Measurement of the Value of Homemaker's Time: A Comparison of the Alternative Methods of the Opportunity Cost Approach

The purpose of this article was to examine the valuation of household production time of American full-time homemakers, using four variants of the opportunity cost approach. Limitations and advantages of each method were discussed.

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Introduction

Researchers have pointed out the importance of valuing homemaker's time for the purpose of its inclusion in national income accounts as well as a measure of well-being in the analysis of income distribution (Murphy, 1982; Peskin, 1983; Zick and Bryant, 1990). Valuing homemaker's time is also essential for the assessment of damages in wrongful death, injury litigation, and divorce.

The opportunity cost approach is one of the methods of valuing household production. The basic premise of the opportunity cost approach is that the value of household production time is at least the market value of the next best alternative, as determined by the homemaker's productivity-related characteristics.

The opportunity cost of household production time for individuals who work in the market is estimated by multiplying the number of hours spent in household production by the market wage rate (net of taxes). However, for individuals who are not employed in the market, assigning a wage to reflect the value of their household production time is problematic. Four variants of the opportunity cost approach, namely, imputed wage, potential wage, Heckman's two-stage reservation wage, and Kidd's reservation wage were used to valuate the household production time of American full-time homemakers.

Data and Characteristics of the Sample

Data for this study are from the 1990 Consumer Expenditure Interview Survey (U.S. Department of Labor, 1992). The sample used in this study consisted of 823 households in which the wife was employed in the marketplace, and 713 households in which the wife was a full-time homemaker.

Table 1
Descriptive Statistics of the Sample

Variable	Employed (n=823) mean	Non-employed (n=713) mean
Wife's age	38.39	51.08
Husband's income	27,151	17,539
Non-wage family income	2,488	9,376
Number of children under 18	1.08	.90
Wife's education	Percentage	
Less than high school	12	30
High school graduate	36	40
Some college	27	20
College graduate	25	10
Race		
Black	8	5
White	92	95
Region of residence		
Urban Northeast	20	20
Urban Midwest	22	21
Urban South	24	27
Urban West	19	19
Rural	15	13

Table 1 shows the means and standard deviation of the variables used in the analyses.

Results and Discussion

Imputed Wage Approach

Some researchers (Ferber & Birnbaum, 1980; Ferber & Green, 1985), have estimated the wage rate for the employed individuals in the sample and imputed the wage rate for homemakers according to their personal characteristics. The imputed wage is then multiplied by the number of hours spent in household production to give a lower-bound estimate of the value of household production time.

Since the survey did not include direct information about the hourly wage rates, total earnings by wives were divided by the number of hours of market work to derive offered market wage. The average offered wage per hour for the wives who were employed in the market was $11.74.

An ordinary least square regression equation that regressed wife's age, education, race, region of residence, occupation, and industry on offered wage for all wives who were in the labor force was estimated. The regression coefficients from the regression equation were then used to impute the hourly wage of wives who were full-time homemakers. Table 2 shows the wage regression for wives in the labor force. According to this imputation, the estimated wage for a full-time homemaker was $6.48.

Table 2
Wage Regression for American Wives in the Labor Force

Independent variables	Regression Coefficient
Constant	.411
Age	.066***
Age^2	-.007E-01***
Education[a]	
Less than high school	-.144
Some college	.136*
College graduate	.290***
Race[b]	
Black	.037
Region of residence[c]	
Urban Northeast	.377***
Urban Midwest	.117
Urban South	.042
Urban West	.209**
Occupation[d]	
Managerial and administrative	.187**
Service	-.257**
Farming, forestry, fishing	-1.751***
Precision production, craft & repair	-.112
Operators, fabricators, laborers	-.096
Self-employed	-1.388***
Industry[e]	
Agriculture, forestry, fishing	.344
Construction	-.048
Manufacturing	.156
Transportation, communication, and public utilities	.175
Wholesale & retail trade	-.058
Finance, insurance, real estate	.048
Public administration	.200
Adjusted R^2	.17***

[a]omitted category is "high school graduate" *p<.05
[b]omitted category is "white" **p<.01
[c]omitted category is "rural" ***p<.001
[d]omitted category is "technical"
[e]omitted category is "service"

This method of imputing wage to full-time homemakers leads to a censoring bias in the wage estimate due to the use of the endogenous criterion of labor force participation as the basis for selecting the sample (Heckman, 1974, 1979).

Potential Wage Approach

A method introduced by Heckman (1979), led to the development of models that correct for the effects of non-random sampling and the estimation of potential wages and reservation wages. The potential wage is the wage an individual could earn in the market given that individual's human capital endowment. The reservation wage, on the other hand, is the minimum wage that would entice an individual to join the labor force (Kinsey, 1986).

Three steps are involved in using the Heckman two-stage correction procedure to estimate the potential wage. First, probit analysis is used over the entire sample to determine the probability that an individual participates in the labor force. The parameters of the probit model are then used to derive lambda (λ), the inverse Mills ratio. Second, lambda is used as an additional regressor in a wage equation which is estimated using ordinary least squares over the sample of labor force participants. Third, parameters from the wage equation are used to estimate the potential wage rate for full-time homemakers as determined by their personal characteristics.

Table 3 presents the parameter estimates for the probability of labor force participation. Wife's age, husband's income, non-wage family income, wife's education, and being black had a positive and significant effect on the wife's probability of being employed in the market. However, having children under the age of two, as well as the number of children under 18 had a negative significant effect on joining the labor force.

The parameters of the probit estimation were used to calculate lambda, which in turn, was used to adjust for censoring bias in the wage equation. The coefficient of the probit lambda was not significantly different from zero, indicating that there were no differences in unobservable factors between full-time homemakers and wives who were employed in the market. The estimated potential hourly wage for household production by full-time homemakers was $6.47.

Heckman's Two-Stage Reservation Wage Model

Whereas the potential wage indicates the lower-bound estimate of home production time by a full-time homemaker, the reservation wage reflects the wage required by the wife to make her indifferent between the last hour of household production and an hour of market work.

Table 3
Parameter Estimates for the Probability of Labor Force Participation by American Wives

Independent variables	Probit Coefficient
Constant	-1.914***
Age	.165***
Age²	-.002***
Husband's income	.004E-03*
Non-wage family income	.002E-02***
Number of children under 18	-.190***
Existence of children under age 2	-.388***
Education[b]	
Less than high school	-.342***
Some college	.187*
College graduate	.485***
Race[c]	
Black	.425**
Region of residence[d]	
Urban Northeast	.015
Urban Midwest	-.102
Urban South	-.203
Urban West	-.095

-Log-likelihood 778.610 *p<.05
[a]omitted category is "no children under age 2" **p<.01
[b]omitted category is "high school graduate" ***p<.001
[c]omitted category is "white"
[d]omitted category is "rural"

The reservation wage can also be estimated using the Heckman's two-stage model. Three steps are involved. First, self selection bias is corrected by using probit analysis to estimate an equation that determines the probability of labor force participation. The parameters of this equation are used to derive lambda(λ).

Second, a two equation system is used to estimate the reservation wage:

$$\ln W = X\alpha + e_1 \quad (1)$$

$$\ln W^* = Z\beta + H\delta + e_2 \quad (2)$$

where:
$\ln W$ = log of market wage
X = vector of characteristics determining market productivity
$\ln W^*$ = log of reservation wage
Z = vector of characteristics determining household productivity
H = hours of market work
e_1 and e_2 = error terms to capture unmeasurable or unobservable idiosyncratic taste elements

An underlying assumption of the model is that in equilibrium $W^* = W$ for employed individuals, whereas $W^* > W$ for those individuals who are not employed in the market. Therefore, the reservation wage for a nonemployed individual is not required to equal the wage the individual could have earned in the labor market. Rather, it signifies the wage required by the individual to make her/him indifferent between the last hour of household production and an hour of market work (Zick & Bryant, 1990).

This model also assumes that the market wage does not vary with the number of hours supplied in the market. However, the reservation wage is assumed to vary with the number of hours worked, implying that the marginal productivity of time in the household varies with the amount of time spent in household production whereas the marginal productivity in the market is invariant to hours worked (Zick & Bryant, 1990).

Since the reservation wage is unobservable, its estimation can only be derived by equating equations (1) and (2) and estimating a labor supply function:

$$H = \frac{1}{\delta}(X\alpha - Z\beta + e_1 - e_2) \quad (3)$$

After estimating equations (1) and (3), the reservation wage may be retrieved given that at least one variable in the X vector is not included in the Z vector (see Zick & Bryant, 1983 for detailed derivation of the reservation wage).

