The Impact of Legal Professionals on Alimony Award Decisions

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The purpose of this study was to determine whether background characteristics of legal professionals have an impact on alimony award decisions. The attorneys' value systems and the judges' disposition play a role in the awarding of alimony. Attorneys possessing liberal beliefs decreased the probability of alimony being awarded. Judges with high temperament scores increased the probability of alimony being awarded. Neither attorneys nor judges were found to have an impact on award amounts.

Introduction

A divorce takes place within the confines of a legal environment. Therefore, legal professionals have a great deal of influence over families in the divorce settlement process. Spanier and Anderson (1979) suggest that once individuals decide to divorce or establish a support agreement, one of their first contacts within the legal environment is an attorney to represent their interests. In fact, alimony awards are arrived at through negotiations between the spouses and their attorneys with the judge acting as a final arbitrator (Oster, 1987). The purpose of this paper is to determine whether background characteristics of legal professionals, i.e., judges/attorneys, have an impact on alimony award decisions in Franklin County, Ohio.

Attorneys bring into the negotiation process different specializations, experiences and value systems, i.e., liberalism and conservatism, which could affect alimony award decisions. Information regarding the impact of these factors on alimony award decisions could enable consumers of legal professionals, i.e., attorneys, to make wise and intelligent representation choices.

During the negotiation process attorneys may adopt negotiation strategies involving the use of threats and misrepresentation of facts in the hope of reaching a more favorable settlement for their clients (Spanier and Anderson, 1979). As pointed out by Spanier and Anderson (1979):

> The attorney's role is that of an advocate for his or her clients, and under an adversary divorce statute, the best interests of the client perhaps may be served by advice which is not wholly consistent with the procedures which the law specifies (p. 612).

Despite the fact that there are laws which govern how divorce cases should proceed (Mnookin and Kornhauser, 1979), judges use their own discretion in carrying out these laws. Spanier and Anderson (1979) found that judges bend the law when necessary to expedite a divorce decree which would benefit all parties involved. Further, judges have different levels of temperament and integrity. Do these attributes have an influence on judges' decision-making processes? Information regarding the impact of these attributes on alimony award decisions could be beneficial to both consumers of legal professionals and to the legal professionals themselves. Because interaction with the legal environment may be the first of many new experiences for divorcing couples (Spanier and Anderson, 1979), information about personal attributes of the judge could provide insight as to

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asset (disposition of residence and cash settlement) awards to both parties.

Questionnaires were mailed to a random sample of three-hundred-fifty Central Ohio attorneys drawn from cases in Franklin County Court of Domestic Relations during 1987-88. Of the one-hundred-forty-seven questionnaires returned, one-hundred-thirty were in usable form.

Questionnaires provided information on: 1) attorneys' ratings of Franklin County, Ohio domestic relations judges with respect to judges' performance--temperament, integrity, legal ability, court management skills, 2) attorneys' perception of the judge's intervention in their cases, 3) attorneys' legal practice, and 4) attorneys' background. For a discussion of the measurement of judicial performance see appendix.

Interviews were conducted with judges in Franklin County, Ohio Court of Domestic Relations. Interviews provided information on the judges' background.

Treatment of the Data

The attorney sample was merged via case identification with the court case sample. Seventy-four attorneys were able to be matched with their actual court cases. Because the sample size is relatively small, results from this study should be interpreted with caution. The court case sample was used as the control in the empirical alimony award and amount models.

The data sets used in this study yielded numerous explanatory variables which were thought to affect alimony awards. Partly to avoid the problem of multicollinearity among the explanatory variables and to arrive at the most parsimonious alimony award and amount models, a two step process was used to reduce the number of explanatory variables.

Results

Model-Building: Award/Receipt of Alimony

A variable reduction or model-building technique was performed on background characteristics of legal professionals, demographic characteristics of divorcing couples and legal processes (decisions). At the first step in variable reduction or building the criterion for continued use in the second step was significance at the .2 level or higher in a probit analysis. The criterion for continued use in the final model was significance at the .1 level or higher in a probit analysis run on all variables which passed criterion in the first step.

As reported in Table 1, six background characteristics, (attorney male, attorney liberal, attorney specialize family law, attorney private practice, judge temperament, and judge court management skills) were significant at the .2 level or higher in the initial probit analysis. Once the impact of these six background characteristics was taken into account, attorney age, attorney income, attorney experience, attorney conservative, attorney not specializing, judge intervene in case, judge age, judge experience, judge integrity, and judge legal ability were rejected at the first step. The statistical hypothesis that these variables had no effect on award/receipt of alimony awards could not be rejected at the .2 level or higher.

Table 1

Initial probit analysis of the impact of background characteristics of legal professionals on the award/receipt of alimony, 1987-88

Background	Coefficients
Attorney male	-3.67*
Attorney age	-.02
Attorney income	.01
Attorney experience	.03
Attorney conservative	1.07
Attorney liberal	-1.43*
Attorney not specializing	-1.16
Attorney specialize family law	2.73*
Attorney private practice	3.88*
Judge intervene in case	2.69
Judge age	.15
Judge experience	-.12
Judge integrity	-.04
Judge temperament	.07*
Judge legal ability	.01
Judge court management skills	.08*

* = p < .2 level or higher

181

Table 3

Probit Analysis of Factors Affecting Award/Receipt of Alimony, 1987-88

Factors	Probit Coefficients (Standard Errors)
Length of marriage	.19 (2.39)*
Husband employed	-1.89 (-.85)
Husband income	.09 (2.27)*
Wife income	-.01 (-1.86)*
One yr. sep. as ground	-1.45 (-.86)
Husband contest divorce	.12 (.09)
Motions filed by husband	.64 (1.59)
Attorney liberal	-4.89 (-2.23)*
Attorney specialize family law	.20 (.12)
Attorney private practice	1.38 (.93)
Judge temperament	.10 (1.94)*

* = p < .1 level or higher
N = 74
Pearson Chi Square = 8.729

Model-Building: Amount of Alimony

An Ordinary Least Squares (OLS) multiple regression procedure was used to reduce the three sets of explanatory variables, i.e., background characteristics of legal professionals, demographic characteristics of divorcing couples and legal processes (decisions). The variable reduction or model-building procedures are the same as those used in the award/receipt alimony model.

As reported in Table 4, four background characteristics, (attorney specialize in family law, attorney conservative, attorney male, and judge legal ability) were significant at the .2 level or higher in the initial OLS multiple regression analysis. Once the impact of these four background characteristics was taken into account, judge court management skills, attorney private practice, judge experience, attorney experience, judge intervene in case, attorney income, attorney age, attorney liberal, attorney not specializing, judge integrity, judge temperament, and judge age were rejected at the first step. The statistical hypothesis that these variables had no effect on the setting of alimony award amounts could not be rejected at the .2 level or higher.

Table 4

Initial OLS regression of the impact of legal professionals on the setting of alimony award amounts, 1987-88

Background characteristics	OLS coefficients
Judge court management skills	-.05
Attorney specialize family law	.27*
Attorney conservative	.25*
Attorney private practice	.15
Judge experience	-.02
Attorney experience	-.10
Judge intervene in case	.01
Attorney income	.09
Attorney age	.02
Attorney male	-.25*
Attorney liberal	.14
Attorney not specializing	.11
Judge integrity	-.06
Judge temperament	-.08
Judge legal ability	.38*
Judge age	.18

* = p < .2 level or higher

Conclusion and Implications

The purpose of this study was to determine whether background characteristics of legal professionals, i.e., judges/attorneys, have an impact on alimony award decisions. Judges and attorneys both were found to have an impact on the awarding of alimony. However, neither judges nor attorneys were found to have an impact on the setting of alimony award amounts.

Findings from this study have implications for consumers' welfare in the legal environment. The attorneys' value systems were found to play a role in the awarding of alimony. Self-evaluated liberals were found to have a detrimental impact on alimony awards. Alimony was much more likely to be awarded when spouses had conservative counsel than when they had liberal counsel (19.0 percent v. 2.9 percent). Conservative attorneys may still be holding traditional views toward alimony. The attorneys' value systems are latent in nature. Consequently, it is imperative that consumers probe in depth when evaluating the background of their potential attorneys. It may behoove poor spouses to pursue conservative counsel while wealthier spouses seek liberal counsel.

Alimony is taxable income. The implication for the poorer spouse is that there is a heavier tax liability. Future research may want to ask divorcing spouses whether they make trade-offs between alimony and other awards in divorce settlements because of the tax factor.

