection of milk and dairy products. Respondents had less support for research, particularly university research. Label requirements for food safety information were supported by 85 percent while education on food handling was supported by 75 percent and more by women than men.

Table 3: Please indicate how important, if at all, you think the following government food safety activities are?

Government activity to . . .		Importance					Total
		None	Slight	Some	Moderate	High	
a. provide money to universities for research on food safety	<u>no.</u>	11	28	106	127	116	388
	<u>%</u>	2.8	7.2	27.3	32.7	29.9	99.9
b. conduct research on food safety	<u>no.</u>	8	19	73	143	148	391
	<u>%</u>	2.0	4.9	18.7	36.6	37.8	100.0
c. require safety information on food labels	<u>no.</u>	4	8	46	82	249	389
	<u>%</u>	1.0	2.1	11.8	21.1	64.0	100.0
d. inspect livestock and poultry at slaughter for traces of chemicals or animal drugs	<u>no.</u>	2	5	24	77	289	397
	<u>%</u>	0.5	1.3	6.0	19.4	72.8	100.0
e. inspect livestock and poultry at slaughter for disease	<u>no.</u>	2	1	10	58	328	399
	<u>%</u>	0.5	0.3	2.5	14.5	82.2	100.0
f. inspect fruits and vegetables	<u>no.</u>	4	14	54	175	149	396
	<u>%</u>	1.0	3.5	13.6	44.2	37.6	99.9
g. inspect milk and dairy products	<u>no.</u>	2	2	32	113	240	389
	<u>%</u>	0.5	0.5	10.5	28.3	60.2	100.0
h. inspect grain and grain products	<u>no.</u>	3	17	69	168	139	396
	<u>%</u>	0.8	4.3	17.4	42.4	35.1	100.0
i. certify safety of food additives	<u>no.</u>	4	5	42	122	222	395
	<u>%</u>	1.0	1.3	10.6	30.9	56.2	100.0
j. certify safety of animal drugs	<u>no.</u>	3	7	40	104	243	397
	<u>%</u>	0.8	1.8	10.1	26.2	61.2	100.0
k. certify safety of pesticides	<u>no.</u>	2	3	3.5	8.2	268	390
	<u>%</u>	0.5	0.8	9.0	21.0	68.7	100.0
l. test for environmental contaminants in food	<u>no.</u>	2	4	38	106	247	397
	<u>%</u>	0.5	1.0	9.6	26.7	52.2	100.0
m. educate people to prepare and store food safely	<u>no.</u>	11	25	63	127	172	398
	<u>%</u>	2.8	6.3	15.8	31.9	43.2	100.0

#### Food Safety Information Sources

Consumers were asked to identify most common sources of food safety information regarding different food safety perils (Table 4). Interestingly, the most frequent response regarding information sources concerning animal drugs or hormones and pesticides was "I don't receive this information" followed by "Government." Among seven listed possible sources, both university and the county extension service ranked extremely or relatively low as an identified source of information for food additives, animal drugs, food exposed to environmental contaminants. The

government ranked high as an identified source. General expressions of degree of confidence by information source were solicited. Responses indicated extension agents were rated higher than any other listed source (68.3 percent rated high or a lot of confidence), followed by University professors (38.1 percent) and "consumer spokesperson" (36.8 percent). Ranked fourth were "family or friend" (31.2 percent). Government ranked a weak fifth (21.6 percent) followed only by "popular media personality" (14 percent) and "food product spokesperson" (12.9 percent) (Table 5).

Table 4: Question 32. "Public information about food safety can come from many sources. For each of the types of food safety information listed, mark the one main source from which you are likely to receive information.

Source	Type of food safety information							
	food additives		animal drugs or hormones used in livestock		pesticides used to kill insects or other pests on or near foods		food exposed to environmental contaminants (lead, mercury, dioxin)	
	rank	%	rank	%	rank	%	rank	%
government	1	34.1	2	25.4	2	20.1	1	32.9
university	8	2.4	5	8.6	7	6.5	8	1.5
county extension agent or home economist	7	3.8	6	7.4	3	14.5	6	4.2
food industry or company	2	19.4	8	3.6	8	2.9	7	3.3
consumer group	4	11.8	4	8.9	5	9.2	4	9.5
popular media personality	5	7.9	3	10.9	4	13.3	3	19.0
family or friend	9	1.2	9	1.8	9	1.5	9	0.0
source not listed above	6	6.5	7	7.1	6	7.7	5	7.1
I don't receive this information	3	12.9	1	26.3	1	24.3	2	22.5
Total	n=340 100.0		n=338 100.0		n=338 100.0		n=337 100.0	

Source	Type of food safety information (continued)									
	food preservation (canning, freezing drying)		cooking and handling of meat and poultry		shelf storage of canned foods		refrigerator storage of meats and poultry products		federal and state role in food safety	
	rank	%	rank	%	rank	%	rank	%	rank	%
government	6	4.7	6	4.7	7	4.5	6	4.8	13	8.5
university	8	2.6	8	3.5	8	3.3	8	2.1	5	5.2
county extension agent or home economist	1	49.6	1	33.9	1	26.8	1	32.3	6	4.2
food industry or company	4	6.4	4	8.6	3	15.7	5	10.1	9	0.0
consumer group	7	3.3	7	4.1	6	6.5	7	3.9	6	4.2
popular media personality	9	2.0	9	2.7	9	2.1	9	1.8	3	10.9
family or friend	3	11.7	2	20.0	4	12.8	2	17.1	8	0.3
source not listed above	5	5.9	4	8.6	5	6.8	4	10.8	4	5.5
I don't receive this information	2	13.8	3	13.9	2	21.4	2	17.1	2	31.2
Total	n=341 100.0		n=339 100.0		n=336 99.9		n=334 100.0		n=330 100.0	

Table 5: "How much confidence do you have in food safety information you receive from the sources listed below?"

Source		Level of Confidence					
		none	little	some	a lot	high	total
a. government spokesperson	no.	22	84	192	65	17	380
	%	5.8	22.1	50.5	17.1	4.5	100.0
b. university professor	no.	23	37	169	105	36	370
	%	6.2	10.0	45.7	28.4	9.7	100.0
c. county extension agent or home economist	no.	6	20	93	181	75	375
	%	1.6	5.3	24.8	48.3	20.0	100.0
d. food product spokesperson	no.	42	104	179	42	6	373
	%	11.3	27.9	48.0	11.3	1.6	100.1
e. consumer spokesperson	no.	21	48	167	113	23	372
	%	5.6	12.9	44.9	30.4	6.2	100.0
f. popular media personality	no.	52	92	176	48	4	372
	%	14.0	24.7	47.3	12.9	1.1	100.0
g. family or friend	no.	17	64	177	90	27	375
	%	4.5	17.1	47.2	24.0	7.2	100.0

Media transmitting food safety information were ranked for convenience. Highest marks from consumers for convenience in receiving food safety information were: 1) food labels; 2) newspaper; 3) T.V. Intermediate were: 4) radio; 5) newsletter; 6) magazine. Lowest ranks went to 7) fact sheets or bulletins; 8) consumer hot-lines; 9) educational meeting. Lower educational levels were associated with higher rankings of T.V. as convenient. These results confirm the wisdom of moving away from traditional Cooperative Extension delivery mechanisms such as educational meetings and even raise questions about fact sheets and bulletins.

#### POLICY RAMIFICATIONS, RESEARCH NEEDS

What are the policy ramifications of surveys of consumers regarding their food safety attitudes, preferences and knowledge? In general, consumers indicate strong support for a high priority government commitment to the safety of the food supply and involvement in a variety of food safety activities. Activities most strongly supported as very important were inspection of livestock and poultry at slaughter for disease and animal drug/chemical residues; and inspection of dairy products. Consumers therefore indicate strong implicit support for enforcement of product standards setting safety levels.

Consumers do indicate strong support in the abstract for safety information on labels. The types of information considered most important varied by socioeconomic characteristics in some cases. Women expressed highest desires to see meat labels guarantee that meat is free of animal drug and other "chemical" residues. Note that this desire is not for risk-benefit information per se, but for certification beyond what consumers now perceive the government does. Consumers do not express strong confidence in government information although government appears to be the major source of many types of safety information (animal drugs, additives, environmental contaminants) when consumers receive information at all. Cooperative extension was rated highly in terms of confidence, but was not perceived as a source of most kinds of food safety information. To the extent that extension can be a more visible supplier of various types of food safety information, consumers appear accepting of its credibility.

Although labels are rated highly by consumers in terms of convenience, much more research remains to be done on the appropriate uses of labels to transmit food safety information. Label information has been categorized in a number of ways: warnings; ingredients; use instructions; risk-benefit information; safety certification. Research on consumer information processing indicates, among other things, that consumers differentially use information, that attribution of behavior change to label information is extremely difficult, that labeling effectiveness may wane if consumers experience "information overload," that consumers may not know what to do with label information indicating ingredients,

risk-benefit information, or warnings. Some evidence suggests that consumers will be more effective users of label information if they have the human capital (in economic terms) in the form of an internalized framework to use it. As an example, ingredient or nutrient composition information on labels may be more effective if consumers have some underlying framework for interpreting and integrating label information. This is an area that needs substantial research.