Several researchers have used this model to estimate the reservation wage (Duncan, 1992; Ferber & Green, 1985; Leppel, 1989; Pappalardo, 1987; Puang & Metzen, 1993; Zick & Bryant, 1983, 1990). Note, the model also assumes that the error terms in the criterion (probit) equation and the market wage equation are jointly normally distributed, with both means equal to zero and with a variance-covariance matrix equal to

$$= \begin{bmatrix} \sigma^2_{e1} & \sigma_{ee_1} \\ \sigma_{e1e} & 1 \end{bmatrix}$$

where e and e_1 are the error terms in the probit and market wage equation respectively (Kidd, 1993).

The empirical results of the wage equation, hours of work equation, and the calculated reservation wage are presented in Table 4.

Since there is no rule provided in the literature for the selection of the identifier to be used in the derivation of the reservation wage, with the exception that it should be significant, wife's age was used as an identifier to derive the reservation wage. The estimated reservation wage was $0.38.

The restrictive nature of the assumed bivariate normality of the error terms has been criticized by some researchers (Lee, 1982; Nelson, 1984; Olsen, 1980). Abdel-Ghany, Sharpe, and Sulaiman (1995), Duncan (1992), Ferber and Green (1985), and Goldberger (1983, p. 79) found that the results arising from application of the Heckman's model are very sensitive due to departures from normality.

Table 4
Parameter Estimates for Wife's Market Wage, Hours Worked, and Calculated Reservation Wage

Independent variables	Dependent variables LN (wage)	Hours	LN (Res. wage) (age used as identifier)
Constant	.410	71.369***	3.322
Age^2	-.007E-01**	.022	-.002
Husband's income		-.332E-05	-.135E-06
Non-wage family income		.215E-03	.877E-05
Number of children under age 18		.130	.005
Existence of children under age 2[a]		4.817*	.196
Education[b]			
Less than high school	-.144	7.482***	.161
Some college	.136*	-.327	.123
College graduate	.290***	-3.092	.164
Race[c]			
Black	.037	-.530	.016
Region of residence[d]			
Urban Northeast	.377***	-2.773*	.264
Urban Midwest	.116	1.767	.189
Urban South	.042	3.443*	.182
Urban West	.209**	2.143	.297
λ	.002E-01	-22.392*	
Average weekly hours		35.96	
Adjusted R^2	.16***		

[a]omitted category is "children under age 2" *p<.05
[b]omitted category is "high school graduate" **p<.01
[c]omitted category is "white" ***p<.001
[d]omitted category is "rural"

Kidd's Reservation Wage Approach

Kidd (1993) suggested replacing Heckman's two-step procedure by a one-step ordinary least square regression which includes the number of dependent children as an alternative proxy variable to Heckman's lambda. The number of dependent children was chosen as valid proxy for lambda because it satisfies two conditions: (1) it is highly correlated with the probability of women labor force participation, and (2) it has no a priori rationale for its inclusion in the wage equation, so that it serves to capture the essence of the omitted variable problem.

In this study, two variables related to dependent children were included in the ordinary least square wage equation; number of children under age 18, and the existence of children under age two. Table 5 presents the regression estimates of the parameters of Kidd's model. The results indicate that the number of children under age 18 variable is significant at the .01 level. This result suggests that the variable reflects the negative sample selection bias in the specification of the wage equation. Using this method, the calculated hourly reservation wage for a full-time homemaker amounted to $5.80.

Conclusions

The four different variants of the opportunity cost approach used in this study yielded different estimates of the value of household production time as might be expected. Is there a basis for evaluating which estimation method is to be preferred?

The imputed wage approach has been refuted in the literature on grounds of selection bias being embedded in selection of the sample. The potential wage approach corrects for censoring bias and yields the lower bound estimate of the estimated wage of household production time. In this study, the estimated imputed wage and potential wage were almost the same, $6.48 and $6.47 respectively, due to the fact the lambda was not significantly different from zero, indicating that there were no differences in unobservable factors between full-time homemakers and wives who were employed in the market.

Heckman's two-stage reservation wage approach has the advantage of correcting selection bias and also reflecting the wage the homemaker would place on her household production time. Whereas, the theoretical base for this method is appropriate for welfare economic analysis, its reliability as a practical measure for estimating the value of household production time has been questioned in the literature. In this study, the estimated wage reservation was $0.38, which is less than the estimated potential wage that is supposed to reflect the lower bound estimate for the wage of household production time.

Kidd's approach is a simpler method of estimating the reservation wage than the Heckman's approach. It also avoids the restrictive condition of the assumed bivariate normality of the error terms in Heckman's model. However, the use of the number of dependent children as a proxy for Heckman's lambda needs to be validated. In this study Heckman's lambda was not significantly different from zero, but the number of dependent children variable was statistically significant, indicating that there were differences in unobservable factors between full-time homemakers and wives who were employed in the market.

In general, the opportunity cost approach has limitations. This approach is used to estimate household production time of the homemaker rather than the value of the household production itself. Thus, the opportunity cost reflects one's own wage only. Household production, on the other hand, requires capital inputs and entrepreneurship in addition to the time spent by the homemaker in producing the commodities.

Table 5
Wage Regression for Wives in the Labor Force Incorporating "Number of Children Under 18" and "Existence of Children Under Age 2" Variables

Independent variables	Regression Coefficient
Constant	.251
Age	.079*
Age^2	-.092E-02***
Education[a]	
Less than high school	-.129
Some college	.136*
College graduate	.273***
Race[b]	
Black	.055
Region of residence[c]	
Urban Northeast	.365***
Urban Midwest	.112
Urban South	.018
Urban West	.201*
Occupation[d]	
Managerial and administrative	.184**
Service	-.269***
Farming, forestry, fishing	-1.718***
Precision production, craft & repair	-.132
Operators, fabricators, laborers	-.104
Self-employed	-1.379***
Industry[e]	
Agriculture, forestry, fishing	.327
Construction	-.092
Manufacturing	.138
Transportation, communication, and public utilities	.139
Wholesale and retail trade	-.064
Finance, insurance, real estate	.014
Public administration	.177
Number of children under age 18	-.065**
Existence of children under age 2[f]	.099
Adjusted R^2	.17***

[a]omitted category is "high school graduate"
[b]omitted category is "white"
[c]omitted category is "rural"
[d]omitted category is "technical"
[e]omitted category is "service"
[f]omitted category is "no children under age 2"

*$p<.05$
**$p<.01$
***$p<.001$

Given these limitations of the opportunity cost approach, in our judgment, the value-added approach measuring household production would be more appropriate for placing a monetary value of home produced commodities. With information about the number of hours spent by the homemaker in different productive activities one can estimate the reservation wage for his/her time. A drawback of this method, however, is that it requires collection of massive amounts of information regarding the produced commodities as well as their corresponding prices in the marketplace. But, given current technological advances in data gathering and the increased availability of information regarding prices of products, collecting data of this sort may become easier in the future. Therefore, we would strongly encourage researchers to consider using this method in the future.

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Endnotes

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The Reservation Wage and the Value of Household Work Time: Estimates for Canada

The value of time spent in household production by Canadian women was estimated using Heckman's reservation wage procedure on data from the 1992 General Social Survey. The estimated wage rates were higher than those generated using the replacement cost and traditional opportunity cost procedures on the same data set.

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The valuation of household production time has been of continuing interest to academics and, to a lesser extent, policy makers. In Canada, estimates of the value of household work -- both in dollars and as a percentage of GDP -- have been made periodically since the 1970's. Recently Statistics Canada hosted an international conference to share expertise on measurement and valuation issues surrounding unpaid work. While conference participants were informed that developing a national system of accounts covering unpaid work is a priority for Statistics Canada, the valuation of time spent in volunteer activities and in the care of elderly relatives were also identified as critical areas during the course of the conference (Statistics Canada, 1994).

One method of valuing the time people spend in household work is the reservation wage procedure. Although this method has become quite common in the literature, to date it has not been used on Canadian data. The purpose of this research is to use the reservation wage procedure to estimate the value of time in household work for Canadian women and to compare the estimates with those obtained using other valuation methods.

Time Valuation in Canada

Valuing time in household production to correct the System of National Accounts has been of continuing interest in Canada. Since the pioneering work of Adler and Hawrylyshyn, replacement cost[2] and opportunity cost approaches have been consistently employed to estimate the value of household production to the welfare of the nation. Using the replacement cost method, household work represented 40% of the GNP in 1961 and 44% in 1971; using the opportunity cost method, 44% in 1961 and 40% in 1971 (Adler & Hawrylyshyn, 1978). Estimates for 1981 ranged between 36 and 41% of GNP (Swinamer, 1985) and for 1986, between 32 and 39% of GDP (Jackson, 1992). Most recently, Chandler (1994) estimated the value of household production to be between $210.8 and $318.8 billion dollars, or 31 to 46% of 1992 GDP, depending on the method of valuation used.[3]

Although the calculation of the gross value of household production as supplemental information to that contained in the System of National Accounts is an important research focus, these aggregate estimates of value do not illuminate decision making at the household level. At times, the replacement and opportunity costs of time for individuals have been calculated, but generation of these estimates has not been a primary focus of Canadian valuation research. Yet it is these estimates which are necessary to develop a clearer understanding of how households choose to allocate the time of their members and which could help to inform debate on a number of social policy questions.