The judge's disposition was found to have an impact on alimony award decisions. Consequently, attorneys may want to become more conscious of the negotiation strategies they adopt when representing their clients. Not only could this awareness help improve judicial relationships between attorneys and judges, but it could also help ensure that the attorneys' clients are being more effectively represented.

Appendix

Statistical Measurement of Judicial Performance

Central Ohio attorneys scored (on a scale of 1 [very bad] to 7 [very good]) domestic relations judges in Franklin County, Ohio on four performance attributes--temperament, integrity, court management skills, and legal ability. As shown in Table 1, the attorneys' overall assessment of the judges' performance was slightly good (5.44). The attorneys' assessment of the judges' legal ability received the highest overall mean score (5.67). The assessment of the judges' court management skills received the lowest overall mean score (5.30). The judge's legal ability is an inferred attribute, and is an attribute which often determines judicial decision-making outcomes.

Table A1
Attorneys' Assessment of Judges' Performance

Attribute	Score
Legal ability	5.67
Temperament	5.45
Integrity	5.36
Court management skills	5.30
Overall mean score	5.44

A MANOVA test procedure was used to assess the attorneys' mean scoring of the judges' performance attributes. The MANOVA indicated that each attribute was significant at the .001 level or higher (Table A2). Although individual mean performance scores of the attributes were found to be in range with the overall mean performance score of the attributes, the means were scored differently. Fisher's Least Significant Difference test (FLSD), the smallest difference that would be statistically significant, indicated that there was some similarity among the attorneys in scoring Judges S and R. Judges S and R consistently received higher mean scores on every attribute. Judges S and R differed from Judges T and L. And, Judge T differed from Judge L.

Use of an overall performance score would have captured variability among the judges; however, the judges' performance attributes were found not to be homogeneous (Table A2).

Making Consumer Education "Green:" Issues and Approaches

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Environmental considerations are increasingly a factor in consumer decision-making. This paper discusses research that describes the various sectors of "green" consumers and the implications for educational programming. It also outlines 10 principles for effective environmental consumer education.

Suddenly, it seems, every choice we make has environmental consequences. Today's "green" consumers are seeking the perfect "green" products. The introduction of "green" products has grown by more than 100 percent since 1985 (*Supermarket News*, 1990). An "eco-mall" was scheduled to open in Summer 1991; the theme was to be, "Please buy only what you need" (Manning, 1991). One firm is planning a line of footwear made from recycled metals, polypropylene, paper bags, coffee filters, and reclaimed scrap tire and foam rubber (Makower, 1991c).

Polls indicate consumers are also "turning green." Since 1987, public concern about the environment has grown faster than concern about any other national problem (Roper Organization, 1990). A sample of food shoppers considered garbage and solid waste disposal a more serious problem in America than nuclear safety, food safety, and national defense (Marketing Research Services, 1990). In a 1990 survey, nearly 90 percent of consumers said they consider the environmental impact of the products they buy and over one-half have decided not to buy a product because they worried about the environmental impact of the product or package (Hager, 1990).

Consumer educators are no doubt looking for ways to incorporate environmental issues in their programs and curriculum. The purpose of this paper is to: 1) identify different types of "green" consumers and the implications for designing education programs, and 2) delineate principles of effective environmental consumer education.

The Green Consumer

Numerous research studies through the years have examined various dimensions of environmentally conscious behaviors. Previous research has identified the ecologically concerned consumer as young, white, female, better-educated, and higher in income, occupational and socio-economic status (Hartman, 1992; see also Ellen, Wiener & Cobb-Walgren, 1991; Schwepker & Cornwall, 1991; and Granzen & Olsen, 1991 for excellent reviews of literature). Personality variables, including internal locus of control, identity with community, and altruism, have also been significantly related to environmentally responsible behaviors (Schwepker & Cornwall, 1991). More environmentally concerned consumers are also more knowledgeable about possible solutions to environmental problems (Granzen & Olsen, 1991).

However, many consumers are still considering possible responses to the call for environmental consciousness. The Roper Organization recently completed a major psychographic study that identified five different types of "green" consumers. Roper surveyed 1,413 Americans and used a clustering technique to divide consumers into five behavioral segments. The segments were based primarily on whether consumers engaged in a list of "environmentally friendly" practices. Profiles of each of the five types of environmental consumers follow (Miller, 1990; Roper, 1990; Schwartz & Miller, 1991).

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Greenbacks are willing to pay far more than the average for products they consider "green." Thus, they may be especially receptive to educational programs in retail establishments.

Research indicates that a substantial portion of the population has ambivalent or even negative feelings about making changes for the sake of the environment. The Roper Report's Sprouts hold more ambivalent feelings that either True-Blue Greens or the Greenbacks. Sprouts are concerned about the environment but uncertain how much they as individuals can do. Designing environmental education programs to allow participants to define individualized answers to questions may be an effective approach.

To motivate behavior changes in audiences with negative perceptions (the Roper Report's Sprouts, Grousers, and Basic Browns), effective education programs must address attitudes. A key is motivation based on specific and realistic examples of behaviors that individuals can adopt that do make a difference. More than 50 percent of Sprouts and Basic Browns and 88 percent of Grousers believe that companies, not individual consumers, should solve the problems. Perhaps sharing specific examples of demonstration recycling programs, packaging reduction measures, and corporate environmental policies will show consumers that some companies are working to identify solutions.

Over three-fourths of the Roper Report's Grousers believe that other people aren't making sacrifices. Sharing statistics about rising participation in environmentally conscious behaviors may or may not be effective in changing the attitude of a Grouser. The belief that one needn't change because others aren't may be difficult to influence.

Children and teens are very aware of and concerned about the environment. However, children take environmental dangers very seriously (Hartman, 1992). Many of the environmental issues are complex; even adults have difficulties dealing with them intellectually and emotionally. "Problem-solving requires a confidence that solutions can be discovered and a healthy self-esteem about one's ability to find them" (Hicks, 1991, p. A20). Educators should carefully select the programs to be targeted to children; one criteria for selection should

be that the program focuses on specific behaviors that children are able to adopt and that will make a difference.

Principles of Effective Environmental Consumer Education

"Enviroshopping" or environmental shopping education programs have become increasingly popular. Various government agencies, businesses, environmental and consumer organizations, and educational institutions have introduced programs directed to both adults and youth. Most programs target three to five behaviors -- the Rs: reduce, reuse, recycle, react, and refuse. Yet, often the programs suffer from one or more important deficiencies. Some programs are simply biased; their intent is to persuade consumers to abandon one or more packaging types in favor of another. Other programs are based on myths and misperceptions rather than facts. Still other programs consist primarily of lists of things that an environmentally aware consumer should do. Lists do not encourage the critical thinking that is essential to make decisions in an area in which the solutions -- and our perceptions of the problems -- are rapidly changing.

Below are basic principles that may guide educators in incorporating environmental education issues in effective consumer education programs.

1. Involve different interest groups. Involving different groups in program design and development will help to establish credibility for the program, ensure that the program offers a balanced perspective, and improve communication and support for the program (U.S. EPA, 1989).

2. Review materials for bias. Select references and resources with care. Industry as well as environmental and consumer organization materials are often one-sided. Try to find materials with a balanced approach. Consumer Education and Information: Guidelines for Business-Sponsored Materials (Society of Consumer Affairs Professionals in Business, 1990) may be helpful in evaluating materials (see also Zelenak, 1991).

3. Provide a positive message. Making consumers feel guilty about their current behaviors will achieve very little in the way of future behavior changes. To motivate behavior changes, individuals

more thorough-going change, generating both greater concern and consistently applied new behavior.

Thus, it is more realistic to expect small initial commitments (such as refusing a shopping bag when one isn't needed) than more drastic lifestyle changes. Yet consumers may see the small changes as insignificant unless a strong rationale for change is given.

Requiring a commitment to a behavior change as a part of the educational program also encourages participants to "own" the problem. For example, participants might sign "promise cards" which obligate the signers to engage in particular behaviors for a given period of time (Geller, 1991).

9. Design programs for the long-term. Significant behavior changes do not occur in a few days or even in a few weeks. Ultimately, most behavior changes are motivated intrinsically; consumers decide that it is the "right" thing to do. Consumers are more likely to continue intrinsically motivated behaviors because they feel the behavior is worthwhile "for its own sake" (DeYoung, 1984). Long-term educational programming is required to induce intrinsically motivated behavior changes.