#### REFERENCES

Cooper, Richard M., "A Time To Warn and A Time To Ban," Product Labeling and Health Risks. Banbury Report 6. Cold Spring Harbor Laboratory, 1980.

Kramer, Carol S. "An Economic Analysis of Food Safety Regulation: The Case of Sulfa and the Swine Subsector." Unpublished Ph.D. dissertation, Michigan State University, East Lansing, Michigan, 1982.

Kramer, Carol S. "Food Safety Policy Analysis: Analytical Methods," Proceedings of the American Council on Consumer Interests: 1986. St. Louis: American Council on Consumer Interest.

Lowrance, William W. Of Acceptable Risk: Science and the Determination of Safety. Los Altos, CA: Wm. Kaufman, 1976.

Mazis, Michael B. "An Overview of Product Labeling and Health Risks," Product Labeling and Health Risks, Banbury Report 6, Cold Springs Harbor, 1980.

Murphy, R. Dennis, "Consumer Responses to Cigarette Health Warnings," Product Labeling and Health Risks, Banbury Report 6, Cold Springs Harbor, 1980.

Penner, Karen P.; Carol S. Kramer; Gary Lee Frantz. Consumer Food Safety Perceptions: A Survey of Consumers in Eight Kansas Counties. Manhattan, Kansas: Kansas State University Cooperative Extension Service, 1985.

Pope, Rulon. "The Kansas Food Safety Survey: An Empirical Analysis." Draft report prepared for the Economic Research Service, U. S. Department of Agriculture, 1985. Unpublished.

Schultz, William B. "Labels, Bans, and Consumer Preferences," Product Labeling and Health Risks, Banbury Report 6, Cold Springs Harbor, 1980.

Schwartz, Steven P. "Consumer Attitudes toward Product Labeling," Product Labeling and Health Risks, Banbury Report 6, Cold Springs Harbor, 1980.

Staelin, Richard. "Appliance Performance Labeling and Point of Purchase Information: The Results of Three Experiments," Product Labeling and Health Risks, Banbury Report 6, Cold Springs Harbor, 1980.



Stokes, Raymond C. "Consumer Research On Food Label Information," Product Labeling and Health Risks, Banbury Report 6, Cold Springs Harbor, 1980.

Wodicka, Virgil, "Prioritizing Risks Associated with the Food Supply," The American Food Supply: Are We At Risk? ICET Symposium II, Cornell University, 1985.

Zellner, James. "Information Remedies: Can They Be Effective?" U. of Fla. Draft, May, 1986. Unpublished.

#### APPENDIX 1: SAMPLING METHODOLOGY AND SAMPLE CHARACTERISTICS

The Kansas Consumer Survey was conducted in the summer of 1983. Sample design involved initial selection of eight counties from a total of 105 in Kansas, balanced with respect to geographical variation, population density, urban-ruralness.

A sampling frame of 255,164 household names, addresses, and telephones from the eight counties was purchased from the Aetna List Company of Chicago. The list was reduced twice by random selection but maintaining the relative proportionality of individual county to state population, first to 10,000 households, then to a final sample of 2,003 households chosen to achieve a final sample size of N=1,100 households plus allow for pre-testing of the questionnaire and for replacements to replace non-deliverable (incorrect) addresses. To obtain the final mail survey sample, the proportional size of the eight counties was multiplied times 1,100 (the sample size) to obtain county sample sizes: Johnson, 380; Franklin, 30; Greenwood, 15; Sedgwick, 500; Saline, 80; Barton, 50; Finney, 30; Thomas, 15.

Survey purpose was stated: "The survey is designed to specifically measure knowledge, attitudes, and practices of Kansas consumers with respect to the overall safety of the food supply and the relative safety of beef products. Consumer perceptions regarding the use of chemicals and the role of government will be emphasized."

Sixty-one questions were constructed and pre-tested by 22 professionals and 100 consumers in the eight sample counties leading to revisions in the survey instrument. Surveys were mailed with a second mailing two weeks later. A telephone follow-up followed the second survey mailing and

attempted to reach 103 households of which 35 resulted in positive commitments; 25 in negative and 43 in failure to contact. Reminder postcards were then employed. The survey was ended approximately 6 weeks later with a final response rate of 36.64 percent of the N=1,100 instruments returned.

The sample included men (40 percent) and women (60 percent). Percentages of questionnaires from the eight counties were similar to the survey total. Johnson and Sedgwick counties are urban-centered and contained 75 percent of all survey respondents. Only 8 out of 403 respondents were considered farm families. Annual household incomes of respondents were higher than the general Kansas population as were educational levels and female-headed households, controlling for educational levels, were lower-income than male-headed households. Whereas 27 percent of state households reported annual incomes higher than \$25,000 in the survey year, 51 percent of sample respondent households fell in this range. About two-thirds (67.4 percent) of respondents had formal education past high school, higher than Kansas in general. Educational attainment levels were highest among respondents under 55 years. Those in age groups 29-37 and 38-55 had most advanced degree work.

The age distribution was ages 19-28 (32.2 percent); 38-55 (35.9 percent); 56 and older (35.9 percent). Some differences in the age distribution of different counties were noted with the large, urban Johnson county providing more middle-age respondents. Employment status of respondents differed by gender, age and educational attainment. Male respondents reported full time employment almost twice as frequently as female respondents (72 and 38 percent). Female respondents reported part time and no employment outside the home more frequently. With respect to children, 44 percent of responding households had children living at home: 48 percent of those with children reporting two children. No significant differences were found comparing respondents with and without children or between parents with children of different age categories.

Summarizing, survey respondents were primarily urban, more affluent and more educated than the general Kansas population. However, the sample was much more representative of the food eating public by gender than many surveys seeking information from the food preparer or homemaker.

CONSUMER BELIEFS ABOUT, ATTITUDES TOWARD AND  
INTENTIONS TO PURCHASE FIRE RESISTANT PRODUCTS<sup>1</sup>

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ABSTRACT

The intentions of 500 Canadian consumers to purchase fire resistant upholstered furniture were measured. Following the Fishbein-Ajzen model, beliefs, attitudes and referent influences were measured as possible determinants of purchase intentions. Respondents' attitudes and intentions were positive but they believed a fire resistant product would cost more. Influential referents included consumer groups and the respondent's spouse.

The research described here addresses a problem of considerable social significance, that is consumers' beliefs about and attitudes toward the property of fire resistance in upholstered furniture and their intentions to purchase such fire resistant products for their home. Each year many people are killed and injured and property losses incurred in household fires. Flammable furnishings are frequently involved in the start or spread of the fire. The costs to individuals, their families and society can be great, measured in terms of property damage, human suffering and costs of treatment.

Responses to this problem include introduction of mandatory safety standards by government, manufacturers' voluntary compliance with standards often accompanied by informative labelling of products, and educational programs aimed at fostering responsible product selection. This is especially important in Canada at present. The Canadian Council of Furniture Manufacturers has recently decided to adopt a voluntary program similar to the UFAC (Upholstered Furniture Action Council) program of voluntary compliance in the United States. Much of this response, however, has taken place without detailed knowledge of consumer beliefs about and attitudes toward textile flammability and its regulation in the marketplace, and the effect of these variables on purchase intentions and behavior. This information would have application in the design of complementary and effective legislative and educational solutions to the problems caused by textile fires.

While earlier studies have examined consumers' attitudes to flammability and their

behavior, the results are equivocal. Laughlin [13] and Laughlin and Buddin [14] found many consumers favored extending flame retardance regulations from children's sleepwear to other textile products.

Wall and Gallagher [20] found a lack of congruence between stated attitudes toward children's flame retardant sleepwear and their actual preferences and behavior. Unwillingness to make trade-offs in product selections may account for this. Burnett [5] found an unwillingness to trade off price, ease of care and durability for flame retardance in apparel, and Rucker et al. [18] drew similar conclusions in a study of unwillingness to pay more for flame retardance in furnishings. Crown and Brown [6] found that flame retardance had a high utility relative to other product attributes such as ease of care and comfort but noted that consumers appear to believe, mistakenly, that flame retardance is nonvariant in textile products. However, while consumers would make trade-offs among these attributes they were, in some cases, only willing to do so under certain conditions [4]. In an experimental study where consumers were asked to select an upholstery fabric, relatively few chose a flame retardant fabric, even when consumer education had taken place and relevant product information was provided [7].

These results are somewhat incongruent. Positive attitudes toward fire resistant products may not lead to their purchase. Unwillingness to make trade-offs, erroneous beliefs about fire resistance in products, lack of perceived norms of behavior and/or lack of motivation to comply with norms could all contribute to lack of attitude-behavior congruence.