For example, changes to the retirement system in general and to the Canada Pension Plan (CPP) in particular is one issue that is moving to the fore of the national agenda. Currently, those who spend their working years engaged solely in household work are not covered by the CPP and cannot collect benefits at the age of 65 as can their employed counterparts. A better understanding of time allocation choices and the value of work performed in the home could promote policy changes that would better serve all workers regardless of whether they worked in the labour market or in home production.

An additional challenge is to expand the knowledge of time allocation beyond the leisure-household work-market work choice to improve understanding of time allocation to activities such as care of elderly relatives and volunteer activities. As the elderly proportion of the population increases, it will become increasingly important to understand the value of time spent by families in the care of their elderly members (Statistics Canada, 1994). Further, as provincial and federal governments are less able or willing to fund social programs, services cut by governments may fall to the volunteer sector. In order to inform public policy and to assist families in their time allocation decisions, researchers will need to do a better job of modelling these individual-level decisions.

Over the past fifteen years Heckman's (1976) reservation wage method of valuing household work time has become commonplace in published research in human ecology. The reservation wage is an opportunity cost method of valuing time in household production and as such shares an important advantage of opportunity cost over replacement cost approaches: it prices time at the value households used in their decision making. Opportunity cost methods are, then, appropriate when the purpose of estimating value is to examine the time allocation decisions of households.

The reservation wage is the wage at which an individual is indifferent between home and market work. A wage higher than the reservation wage is required to overcome a nonemployed individual's "reservations" about market work and draw him or her into paid employment. For those in the labour market, the reservation wage is theoretically equal to their market wage rate because these individuals have accepted a market wage rate as the value of their time; for those not in the labour market, the reservation wage is the wage at which an individual is indifferent between time in household work and time in market work.

The reservation wage technique makes it possible to estimate the opportunity cost of time for nonlabour force participants from wage and hours data on labour market participants while accounting for the self-selection bias inherent in this estimation. This bias arises in the estimation of the value of household work time because market wages are observed only for employed women (Heckman, 1979). To date, reservation wage estimates have been calculated on data from the United States (Duncan, 1992, 1993; Zick & Bryant, 1983, 1990) and Malaysia (Abdel-Ghany, Sharpe, & Sulaiman, 1995; Puang & Metzen, 1993).

Despite the advantages embodied in the reservation wage procedure, current research indicates that reservation wage models are exceedingly sensitive to the specification of the estimating equations (Abdel-Ghany, Sharpe, & Sulaiman, 1995; Duncan, 1992, 1993). Recent work by Abdel-Ghany, Sharpe, & Sulaiman (1995) has documented extreme differences leading the researchers to conclude that the method is a poor choice for use in developing nations. Stolzenberg and Relles (1990) argue that the Heckman procedure should be used with caution but suggest that it may be appropriate when theoretically justified, the sample is large, and the assumption of normality is reasonable. Given that these criteria hold here, the Heckman procedure is an suitable analytical tool for this research.

Method

Data

Data from the 1992 General Social Survey were used to estimate the value of time spent in household production for Canadian women. The data were collected via telephone interviews conducted between January and December, 1992. Random digit dialling was used to select a stratified sample of 12,765 households. The sample was drawn from the ten provinces; the Yukon and Northwest Territories were not included in the sample. For each household, a household member aged 15 years or older was randomly selected to respond to the survey. Of the sampled households, 9,815 responses were obtained (a response rate of 77%).

For the purpose of this research, the sample was confined to married or cohabiting women, whose husbands were employed. These restrictions facilitate comparisons with other reservation wage estimates and, in the case of the elimination of unemployed husbands, removes the additional statistical complication of needing to correct for the bias presented by unemployed spouses. The sample consisted of 1,353 women, of whom 812 (60%) were employed and 541 (40%) were not. All the analyses reported here have been weighted according to Statistics Canada weighting formulas in order to account for unequal sample selection probabilities.

Empirical Specification

The derivation of the reservation wage model is well-established and is not delineated here. Readers are referred to Kinsey (1986) and Zick and Bryant (1983) for exposition of the model. Briefly, the theoretical model consists of three equations which describe the wage rate (**W**), the reservation wage rate (**W***), and the hours of market work (**H**):

$$\mathbf{W} = \mathbf{X}\alpha + \mathbf{e}_1 \quad (1)$$

$$\mathbf{W}^* = \mathbf{Z}\beta + \mathbf{H}\delta + \mathbf{e}_2 \quad (2)$$

$$\mathbf{H} = \frac{1}{\delta}(\mathbf{X}\alpha - \mathbf{Z}\beta + \mathbf{e}_1 - \mathbf{e}_2). \quad (3)$$

where **X** represents a vector of labour market characteristics and **Z** represents a vector of household productivity characteristics.

The first step in the estimating procedure is to correct for self-selection bias by estimating a probit equation for the probability of labour force participation. This equation is estimated over the entire sample and the sample correction factor (the Inverse Mills ratio) is generated from the estimates. This correction factor is included as a regressor in the equations comprising the second step of the process, permitting estimation of these equations on the labour force participants alone. Here the labour force participation equation is specified as:

$$\text{LFP} = \text{AGE} + \text{AGE2} + \text{HIGHSC} + \text{COLLEGE} + \text{HEALTHLT} + \text{SPMKTWK} + \text{HHINC} + \text{HOMEOWN} + \text{HHSIZE} + \text{YKIDLT5}. \qquad (4)$$

In step two, the real wage (1) and reservation wage (2) equations are specified as

$$\text{LNWRATE} = a_0 + a_1\text{AGE} + a_2\text{AGE2} + a_3\text{HIGHSC} + a_4\text{COLLEGE} + a_5\text{HEALTHLT} + a_6\text{LAMBDA} \qquad (5)$$

and

$$\text{LNWSTAR} = b_0 + b_1\text{AGE} + b_2\text{AGE2} + b_3\text{HIGHSC} + b_4\text{COLLEGE} + b_5\text{SPMKTWK} + b_6\text{HHINC}\ b_7\text{HOMEOWN} + b_8\text{HHSIZE} + b_9\text{YKIDLT5} + b_{10}\text{HRSMKTWK}. \qquad (6)$$

However, the reservation wage is not observed in the data. Since we assume that **W** = **W*** for employed women, equations (5) and (6) can be set equal to each other and solved for hours of market work, which is observed in the data. The real wage equation (5) and the resulting hours equation

$$\text{HRSMKTWK} = c_0 + c_1\text{AGE} + c_2\text{AGE2} + c_3\text{HIGHSC} + c_4\text{COLLEGE} + c_5\text{HEALTHLT}\ c_6\text{SPMKTWK} + c_7\text{HHINC} + c_8\text{HOMEOWN} + c_9\text{HHSIZE} + c_{10}\text{YKIDLT5} + c_{11}\text{LAMBDA} \qquad (7)$$

can be estimated via OLS and the parameters of **W*** retrieved, providing that at least one variable present in **X** is not also present in **Z**.[4]

Definitions and descriptive statistics for all variables are presented in Table 1. The variables comprising the empirical equations were chosen in accord with human capital theory. The analysis was limited both by a lack of variables in the data set that could be used to control for labour market characteristics and by the measurement of the sociodemographic variables that were present. Measurement of the dependent variables was, however, straightforward. Respondents were asked to recall the amount of time spent in market work during the previous week. The wage rate was calculated from information provided by respondents on income and pay periods according to formulas recommended by Statistics Canada.

Table 1
Definitions and Descriptive Statistics of Variables Used in the Model.