10. Keep the goal in perspective. The goal of an effective environmental consumer education program is to promote consumers' awareness of the environmental consequences of their purchase decisions and to motivate long-term behavior changes. However, as author Karen Christensen (1991, p. 6) has noted, "We cannot save the planet by shopping." Joel Makower (1991a, p. 8), coauthor of The Green Consumer, cautions, "As Green Consumers, we have a responsibility not just to shop "green" but to move beyond the trivial, to use our buying power and our political power to help make changes where they really count."

As educators we have a responsibility to design education programs that also "move beyond the trivial." Our education programs should not merely teach people what to buy. An effective education program increases consumers' understanding of the interaction among consumers, government, and businesses in solid waste management issues. It considers the implications of consumers' use and disposal decisions as well as their purchase decisions. It also urges consumers to reexamine their lifestyle choices, which are the core of many other decisions we make (Stum, in press).

Final Thoughts

Some of the basic principles for effective environmental education may appear to conflict. For example, an easy way to limit the amount of new information consumers receive is to simply provide lists of environmentally conscious behaviors. Yet lists do not challenge consumers to make their own choices; lists also suggest the solutions are simple.

Designing programs that follow the guidelines will not be easy. However, the results should be high quality education that meets the needs of consumers.

Appendix

Suggested Topics to Incorporate Environmental Education Issues in Consumer Education

The Consumer in the Marketplace: Evaluation of the environmental implications of our chosen lifestyle; environmental ethics as a motivating value

The Consumer in Our Economy: Interaction of the roles of consumers, businesses, and government in solid waste management problems and solutions; interaction between demand for recycled products and packaging and availability of programs that collect recycled materials

Management: Management of time to collect recyclables

Saving, Investing, and Financial Services: Socially conscious investing

Taxes: Public financing of solid waste disposal alternatives; taxes as a disincentive to litter or to discourage use of specific packaging types

Consumer Services: Environmental implications as a criteria in selecting services such as fast food restaurants, dry cleaning, and auto repair and maintenance services

Scarlett, L. (1991, September). <u>A consumer's guide to environmental myths and realities</u>. (Report No. 99). Dallas: Center for Policy Analysis.

Schwartz, J. & Miller, T. (1991, February). The earth's best friends. <u>American Demographics</u>, 26-35.

Schwepker, C.H., Jr. & Cornwell, T.B. (1991). An examination of ecologically concerned consumers and their intentions to purchase ecologically packaged products. <u>Journal of Public Policy & Marketing</u>, <u>10</u>(2), 77-101.

Society of Consumer Affairs Professionals in Business. (1990). <u>Consumer Education and Information: Guidelines for Business-Sponsored Materials</u>. Washington, D.C.: Consumer Information Center.

Stum, M.S. (in press). Seeking solutions to solid waste management: The role of lifestyles. <u>The Journal of Consumer Education</u>.

<u>Supermarket News</u> (1990, August 6). Green introductions increase 100% a year, p. 22.

U.S. Environmental Protection Agency. (1989, September). <u>Promoting source reduction and recyclability in the marketplace</u>. Washington, D.C.: U.S. EPA.

Zelenak, M. (1991). Identifying and evaluating resources in consumer education. <u>The Journal of Consumer Education</u>, <u>9</u>, 39-47.

Life and Death Health Care Decisions:
Legal Rights, Policy Trends, and Consumer Education Challenges

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Individuals of all ages face the risk of experiencing incapacity and health care conditions requiring treatment decisions. This workshop presented an overview of the issue of life and death health care decision making, current legal rights and policy trends, and the dilemmas and decisions confronting consumers. Questions regarding the effectiveness of policies in ensuring consumer autonomy were raised and educational strategies presented.

The Issue

Life and death health care decision making has emerged in the last 20 years as a complex legal, ethical, and economic issue facing health care consumers, family members, health care providers, and society. Increasing life expectancies and the capacity of medical technology to control the circumstances and timing of death have raised many questions regarding the quantity and quality of life. In addition, health care providers now consider autonomy, or respect for the values and beliefs of the patient, as a guiding ethical principle along with beneficence (balancing good over harm) and justice in the decision making process. Given the reality that there is no obvious consensus as to what is good or bad in health care, individuals are allowed to make autonomous decisions with respect to the course and direction of their own lives.

Legal Rights and Policy Trends

The Supreme Court has consistently upheld a competent individuals right to refuse treatment removing liability of physicians if the provider is following the wishes of the patient. Non-initiation or withdrawal of life-sustaining treatment does not constitute attempted suicide as the decision is considered to be based on a wish to be free of medical intervention rather than a specific intent to die. Death typically follows from the underlying medical condition. If a patient is competent, or able to understand and appreciate the information needed to make a decision, informed consent procedures provide for autonomous decisions.

Issues surrounding autonomy and an individual's right to refuse treatment become more complex when a patient is incompetent or without the capacity to decide or communicate decisions. If an individual's wishes regarding treatment are known either through a written directive or a proxy decision maker, health care providers are legally obligated to act upon the patient's previously expressed wishes. Legal mechanisms referred to as advance directives permit competent individuals to express their preferences regarding medical care. Most state legislative activity has occurred in the past 5 years, 46 states plus the District of Columbia now have some state statute providing specific legal mechanisms to address medical decision making, living wills are the most common form. Many states have amended their advance directive legislation as a result of the Nancy Cruzan Supreme Court case decision in June 1990. States continue to address issues of types of treatment allowed, health care conditions in which directives apply, and what constitutes clear and convincing evidence of a person's wishes. A competent individual may also identify a proxy decision maker, or someone to

195

Consumers Want a Government Program
for Health Care

Linda Lipsen, Consumers Union[1]

Where is the health care debate headed in the United States? Because I believe in truth in advertising, I'll present my conclusion, up front. Consumers are demanding a governmental solution to America's health care crisis and policy makers are beginning to get the message.

It seems fitting to discuss this topic with you in Canada---a country which unambiguously believes that health care is a right not a privilege. Our nation is still grappling with this basic moral question---right or privilege? I have some hope that because our health care system continues to price more and more people out of it, we will be forced to come out on the right side of this question.

I feel right at home with ACCI because we are all part of the same family. Actually, we are relatives. Consumers Union and ACCI were both founded by the tenacious Colston Warne. It gives me great satisfaction to say that we are descended from the man who was once deemed "the most dangerous man in America."

Our organizations continue in the "dangerous" tradition joint vision of educating consumers about the marketplace so that they may make rational choices. So actually---- we are just one big extended family here having lunch and talking about health care. My favorite theme.

If God made the universe in 6 days. Clearly, the Devil took advantage of the day of rest to make America's health care system. First, America's health care "system" leaves 37 million citizens out in the cold, some 60 million without adequate protection, and countless others in a state of

profound insecurity.

That's the bad news or at least part of the bad news. The good news, from the perspective of an advocate for health care reform, is that there is brewing what appears to be a people's movement for comprehensive change. During the past two years, health care issues have moved from the back burner to center stage. Because of the urgency and political saliency of these issues, policy makers regularly make the pilgrimage to Canada to see how our neighbors live. What they find is a country which has been largely successful in providing universal coverage to all its citizens while holding down costs. The Canadians have built their system around the notion that everyone deserves health care regardless of their ability to pay.

The Canadian government accomplishes this objective through the elimination of the administrative waste that exists in the private insurance market, through the use of global budgets, and by financing through the tax code instead of through the payment of premiums, co-pays and deductibles.

We can learn a great deal from the Canadian single payer model. There is no justifiable reason to ignore Canada's rich 25 year history with a government financed system. The United States cannot continue to keep its head in the sand, while the rest of the industrialized world has a comprehensive health care system in place.

Defenders of the status quo attempt to distinguish our countries in order to make the point that this system could not work in the United States.

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employees needed to administer the Canadian system, which serves 25 million people.

Our health care system is the costliest in the world. The U.S. spends 171% more per capita than Great Britain, 124% more than Japan, 88% more than West Germany, and 38% more than Canada. We pay more, much more---but get less. Many get nothing. We lag woefully behind the industrialized world in meaningful health indicators.

During the past 50 years, health care expenses (as per cent of GNP) have grown dramatically. In 1940, national health expenditures were 4.0% of GNP. It is expected that health care will consume 15% of GNP by the year 2000. Costs ride an "up" elevator to ever-higher levels while consumers ride a "down" elevator to lower coverage.

Politicians have been trying to move national health care up the domestic policy ladder for decades, with little success. What is different in 1992 is that the debate has moved far beyond concerns for the poor. This debate is no longer about any collective guilt we may feel about the very poor and disadvantaged. Rather, the renewed vigor for national health insurance reflects pure self interest among the middle class. For most voters this is a pocketbook issue, not an empathy issue.