The Fishbein-Ajzen model of behavioral intentions [1, 10] integrates information about each of these variables and forms the conceptual framework for this study.

ATTITUDE AND BEHAVIOR

The study of attitude and its relationship to behavior has a long, contentious history. During the 1970s and 1980s there has been clarification of both conceptual definitions and variable interactions. While several models have been tested, the Fishbein-Ajzen model has received much attention in psychology and applied fields like consumer studies [10].

The model may be represented as:

$$B \sim BI = A_{act}(w_1) + SN(w_2)$$

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Briefly, it proposes that behavior (B) is the outcome of behavioral intention (BI) which has two determinants - attitude toward the behavior ( $A_{act}$ ) and subjective norm (SN), which have empirically determined weights. Attitude is "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object" [10, p. 6]; subjective norm is the individual's perception that important referent individuals or groups would want her/him to behave in a certain way. Attitude is, in turn, determined by cognitive structure, that is beliefs about the consequences of behavior and an evaluation of those consequences; subjective norm is determined by normative structure, that is the individual's perception of how referents would want him/her to behave and the motivation to do so.

The model has been applied in studies as varied as voting behavior [11, 3]; use of non-prescription drugs [17]; use of alcohol [2]; product or service choice behavior [21, 19]; simulations of product choice behavior [15, 16]; and energy consumption behavior [9]. Zanna, Higgins and Herman [22] have provided a recent review of the state of the art.

Many issues which have been examined, however, have two quite clear sides, often of a contentious nature, such as political candidacies, use of drugs or alcohol, use of nuclear power and so on. Other studies have looked at product choices among competing alternatives where preferences are part of daily life and consumption patterns. The model has received relatively little application in studies where behavior may be less variable.

In this study the behavior of interest, home safety, is undeniably important, but may be a "motherhood" issue. Everyone may have a positive attitude to safety but may do nothing about it. Earlier work by the authors suggested that consumers may not be aware of product alternatives, make erroneous assumptions about fire resistance as a product attribute or simply take it for granted. By examining how beliefs about behavioral consequences and evaluations of those consequences plus how normative beliefs affect behavioral intentions and ultimately behavior, the research was designed to elucidate the attitude-behavior relationship in this little investigated context of product safety. The focus of this paper is a descriptive analysis of the constructs in the model. Structural analyses of the relationships will be reported elsewhere.

#### OBJECTIVES

The objectives of that portion of the research reported here were:

1. To measure and describe consumers' cognitive structures and attitudes toward purchasing products which are fire resistant.

2. To measure and describe normative structures and subjective norms for these products.
3. To measure intentions to purchase fire resistant products.
4. To measure the effect of consumer demographics and other characteristics on these variables.

#### METHOD

##### Research Plans and Methods

Sample. A survey was administered in two Western Canadian cities, Winnipeg (Manitoba) and Edmonton (Alberta), to an area sample of 500 consumers. Areas were selected so as to give a broad range of subjects, representative of a variety of demographic, socio-economic and life-style groups but also representative of the population of interest, that is purchasers of selected household textile products. Fishbein and Coombs [11] and Ellison, Ellison and Everett [9] used similar approaches with satisfactory results. Within each area homes were systematically approached and occupants asked to participate. A total of 53 percent of homes approached were in the final sample of 486. The remainder were either not at home or did not wish to participate. Of those at home, 70 percent agreed to participate. A questionnaire was then given to them and collected following completion.

Questionnaire. The focus of the sample survey was purchasing upholstered furniture. A questionnaire was developed, which operationalized the components of the model according to procedures described by Ajzen and Fishbein [1], and incorporated additional external variables which might elucidate the relationships among components and which were needed to describe the sample. These included demographic and socio-economic data plus information on smoking behavior and experience with household fires and fire injuries. Items for the questionnaire were developed from the results of the authors' earlier research.

Measuring behavior presented special problems. In studies of brand choice the product is typically a frequently purchased non-durable item such as soft drinks, groceries, shampoo, etc. Thus, the researcher can measure attitudes and behavioral intentions and follow up a week or two later with a measure of behavior. With a higher-priced consumer durable like upholstered furniture, a longer time period must be allowed, as few if any consumers are likely to buy furniture within a few weeks of completing the questionnaire. Even allowing a reasonable length of time, there will probably be many consumers who do not make an upholstered furniture purchase at all.

Consequently, the present research measured only behavioral intentions to purchase fire resistant upholstered furniture rather than alternative products without this property. A follow up study will track actual purchases among the respondents.

Attitude in this study ( $A_{act}$ ) was attitude toward purchasing fire resistant upholstered furniture. Cognitive structure, the determinant of attitude, was the sum of the product of beliefs in the consequences of performing the behavior of interest ( $B_i$ ) and the consumer's evaluation of those consequences ( $E_i$ ). Six salient product attributes, identified in earlier research [6] were included in the belief statements and are shown in Table 1.

TABLE 1

Cognitive Structure and Attitude Components

$B_i$  - beliefs about outcomes of buying fire resistant upholstered furniture from likely (+3) to unlikely (-3).

	Mean	Std. Dev.
It will cost more	1.67	1.18
It will decrease the risk of household fires	1.45	1.41
I may have a poorer selection of products	-0.87	1.62
I would increase my family's safety	1.72	1.27
It will be more difficult to clean	0.01	1.49
There would be some decrease in durability	0.54	1.45

$E_i$  - evaluation of consequences of outcomes from good (+3) to bad (-3)

	Mean	Std. Dev.
Paying more	1.32	1.73
Reducing fire risk	2.69	0.74
Having wide selection	1.98	0.99
Ensuring family's safety	2.86	0.45
Ease of cleaning	1.55	1.43
Durability	2.70	0.64

$E_i B_i$  - summated measure of cognitive structure (+54 to -54)

$A_{act}$  - attitude toward the behavior "Buying fire resistant upholstered furniture for my home would be:"

	Mean	Std. Dev.
1 sensible /foolish (+3 to -3)	2.57	0.83
2 necessary/unnecessary	1.71	1.59
3 beneficial/harmful	2.30	1.05
4 a good idea/a bad idea	2.37	1.08
5 important/unimportant	2.04	1.41
Summation (+15 to -15)	10.07	5.22
Average (+3 to -3)	2.21	1.06

Subjective norm (SN) was the individual's perception that important referents would want the individual to behave in a certain way. Normative structure, the determinant of subjective norm, was the sum of the product of normative beliefs that referents think the individual should perform the behavior ( $NB_j$ ) and motivation to comply with those normative influences ( $MC_j$ ). Appropriate referents, identified by Horne and Crown [12], are shown in Table 2.

The variables were measured on 7-point scales. All were bipolar scales, scored from +3 to -3, with the exception of  $MC_j$  which was treated as a unipolar scale as recommended by Ajzen and Fishbein [1, p. 263].

TABLE 2

Normative Structure and Subjective Norm Components

$NB_j$  - normative beliefs about likelihood of 6 referent groups wanting the respondent to buy fire resistant upholstered furniture from likely (+3) to unlikely (-3)

	Mean	Std. Dev.
Government agencies	1.77	1.26
Consumer groups	1.74	1.23
Spouse	1.12	1.59
Family	0.92	1.57
Store salesperson	0.67	1.59
Friends	0.05	1.68

$MC_j$  - motivation to comply with wishes of 6 referent groups from likely (7) to unlikely (1)

	Mean	Std. Dev.
Spouse	5.54	1.37
Consumer groups	5.26	1.42
Family	4.73	1.52
Government agencies	4.38	1.71
Store salesperson	4.13	1.56
Friends	3.82	1.69

$ENB_j MC_j$  - summated measure of normative structure (+126 to -126)

SN - subjective norm - likelihood that "most people who are important to me would want me to buy fire resistant upholstered furniture" from likely (+3) to unlikely (-3)

	Mean	Std. Dev.
	1.13	1.52

RESULTS AND DISCUSSION

Profile of Respondents

Of the 486 usable responses, 64 percent were from women and 36 percent from men. The majority, 85 percent, were married. Age ranged from 18 to 82 with a mean of 35 ( $\sigma = \pm 11.12$ ). Fifty-three percent were employed full-time and a wide variety of occupations were represented, ranging from unskilled manual laborers to professionals. Modal categories were skilled trades occupations and skilled clerical workers. The modal income category was \$34,000-39,999. Forty-two percent of the sample had at least one smoker in their household. The families of 13 percent of respondents had experienced an accident with fire. Seventeen percent of respondents had had relatives or good friends injured by fire.