Variable	Definition	Mean[a] (std. dev.)
Dependent variables		
LFP	Labour force participation of wife 0 = No, 1 = Yes	0.59 (0.49)
LNWRATE[b]	Natural log of wage rate	2.51 (0.47)
HRSMKTWK[b]	Weekly hours worked in market by wife	35.08 (11.25)
Independent variables		
AGE	Wife's age	37.49 (10.09)
AGE2	Wife's age squared	1507.50 (803.78)
LESSHSCH	Less than Grade 12 education (omitted) 0 = No, 1 = Yes	0.16 (0.37)
HIGHSC	Grade 12 or more (non-academic training or some college) 0 = No, 1 = Yes	0.42 (0.49)
COLLEGE	College degree or more 0 = No, 1 = Yes	0.42 (0.49)
HEALTHLT	Wife has a long term physical or health problem 0 = No, 1 = Yes	0.12 (0.32)
SPMKTWK	Weekly hours worked in market by spouse	44.35 (13.49)
HHINC	Household income	51,474.00 (21,682.00)
HOMEOWN	Dwelling owned by a member of the household 0 = No, 1 = Yes	0.77 (0.42)
HHSIZE	Number of people living in household	3.43 (1.16)
YKIDLT5	Child less than 5 years of age present in household 0 = No, 1 = Yes	0.27 (0.44)
LAMBDA	Sample selection correction factor	

Note. N = 1353.
[a]Means reported for noncontinuous variables represent the proportion of the sample with a value of 1. [b]For employed wives only.

Results

The coefficients resulting from the estimation of the wage and hours equations are presented in Table 2 but will not be formally discussed.

The value of nonemployed women's time in household work as estimated from the reservation wage equation is compared to the values derived by Chandler (1994) using the replacement cost and opportunity cost

Table 2
Parameter Estimates for Wife's Market Wage and Hours of Market Work, and Calculated Coefficients for the Reservation Wage Equation.

	Independent variables		
Dependent variables	LNWRATE (Std err.)	HRSMKTWK (Std err.)	LNWSTAR
AGE	0.030*	1.039	0.020
	(0.013)	(0.616)	
AGE2	-2.6E-4	-0.017	-8.8E-5
	(1.7E-4)	(0.009)	
HIGHSC	0.140*	0.294	0.137
	(0.062)	(1.993)	
COLLEGE	0.381*	2.012	0.361
	(0.065)	(2.732)	
HEALTHLT	-0.013	-1.322	–
	(0.058)	(2.134)	
SPMKTWK	–	0.030	-3.0E-4
		(0.041)	
HHINC	–	2.5E-4*	-2.4E-6
		(8.1E-5)	
HOMEOWN	–	-2.944*	0.029
		(1.287)	
HHSIZE	–	-2.417*	0.024
		(0.966)	
YKIDLT5	–	-7.413*	0.073
		(3.494)	
HRSMKTWK	–	–	0.010
LAMBDA	-0.473*	12.429	–
	(0.072)	(9.627)	
INTERCEPT	1.811*	10.217	1.710
	(0.264)	(14.395)	
Adj R^2	.27	.09	
	$F_{(6,564)} = 35.52$	$F_{(11,559)} = 6.16$	

Note. n = 812.
*p < .05.

methods in Table 3. Of the methods, the reservation wage procedure provides the highest estimate of the value of household work time regardless of whether or not the wife was employed. For nonemployed wives, the value of household work time is $12.48 per hour; for the employed, $13.70.

The replacement cost method provides a lower value of time ($11.05) than the reservation wage procedure, a result in accord with previous research results (Zick & Bryant, 1983). The replacement cost method values household production time at the cost to the household to replace the wife's household time with market substitutes but does not consider the intrinsic value the household places on her time or the costs she would incur in entering the labour market. The result here lends weight to the argument that the replacement cost method understates the value of the wife's household production time to the household.

Because the reservation wage estimates were derived only for married women with employed husbands, whereas Chandler's estimates represent average opportunity costs for all women in the General Social Survey, the opportunity cost estimates are not strictly comparable although they do provide useful benchmarks. The most appropriate comparison is between the gross opportunity cost and the reservation wage values as the information necessary to net out the effect of taxes was not available for use in estimating the reservation wage. Here, the reservation wage method values the household work time of nonemployed wives at $1.24 more per hour than the $11.24 value imputed by the gross opportunity cost method.

Conclusions

The reservation wage estimates derived here provide additional documentary evidence of the value of household work time on a relatively recent set of Canadian data. When the results are considered in concert with Chandler's (1994) estimates on the same data set, the research also confirms earlier findings on the relative magnitude of household work time values imputed by replacement and reservation cost methods. Zick and Bryant (1983) compared reservation wage and replacement cost estimates of the value of household time for New York wives in two-parent two-child families and concluded that the replacement cost method underestimates the value of the wife's time in household production to the household. That result is corroborated here.

There was little evidence of sensitivity to model specification with the data, marking this study as an aberration among recent research. The reservation wage

Table 3
Average Value of Wife's time in Household Work as Estimated by Reservation Wage, Opportunity Cost, and Replacement Cost Methods.[a]

Method	Wage Rate (dollars)
Reservation wage	
Nonemployed women	12.48
Employed women	13.70
Gross opportunity cost	11.24
Net opportunity cost	7.94
Replacement cost	11.05

Note. Replacement and opportunity costs were derived by Chandler (1994) using data from the 1992 General Social Survey, the 1991 census, and The National Finances.

procedure may be a useful technique for valuing household work time in Canada and is worthy of further exploration despite it's potential pitfalls. In addition, Abdel-Ghany, Sharpe, & Sulaiman (1995) have explored a new reservation wage estimating procedure suggested by Leonesio which they found to be an improvement over the Heckman procedure. It would be instructive to use the Leonesio technique on this sample to discover how the Heckman and Leonesio procedures compare on Canadian data.

Finally, although opportunity cost methods are theoretically justified, one recognized drawback to these methods of valuing time is the assumption that the value of time in all activities is equal. Kinsey (1986) has noted that this is not likely to be the case and that allowing the value of time to vary with the activity is needed in modelling time allocation decisions. Continued work in this area is imperative if the analysis of time allocation is to extend beyond the allocation to household work, market work, and leisure.

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Endnotes

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2. The replacement (or market) cost method most commonly used in Canadian valuation research measures the value of household production as the sum of the products of time spent in the activities comprising household production and the average hourly wages of people performing similar work in the labour market.
3. In 1992, the average exchange rate for the Canadian dollar was 1.2083 US.
4. HEALTHLT is the variable present in **X**, but not **Z**, which permits identification. The coefficients for equation (6) are calculated as follows: $b_0 = a_0 - c_0*b_{10}$, $b_6 = -c_7*b_{10}$, $b_1 = a_1 - c_1*b_{10}$, $b_7 = -c_8*b_{10}$, $b_2 = a_2 - c_2*b_{10}$, $b_8 = -c_9*b_{10}$, $b_3 = a_3 - c_3*b_{10}$, $b_9 = -c_{10}*b_{10}$, $b_4 = a_4 - c_4*b_{10}$, $b_{10} = a_5/c_5$, $b_5 = -c_6*b_{10}$

The Value of Unpaid Work in the System of National Income Accounts: A Satellite Account Approach

This paper reports work on establishing a national satellite account measure of household production's monetary value and related measurement issues. The model is one that incorporates a satellite measure of household production using input valuation. This measure is unique because it incorporates not only measures of time value but also consumer expenditures in as much as they are also inputs to separate household "industries" that when taken together comprise the total household production process.

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Introduction

In the brief time I spend with you today, I would challenge you to consider the private and social value of unpaid work and hope to convince you of the need to include the value of unpaid work in the system of national income accounts. National income is a measure of the money value of the goods and services available to a nation from economic activity. Theoretically, it is a measurement of the production boundary of an economy. Practically, it may be interpreted as an indicator of a nation's economic well-being. The United Nations agrees upon international standards by which national income is measured. Because the value of production is typically based on market prices, by its very definition, current measures of national income presume that the significance of a thing lay not in its nature, but in its price. When used as a yard stick for measuring well-being, it implies that every item of commerce adds to our nation's welfare merely because it was produced and purchased.

Unpaid Work and National Income Accounts

When I refer to unpaid or nonmarket work I include: unpaid activities by men and women for themselves, for other household members, or for the community and which (activities) may be replaced by market goods or services. The stipulation of including only activities that could be accomplished by hiring a person from the market and outside the household fulfills what has come to be known as the "third person" criterion of unpaid work (Hawrylyshyn, 1976). The domains of unpaid economic activities. It includes unpaid work activities for both the family and community. Tradable activities are those activities that meet the third person criteria of unpaid economic activity. Recipient only activities, are non-tradable consumption activities that cannot be received for another. Examples include exercise, eating, and leisure activities. Prior to 1993, no unpaid activities were recognized by the United Nations' System of National Accounts (SNA's). In 1993 the SNA was revised to include non-market goods production for family use.

So, what are the implications if tradable household maintenance activities are excluded from the SNA? What makes the difference whether our national accounts measure the value of unpaid work activities such as, raising children? From a theoretical perspective, economists should be concerned about the omission of unpaid work from measures of SNA if we believe that SNAs reflect the sum of all productive activity in a nation. If we wish to concern ourselves with such a measure of productivity, then inclusion of an activity should not be contingent upon its payment.