Individuals without health insurance have many faces. They may be poor, since only 38 per cent of the poor receive Medicaid. But increasingly, lack of insurance coverage is a middle class phenomenon.

What is energizing the beginnings of a grassroots movement for comprehensive reform is the understanding that everybody---rich and poor, employed and unemployed, male and female, young and old---is at risk of being without health insurance. Even those of us who feel our employer-provided policies protect us well could be just one illness, or one accident, or one lay-off away from losing both our health insurance and our life savings.

Spiralling health care costs are leading to high premiums that force the middle income consumer (both employees of firms and the self employed) to

drop coverage. Equally disturbing, the number of employers paying premiums is in free fall.

Working Americans are profoundly insecure about their health benefits. According to a recent New York Times poll, one in 10 Americans has stayed in a job they wanted to leave because of fear of losing health insurance coverage.

Americans' growing concern about ever escalating health care costs is beginning to crystalize into a demand for governmental action. According to a recent Wall Street Journal poll, a clear majority of voters believe the federal government has primary responsibility for reducing the high cost of health care. In 1988, only 10% of Americans thought their health care arrangement worked very well and 89% said the system needed fundamental changes. By contrast, the vast majority of Canadians are happy with their health care system.

According to Celinda Lake a noted public opinion pollster, "Americans believe that the market system has completely failed in the health care arena. They are so frustrated with the private health care industry, they believe even a governmental bureaucracy would prove more efficient and less costly health care." In one western state, Lake notes that two-thirds of voters agree that health care costs are so far out of control that only a government health care system can bring them under control. As Paul Starr wrote in American Prospect, what once was considered a way to spend more money on health care---national health insurance, has now evolved into a system of controlling costs.

In this decade, support for national health insurance has risen from 48% to 63%. (NYT 1980, 1990) As Robert Blendon, a respected health care scholar observed, "the public's enthusiasm for national health care now approximates the level of support for Medicare in the year before its enactment."

Harris Wofford's come from behind victory in Pennsylvania last November demonstrated that health care has become an issue of political salience. His campaign mantra, "If criminals have the right to a lawyer, working Americans should

Rent-to-Own Choices of Low Income Consumers

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This study addresses why consumers choose rent-to-own (RTO) contracts and their satisfaction with RTO. About 40% of low income consumers had used RTO agreements in the past. Three factors--respondents' age, perception of the costs of RTO and credit history--best differentiated users from nonusers of RTO. Users of rent-to-own were typically younger, were more accurate in their perceptions that RTO costs are high, and were more likely to have been turned down for credit.

Rent-to-own (RTO) agreements have increased substantially in number and sales value in recent years. The Association of Progressive Rental Organizations (1990) reported that there were over 7,000 retailers in 1990 that rented or sold goods via rent-to-own contracts valued at over $2.5 billion, a 67% increased since 1986("How to pay $1300...,1986) and a 150% increase since 1982 (Lee, 1983). Commentary and research on rent-to-own transactions has also increased, focusing on such issues as the characteristics of RTO users (Council of Better Business Bureaus, 1990; Henry, 1987; Lawrence, Cantwell, Carter, & Thomasson, 1989; Rath, 1983; Stein & Brown, 1988), the features of RTO contracts and users' experiences with them (Lamb, 1989; Taateraka, 1987) and existing and proposed legislation and regulation (Hoge, 1988; Lamb, 1989; Scott, 1984; Winn, 1989, 1990). The largest volume of research has targeted the costs of rent-to-own transactions, valid ways of measuring their costs, and comparisons of costs of RTO contracts with traditional credit arrangements (Caruso, Desobry, LeBeouf, Thomasson, & Lawrence, 1988; Curran & Leibovici, 1990; Stein & Brown, 1988; Swagler & Wheeler, 1989; Walden, 1989).

Little research has focused on why consumers choose rent-to-own arrangements, despite the well-documented high costs of such choices. One possibility argued by some researchers has been that consumers, particularly those with low education and income who appear to be a targeted market segment, have imperfect information about the costs of RTO (Stein & Brown, 1988; Swagler & Wheeler, 1989). Others have suggested that renting-to-own contracts offer benefits to consumers (such as immediate gratification, lack of hassle about their credit worthiness, and better repair service) that justify or at least contribute to an explanation of its higher costs (APRO, 1990; Henry, 1987; Scott, 1984). Another reason mentioned for consumers choosing RTO has been that they lack access to traditional methods of obtaining needed durable goods (Swagler & Wheeler, 1989). These possible explanations have not been assessed in a comprehensive multivariate analysis. Therefore, the first objective of this study was to investigate the factors related to consumers' choice of rent-to-own arrangements as a method of obtaining goods. This was accomplished both by examining their choices in a hypothetical scenario and by investigating their actual use of rent-to-own contracts in the past.

The second objective of the study was to investigate the factors related to consumers' satisfaction with RTO when they have used rent-to-own to obtain at least one durable good. Swagler and Wheeler (1989) found that many RTO users report substantial dissatisfaction with their

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costs of various RTO contracts or may not be able to compare these costs to the costs of other options (Stein & Brown, 1988; Swagler & Wheeler, 1989).

A second reason that RTO costs may be perceived as lower is that consumers may not end up buying the good and, thus, may not actually pay the calculated total costs. Sporadic or short term rental of goods may result in a cash outlay much lower than the total costs calculated in all of the past comparisons of RTO and credit costs.

A third reason for the perception that costs of renting-to-own may be lower is the high rate of time discount of the individuals who use it (Swagler & Wheeler, 1989). If these consumers are intent on having the product now, they may heavily discount the costs of renting-to-own.

Three empirical variables were used to capture the effects of consumers' perceptions of the costs of renting-to-own. First, consumers' level of formal education was used as a general measure of their ability to assess its costs. Second, consumers' perception of the costs of renting-to-own versus using credit was measured. Finally, an index of their ability to accurately calculate the costs of renting-to-own was taken from three objective items asking respondents to calculate the costs of three example RTO transactions. The hypothesis was that the lower the education of the consumer, the lower they believe the costs of RTO to be, and the less accurate their knowledge of the example RTO costs, the more likely it is that consumers will choose RTO.

The third part of the proposition is that consumers may use RTO because they perceive it to be their only option. Lack of access to credit has been strongly suspected and confirmed by Swagler and Wheeler (1989) to be a motivating force behind renting-to own. Three variables will measure this effect. Consumers' age was measured on the assumption that young adults will have had less time to establish a viable credit rating and less experience with credit- granting institutions. Consumers' income may also reflect this effect; lower income consumers will, ceteris paribus, be less likely to have access to traditional forms of credit through banks, credit unions, and finance companies. Finally, asking whether the respondent has ever been denied credit was used as the most

direct measure of this effect.

The second proposition to be tested addressed the factors affecting satisfaction of RTO users with their experiences. The same factors discussed previously as antecedents of consumer choice of renting-to-own were examined in relation to satisfaction. Specifically, consumers' satisfaction with their rent-to-own experience was posited to be a function of their perception of the benefits and costs of RTO and whether they perceive it to be their only option for obtaining goods. It was hypothesized that consumers would report more satisfaction with their experience when the net benefits of RTO were perceived to be higher and that they had options other than renting-to-own. Consumers' experiences during the term of their RTO contract (whether they experienced any problems, whether they ever missed a payment and whether they ever needed service or repair on the product) were examined in relation to their satisfaction. It was hypothesized that consumers who did not experience a problem, never missed a payment, and never needed a repair would be more satisfied than consumers who experienced these problems during their RTO contracts.

Methods

Subjects and Procedures

The sample for this study was selected from the residents of five randomly selected complexes of the public housing authority in a mid-sized Southern city. Residents are assigned to their housing units by the local housing authority as units become available, a naturally occurring random procedure that produces housing complexes of similar resident profiles. Data from the housing authority verified that the complexes involved in the study were similar in the number of housing units and the ages of the heads of household to the public housing complexes in the entire city. Data were collected from subjects at regular monthly resident meetings. One of the researchers was present at each meeting to explain the research project, administer the human subjects consent process, implement the data collection, and answer any subject's questions. A total of 105 subjects completed pencil-and-paper questionnaires at the residents' meetings during March, 1991. Although these subjects were not a random sample of the residents of all public housing in the city, the

to-own plans give people a way of buying items that are new and up-to-date;" (b) Rent-to-own plans are easy for people who do not have credit or have bad credit records;" (c) Furniture stores offer better repair service than rent-to-own stores;" (d) Rent-to-own plans make it easy for people who can only make low weekly or monthly payments to buy things they need;" and (e) Rent-to-own plans give people a way to get things they need right away." The response set ranged from strongly agree (coded 5) to strongly disagree (coded 1); scores on the negatively worded item were reversed and then averaged. Scores for the items were summed. Higher scores indicated that consumers perceived the benefits of renting-to-own to be greater.