Components of the Fishbein-Ajzen Model

Cognitive structure and attitudes. The components of cognitive structure,  $B_i$  and  $E_i$ , are shown in Table 1. Mean responses to beliefs about the outcomes of buying fire resistant upholstered furniture showed that respondents felt it was quite likely that this would increase their family's safety and decrease the risk of household fires. It is clear they also felt that a fire resistant product was quite likely to cost more than one which was not. The neutral mean response to the question on ease of cleaning and only slightly positive response to the durability question may indicate that consumers felt fire resistance would have little impact on these factors or, more probably, that they lacked the information necessary to make such a judgment. The slightly negative response



to the question about selection also indicates that consumers felt fire resistance would have little effect, although it is interesting that this was the only response that was on the unlikely side of the bi-polar scale.

Mean responses to the evaluations of the various outcomes showed very positive feelings about ensuring family safety and reducing fire risk. While this is not surprising, given that these are "motherhood" statements, it was important to confirm the assumption that people do feel this way, to determine whether these "motherhood" evaluations do influence behavioral intentions and if not, what variables intervene.

Very positive evaluations were also given to having durable furniture. Earlier work has shown that durability is a product attribute that consumers consider very important and may be unwilling to trade-off for other attributes like fire resistance [7].

Quite positive evaluations were given to having a wide selection of products to choose from and having furniture which is easy to clean.

The response to "paying more for upholstered furniture which is fire resistant" was only slightly positive. This question was worded this way to be relevant to the study. In retrospect perhaps it should have focussed on cost alone but evaluation of cost is a difficult measure in any event, given the consumer's tendency to equate cost with quality. The measure as is suggests respondents would be slightly willing to make a trade-off and pay more for fire resistance.

Overall, the summated measure of cognitive structure,  $\Sigma E_{i1}$ , was positive but somewhat weak. There was, however, considerable variability in responses, with a considerable number at or close to neutral on some of the bi-polar belief and evaluation scales which reduced the overall mean. As suggested earlier, these positions may reflect a lack of knowledge.

The measure of attitude comprised five bipolar scales, (see Table 1), with a total possible score range of -15 to +15. The mean response of 10.07 shows that respondents had quite positive feelings about buying fire resistant upholstered furniture. This summative index is recommended by Fishbein and Ajzen [10]. A total of 87 percent of respondents completed all five scales. However, some respondents completed only one of the five scales and several respondents completed only some of the five. To allow for this an index, adjusted for the number of scales completed, was calculated. The mean of this index equalled 2.2, on a scale ranging from +3 to -3. This was slightly more positive than the summated measure.

Normative structure and subjective norm. The components of normative structure,  $NB_j$  and  $MC_j$ ,

are shown in Table 2. Mean responses to normative beliefs about the likelihood of each of six referent groups wanting the respondent to buy fire resistant upholstered furniture are given in the table. They show that respondents believe that government agencies and consumer groups are the most likely referents who would want fire resistant purchases. The respondent's spouse was only slightly likely to want this while family and store salespeople were rated slightly lower still. A neutral response was obtained for friends.

These results are interesting. They suggest that consumers recognize a broad societal pressure from government and consumer groups to purchase this type of product but that they do not feel any strong pressure from more immediate referents. While consumers appear to know what is good in general, perhaps they do not feel that this necessarily applies to them possibly because they are careful or do not smoke.

The mean responses to motivation to comply show that there was quite a strong likelihood of compliance with the wishes of the respondent's spouse and, more surprisingly, of consumer groups. This likelihood was less for family and markedly less for government agencies and salespeople. Both these referents were rated only slightly above the midpoint of the likelihood to comply scale, while friends were rated slightly below the midpoint.

Overall, the summated measure of normative structure,  $\Sigma NB_j$ , was positive but somewhat weak. Like the summated measure of cognitive structure, there was considerable variability in responses to the component bi-polar scales which warrants further investigation.

The measure of subjective norm was a single bipolar scale with a range of +3 to -3 as recommended by Fishbein and Ajzen [10]. The mean response of 1.13 suggests that respondents felt it only slightly likely that most people who are important to them would want them to buy fire resistant upholstered furniture.

Behavioral intention. The mean response to the question "Next time I buy upholstered furniture, I shall buy a fire resistant product" was 1.72 ( $\sigma = \pm 1.27$ ) on a scale from likely (+3) to unlikely (-3), with 83 percent of respondents on the positive end of the scale. That is, behavioral intention was positive and moderately strong.

#### Correlations among model components

The correlation between attitude ( $A_{act}$ ) and the summation of cognitive structure  $\Sigma E_{i1}$  was positive and significant but somewhat weak ( $r=0.35$ ,  $p=0.01$ ). This, and the problems noted above in scoring  $A_{act}$ , suggest the need for refinement of the attitude and the cognitive structure measures. The correlations between attitude and behavioral intention ( $r=0.48$ ,

$p < 0.01$ ) and between cognitive structure and behavioral intention ( $r = 0.49$ ,  $p < 0.01$ ) were both positive, significant and relatively strong.

There was a strong and significant positive correlation between the measure of subjective norm SN and normative structure ENB<sub>MC</sub> ( $r = 0.72$ ,  $p < 0.01$ ). The correlation between subjective norm and behavioral intention ( $r = 0.53$ ,  $p < 0.01$ ) and between normative structure and behavioral intention ( $r = 0.58$ ,  $p < 0.01$ ) were both positive, significant and moderately strong.

#### Effect of Consumer Characteristics

It was of interest to determine whether there were differences in responses to the variables in the Fishbein-Ajzen model among respondents who differed on other variables. T-tests of means of smokers versus non-smokers in the sample showed significant differences between the two in attitude toward the behavior, subjective norm, behavioral intention and cognitive structure (Table 3). Smokers had more positive overall mean responses for all these variables.

TABLE 3  
Differences in Measures between  
Households with and without Smokers

	Non Smokers Mean	Smokers Mean	Signif. of t
Attitude	9.68	10.60	0.05
Subjective norm	0.99	1.31	0.02
Behavioral intention	1.62	1.87	0.03
Cognitive structure	10.12	12.67	0.02
Normative structure	30.52	35.95	0.07

Respondents also reported whether their families had ever experienced an accident with fire. No differences in any of the measured variables were found between those families which had experienced an accident and those which had not. However, there was a significant difference ( $p = 0.02$ ) in mean attitude scores ( $A_{act}$ ) of those who reported having close friends or relatives who had been injured in fires ( $\bar{x} = 11.34$ ) and those who had not ( $\bar{x} = 9.87$ ).

Some differences were found among respondents with different demographic and socio-economic characteristics. No significant differences were found between responses of male and female respondents. Those with children at home had a significantly lower mean score ( $p = 0.04$ ) on cognitive structure than those without children. This is difficult to explain. Children in a household may be regarded as a group at higher risk in the event of a fire and parents thus likely to have a more positive evaluation of safety in furniture choice. It may be, however, that other factors become more important. This apparent difference may also be an artifact of the combined measure which includes reference to other important attributes such as durability. Attitude to buying fire resistant upholstered furniture was somewhat more positive for those

respondents with children ( $\bar{x} = 10.49$ ) than those without ( $\bar{x} = 9.75$ ), although the difference was not significant.

Those who had purchased furniture within the past 12 months had a significantly higher ( $p = 0.01$ ) mean score on cognitive structure, 12.66 compared to 9.9 for those who had not made a purchase. Although very few of these purchases were of fire resistant products, it may be that just the recency of the purchase had made those consumers more aware of the importance of various product attributes, resulting in higher scores.

Correlations between components of the model and age, years of schooling and income showed a number of significant relationships but all were notably weak (Table 4).

TABLE 4  
Correlations of Model Components with  
Age, Years of Schooling and Income

	Behavioral Intention	Attitude	Subjective norm	Cognitive structure	Normative structure
Age (r)	0.05	-0.07	0.08	0.11*	0.04
Years of Schooling (r)	-0.14**	-0.04	-0.15**	-0.09	-0.08
Income (rho)	-0.12**	0.02	-0.10*	-0.04	-0.11*

\* $p < 0.05$ ; \*\* $p < 0.01$

Analysis of variance was used to assess the effect of occupation and education level on the model components. No significant differences were found among occupational groups in attitudes, beliefs and behavioral intentions. Some significant differences were found among those with high school, some post-secondary, and university educations (Table 5). Those with

TABLE 5  
ANOVA of Effect of Education and Occupation  
on Model Components

	F Values				
	Behavioral Intention	Attitude	Subjective norm	Cognitive structure	Normative structure
Occupation	1.85	0.70	1.40	0.92	0.40
Education	8.58**	4.91**	7.95**	3.62*	3.06*

\* $p < 0.05$ ; \*\* $p < 0.01$

university educations tended to score lower on all the model components than one or both of the other two groups. Possibly those with university educations believed themselves to be more knowledgeable about textile product safety and were, therefore, less likely to pay attention to referents. It is not clear, however, what might explain their lower cognitive structure scores. These differences are also reflected in a lower value on the behavioral intentions scale.