From an international comparative perspective, when internationally agreed upon measures of SNA exclude the value of unpaid work, lesser developed countries whose economies rely heavily on informal markets for trade, appear to be much less prosperous than their developed country counterparts. The 1993 SNA revision to include non-market production of certain goods (especially subsistence agrarian activities) was intended, in part, to remedy this problem.

By excluding unpaid work in the SNA we risk erroneously attributing substitutions from unpaid to paid activities as growth in the economy's production frontier. Consider this potential bias in the context of the increase in women's labor force participation rates in the United States. The percentage change in women's labor force participation rates when compared to the percentage change in either, total personal consumption, non-durable good spending, and services in the US over the last 25 years reveals strikingly similar trends. Is it possible that American's recent economic growth and prosperity, as measured by GDP, is partly attribute to women's increased labor force participation?

Well, it's possible inasmuch as when parents remain out of the paid labor force and are the primary unpaid care providers for their children, we attribute no value to their contributions in economic accounts. But if they enter the labor force and hire child care, the value of that service (as measured by the price paid) is immediately counted in GDP. The danger of ignoring unpaid work in national accounts is that we may err and attribute such production substitution effects to real economic growth. Current measures of GDP have the potential of being dangerously false indicators of economic growth and well-being. If the quality of market purchased child care services are equivalent to the home produced services, the GDP "growth" that results from our substituting away from parental provided care represents simply a one-to-one trade off, and at worst, no real growth. However, the scientific evidence on these issues is mixed and social scientists are a long way from reaching consensus about whether market purchased goods (like meals) and services (like day care) are on a par with the home produced goods and services they replace. If indeed market purchased goods are inferior to the home produced ones they replace, then not only is our domestic product not increasing, we are really experiencing a net decline in production.

Another example of why it is important that we assign an economic value to unpaid work relates to changes in civic and volunteer activities. When men and women spend more time in paid work, they also have less time available for charitable and philanthropic work. For example, recent estimates (Brown & Lankford) indicate that when women become full time labor force participants, their civic volunteer work decreases by about 39% and numerous other studies have found that their unpaid work in the home decreases by about a third. As fewer people are willing and able to give of their time to charities in aid of the poor, like the example of unpaid child care, that work must be turned over to others. In the case of social assistance, if services are to be maintained, it is the tax payer who is left to provide the direct cost of these services. As social assistance payments become an ever greater percentage of the tax dollar, we realize how much in years gone by the **value** of charitable work was underestimated.

Previous Proposals to Include Unpaid Work in SNA's

Robert Eisner, is one of several contemporary authors who has written on the subject of including unpaid work in national income accounts. In his book The Total Incomes System of Accounts (1989) he reviewed the Extended Income Accounts literature and various proposals to measure not only unpaid household production, but also unpaid government services. These Extended Income Accounts (EIA), just as their names imply, propose leaving intact the central accounting procedures of income accounts, and simply "extending" the accountancies to include additional measures. In addition to his own work Eisner reviewed the EIA proposals of Jorgenson & Framaeni (1987), Ruggles and Ruggles (1982), Zolatas (1981), Nordhaus & Tobin (1972). A difference among the authors is which of the unpaid activities to include in their model. Some propose including only activities that meet the third person criterion, while others would also include recipient only activities.

A central framework of a System of National Accounts like Extended Income Accounts is advantageous in that it represents an integrated accounting structure that is exhaustive and consistent. However, it is limited by its inflexibility and inability to accommodate alternative measures simultaneously. In contrast to the EIA genre of accountantcies, are proposals to establish satellite measures of unpaid work.

Satellite accounts stress the need to expand the analytical capacity of national accounting for selected areas of social concern in a flexible manner without disrupting the central system of accounting. According to the United Nations Secretariat (Provisional draft 21 July 1992), "Revised System of National Accounts" typically satellite accounts are adopted to allow for:

- the provisions of additional information on particular social concerns of a function or cross-sector nature,
- the use of complementary or alternative concepts, including the use of alternative classification schemes when needed to introduce additional dimensions to the conceptual framework of national account,
- extended coverage of costs and benefits of human activity

further analysis of data by means of relevant indicators and aggregates linkage of physical data sources and analysis to the monetary accounting system.

The UN, further recommended the use of satellite accounts to establish international standards to measure the boundary of production that would include household work and voluntary work, arguing that these additional dimensions represent valuable enrichments of the analytical power of the national accounting approach.

Suggested satellite methods to impute values to non-market household production generally can be categorized in one of two ways:

i) an output approach consisting of assigning a money value to total household production output. By this methodology the value of unpaid labor to the production process is determined by subtracting intermediate consumption goods cost from the value of total household production, or

ii) an input approach consisting of calculating the cost of intermediate consumption goods and adding to that the imputed money value of unpaid labor inputs. Fixed capital investments may also be added to such an estimate.

To the extent that many researchers are interested in ensuring that satellite accountancies, like national income accounts, capture a measure of value added. It is generally agreed that ideally, we would prefer measures of household production output, rather than ascribing an arguably, arbitrary value to time use to measure the contribution of labor. Chadeau (1992) has used the output methodology, that requires a market value be assigned to all goods and services produced in the home. Since one must have complete data on quantities and quality of goods and services produced, few others have adopted this valuation technique. Such data collection is complex, expensive and fraught with limitations. However, when output measures are available, the value of time is calculated as the difference between that value and direct related intermediate expenditures.

Proposed Methodology

The model that I want to report to you today is a satellite measure of household production using input valuation. In this measure I use an input/output (I/O) model first proposed by Ironmonger (1989), that is unique because it incorporates not only measures of time value but also consumer expenditures as inputs to household "industries" that when taken together comprise the complete household production process. Ironmomger's model is intriguing not only because of its conceptual consistency with paid industry's measurement of labor and capital's value added, but also because of its consistency with Gary Becker's conceptual model of household production and the way households combine time and market purchased goods to generate home produced goods and services. There are several steps involved with building such a model. They include

1) identification of household industries,
2) measurement of household time use in each household industry,
3) valuation of unpaid work, and
4) measurement of household expenditures for goods and services used in each household industry production process.

The first step involves identification of unpaid work industries. What is an unpaid industry? Like paid work, we can classify unpaid work by the type of goods or services produced. In this analysis the industry classifications of Ironmomger will be used. They include the unpaid industries of:

1) home meal preparation,
2) laundry and cleaning,
3) repairs and maintenance,
4) other household work,
5) education and community work,
6) child care,
7) shopping, and
8) gardening.

Robinson's 1985 survey, American's Use of Time (AUT) was used to measure time use. This was the last year a complete U.S. national time budget survey was conducted. The 10 year old data reflect how woefully behind the rest of the world we are in this area of research. In 1992 time use data were collected in: Australia, Austria, Canada, Germany, and Israel. And in the past 5 years surveys were conducted by the statistical offices of Bulgaria, Finland France, Hungary, Italy, Norway, Sweden.

The AUT data have not been used in previous EIA studies (ICPSR 1975 data are most commonly used with some using the 1981 panel follow-up). They were first released in 1993 to the Inter-university Consortium for Political and Social Research (ICPSR) for public use. The AUT data include full day accounts of time broken down into 90 categories, consistent with Multinational Time Budget Research Project Guidelines (Szalai 1972).

Next step in model development is establishing a means to value unpaid time inputs to the household industries. Early attempts to estimate household production's value, like those developed by Gager and Walker (1980), involved assigning a monetary value to time spent in different unpaid productive activities, like meal preparation, dish washing, laundry etc. Generally, three different methodologies have been used to do this:

1) the **service replacement cost method**; a calculation of the cost to replace each separate service,
2) the **household technician replacement cost method**; a valuation of total household work hours at the going wage rate paid to a housekeeper, or

3) the **market wage rate (opportunity cost) method**; a valuation of each hour of house work a family member does at that person's actual or potential wage rate.

Service Replacement Cost Method

The market alternative cost method matches household tasks -- cooking, cleaning, child care, etc. -- with the dollar value a family would have to pay for such services in the market place. For example, if a family member spends one hour each day washing dishes, then that hour would be valued at the going hourly wage for a dishwasher. Similarly, a price tag would be attached to each activity that family members engages in -- cleaning, laundering, bookkeeping, counseling, etc. Such wage information may be available from state departments of labor. Otherwise national average wage information is reported by the U.S. Bureau of Labor Statistics. However, many families find that either market purchased alternatives to services like child care are far from perfect substitutes or market alternatives are not available in their geographic area. Further it's difficult to compute one value for an hour spent carrying out several simultaneous tasks. Consider, for example, the problems fraught with valuing an hour of time spent by a parent holding a baby while balancing the check book, monitoring dinner cooking, laundry and a 7-year-old doing homework.