Costs of renting-to-own. Three variables measured respondents' perceptions of the costs of RTO arrangements. As a general measure of ability to utilize periodic payment information to calculate costs, respondents' education was measured in a single item asking about the number of years of school completed.

In a second question respondents were asked to compare the costs of renting-to-own versus credit. Four responses were available: The cost of renting-to-own is (a) less than buying on credit (coded 1), (b) about the same as buying on credit (coded 2), (c) a little more than buying on credit (coded 3), and (d) much more than buying on credit (coded 4).

A third variable measured the respondents' knowledge of the costs of RTO in three example transactions. Each transaction was about a specific product (a microwave, VCR, or a refrigerator). Information was given about the weekly and monthly payment, the term of the RTO contract, and/or the cash price[3]. Respondents were asked to indicate, in multiple-choice format, what the total cost of the RTO transaction would be if the products were purchased or how much higher the RTO total cost would be compared to the cash price. The knowledge score was derived by adding the number of items the respondent answered correctly.

Perceptions of RTO as only way of obtaining goods. Three independent variables measured respondent's ability to obtain goods with options

other than renting-to-own. Subject's age was measured with an open-ended question. Whether the respondent had ever been turned down for conventional credit was measured with a single item with a yes, no, don't know response set. Income was measured indirectly by asking them how much rent they paid the housing authority. Since rent is based on a formula including the respondents' income, age, and number of family members, the household income could be computed from these variables[4].

Data Analysis

The questions involving respondents' choices of RTO in the hypothetical scenario and their actual use of RTO in the past were assessed using multiple discriminant analysis. Because the number of discriminating variables was large, given the number of subjects, preliminary bivariate analyses (ANOVA's and correlation coefficients) were used to narrow down the variables. Any variable that was significantly related to either consumer's hypothetical choice or actual use of RTO was retained for use in the multiple discriminant analysis. Backward elimination multiple regression was used to identify factors associated with RTO users' satisfaction.

Results

Consumers in the sample were predominantly Black or African-American women who had not completed high school. Most were relatively young (under 40), not employed and not currently married (either having never married or being divorced or widowed). Their incomes ranged from under $1000 per year to over $17,000 and averaged slightly more than $5000. The modal income was $2500-4999 indicating that the typical household has money income substantially less than the poverty level.

Discriminators of Hypothetical Choice of RTO

The seven discriminator variables that were statistically significant in bivariate analyses were entered into a multiple discriminant analysis (Table 1). The overall analysis could significantly discriminate between the two groups ($\Lambda = .795$, p < .05). The most statistically significant discriminating variables were (a) consumers' perception of the cost of renting-to-own and (b) their perception of the benefit of rent-to-own in

Table 1

Discriminant analysis of hypothetical choice of RTO in obtaining television

Variable	Chose RTO	Did not choose RTO	F-value
	Mean (s.d.)		
BENEFITS OF RTO			
Benefit of buying new items	3.64	2.73	5.64 *
	(1.03)	(1.20)	
Benefit of low periodic payment	3.82	3.03	3.85 [a]
	(.87)	(1.29)	
COSTS OF RTO			
Education	10.7	10.4	0.21
	(1.4)	(2.5)	
Perception of cost of RTO	.36	.41	4.58 *
vs. credit	(.51)	(.47)	
PERCEPTIONS OF LIMITED CHOICES			
Age	28.9	38.5	3.41 [a]
	(6.8)	(16.9)	
Income	$4258	$5173	0.76
	(783)	(3450)	
Turned down for credit	.46	.44	0.01
	(.50)	(.52)	

Wilk's lambda = .795   F-value = 2.06   p = .045

Actual group	Classification into:	
Chose RTO	10	1 11
	90.9%	9.1%
Did not choose RTO	18	53 71

Hit ratio = 63/82 = 76.8%

*p < .05   [a]p < .10

Of those subjects reporting that their merchandise needed service or repair, over half of the consumers reported that they received a loaner while their product was being repaired, another 40% reported that the product was fixed in their home, and only about 8% of the consumers reported that no repair or service was obtained from the RTO dealer. Repair service is considered by the RTO industry as a key benefit and selling feature of renting-to-own; this claim appears to be supported by the data reported here.

When asked how satisfied they were with their RTO experiences, over half of the RTO users, fell into the middle category, reporting that "it was OK." About one-fifth, fell at either extreme of the scale, reporting, "it was everything I wanted it to be" or "I was not happy at all."

Respondents varied considerably in their responses to whether they would be likely to use RTO again. Over 40% indicated that they would, another one-fourth indicated that they might, and about one-third indicated that they would not ever use RTO again. Likelihood of future use was positively correlated to satisfaction (r = .48). When respondents reported that they were satisfied with their past rent-to-own experiences, they were more likely to consider using it again.

Factors Related to RTO Users' Satisfaction with their Experience

Fourteen variables representing the consumers' perceived need for using RTO and the benefits and costs of RTO were possible determinants of RTO users' satisfaction. Because of the relatively small number of subjects compared to the number of independent variables that were hypothesized to affect the level of satisfaction of RTO users, backward elimination regression was used. Variables were retained in the equation as long as their associated p-values were less than .10. The results presented in Table 4 show that six variables met this criteria.

Three of these variables were significant at conventional significance levels. Consumers who were more knowledgeable of the costs of renting-to-own vs. conventional credit arrangements

Table 4
Regression of RTO users' satisfaction with their experience

Variable	b-value (Std. error)	Beta	t-value
Income (100's)	.150 (.086)	.25	1.76 [a]
Knowledge of RTO costs	-.495 (.178)	-.33	-2.78 *
Benefit of buying new and up-to-date items	.390 (.161)	.36	2.43 *
Benefit of access to goods despite no or poor credit record	.293 (.159)	.22	1.84 [a]
Benefit of better repair service	.285 (.157)	.25	1.81 [a]
Experienced problem w/ RTO	-1.369 (.403)	-.46	-3.40 **
Intercept	0.59		
R^2			.66
Adjusted R^2			.58
F-value		7.68	***

* $p < .05$ ** $p < .01$ *** $p < .001$ [a] $p < .10$

were less satisfied than less knowledgeable users. RTO users who believed the benefits of RTO were greater in terms of allowing access to new and up-to-date items were more satisfied than other users. Consumers who experienced a problem during their rent-to-own contract period were less satisfied than those who had no problem.

The other variables which entered the regression equation were income and the perceived benefits of access to goods and better repair service. RTO users with higher incomes, who believed that RTO gaves them access to goods despite a poor credit rating, and those who percieived repair service as a benefit, were more satisfied with their RTO experience than other RTO consumers. Overall, these six variables accounted for almost two-thirds of the variance in RTO users' satisfaction with their experiences.

Discussion and Implications

Over 40% of a sample of residents of public housing in a middle-sized Southern city had used rent-to-own contracts. This supports the assertion that low income consumers are a market segment targeted by the RTO industry. This proportion, however, was higher than the percentage of consumers who chose the rent-to-own option in a hypothetical scenario with four choices for obtaining the same good. This suggests that consumers may be using RTO contracts because their realistic chances of using other options such as installment credit, layaway or cash purchases are limited.

In the question simulating the choice of a television set, consumers who selected RTO as a means of obtaining the television perceived the benefits of RTO to be higher than those who did not select the RTO options, both in terms of allowing them access to new and up-to-date items and in terms of RTO's short-term "affordability" (via the low periodic payment). Those who had used RTO did not perceive the benefits any differently than nonusers. Among those who have used rent-to-own, consumers who were more satisfied with their experience perceived the benefits of RTO as positive in terms of access to new and up-to-date goods. Consumer advocates must recognize that in the view of some low-income consumers, there are benefits that accompany the use of RTO that may make their choices rational and justify the existence of the market for rent-to-own contracts.