## CONCLUSION

The results of this study contribute to our understanding of the beliefs and attitudes consumers hold about fire resistant products. Consumers express positive attitudes towards purchasing safe products and reducing fire risk and express moderately strong intentions to do so but they are generally less sure in their beliefs about the outcomes of buying fire resistant upholstered furniture. Several of the scales have fairly high standard deviations and further examination of frequency distributions shows that there is substantial variability in responses, particularly among beliefs about outcomes. It seems probable that many consumers are uncertain about possible outcomes, particularly the effect of fire resistant properties on other product attributes, notably durability and ease of cleaning. From the direct measure of attitude it also emerges that while consumers generally see buying fire resistant furniture as very sensible, overall they are less positive about the importance or necessity of doing so. These results help to explain previous equivocal findings. In several studies, consumers have shown positive attitudes toward purchasing fire resistant products. However, where these studies included measures of actual or simulated choice consumers did not pay much attention to the issue of fire resistance and tended not to choose the safer product voluntarily.

The study also throws light on the referents which consumers use and the likelihood of them following referent advice. Among referents, the most remote referents, consumer groups and government agencies, were seen as most likely to want the consumer to make a particular decision, while more intimate referents like spouse and family were judged much less likely to want this choice. Surprisingly, friends were judged as not influencing the consumer decision either way. It also seems that, with respect to the fire resistance issue, store salespersons were rated only slightly greater than neutral sources of influence.

These findings support in some measure the "motherhood" nature of safety issues like fire resistance. Consumers are aware that fire resistance is an issue and that it is one which is of importance at a societal level, but they do not see it in very personal terms. Hence the lower scores for more immediate referents, and only a weakly positive score on the direct measure of subjective norm. Ellison, Ellison and Everett [9] also reported an increase in normative belief from friends, to media to government, in a study of behavioral intention toward energy conservation. This may also be a "motherhood" issue, or perhaps one for which participants give concessionary responses.

Referents can be divided into two groups, personal and non-personal, when examining normative beliefs and motivation to comply.

Among personal associates (spouse, family, friends) the power to elicit compliance increases with the intimacy of the relationship. Experts (consumer groups) are rated most highly among non-personal referents, those with a vested interest (sales people) rate lowest, with government agencies in between. Within both personal and non-personal groupings the results are in accord with those of Bowman and Fishbein [3]. The overall pattern between groups is also similar, that is the most intimate personal associates and experts rated highly while friends and those with a vested interest rated lowest.

The combination of high scores for normative beliefs and motivation to comply for consumer groups suggests that they are perceived as concerned about safety and have the confidence of consumers. The results indicate that such groups may be very important in influencing consumer decisions about these products, because they are viewed as impartial and disinterested. Interestingly, government agencies are perceived as concerned (highly rated on normative beliefs) but consumers appear less confident about complying with government advice. Spouses and family, while important to consumers, appear not to be considered very interested in or knowledgeable about the issue under consideration.

Quite strong behavioral intentions were expressed by respondents, yet both the previous behavior of respondents in this study and behavior measured in other studies suggests that, in fact, consumers do not pay much attention to the issue of fire resistance. A major reason for this well worth exploring further is the apparent belief that "it will never happen to me" [6]. One way of elucidating this further will be to do more analysis comparing responses of smokers and non-smokers. Results of the analysis so far suggest that this variable may be discriminatory. In follow-up research a measure of behavior will be derived and the Fishbein-Ajzen model will be tested to see whether in fact positive attitudes and behavioral intentions are reflected in purchases.

The findings of this study have implications for public policy. They identify some of the referent influences but also show that voluntary compliance with government's recommendations may not be that likely. This suggests consideration of making programs of flammability testing and labelling mandatory. Where voluntary programs are adopted, such as in Canada and the USA, consumer education may also be warranted to increase the knowledge of consumers about flammability hazards. Specifically, educators have a role to play in convincing consumers that fire safety is an important issue, and that no one is immune from the hazard of fire in the home. Consumers could be educated about reducing this hazard by purchasing fire resistant upholstered furniture products and about the effect, or lack of effect, fire

resistance will have on other product attributes like ease of cleaning, durability and cost. In this way, consumers will see the benefits to them of purchasing flame resistant products and the likelihood of misconceptions will be reduced, with positive effects for behavioral intentions and purchases. The results of this research suggest the role consumer groups can play in fostering a safer home environment is worthy of further investigation.

#### REFERENCES

1. Ajzen, I., and Fishbein, M. Understanding Attitudes and Predicting Social Behavior, Englewood Cliffs, NJ: Prentice Hall, 1980.
2. Bearden, W.O., and Woodside, A.G., "Situational and extended attitude models as predictors of marijuana intentions and reported behavior." Journal of Social Psychology 106 (1978):57-67.
3. Bowman, C., and Fishbein, M. "Understanding Public Reactions to Energy Proposals: An Application of the Fishbein Model." Journal of Applied Social Psychology 8 (1978):319-40.
4. Brown, S.A., and Crown, E.M. "Consumer Attitudes to Flammability in Household Textiles." Home Economics Research Journal 13 (1985):373-382.
5. Burnett, S.B. "Assessing the impact of increased product safety on consumer utility." In Advances in Consumer Research, ed. H.K. Hunt, Vol. 5. Ann Arbor, MI: Association for Consumer Research, 1978.
6. Crown, E.M., and Brown, S.A. "Flame retardance as a criterion in textile product evaluation: a conjoint analysis approach." Journal of Consumer Product Flammability 8 (1981):221-234.
7. Crown, E.M., and Brown, S.A. Upholstered furniture: Effect of consumer information and education on cognition and choice, Ottawa, ON: Consumer and Corporate Affairs, Canada, 1983.
8. Crown, E.M., and Brown, S.A. "Consumer Trade-offs among Flame Retardance and Other Product Attributes: A Conjoint Analysis of Consumer Preferences." Journal of Consumer Affairs 18 (1984):305-316.
9. Ellison, R.A., Ellison, M., and Everett, G.E. "Longitudinal Research Utilizing Ajzen's and Fishbein's Theory of Reasoned Action: Enercan Pilot Study." In Marketing, ed. J.D. Forbes, Vol. 4. Vancouver, BC: Administrative Sciences Association of Canada, 1983.
10. Fishbein, M., and Ajzen, I. Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley, 1975.
11. Fishbein, M., and Coombs, F.S. "Basis for decision: An attitudinal analysis of voting behavior." Journal of Applied Social Psychology 4 (1974):95-124.
12. Horne, L., and Crown, E.M. "Use of Information Sources in the Purchase of Home Furnishing Textile Products." Canadian Home Economics Journal 33 (1983):227-232.
13. Laughlin, K.C. "Consumer acceptance of FR sleepwear." Textile Chemist and Colorist 8 (1976):51-55.
14. Laughlin, K.C., and Buddin, F. "Consumer acceptance of FR sleepwear: part II." Textile Chemist and Colorist 9 (1977): 218-222.
15. Miniard, P.W., and Cohen, J.B. "Isolating attitudinal and normative influences in behavioral intentions models." Journal of Marketing Research 16 (1979):102-110.
16. Miniard, P.W., and Cohen, J.B. "An Examination of the Fishbein-Ajzen Behavioral Intentions Model's Concepts and Measures." Journal of Experimental Social Psychology 17 (1981):309-339.
17. Oliver, R.L., and Bearden, W.O. "Crossover Effects in the Theory of Reasoned Action: A Moderating Influence Attempt." Journal of Consumer Research 12 (1985):324-340.
18. Rucker, M.H., McGee, K.M., Hughes, R.K., Gorang, M.L., O'Reilly, L.M., and Damant, G. "Consumer Research on Furniture Flammability." Journal of Consumer Product Flammability 7 (1980): 151-160.
19. Ryan, M.J., and Bonfield, E.H. "Fishbein's Intentions Model: A Test of External and Pragmatic Validity." Journal of Marketing 44 (1980):82-95.
20. Wall, M., and Gallagher, J.E. "Consumer Attitudes toward Children's Flame-retardant Sleepwear." Canadian Home Economics Journal 33 (1983):21-26.
21. Wilson, D.T., Mathews, H.L., and Harvey, J.W. "An Empirical Test of the Fishbein Behavioral Intention Model." Journal of Consumer Research 1 (1975):39-48.
22. Zanna, M.P., Higgins, E.T., and Herman, C.P. Consistency in Social Behavior. The Ontario Symposium, Vol. 2. Hillsdale, NJ: Lawrence Erlbaum Associates, 1982.



## CONSUMER SAFETY ISSUES

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The two papers in this session, Kramer and Penner [1987] and Brown, et al. [1987] make excellent contributions to the consumer safety literature. The Kramer and Penner paper reports new analyses of the Kansas Consumer Survey. The Brown, et al. paper is part of continuing series of research studies on consumers and fire resistant products. In a variety of ways these papers serve to highlight some of the important policy characteristics of consumer safety issues. Some of these characteristics are briefly discussed below.