The Household Technician Replacement Method

The second approach, the household technician replacement cost method, involves calculating time spent by family members in home production and valuing time at the market wage paid to a housekeeper with comparable skills. This approach addresses the problem of valuing simultaneous activities, but it too has drawbacks since it excludes the management component of house work -- the skill most highly valued in the market place. For example, even if a housekeeper is hired to complete household chores, the employer must still plan, supervise and evaluate the work. Neither that amount of time nor its value is included in either the household technician replacement or the service replacement methodology.

The Market Wage Rate Cost Method

The concept of opportunity cost underlies the market wage rate cost method. An opportunity cost represents the value of the second best activity precluded by engaging in another. The market wage rate cost method presumes that the opportunity cost associated with home production is ones market wage rate. That is, the opportunity cost of spending an hour in home production is represented by the wage that one could have earned in the paid labor force. The wage rate is thus assumed to represent the best alternative valuation of what a family member gives up to do house work, or the "cost" of home production.

The drawback of this method is that it understates the value of household time. Clearly, the household member must value the work that they do in the home at least as much, if not more, than their foregone wage. Otherwise they would work in the paid labor force and purchase substitute goods and services from the market. For employed household members the valuation is straightforward. Each hour of house work is valued at the net hourly wage rate, or take-home pay. Ones net hourly wage rate equals the hourly wage on the job minus variable employment costs like taxes. However, if one is not employed, valuing an hour of home production by this method is more difficult. One must assess earnings capacity assuming employment options exist. One valuation approach is assigning the after-tax wage rate of a labor force participant with similar characteristics and qualifications (age, sex, occupation, education, etc.) to an unemployed household member.

There have been numerous attempts at deriving population estimates of unpaid work's monetary value and comparing that value to paid production activity measures like GDP. For example, Murphy (1982) used various methodologies to value household production time and compared both his and previous authors findings with GNP. His estimates of the value of unpaid work in the household to GNP range from 26-47%. In this model, like Ironmonger (1989), I have used the average market wage for men and women in my model and will come back and revisit implications of that decision in the discussion section of this paper.

Finally, to measure household expenditures for goods and services used in each household industry I used unpublished data tables produced by the U.S. Bureau of Labor Statistics 1985 Consumer Expenditure Survey (Interview) data. These tables report average expenditures by detailed categories. Each detailed expenditure category was considered for allocation to one of the household industries, using standards first applied by Ironmonger.

Results

The household production portion of the input table includes time and intermediate consumption expenditures. The entire table includes paid work/human capital investment activities and leisure activities.[2] Every minute of time and dollar of household spending is allocated to an element of the table. First, lets examine the amount of time allocated to each of the household industries.

To put the amount of effort in perspective, Manufacturing, is the largest conventional paid industry in the U.S. In 1985 American workers spent 40.6 billion hours working at manufacturing jobs. However, hours spent in the home meal industry easily exceeded that with Americans spending 51.5 billion hours per year in such activities. Women alone account for 41.1 billion of those hours and thus spend more time preparing meals each year than all the time that paid workers spent in manufacturing jobs. Americans spend about the same amount of time in the household laundry and cleaning industry as do all American's who work in Manufacturing (40.6 billion).

The amount of time spent in the home child care industry is slightly less than all the time spent by Americans working in Retail, the third largest paid industry (25 vs 26 billion hrs). The amount of time spent in the household repair and maintenance industry, is slightly more than all the time spent by Americans in the paid industry of construction.

Volunteer civic and community activities rank 4th (19.6 billion hours) among the paid industries, behind Retail trade, but exceeds the time spent by Americans in wholesale trade, finance and real estate, transportation and public utilities, construction, and mining. Further, American women's total unpaid work efforts alone exceed by about 5 billion hours per year, the total amount of time spent by ALL workers in ALL non-agricultural, private paid industries. While economists bite their nails making predictions about the nation's welfare based on estimates of hours worked in paid industries, this huge amount of productive, albeit unpaid work, is all but invisible in our economic accounts.

American's overall paid versus unpaid work efforts are very similar to those of adults in other countries. American's total average hours worked is similar to that of our Canadian counterparts, with each averaging 47.4 and 47.5, respectively.

Using the average wage for all full time workers to value unpaid time inputs to the household industries, the total value attributable to all household industries amounts to about 67% of the 1985 GDP. The value of time inputs alone represent about 52% of GDP. As discussed earlier, Murphy (1982) points out that these results are sensitive to the valuation technique chosen. In this analysis we used the average population wage rate, rather than separate wages for men versus women or minimum wage. Either of those estimates would result in <u>lower</u> estimated time values.

Although household expenditures are already included in NIA's, my I/O model indicates that about 37% of those goods and services that we currently count as final consumption, indeed undergo another value added production process before finally being consumed by households. The largest portion of those expenditures are allocated to the Home Meal industry (26%).

Several other nations have used the satellite technique proposed here to assess the value of unpaid industries in their own countries. To derive unitless measures from which to compare relative time versus intermediate consumption inputs to household industries across countries (extracting from currency and other differences) I/O coefficients were calculated. All inputs to the household production processes are classified as falling into one of six categories: 1) materials, 2) services, 3) energy, 4) equipment, 5) housing, and 6) labor and calculated as a percentage of the total input value. Comparisons of coefficients for the U.S. with other countries again reveal striking similarities across countries.

I hope that I have been able to convince you, not only of the importance of including the value of unpaid work in NIA's, but also of the versatility of adopting a satellite measurement technique to include the total value of production in household industries. The satellite measure is preferable over an extended income accountancy since it would measure both the value of unpaid work and intermediate consumption whose value is hidden within total expenditure/consumption measures used in our standard accountancies. Through such an accountancy, we could monitor household production substitution effects as they occurred throughout the business cycle and we would have a better handle on whether nominal growth in GDP was measuring real economic growth in productive activity or rather such substitutions.

There is an unquestionable need for further research in this area. Although there remain important questions that we can address with existing data, there is a critical need for contemporary national household time use data. Although the U.S. government collects extensive expenditure data to better understand how households allocate income to meet basic needs, it has thus far failed to recognize the urgent need to better understand household time allocation questions and the implications of those decisions have on the nation's economic well-being. It is only when the myopia with which we currently view economic activity within our economy is corrected, that we can see the full spectrum value added production in our society.

Acknowledgements

I would like to express appreciation to Soye You for expert research assistance.

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Question Wording Experiments: An Introduction

Public opinion researchers often measure the level of consumer concern about product safety, and other market place issues. Many of these studies use a standard question format, i.e., the respondent is asked "How concerned are you about . . .?" A series of experiments conducted at Penn State have found that many respondents overstate their concern because they have the impression they "should" be concerned about the issue. This paper summarizes the results of these wording experiments.

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Consumer and public opinion researchers frequently become involved in examining the public's concerns about product safety and other market place issues. These researchers seek both to determine the level of concern with particular issues and the characteristics of those who are most concerned. These measures frequently are used in establishing public policy priorities. This use of concern measures has become more frequent in recent years, making accurate measurements of public concerns more and more important.

Over the past five years, my colleagues and I have been conducting a series of studies of how the working of survey questions influence the responses given by the public. Our central focus has been survey questions that measure consumer "concerns." During this session, we will present some of our findings and suggest how these results may be applicable to future studies of public concerns. My presentation will briefly describe the research tradition of response effects studies and outline our research program. Robert Herrmann and Arthur Sterngold will present some of the major findings of our studies and offer suggestions concerning how research may more accurately measure public concerns.

Question Wording Experiments

Question wording experiments have been conducted since the 1940s. However, the major thrust of this research tradition began in the early 1980s with the publication of "Questions and Answers in Attitude Surveys" by Schuman and Presser (1981). This seminal book has lead to an explosion of research which continues to the present.

The methodological tool that is most widely used by those who conduct research on question wording is the split-ballot experiment or between-subjects experiment. The total sample is randomly divided into two or more subsamples, each of which is administered one form of a question. The responses of the subsamples are compared to determine if the univariate or marginal distribution of the experimental groups differ. These differences are often referred to as response effects, i.e., the responses given by those interviewed are influenced by the wording of the question. In addition to question wording, other response effects include question form and question context. Our current research program is limited to question wording, although we have also conducted question order experiments in the past (Sterngold, 1991).

Over the last 15 years, a number of studies have clearly demonstrated that those who respond to questions on surveys are indeed influenced by question wording. Schuman and Presser (1981) have explained these findings by suggesting that once respondents agree to be interviewed, they go along with the "rules of the game" imposed by the interviewer and the question formate. Respondents "accept the framework of questions and try earnestly to work within that framework" (Schuman & Presser 1981, p. 299).