It is likely that many consumers do not know how much they are paying for RTO benefits. Hypothetical choosers of RTO had misconceptions about its cost; they were less likely to say that RTO costs much more than traditional credit than those subjects who did not choose RTO. Once consumers had used RTO, they were more likely to say it costs much more than traditional credit. It appears that consumer's misconceptions are corrected with use of the arrangement. The more accurate consumers' perception of the cost of RTO, the more dissatisfied they were and the less likely

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if neither the buyer nor the seller can observe product quality costlessly.[2]

In the United States, litigation has been the traditional means of resolving disputes in issues of product quality and liability. However, litigation is increasingly expensive and time-consuming for both the firm and the consumer. CAP's have emerged as an alternative means of resolving disputes between buyer and seller at a lower cost than litigation. They are invoked when negotiations between seller and buyer break down, and when mediation, if attempted, fails. They usually take the form of a panel of arbitrators composed of both consumer and firm representatives whose decisions are typically binding only upon the firm.

Although CAP's are less costly than litigation, they have been subject to criticism by consumer advocates on several grounds. First, since CAP's are generally established and operated by the firms whose products are under scrutiny, it is possible that the arbitrators will not be independent. Furthermore, since CAP's are an extra-legal mechanism, firms have the opportunity to conceal possible design defects which may otherwise which may otherwise have resulted in a costly and damaging class-action suit, a recall, or both. It is this latter point which motivates our model, in which we examine a manufacturer's decision to establish an arbitration board to deal with disputes over product quality which would otherwise be resolved through litigation. Section III presents the basic structure of the model. The actual mathematics of the model of firm choice of mean quality under the two scenarios is relegated to the Appendix. In Section IV, we examine the theoretical effect of the mandating of arbitration as a means of dispute resolution on mean product quality. Section V uses simulation results to assess the relative profitability of the litigation and arbitration scenarios. Section VI concludes the paper by assessing the usefulness of the simulations and suggesting future extensions of the work.

Modeling Consumer Arbitration: Assumptions and Definitions

We assume that a single firm produces and sells n units of a product through local dealerships. The manufactured products are of two possible types -- high quality and low quality. For a given level of

unit cost, there is an associated probability t that each of the n units produced will be high quality and a probability (1-t) that each unit will be of low quality. It is assumed that unit cost of producing higher quality goods, $c(t)$, is increasing in t at an increasing rate, so that $c'(t) > 0$ and $c''(t) > 0$. The products are shipped costlessly from the manufacturers to the dealers, who then sell them to consumers. The price received by the manufacturers is p, which is assumed exogenous to the model. It is reasonable to assume that both p and n are exogenous in the context of a one-period model where production and pricing decisions are made *ex ante*.

Quality is not *ex ante* observable to either the buyer or the seller, but there is a partial warranty in effect such that the manufacturer agrees to replace the item if both the buyer and the seller agree that the unit is in fact low quality. The probabilities that the buyer and the seller correctly assess the true product quality are denoted by p_c and p_s, respectively. It is assumed that these probabilities are independent, and that they are at least 0.5 in magnitude.[3]

After the consumer purchases the product, she assesses its quality. If she judges the unit to be of high quality, she retains it. If she believes it to be low quality, however, she returns it to the seller under the terms of the warranty. The seller will decide to repair or not repair the unit based on her own independent assessment of the quality of the product. If the seller also believes that the product is low quality, she repairs the unit at a cost (to the manufacturer) of $g per unit. If the product is in fact high quality, but both the buyer and the seller believe it to be low quality, we will assume that the cost of repairing the unit and certifying it to be high quality is also assumed to be $g.[4] It is less expensive to repair the product than to replace it, so g < p.

Litigation and arbitration enter the picture when the buyer and the seller disagree about the product's quality. If the buyer believes the product to be low quality while the seller insists that it is high quality, the buyer proceeds to litigation in an effort to obtain a high quality product.[5]

The per case cost of litigation to the firm is $F_1 > g$ per unit, and it is assumed that each party bears her own legal costs regardless of the outcome of

marginal benefit of doing so no longer exceeds the marginal cost. We will call the optimal value of t under the arbitration scenario t**.

The question we will pose is whether the introduction of arbitration increases or decreases the optimal choice of mean product quality under the litigation only scenario, t*. In other words, if each firm were required to establish an arbitration system in order to help resolve consumer disputes, what would be the effect on its choice of t? Consider Figure 2 below.
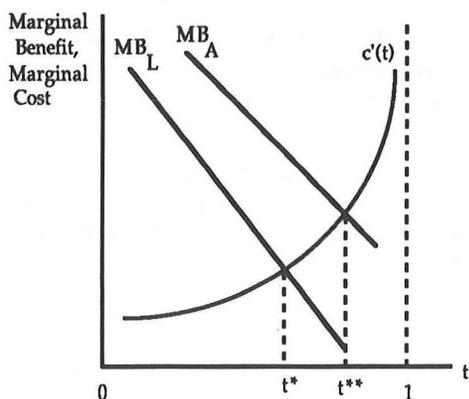
Figure 2

If it can be shown that $MB_A > MB_L$ for all values of t then it follows that the introduction of arbitration will improve mean product quality; that is, t**>t*. On the other hand, if $MB_A < MB_L$ for all values of t, then the opposite conclusion will hold: the introduction of arbitration will reduce the firm's optimal choice of t, and t** will be less than t*.

From the theoretical model, the direction of the inequality will depend on the various values of its parameters. The parameters are: p_c, p_s and p_a, the probabilities that the agents correctly assess product quality; F_1 and F_2, the costs of litigation and arbitration to the firm; g, the cost of repairs; and m and n, the number of consumer court wins necessary to trigger a recall and the total number of buyers respectively.

With this many parameters, it is a daunting task to identify the mathematical properties of the model. However, by simulating the model with

plausible values of the parameters, a baseline case can be evaluated to determine the effect of the introduction of arbitration on product quality. Beyond that, the sensitivity of the baseline case can be assessed through discrete changes of the parameters.

The Simulations

The values of the parameters that constitute the baseline case simulations are as follows: p_c and p_s are each .5 (see footnote 3). P_a is a convex combination of p_c and p_s such that it falls midway between p_c and p_s. F_1, the per case cost of litigation, is $5,000, while F_2, the per case cost of arbitration, is $80.[12] Repair costs, g, are $400. The total sales of the product, n, are 100 units while m, the total number of wins in court necessary to trigger a recall, is 10.[13] For the baseline case and all subsequent cases, simulations were carried out using Mathematica[14]6.

The baseline marginal benefits of litigation and arbitration as quality increases from 0 to 1 (perfect quality) are shown in Figure 3. In Figure 3, the downward-sloping portion of MB_L is above and to the right of that of MB_A. Given that the optimal product quality is determined where c'(t) intersects the downward sloping portion of the appropriate marginal benefits curve, the implication is that under the baseline scenario, t*>t**.[15] In other words, the optimum quality chosen by the firm is higher under litigation only than under arbitration for the baseline case.[16]
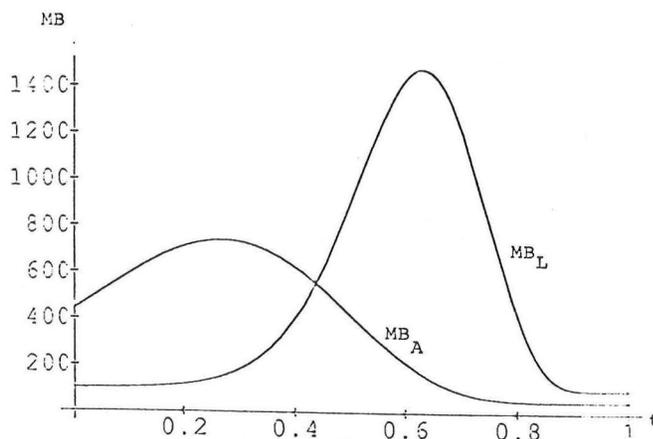
Figure 3

215

An increase in the value of g, the cost of repair, shifts both marginal benefit curves upward, as shown in Figure 5d.[17] Thus, the optimal choice of t increases in both scenarios, although t* will still exceed t** with the new value of g.

The last row of Figure 5 presents two alternative scenarios for the value of m, the number of wins in court required to trigger a recall. It should be pointed out that m can be interpreted as a policy variable reflecting the responsiveness of the regulatory authorities to product quality issues. Note that as m decreases (Figures 5e and 5f), both marginal benefit curves shift to the right, implying an increase in the optimal choice of t in both cases. In other words, more stringent pro-consumer policy does indeed cause firms to increase the mean quality of their products. However, note that the marginal benefit under litigation still exceeds the marginal benefit under arbitration, implying that arbitration reduces the mean level of quality relative to the litigation only scenario. This is, as noted, true of all the cases examined in Figure 5.