First, consumer safety policy questions are debated against a political backdrop in which the major players are industries that by and large 1) do not really believe that consumer safety is a problem with regard to their products, 2) do not believe consumers believe safety is a problem, 3) want to retain control over the marketplace, especially control over the nature of products, and 4) have virtual veto power over changes in safety policy [Feldman 1980].

Second, there is unnecessary confusion and inconsistency in the consumer safety literature over uses of the terms "safety" and health." Occasionally these terms may legitimately be used interchangeably. Often, however, to do so may be misleading or cause confusion. One way to clarify usage of these terms is to reserve the term "safety" for short-term, "clear and present danger of injury or death" situations. The term "health" could then be reserved for situations having longer-term consequences for consumer well-being. Were such a system being followed, Kramer and Penner [1987] would not have had to reproduce FDA's "food safety hazards" list which ranks malnutrition as the Number 2 safety hazard (it would be better characterized as a health problem). Later in the same paper, "too much fat" is a response stub reported as a reason for consumer non-purchase of meat products---a health, not a safety issue.

Third, safety is becoming increasingly salient in consumer decision making across a wider range of products. For example, greater numbers of consumers are questioning the safety of a greater number of products in the U.S. food supply. This becomes relevant for policy, especially information provision policy, given what we know about the ways in

which consumer information processing differs for products perceived as risky vs. benign [e.g., Bettman, et al., 1986].

The fourth characteristic of the consumer safety arena has to do with the information environment. There is simultaneously too much and too little information available to consumers on the safety of many products. Too much information is a problem when two sides in a consumer safety controversy both have "scientific" or other evidence and both are expending resources to make that information available to consumers. Too little information occurs most frequently when the product or the safety issue, for whatever reason, fails to capture the attention of the news media.

Fifth, there are at least three major ways in which policy makers can respond to the risk associated with product choice and use [Mande, 1987]. The first is to allow the free market to operate entirely unencumbered by government regulation. Sellers would have total freedom to offer for sale any product, regardless of the risk it poses to the safety and health of consumers. Consumers would have total freedom to choose, within their own economic constraints, from among the available pool of products. The second option is for government to provide or mandate the provision of information regarding the safety characteristics and degree of risk involved in purchase and use of the product. Consumers in this scenario would be able to make informed choices in the marketplace. The third policy option is for government to control the extent of risk that consumers face in the marketplace. This process may occur through the promulgation of product safety standards, inspection procedures, and information campaigns.

Clearly at any given time all three of these policy options are in operation in the marketplace. The contrast between the policy responses to the product categories discussed in these two papers is a case in point. While consumers in the Kansas Consumer Survey expressed substantial concern about the degree of risk in the food supply, respondents in the Brown, et al. survey approach the risk of an upholstery fire with considerable equanimity. The conditions under which consumer safety issues change from "motherhood" issues into front-burner policy issues is ripe for study. These two papers give us some clues about where to look for some answers.

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#### REFERENCES

Bettman, James R., Payne, John W., and Staelin, Richard. "Cognitive Considerations in Assigning Effective Labels for Presenting Risk Information," *Journal of Public Policy & Marketing*, 5:1-28, 1986.

Brown, S. A., Crown, E. M, and Marshall, S. P. "Consumer Beliefs About, Attitudes Towards Intentions to Purchase Fire Resistant Products," *The Annual Conference of the American Council in Consumer Interests*, edited by Vickie Hampton, 1987.

Feldman, Laurence P. *Consumer Protection: Problems and Prospects*, 2nd edition, West Publishing Co.: St. Paul, MN., 1980.

Kramer, Carol S. and Penner, Karen P. "Food Safety Information and Regulation: Are These Substitutes or Complements?" *Proceedings of the Annual Conference of the American Council on Consumer Interests*, edited by Vickie Hampton, 1987.

Mande, Jerold, "Issues for the Next Decade," paper presented at the 10th Annual National Food Policy Conference, Washington, DC, 1987.

ABSTRACT

Mature public interest lobbying acts have come to play a significant part in affecting the outcomes of important legislative fights. The public interest lobbyist's raw material is the unfocused energy of the public will. To succeed, the lobbyist must focus and unleash that energy so that it will move legislative mountains. In reviewing five recent public interest victories, we see that the lobbyists must manifest balance in two critical strategic principles: (1) the seizing of the middle ground and (2) timely compromises.

Today, the challenge facing the nation's public interest lobbies is to channel the country's political energy and give it coherent policy direction. They must also recognize their common state in pursuing two over-arching needs that will determine the future integrity of our government and its responsiveness to national needs. First they must abandon the sterility of a Gramm-Rudman-Hollings approach to the federal budget. They must also make fundamental campaign financing reform a top priority.

In the cold light of the morning after the 1980 elections, who among those who saw themselves as members of the public interest community did not awake with dread? Arms control activists despaired of restraining the uncontrolled growth of the nuclear arsenal. Civil rights workers saw undermined that fragile legal scaffolding which they had painstakingly erected over two decades. And consumer, environment, and public health advocates foresaw the transformation of regulatory regimens -- bulwarks against corporate greed -- into facilitating hand-maidens of that greed. And so it happened -- or at least began to happen.

With all the subtlety of a Chicago mayor clearing the snowbound streets in an election year, the Reagan Administration set about plowing up - regulatory restraints and redistributing the treasury's wealth from alms to arms.

Much that was dreaded came to pass, but not all. Indeed, on some of the most vulnerable fronts, public interest groups staved off impending doom, and, in a handful of cases, gained significant victories which defied their own baleful predictions. Two years ago, I set out to study some of these cases to see if I could learn some lessons about the resiliency of citizen groups in what should have been the worst of times. In doing, I chose five citizen triumphs over what appeared to be insurmountable odds, each one of which represented a major public interest arena:

public health, civil rights, the environment, arms control, and consumer justice.

The first case study was the passage of the Cigarette Labeling Act of 1984 requiring a new series of four deadly warnings to rotate on cigarette labels and in all cigarette advertising, in which the mythic tobacco lobby was defeated for the first time.

Next came the defeat of the American Medical Association's strenuous effort to escape consumer protection and antitrust regulation, in which the doctors' torrent of campaign contributions brought the AMA only shame.

Third was the preservation by Congress of the Tuolumne Wild River in California, snatched from the clutches of the dam builders and real estate developers.

Fourth, the overwhelming victory, in 1982, for a Voting Rights Act stronger than any of its advocates dared to hope for.

Finally, the containment of the MX missile system in 1984.

What happened?

In each case, of course, large forces were, of course, afoot. Movements, or at least broad, popular impulses, loom behind each of these victories. As the issues were ultimately cast, the outcomes, in each case, truly reflected the will of the majority -- as reflected in opinion polls, if not election polls. There were also, in each case, uncommonly dedicated and effective leaders within Congress -- in the ranks of both its members and their staffs.

There were sympathetic, or at least responsive, media voices. There were, at least in the tobacco and AMA cases, important supportive advocates within the administration.

There were, "on the outside" of the Congress, broad citizen group and affected interest group coalitions -- commonly slow-forming, hesitant; thinly staffed and funded; distracted by other urgent battles -- but ultimately a coherent force.

And, at the core of each of these coalitions was a small group of professional lobbyists -- veterans of legislative campaigns stretching back over many seasons, and including diverse causes within a broad spectrum of policy arenas.

Still, it wasn't supposed to happen.

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Among political scientists, even the most nonchalant pluralist now views with discomfort, if not despair, the disproportionate influence of the organized special interest set against the diffuse, undifferentiated and unorganized general interest. That is why the political scientist greets with surprise even modest public interest triumphs.

In The Politics of Regulation, James Q. Wilson airs this puzzle as it applies to the outpouring of consumer and environmental laws in the late sixties and early seventies:

"A policy may be proposed that will convey general (though perhaps small) benefits at a cost to be born chiefly by a small segment of society... Since the incentive to organize is strong for opponents of the policy but weak for the beneficiaries, and since the political system provides many points at which opposition can be registered, it may seem astonishing that regulatory legislation of this sort is ever passed."

That it does happen, Wilson attributes to entrepreneurial politics, which require:

"The efforts of a skilled entrepreneur who can mobilize latent public sentiment (by revealing a scandal or capitalizing on a crisis), put the opponents of the plan publicly on the defensive (by accusing them of deforming babies or killing motorists), and associate the legislation with widely shared values (clean air, pure water, health and safety). The entrepreneur serves as the vicarious representative of groups not directly part of the legislative process."

Perhaps such entrepreneurs as Ralph Nader could succeed in the 1960's and 70's simply by triggering public animus through the press. For organized economic interest groups lacked the political commitment, the political leverage of massed political action committee dollars and the benefit of a de-regulatory political environment. But, in both Congress and the Reagan Administration, today's public interest entrepreneurs face stonier walls. Concerned citizens quickly learned that they could no longer "let Ralph do it." Citizens broadly affected cannot remain aloof from the legislative process, and the public interest entrepreneur's enterprise must be backed by an organized, not "vicarious," constituency.