The Penn State Question Wording Experiments

Our interest in question wording experiments began when be became involved in food safety and environmental studies. As far as we know, product safety wording experiments have seldom been conducted in the past. We became concerned about the problem of response effects when we conducted our first pretest of a food safety survey. Using the standard question format, we asked our respondents, "How concerned are you about pesticides and other chemicals that may be on the foods you eat?" A number of those interviewed responded by saying, "I don't know much about that, but I really should be concerned. Put me down as very concerned."

It became apparent that many respondents knew little or nothing about the food safety issues, but were willing to provide a response rather than say they didn't know enough to respond. It also was apparent that many respondents were influenced by the question wording, namely the phrase "How concerned are you about . . . " Those responding may have had the impression they "should" be concerned about the food safety hazard.

The standard interview format for survey questions does not allow the interviewer to establish whether a line of questioning is relevant to the respondent (Suchman & Jordan, 1990). It is not surprising that many respondents who were interviewed for our pretest were not aware of food safety issues. Hoban, Woodrum and Czaja (1992) and Lee (1989) have argued that the public has little understanding of biotechnology and food safety. Public concerns about food safety have been referred to by Lee (1989) as "food neophobia." Lee (1989) has suggested that the public fears concerning food safety are an outgrowth of a lack of experience with growing food, limited knowledge of chemistry and biology, fear of uncertainty, and an inadequate understanding of statistics and mathematics.

On what basis do respondents answer questions about issues they know little about? Schuman and Presser (1981) have argued that often respondents who are uninformed about an issue base their answer on underlying general dispositions. These respondents construct answers about a particular issue referred to in the question by drawing on an underlying disposition not specific to the issue but vaguely related to it. Unfortunately many researchers mistake these type of answers as "informed opinions."

Standard degree-of-concern questions (e.g., "How concerned are you about . . .") often contain presuppositions. Studies of the social uses of language indicates that these types of questions contain unstated assumptions about their respondents (Clark, 1985; Luch & Thomas, 1990). The wording of the question may give the respondent the impression that they "should" be concerned about the issue.

We came to the conclusion that we needed to restructure our food safety concern questions to 1) identify those respondents who were familiar with the food safety hazard, and 2) not encourage respondents to say they were concerned about the food safety issue. We developed two filter questions to precede the degree-of-concern question to more accurately measure consumer concerns. The concern filter question asked, "Are you concerned about . . . ?" The awareness filter question asked, "Have you heard about any health problems that may be caused by . . . ?" These filter questions were incorporated into a series of split-ballot experiments to determine what differences and improvements might be associated with these changes in question wording. The experiments were included in three studies which are described below.

<u>The 1991 Study</u>

In 1991, we embedded a split-ballot experiment in a national random digit dialing telephone survey of 1206 adults. The survey asked a wide range of questions about people's dairy product consumption patterns and other food-related attitudes and behaviors. Four food issues were used in the experiment: pesticides, bacteria, animal rights, and BST. Those interviewed were randomly assigned to one of two experiments concerning the question wording. Part of the respondents were asked the standard-degree-of-concern question, e.g., "How concerned are you about getting food poisoning from bacteria on meat or chicken you buy at the supermarket?" The response choices were "very concerned, somewhat concerned, a little concerned, or not concerned." The rest of the respondents were first asked a concern filter question, "Are you concerned about . . .?" (yes/no). If they indicated they were concerned, they were then asked to indicate their degree-of-concern ("very, somewhat, or a little").

For all four food issues, those who were asked the concern filter questions were twice as likely to say they were not concerned about the food issue than those who answered the standard degree-of-concern question (Sterngold, Warland & Herrmann, 1994). Our interpretation is that standard degree-of-concern items may be leading questions about issues. We also have suggested that the concern filter may help solve this problem (Sterngold, Warland & Herrmann, 1994).

<u>The 1994 Study</u>

Our 1994 study included tests of both the concern filter and an awareness filter. We conducted a national random digit dialing telephone survey of 1000 adult household members in May and June of 1994. Those interviewed were asked about how concerned they were about eight food safety issues: pesticides, Salmonella, Listeria, BST, additive and preservatives, undercooked hamburger, chemicals in water, and a fictitious hazard IMS.

The respondents were randomly assigned to four subsamples. The question sequence, using Salmonella as an example, for each of the four groups is described in Table 1. Those randomly assigned to Experiment 1 were asked the standard degree-of-concern question, i.e., no filters. For each issue, the response choices read by the interviewer were, "very concerned, somewhat concerned, a little concerned, or not concerned about it." The interviewers were instructed to accept "Don't know" answers if volunteered by the respondents.

The second experimental group was first asked a concern filter question, "Are you concerned about . . .?" (Table 1). Those respondents who answered "Concerned" were then asked a follow-up degree-of-concern question. The follow-up question offered the same response categories as the standard form question of Experiment 1, except the "not concerned about it" response was not offered. This is the same question format developed for the 1991 study.

The respondents randomly assigned to Experiment 3 were first asked the awareness filter "Have you heard about any health problems that may be caused by . . .?" Those who answered "Yes" were then asked a follow-up question identical to the standard form question used in Experiment 1 (Table 1). The awareness filter in Experiment 3, unlike most previous "Don't know" filters, is specific with respect to what dimension of awareness is being measured, namely if the respondent is aware of any health problems associated with the food safety issue. We believe that it is very unlikely that the respondent will have an informed attitude about the risk associated with the food safety issue if they are not aware of any health problems associated with the food safety issue.

Table 1
Question Format for the Four Experiments.

Experiment 1 (Standard Form - No Filter)

a. How concerned are you about Salmonella on foods? Would you say you are . . .
   Very concerned, Somewhat concerned, A little concerned, or, Not concerned about it

N = 248

Experiment 2 (Concern Filter)

a. Are you concerned about Salmonella on foods? Would you say you're . . .
   Concerned, or, Not concerned
b. (If concerned) Are you . . .
   Very concerned, Somewhat concerned, or, A little concerned about it

N = 253

Experiment 3 (Awareness Filter)

a. Have you heard about any health problems that may be caused by Salmonella on foods?
   Yes, No
b. (If Yes) How concerned are you about Salmonella on foods? Are you . . .
   Very concerned, Somewhat concerned, A little concerned, or, Not concerned

N = 255

Experiment 4 (Concern and Awareness Filter)

a. Have you heard about any health problems that may be caused by Salmonella on foods?
   Yes, No
b. (If Yes) Is this something that concerns you, or would you say you're not concerned about Salmonella on foods? Are you . . .
   Concerned, or, Not concerned
c. (If Concerned) Are you . . .
   Very concerned, Somewhat concerned, or, A Little concerned

N = 244

Experiment 4 utilizes both the concern and awareness filter. Respondents assigned to this experimental group were first asked the awareness filter question. If they indicated that they were aware of health problems associated with the food safety issue, they were also asked the concern filter question. Those who said they were "Concerned" were asked the degree-of-concern question (Table 1).

The random assignment to the various subsamples was apparently successful. Cross-tabs of the four experimental groups with 40 other variables including demographic characteristics, other attitude items, behavior measures, knowledge measures, and food roles were examined. None were statistically significant.

The marginals for those respondents assigned to Experiment 2, Experiment 3, and Experiment 4 were all statistically different from the standard question form (Experiment 1) for all eight food safety issues. The paper by Robert Herrmann illustrates these differences.

The 1995 Study

We returned to the field in 1995 and conducted a national survey with 1200 adults. We constructed the same four experimental groups that were created for the 1994 study. The food issues for the 1995 study were pesticides, Listeria, Salmonella, BST, and fat. Analysis of the cross-tabs of the food issues with other variables indicated that the respondents were randomly assigned to the four experimental groups.

To determine if the awareness filter was a measure of actual knowledge, we created knowledge questions for Salmonella, BST and fat. We found strong evidence that those who said they were aware of the health problems of these food issues were much more knowledgeable about the issue than those who were not aware. Arthur Sterngold discusses these findings in his paper.

Conclusion

These three studies have clearly indicated that standard degree-of-concern questions encourage some respondents to overstate their concerns about food safety issues, either because the question is leading or they are encouraged to give a response even though they are not aware of any risks associated with the food safety item. We have also been able to highlight the difference between underlying general dispositions and informed and developed attitudes. When new product safety, biotechnological, food safety or environmental issues are introduced to the public, researchers often measure public reaction. Most likely, if standard unfiltered questions are used, the researcher will measure a mixture of underlying general dispositions and informed opinions. If a researcher wishes to measure informed opinion or developed attitudes, we believe that both a concern and awareness filter may be advisable. Both type of measures are useful and appropriate. We need to be clear about what we are measuring, and not confuse general dispositions with informed opinions.