Conclusion

The objective of this paper was to construct a theoretical model of the firm's choice of mean quality under various dispute resolution scenarios, and to perform some simulations using plausible parameter values in order to investigate the implications of introducing arbitration on product quality. The reason this technique was employed was to demonstrate the value of using simulation techniques in consumer economics research when theoretical models alone fail to generate predictions.

The previous section outlined the results of the simulation in the form of a series of diagrams showing the marginal benefits of increasing mean quality under arbitration and under litigation only. When the optimal choice of quality was not 0, we found that the firm always chose a higher mean quality level under the litigation only scenario. It was also suggested that when the consumer is not as well-informed as the seller, the firm chose to produce only low-quality products. In addition, we showed that a more stringent recall policy increased the firm's optimal quality choice under both scenarios, and that an increase in the cost of repairing a defective product also led the firm to choose a higher mean quality under both scenarios.

Clearly, these results depend on the specific choices of parameter values and are thus by no means general. Further research would enable a broader range of parameter values to be investigated so that more general conclusions may be drawn. A parallel research project of a more empirical nature would attempt to specify exactly the parameter values for the baseline case by survey research or other methods. Last, the theoretical model may be extended to encompass more realistic assumptions about the way consumers and firms make decisions to take legal action.

APPENDIX

Profit Maximization with Litigation Only

We now proceed to characterize the firm's choice of t, mean product quality. When litigation alone is the means of resolving disputes, the firm's expected profits can be written as follows:

$$E(\pi_L(t)) = pn - c(t)n - gn[(1-t)p_cp_s + t(1-p_c)(1-p_s)] - ...$$
$$.. - Fm[(1-t)\,p_c(1-p_s) + t(1-p_c)p_s] - gn\phi(t) - ...$$
$$... - gn\sum_{i=m}^{n}\binom{n}{i}\phi(t)^i(1-\phi(t))^{n-i} \qquad (1)$$

where $\phi(t) \equiv (1-t)p_cp_s$ is the probability that each of the n consumer sues and wins in litigation against the firm.

The first two terms in (1) amount to total revenues net of production costs. The third term represents the expected costs to the firm of repairs under the terms of the partial warranty which states that the dealer will repair the unit at the manufacturer's expense if the dealer agrees that the product is low quality. The fourth term expresses the expected legal costs incurred if the dealer and the consumer disagree about product quality. Expected court awards is expressed by the fifth term, and the last term represents the expected cost of a recall.[18] To see this, note that the probability of each of the consumers eventually winning a suit against the firm is $\phi(t)$; conversely, the probability of each consumer *not* winning in court is $1 - \phi(t)$. We are thus dealing with a binomial distribution with mean nf(t). The probability that any number m of the n consumers winning is given by

$$\binom{n}{m}\cdot\phi(t)^m\cdot(1-\phi(t))^{n-m};$$

the probability of any number (m+1) consumers

where t** represents the profit maximizing value of t given the introduction of arbitration into the dispute-resolution process. Again, the second-order condition is assumed to hold.[22] We will refer to the righthand side of (4) as MB_A, the marginal benefit of an increase in t under the arbitration scenario.

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Endnotes

1. See, for example, Widdows [1987], [1988], [1989].

2. See Palfrey and Romer [1983].

3. In other words, it is assumed that buyers and sellers do at least as well as they could by deciding product quality by tossing a fair coin.

4. We essentially are saying that the repair process does not damage a high quality product in any way.

5. The assumption that the consumer always litigates deserves some additional explanation. We are implicitly assuming that the consumer believes the courts to be omniscient and also believes that her own subjective assessment of product quality is correct. In assuming that the consumer always litigates, we are implicitly saying that the cost to the consumer of going to court are less than the benefits, which the consumer believes to be p, the cost to the consumer of replacing the product. Violation of any of these assumptions might explain the actual low rate of litigation over product quality disputes.

6. This is the usual method of allocating court costs in the U.S. In the United Kingdom, in contrast, course costs for both parties are paid by the winner of the suit.

7. Again, this assumption is not terribly unrealistic. The repairs themselves constitute the bulk of recall costs to the firm. Costs of notification are small by comparison, and the consumer frequently has the responsibility of transporting the item to the dealer for repair.

8. This is clearly a very reasonable

Complaints, Redress, and Subsequent Purchases
of Medical Services by Dissatisfied Consumers

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Estimation of a block recursive model of complaints, complaint resolution, and subsequent purchase of medical services by dissatisfied consumers indicates that consumer action may not help increase quality of medical services. It may, however, increase competition in the medical industry, albeit at a cost borne specifically by the consumer.

539.9 billion dollars were spent on health services in 1987 and rises in the cost of health care have surpassed rises in the general consumer price index every year since 1966 (Health Insurance Association of American 1990). The general consensus of many is that medical costs are out of hand, and the quality of medical care is not optimal. One way to help contain costs and increase quality of care is to increase medical care consumerism; that is, have clients assume more responsibility in their care (Beisecker 1988). Complaining about dissatisfaction with medical care is one form of consumerism. It can be added to the list of other consumer oriented activities, including doctor shopping (Pauly and Satterthwaite 1981; White-Means 1989), and should produce the same results. First, it can lead to a higher quality of care provided at a given cost if complaints are resolved. Second, if clients are dissatisfied and a problem goes unresolved, clients can switch medical service providers, increase competition in the industry, and drive prices down.

Review of Literature

Despite their apparent importance, relatively few studies have examined dissatisfaction and complaints about medical services (Best and Andreasen 1977; Andreasen 1985; Singh 1989; Singh 1991). Some studies have focused on satisfaction of patients with mental health services (Corrigen 1990; Heath et al. 1984).

In general, research has found that demographic variables have some effect on complaining behavior. Increases in age are associated with increases in patient satisfaction and decreases in complaints (Andreasen 1985; Corrigan 1990; Singh 1991). Beisecker (1988) found that the older a consumer, the more likely they are to "put themselves in the hands of the provider." Women tend to complain more, to know more about the medical industry and to have lower expectations about complaint resolution (Heath et al. 1984; Andreasen 1985; Singh 1991). More highly educated consumers tend to be more satisfied with mental health care (Corrigan 1990). But, there is no conclusive evidence that increases in education or income are associated with actual complaints to care providers or with expectations of complaint resolution (Singh 1991). Consumers who are employed, have children, and have higher incomes are also more dissatisfied with medical services (Andreasen 1985). Interestingly, increases in the prices paid for mental health services are associated with increases in client satisfaction (Heath et al. 1984).

One of the ways in which services are distinguished from products is that they are intangible (Shiffman and Kanuk 1991). Eiglier et al. (1977) go farther and cite the Oxford English Dictionary to define two aspects of intangibility: palpable and mental. Because services can not be touched, consumers may have difficulty in creating appropriate mental images of a service. Indeed, Zeithaml (1981) cites medical diagnoses as the most difficult for consumers to evaluate of all goods and services, given their credence qualities. That is, consumers may not be able to evaluate the service as being "good" or "bad" even after it is rendered.

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behavior has be modelled in this way with fairly robust results for the general categories of personal and professional services. (Kolodinsky 1990a; 1990b). A consumer is dissatisfied, complains, the complaint is resolved or not, and the consumer makes or does not make a subsequent purchase.

This model has been expanded upon to include decisions that occur simultaneously, and has been applied to the general category of personal and professional services (Kolodinsky 1991). It is very likely that when a consumer decides on whether to voice a complaint directly to a seller, a variable that influences the decision is the likelihood that the provider will resolve the complaint. In a world where scarcity of time is prevalent, efficient consumers should take the probability of effectiveness into consideration. On the other hand, the probability that a seller will resolve a complaint is a function of whether or not a consumer is likely to voice a complaint. Bryant (1988) has suggested this scenario. This complicates the basic model in that no longer do we have a simple recursive model, where each event follows one another. The model is now a block recursive one in which some events follow one another and others are simultaneously determined.

Conceptually, this model is not difficult to compose. Complaints can be written as a function of the probability of resolution, economic factors including prices and income, preference shifters, including personality traits, and indicators of learning, and non-pecuniary and time constraints. The probability of complaint resolution can be written as a function of complaints and supply side factors. Subsequent demand of the good or service that originally caused the complaint can be written as a function of complaints, complaint resolution, economic factors, and preference shifters.