Amid the clamor of competing outrages, the threshold of spontaneous public indignation continually rises. The entrepreneur's media skills may still be valuable in evoking public outrage on those issues that lend themselves to dramatic media "bytes." But it is not enough. "The hard fights," as former Common Cause President David Cohen insists, are "not for the short-winded." And these case studies suggest that mature public interest lobbying arts have

come to play a significant part in affecting the outcomes of such "hard fights."

How can we best capture the essence of the citizen lobbying arts? Not surprisingly, the ancient Chinese martial arts suggest a framework for characterizing key, recurring elements in the successful public interest lobbying campaign. Of particular relevance are the central concepts relating to the marshalling, transforming, and focusing of energy, (T'ai C'hi) and the importance of moderation and balance, the avoidance of excessive aggressiveness (Yang), or yielding (Yin).

The public interest lobbyist's raw material is the unfocused energy of the public will. To succeed, the lobbyist must focus and unleash that energy so that it will move legislative mountains. It is not surprising that the lobbyists' roles can best be described generically in terms of energy. In providing support and encouragement for their Congressional leaders they nurture energy. In coalition building, they harness energy. In shaping legislative strategies, they focus energy. In directing the focus of organized grass roots constituencies toward the appropriate target legislators at the right time and in the right way, they unleash energy. In the face of frustration and defeat, they sustain energy.

Common Cause played the leading role in the defeat of the MX missile. Common Cause founder John Gardner's evocation of Common Cause's "operating philosophy" is framed in terms of the focusing of energy:

"In Common Cause we guard against aimless dissipation of energy by a simple operating philosophy: with rare exceptions we do nothing but fight specific battles -- legal or legislative. We enter each battle seeking a specific outcome. And we stay with it until we win or lose.

We do not engage in educational campaigns for their own sake, nor research for its own sake (though we use the research of others). Nor do we make pronouncements or engage in debate on any issue unless we intend to fight that issue through to a conclusion.

That operating philosophy has forced us to focus our energies and resources on specific targets. It has spared us the vague and intangible efforts to "do good" that absorb so much of the energies of well-intentioned organizations."

This energy focus was central to each of the campaigns I studied. In building and sustaining the "intensity" of the anti-MX campaign, year after year, vote after vote; in maintaining the morale of the health lobby through months of slippery negotiations with the tobacco lobby; in hanging in against the American Medical Association though defeat appeared inevitable; in



mobilizing a new campaign to save the Tuolumne on the wreckage of a succession of failed wild river campaigns; and in behaving as if a cresting new administration could be overcome to strengthen the Voting Rights Act, the public interest lobbyists serves as energy conservers and mobilizers.

The transformation of energy also serves as an apt metaphor for the public interest lobbyists' treatment of powerful adversaries -- the great corporate lobbies, trade Associations, and government bureaucracies:

Very large animals have certain advantages in confronting very small or weak prey. But big is not always best. Brainpower tends to lag behind musclepower. Agility and flexibility suffer. Momentum can be awe-inspiring, but only so long as it is headed in the desired direction.

A very large lobby directed by a diverse assortment of imperfectly synchronized brains, which are capable of converging only upon the one course of conduct which has proved successful in the past, is in trouble. If its behavior is also marked by the habit of duplicity; if its intelligence-gathering apparatus is distorted by grandiose delusions; if it is both overly confident and overly fearful; if it is equally prone to alienate friend and adversary alike, it is in trouble.

And, if it is opposed by a lean and light-fingered lobby, flexible, resourceful, trustworthy, reasonable, good-humored, and principled -- it may very well lose.

Even the novice martial arts student learns that the essence of combat is to turn the aggressive energy of the charging adversary (Yang) to advantage, through yielding, deflecting and redirecting that energy (Yin). Those who lack experience in lobbying campaigns are easily intimidated by the apparent power and resources of their adversaries. The mature lobbyist sees both power and vulnerability, and takes advantage of the musclebound giantism of the adversaries to transform and redirect excessive aggression back upon its source.

Thus the anti-MX lobbyists make use of the massive, taxpayer funded lobbying efforts of the Pentagon and defense contractors to rouse public sentiment against the military-industrial complex's gargantuan, waste-making greed! The Health Coalition's lobbyists, by counseling patience and flexibility in negotiation, give the tobacco lobby ample opportunity to display its arrogance and contempt for Congress, qualities which alienate even its most dedicated allies. The Congress Watch lobbyist transforms the AMA's lavish campaign contributions into an unshakable political albatross. The wild river lobbyists likewise succeed in turning the dam builders and water developers lobbying and campaign largess into an index of corruption. Finally, the martial arts practitioner himself avoids both excessive aggressiveness or excessive yielding, seeking balance, rootedness, flexibility. In

each of the case studies, the lobbyists manifest balance in two common -- and critical -- strategic principles: (1) the seizing of the middle ground, the perceived moderate center; and (2) timely compromise.

In the MX campaign, the lobbyists argued strenuously against premature public abandonment of the goal of "no MX's," though construction of an initial 21 had been authorized by Congress the previous year. They well understood that Congress would not likely reverse that decision, but nonetheless insisted that the House be forced to vote on an amendment to do just that. They did so in order to posture the vote to deny funding for additional missiles as the middle ground. As the voting approached, each side constantly recast its strategy, maneuvering to be in position to offer, in the right sequence, the perceived middle ground.

In pursuing strengthened cigarette labels, the health lobbyists struggled to shed the image of Puritanism and zealotry which anti-smoking crusaders had sometimes invited. They restrained an increasingly restive constituency in remaining flexible and reasonable in seeking limited compromise -- all in the successful effort to cast the tobacco lobby as extreme and inflexible in its demands.

In the AMA case, FTC Chairman James Miller portrayed the AMA as seeking a status above the law as a privileged aristocracy, and Congress Watch lobbyist Jay Angoff's succeeded in attaching a "sold" sign to Congressmembers voting for the "AMA amendment." Thus the supporters of FTC authority over the professions progressively isolated the AMA's effort as on the venal fringe.

From its very choice of a name for its campaign, "the Tuolumne Preservation Trust," to its slogan, "Leave it as it is," the lobbying strategy for the Tuolumne sought to shed the image of wild river preservationists as elitist white river rafters against progress. Instead, they drew into their coalition family campgrounds and others who already used the rivers resources for water and power, and claimed the banner of balanced usage, while labeling those who would further dam and exploit the river as development-mad extremists.

In the Voting Rights Act campaign, the goal was not simple majorities of the Senate and House, but filibuster-proof and veto-proof consensus. The key lobbying strategists for the Leadership Conference on Civil Rights focused their strategy upon isolating the President and his civil rights policymakers from the conservative Republican mainstream. They made boisterous use, in this regard, of the administration's abortive effort to grant tax-exempt status to segregated, fundamentalist colleges, an effort almost universally condemned in Congress.

As the Samurai manual, the Book of Five Rings counsels, "The General knows when to march and when to halt."

Nothing is more taxing to a coalition than confronting the need for compromise. Nothing challenges the leadership -- and character -- of the lobbyist more than resisting the rush to compromise born of despair or frustration, or, worse, risking the opprobrium of the militant millenarians, by counseling that the time to compromise has come.

It is always tempting to preserve one's reputation for uncompromising purity, rather than to risk shunning as a "sell out." Even if the compromise should prove successful, and the legislation passes, no one will ever know for certain whether it was really necessary. Thus the author of compromise risks shunning by the rigidly unyielding.

Yet it was in the art of timely compromise that the public interest lobbies most showed their balance and flexibility.

The anti-MX lobbyists fiercely resisted premature abandonment of the goal of "no MX's." Yet, they maintained flexibility. Indeed, they embraced a militant slogan, "No MX's in 84," which was sufficiently ambiguous to permit them, when they -- and their Congressional leaders -- saw they could not muster the votes to halt production of the 21 MX missiles authorized in 1983, but not yet actually built, to shift to the lesser, but attainable goal of halting the authorization of additional missiles.

The leaders of the anti-AMA coalition, not without strain, accepted a last minute compromise offered by Senator Rudman which engraved in law the exclusive right of the states to set bona-fide licensing standards for professionals. This frustrated the unstated desire of some members of the anti-AMA coalition, such as the nurse-midwives, who hoped to spawn an FTC challenge to state-imposed restrictions (though the FTC had disavowed any such intent). But such a challenge would have given some legitimacy to the AMA partisans' arguments that the FTC was a threat to historic states' rights. By its surprise and clarity, the Rudman Amendment undermined the AMA's latent Senate support.

On the cigarette labeling bill, the Health Coalition's lobbyists strenuously resisted, at some risk, a weak compromise that their own Senate leader, Senator Hatch, was poised to embrace. But as time and the likelihood of passage waned, the coalition gave up one of the warnings it ardently sought: that smoking was addictive. However painful, it was the lobbyists' judgment that the compromise was essential.