Data

Data were collected by a mail survey sent to a simple random sample of 1500 households in a New England State in the Spring of 1989. The questionnaire was developed in three-steps. First, questions were developed by examining survey instruments of other researchers interested in consumer complaining behavior and the quality of services (Day and Landon 1977; Ash and Quelch 1979; Duhaime and Ash 1981; Day and Bodur

1977; Marketing Science Institute 1985; Berry, Zeithaml, and Parasuraman 1985). Next, the questionnaire was tested using a panel of experts skilled in survey research. Finally, students in a university level Consumer Motivation course pretested the instrument.

Table 1. Descriptive Statistics

Variable Definition		Dissatisfied Sample	Entire Sample	Non-Response
PRICE	Price of service	696.33[m] (3206)	122.71[m] (683)	na
INCOME	Annual family $	28166[m] (16377)	31857[m] (20833)	na
YNGKIDS	# of kids under 6	.24[p]	.16[p]	.18[p]
OLDKIDS	# of kids ≥ 6	.33[p]	.32[p]	na
SIZE	Company is large	.18[p]	na	na
URGE	incentive for consumer voice	.29[p]	na	na
AGE	Age of respondent	44[m] (13)	48[m] (15)	50[m] (16)
COLL	completed college	.58[p]	.59[p]	.23[p]
PREPUR	Dissatisfied	.61[p]	na	na
DISAT	very dissatisfied	.39[p]	na	na
FEMALE	female	.49[p]	.45[p]	.48[p]
MARRIED	married	.62[p]	.75[p]	.69[p]
RURAL	rural resident	.48[p]	.38[p]	.38[p]
HOURS	weekly hours worked	29.8[m]	29.1[m]	na
COMPLNTS	# of complaints	1.55[m]	na	na
RESOLVE	complaint resolved?	.21[p]	na	na
BUYAGAIN	purchase again?	.58[p]	na	na
		N=90	N=509	N=100

[m]Mean value is given
[p]Proportion of the sample is given
Standard deviations are given in parentheses

The survey consisted of three sections. The first collected information about satisfaction and complaining behavior associated with services: one of the service categories was medical services, either in an office or hospital setting. The second section included a list of statements about consumerism and feelings toward the business community. The final section collected demographic information. A total of 509 questionnaires were returned completed. Of those completed, 90 observations (17.6 percent) expressed dissatisfaction with a medical service,

normal goods.

Employment of a respondent outside the home (HOURS) and the presence of children under the age of six (YNGKIDS) measure time constraints placed on the respondent. Economically, variables are expected to have a negative influence on complaints since market work and presence of young children compete for available time. They are expected to have a positive effect on subsequent purchase since looking elsewhere for a service involves search time.

Whether the medical provider offered some sort of outward customer service (URGE) to attract consumer comments measures a possible softening of constraints by sellers that may influence consumer complaint behavior. This includes patient care representatives in a hospital, for example. URGE should exert a positive influence on complaints (Kendall and Russ 1975). SIZE and URGE expected to exert a positive influence on complaint resolution, since larger companies are more likely to be able to afford customer service personnel and companies that indicate a willingness to please dissatisfied customers are expected to honor it. The effect of URGE on subsequent purchases should be positive. One of the major reasons for offering customer service programs is to retain customers by keeping them satisfied (Fornell and Wernerfelt 1987).

Learning is measured by age of respondent (AGE), and whether or not a respondent completed college (COLL). Persons with a college degree may be better at problem solving, while older consumers may have learned that complaining about medical services is unlikely to bring about desired results. Age is also included in the complaint resolution equation. If a complaint is made by telephone or in person, a seller may be able to ascertain the age of the respondent. The direction of effect of age on complaint resolution will give an indication if older persons are treated differently by sellers than younger persons. Both age and education are included in the subsequent demand equation. If older persons are "more set in their ways" then age should exert a positive influence on subsequent purchase. The effects of education should be negative, as more highly education consumers are better able to sift through alternative sources of medical care.

Attitudes/personality are measured by two factors extracted from 21 different statements using Principal Components Analysis. These two factors are titled BUSINESS, a measure of consumer attitudes toward business, and CONSUMER, a measure of consumer attitudes and actions toward consumerism. BUSINESS expected to impact negatively on complaints because the factor is framed in terms of consumers' perceptions of the unwillingness of business to respond to consumers. CONSUMER is expected to impact positively on complaints as these actions are consistent with positive attitudes toward consumerism.

Three additional variables are included in the analysis: the level of dissatisfaction (DISAT), whether the respondent was female (FEMALE), and whether the respondent resides in a rural area (RURAL). If a consumer is very dissatisfied (DISAT), one might expect complaints to increase, complaint resolution to increase, and subsequent purchases to decrease. Females tend to voice their dissatisfaction to a greater degree than males (Andreasen 1985; Corrigen 1990). Research has found that rural consumers tend to be more satisfied with their buying experiences, and therefore complain less (Leisfeld 1981). They may also have fewer medical providers to choose from.

Results

Results of structural equation estimates are provided in Table 2. Results of the Probit equation, which estimates the probability of making a public complaint is used to correct for sample selection bias. Individual variables having negative effects on the probability of complaining about medical services include level of dissatisfaction (DISAT), presence of young children (YNGKIDS), and perceiving that businesses did not care about consumers (BUSINESS). Increases in the price (PRICE) of the service and increases in the probability that the provider would resolve the complaint (RESOLVE) had significant, positive effects on the probability of complaining.

The number of complaints a respondent made to a seller were positively and significantly influenced by increases in the number of hours

less likely to be resolved than in grocery or auto repair industries and older consumers tend to believe their dissatisfactions will be taken care of (Singh 1991). These findings are unfortunate since women and older persons utilize the health care system to a greater extent than to younger males (Health Insurance Association of America 1990).

Income does not directly influence the complaint process for medical services. Increases in education actually decreases the number of complaints made. Singh (1991) found that these variables tend to be associated with a more sophisticated consumer who realizes that the medical industry, due to its structure, is unlikely to respond to consumer complaints. This is an unfortunate finding and does not support medical consumerism as a way to increase quality and competition in the industry.

Restraints in the model do not appear to be a driving force in the complaint process. Complaints for medical services do not compete with family time or employment, except that once a consumer decides to complain, the more hours worked, the more complaints are made. Perhaps consumers pressed for time rationalize that once the complaint process is begun and time has been invested, it is better to pursue the problem until it is resolved.

It was expected that if consumers felt that businesses were "out only to make a buck", and "did not care about the consumer," that consumers would be less likely to complain, in part because they felt their complaint would not be resolved. Indeed, if consumers perceive that sellers will be likely to resolve their complaint (RESOLVE), consumers are more likely to complain. These personality/attitude variables, however, do not affect switching behavior, not boding well for medical consumerism as a method for instituting industry change.

The learning model appears to have the most impact on the complaint process. The overriding message to sellers from the results is that medical providers should "get it right the first time" or risk losing clients. When a consumer is very dissatisfied, they appear to be less likely to repurchase from the same service provider EVEN IF THEIR COMPLAINT WAS RESOLVED or the

seller offered some kind of customer service program. If consumers believe their complaint will be resolved, they will complain, but they won't purchase the service again. And, providing customer service encourages consumers to complain and may increase expectations about resolution. Increased expectations may disappoint some consumers, making them less likely to repurchase the service again. Thus, consumers tend to "learn" that when they are dissatisfied, they might be better off trying a new medical provider even if their complaint was resolved. This finding doesn't bode well for what has been called "defensive marketing strategy" (Fornell and Wernerfelt 1987).

Conclusions

What can be gleaned from the above discussion? Unfortunately, most of the news is not encouraging. The consumer oriented practice of complaining as a form of consumerism is not likely to have the effect of increasing the quality of medical care. Even though females tend to complain more, their complaints are resolved less often. Those with higher educations, who might be better able to deal with service providers, actually complain less. Older consumers, who have an average more physician visits than younger consumers (Health Insurance Association of America 1990), are less likely to have complaints resolved. Perhaps older consumers could be educated in "the art of complaining." However, given the current results on complaint resolution, it appears their complaints won't be dealt with satisfactorily.

The glimmer of good news is for increases in competition in the medical industry. Consumers do appear to be more likely to switch medical care providers when dissatisfied, even if their complaints are resolved. Switching, however, places real costs on the consumer. Not only are there increases time costs associated with "doctor shopping," for which little information is available, there are also pecuniary costs in that consumers must pay for medical services a second time if quality is not up to par the first time.

What this indicates is that medical consumerism may not be able to help the plight of the medical industry. In other words, perhaps society and

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