Though the Voting Rights Act extension passed the House overwhelmingly, and though it enjoyed the support of a comfortable majority of the Senate, the Coalition's lobbyists still counseled negotiation of what proved to be an exceedingly modest compromise with Senator Dole of Kansas, not yet Republican Senate Leader, but a strong force among Senate Republicans. Dole's support was seen as necessary to isolate the hostile

Reagan Administration and its veto potential. Once Dole had signed on, the administration reluctantly withdrew its veto threat.

Eric Fromm, in The Revolution of Hope (Harper & Row, 1968), cites "hope" as "a decisive element in any attempt to bring about social change." But in so doing, he first distinguishes active from both passive and millenarian hope:

"While passive waiting is a disguised form of hopelessness and impotence, there is another form of hopelessness and despair which takes exactly the opposite disguise -- the disguise of phrase making and adventurism, of disregard for reality, and of forcing what cannot be forced."

David Cohen draws upon his two decades of hands-on lobbying experience to draw up a taxonomy of public interest lobbyists, strikingly parallel to Fromm's categories of hope. Three types of lobbyist are amply represented within the public interest community, Cohen notes: the "apocalyptic," the "bureaucratic," and "the movement."

The apocalyptic lobbyists, who most resemble Fromm's adventurists, lack neither energy nor the fires of conviction. But they prove poor -- and unwilling -- lobbyists. In the extreme, as Byron Kennard has observed,

"People are attracted to social movements for a variety of reasons... Some people turn out to be motivated by deep wells of anger and bitterness. They wallow in disappointment and defeat. To these people, winning is unthinkable, even distasteful. They set up a self-fulfilling prophecy: to win is to sell out, that is, to lose."

Bureaucratic lobbyists are most often found in the larger, well established (and better funded) institutions. Though the lobbyists themselves may have been drawn to the organization by concern for its cause, the organizational culture soon wears down the edge of aggressive pursuit. The bureaucratic lobby is unwilling to risk, unwilling to challenge, unwilling to press its friends or tangle with its adversaries in the public arena. It is the most addicted to the illusionary compromise. In Fromm's terms, the bureaucratic lobby is mired in "passive waiting."

What is it, then, that characterizes active hope? And how does it relate to "movement" lobbying? Again Fromm is helpful:

"Hope... is neither passive waiting nor is it unrealistic forcing of circumstances that cannot occur. It is like the crouched tiger, which will jump only when the moment for jumping has come. Neither tired reformism nor pseudo-radical adventurism is an expression of hope. To

hope means to be ready at every moment for that which is not yet born, and yet not become desperate if there is no birth in our lifetime. There is no sense in hoping for that which already exists or for that which cannot be. Those whose hope is weak settle down for comfort or for violence; those whose hope is strong see and cherish all signs of new life and are ready every moment to help the birth of that which is ready to be born."

The "movement" lobbyist, observes David Cohen, is hopeful both to issues and people:

"Movement lobbyists believe it is possible to push and make demands and bend the legislative/policy system. They are also optimistic about participation, because they believe in the good sense of people to be able to do things well. This contrasts with the bureaucratic style of lobbying which rarely shares its tasks with its members or volunteers."

It is not coincidence that leads Common Cause Chairman Archibald Cox to describe Common Cause's institutional culture in terms of hope:

"Common Cause's national energies are principally harnessed towards effective effort throughout the country on issues which can be joined with hope of a specific outcome."

Fromm's "crouching tiger" is similarly evoked by Cox's deliberate embrace of the unflattering term "opportunistic" to characterize Common Cause's *modus operandi*.

Now, new opportunities stretch before us, spawned by the elections, by the unraveling of the Reagan Administration, and by the unmasking of the emptiness of the Reagan vision.

Opportunity lies in the Congress, not because of the inherent greatness of its leadership -- with some exceptions -- but because of another of the central lessons of public interest lobbying:

By and large, public interest lobbies don't convert or intimidate into submission their ideological or political adversaries. Their critical role is to transform sympathetic members of Congress into committed leaders and supporters. What they do best is motivate, energize, prod, support, and cheerlead those whose natural inclinations are to agree with them. And if there is one clear lesson the lobbies have learned, it is that strong, committed leadership within Congress is the key to winning.

Now there are many more sympathetic members -- and potential leaders for these causes -- in the Senate as well as the House. And they have the essential staff resources, the control over committee and floor agendas, and the consequent high profile access to media gatekeepers.

Next, what the 1986 Congressional elections began, the unraveling of the Reagan presidency has accelerated: the search for a new national agenda in the post-Reagan era.

The American people have the habit -- unsettling to those who happen to be in office -- of constantly looking ahead and demanding, "What's next?" That's the way it was the last time we saw a popular president near the end of a second term. In 1958, the democrats swept Congress. For the next two years, the issues stimulated by the advocacy of civil rights groups, organized labor, farmers and senior citizens lobbies set the framework for the 1960 presidential debate and influenced the early domestic actions of the Kennedy Administration. President Kennedy set out to get the country moving again. But he would not have seen the way so clearly if the movement lobbies of the fifties had not been banging on the doors of President Eisenhower's last congress, moving their issues on to the nations' agenda. Today, the challenge facing the nation's public interest lobbies is to channel the country's restless political energy and give it coherent policy direction -- direction that the political parties have largely been unwilling, or unable, to set themselves.

The Democrats -- and progressive Republicans in Congress -- do have an opportunity to show they can govern, if they can respond to those constituencies that are looking ahead and are ready to face America's problems -- not narrow interest lobbies focussed inwardly on their own privileges and pocketbooks, but broad citizen movements. They must respond to those who would restore excellence and universal opportunity in education and housing, defend the environment, redeem civil rights and liberties, reverse the increase in poverty with a secure net for children and the elderly, and defuse nuclear terror. They must do so within an economic framework that draws upon the restless entrepreneurial energies of Americans without abdicating the search for equity and decency to the relentlessness of market forces. And they must frame a set of alternative actions -- government actions -- that the American people can embrace.

Public interest lobbies practice robust politics. They place demands on the political and legislative system. That is the stuff of the Constitutional right to petition the government to redress grievances. They are trying to make the political system bend.

House and Senate Democrats and Republicans alike will be tempted to follow their usual habit: say yes to their traditional interest group constituencies and avoid the responsibility of proposing a coherent program. This is where the public interest lobbies can play their agenda-setting role. None of us should be expected to give up our individual issues -- some will be embraced; others may fall by the wayside.

But the public interest lobbies cannot stop there. They must also recognize their common stake in pursuing two over-arching needs that will determine the future integrity of our government and its responsiveness to national needs:

First they must work to abandon the sterility of a Gramm-Rudman-Hollings approach: the mechanical budget guillotine. Instead, Congress must combine thoughtful budget restraint and progressive tax increases in a way that takes the deficit problem seriously, yet still leaves room for new policy initiatives to address the concerns of most Americans -- education, helping depressed regional economies recover, enabling low and middle income families starting out to gain access to affordable housing, and access to health care for those who are poor, near poor or unable to cope with catastrophe.

They must also make it a first priority to remove the suffocating blight of cash-on-the-barrelhead politics and move, instead to a system that limits overall campaign expenditures, limits what candidates can take from political action committees and family treasuries, and rewards small contributions with a matching public finance system. The consumer lobby may have beaten the AMA, but it didn't beat the auto dealers, who dealt campaign cash more efficiently than they ever deal autos, and a whole host of corporate and trade associations who are investing in Congress rather than research and development, management, worker retraining, or marketing abroad. Common sense tells us they invest in Congress because Congress pays off, not for love of democratic process, and that brings us to the final piece of good news: the time is ripe for fundamental campaign financing reform. The wind is up. Senators Robert Byrd and David Boren, with the strong support of Common Cause and a host of others, have introduced a comprehensive campaign finance reform bill, S.2. As of today, that bill has 36 cosponsors, and rising.

Let me tell you, this system is so rotten, there even is a new group in Washington, come together in common disgust: Lobbyists For Campaign Financing Reform. And they are serious: everybody touched by this system is demeaned, if not corrupted.

Ironically, public interest lobbies today owe much of their present strength and fitness to the Reagan Presidency. The early 1980's were the wilderness years. Losing allies in Congress and the administration, they were forced to strengthen their grass roots citizen networks, and develop organizational cultures that recognized and rewarded commitment for long term struggle. Those who survived were those who had learned that citizen advocacy was truly "not for the short winded."

Now, in 1987 and 1988, we can also reach beyond Reagan to help shape a new agenda for the nation in the 1990's. In 1959 and 1960, progressive Democrats and Republicans in Congress set the

agenda for the 1960 election campaign and for the Kennedy Administration. They now have the opportunity to do so again, interring the exhausted Reagan agenda -- with a little help (and a big push) -- from the public interest lobbies.