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Do Surveys Accurately Assess Public Opinions?

Typical survey questions may encourage people who have never heard about an issue to nonetheless express an opinion about it. To examine this, we conducted a national telephone survey of 1204 adults in 1995. Early in the survey, people were asked how concerned they were about "the use of BST in producing milk." Much later in the survey, people were asked several objective knowledge questions about very basic characteristics of BST. Of those respondents who were not familiar with any of these characteristics, nearly a third said they were concerned about "the use of BST in producing milk" when answering the earlier concern question. This finding contributes to the evidence that opinion surveys often may encourage people to fabricate answers about topics with which they are unfamiliar.

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Introduction

Surveys and polls have become prominent elements of American political life, popular culture and commercial activity. They are used to inform, to persuade, and increasingly, to simply entertain. Yet, when surveys and polls ask about unfamiliar topics, they invite people to manufacture on-the-spot opinions that are little more than artifacts of the methods and instruments used to elicit the responses (Fazio, Lenn & Effrein, 1984).

Research on fictitious issues suggests the magnitude of this problem (Bishop, Oldendick, Tuchfarber & Bennett, 1980; Schuman & Presser, 1981). These studies show that many people will offer substantive opinions about imaginary topics when answering survey questions rather than admit they are unaware of the issues. For example, Bishop et al. (1980) found that a third of respondents offered opinions about the "1975 Public Affairs Act," even though no such act existed. If so many people will offer opinions about fictitious issues, it is likely that even greater proportions will express views about topics they are only vaguely aware of, but about which they have no real understanding.

Several methods have been proposed to deal with this problem. Nearly 50 years ago, Gallup (1947, p. 392) argued that before asking for people's opinions, we should first inquire if respondents have read or heard about the issues in order to identify those who "don't know what they're talking about." To achieve the same result, Philip Converse (1970) suggested that surveys should include objective knowledge questions about the topics of the opinion questions. Other researchers have recommended using measures of attitude strength or other ancillary characteristics to distinguish between stable opinions and more transitory ones (Schuman & Presser, 1981), including the "mushiness index" developed by the firm of Yankelovich, Skelly and White (Asher, 1988).

Awareness Filters

Sterngold et al. (1995) proposed using awareness filters to identify people who are unaware of issues before asking for opinions (e.g., "Have you read or heard anything about . . . ?"). In the 1994 study described earlier by Rex Warland, people were asked how concerned they were about "IMS in seafood," a fictitious issue. In response to a standard survey question, less than a third of the respondents said they were unfamiliar with IMS in seafood, while over half indicated they had positive levels of concern it. However, when people were first asked if they had heard about any health problems caused by IMS in seafood (the awareness filter), over three-quarters admitted they had never heard about IMS, and less than a fifth said they had heard about IMS and were concerned about it. This shows that using awareness filters can help reduce (but not fully eliminate) the tendency for people to fabricate opinions about unfamiliar topics.

Opinions Based On General Attitudes

When a filter question is used to screen out people who are unfamiliar with the issue, it decreases the number or respondents who qualify for the corresponding opinion question, reducing the effective sample size in the eyes of those researchers who treat "unaware" responses as missing data. Partly for this reason, some researchers have argued against the use of such filters, suggesting that even when people lack specific knowledge about an issue, they can still provide valid opinions based on their general attitudes (Schuman & Presser, 1981; Gilljam & Granberg, 1993; McClendon & Alwin, 1993).

However, encouraging people to express opinions about unfamiliar topics based on their general attitudes is poor science, and it may seriously mislead survey sponsors and audiences. For one, if a certain topic is unfamiliar to a person, then almost by definition, the person will have to speculate or guess about the topic's meaning in order to decide what general attitudes to draw upon and how to apply them. Such conjectures or guesses may be wrong.

For example, a survey conducted by Schuman and Presser (1981) asked people if they favored or opposed two highly obscure issues, the Agricultural Trade Act of 1978 and the Monetary Control Bill of 1979. The survey interviewers were instructed to record any spontaneous comments made by respondents to explain their answers. For the Agricultural Trade Act, some people made remarks indicating they believed the act was pro-trade (e.g., "We need more trade") while the comments of others suggested they believed the act would restrict trade (e.g., "Shipments from Japan are killing our products here"). For the Monetary Control Bill, a variety of inferences were offered by respondents about the bill's meaning, including, "That's a bill that has to do with controlling inflation," "Well, it must be about a balanced budget," and the "bill has to do with controlling pay raises." Other remarks suggested more capriciousness in how people answered the questions (e.g., "I don't know what it is, so I'll oppose it," "It has a bad ring to it").

Schuman and Presser (1981, p. 148) observed that even if some of these remarks represented reasonable conjectures about the nature and contents of the two legislative items, nonetheless, each was an "unsupported inference from the wording of the question."

Surely, it is not responsible for survey researchers to encourage people to offer opinions about specific topics based on their general attitudes when doing so may require respondents to speculate or guess about the meaning of the issues.

Equally important, when people are encouraged to give opinions about unfamiliar issues, survey sponsors and audiences are likely to be misled about the extent to which the public is ignorant about the issues. This is because when people express opinions, it is implied that they are at least somewhat familiar with the objects of those opinions. But this may simply not be the case when the opinions are based on general attitudes rather than specific views about the topics in question.

For example, in the 1994 study mentioned earlier (Sterngold et al., 1995), people were asked how concerned they were about "Listeria bacteria in milk," a serious but obscure food safety hazard. In response to a standard survey question, 17% of the respondents said they were unaware of Listeria, 15% indicated they were not concerned about it, and 69% expressed varying levels of concern. This gives the impression that at least the 69% of respondents indicating concerns were familiar with the issue. However, when people were first asked if they had heard about any health problems caused by Listeria bacteria in milk, 64% said they had not heard about it. This latter statistic provides a more accurate estimate of the public's familiarity with Listeria because it is based on responses to a filter question which directly asked people if they were aware of the issue.

Survey sponsors and audiences are likely to assume that the marginal results of surveys accurately reflect the true distributions of opinions among the public, treating survey results as literal descriptions of fact (Schuman, 1986; Bogart, 1957). In the absence of explicit efforts to determine the proportions of people that are unaware of an issue, survey reports may often give the impression that more people know and care about a particular issue than is actually the case.

Research Design and Measures

To study the extent to which uninformed consumers will express opinions about unfamiliar issues - and the efficacy of using awareness filters to reduce this tendency - we embedded a split-ballot (split-sample) experiment in a 1995 national telephone survey of 1204 adults. Details about the survey methodology are given in the paper by my colleague, Robert Herrmann.

The survey began with a series of questions asking people how concerned they were about several food safety issues, including "the use of BST in producing milk. BST sometimes is also called BGH." The remainder of this paper focuses solely on the results for this question.

The respondents were randomly assigned to experimental groups, each of which received different versions of the food safety questions. The <u>no-filter group</u> received standard concern questions, which asked: "How concerned are you about [issue]?" The answer choices were "very concerned," "somewhat concerned," and "not concerned." If respondents indicated they were unfamiliar with an item, their answers were coded as "unaware." The awareness filter group first received an awareness filter for each issue which asked: "Have you heard about any health problems that may be caused by [issue]?" Respondents who indicated they had heard about the issue were then asked the standard concern question given to the no-filter group, while people who indicated they had not heard about the issue were skipped to the next question.

Much later in the survey, all of the respondents were asked a series of objective knowledge questions about BST. These knowledge questions focused on rudimentary characteristics of BST that consumers who were legitimately concerned about the issue could be reasonably expected to know. Each of the objective knowledge questions was a multiple-choice item which offered three substantive answer alternatives and a "not sure" option. The following shows the exact wording of the questions and answer choices, as well as the proportion of respondents which chose each answer (correct answers are bolded and underlined):

Objective Knowledge Questions About BST

From what you've heard, is BST . . . ?
A preservative used in processed foods (%)
A hormone given to dairy cows (44%)
A mineral added to cattle feed (6%)
Or, are you not sure? (46%)

What food products may contain BST?
Fruits and vegetables (2%)
Chicken and eggs (3%)
Milk and other dairy products (56%)
Or, are you not sure? (39%)

What effects does BST have? Does it . . . ?
Reduce the fat content of milk cows give (1%)
Make cows give more milk (45%)
Keep dairy products from spoiling (9%)
Or, are you not sure? (45%)

Forty-three percent of the survey respondents gave incorrect answers and/or "not sure" responses to all three of the BST knowledge questions. Our experimental hypotheses were: (1) in response to the standard (unfiltered) concern question about BST, only a minority of these uninformed consumers would admit they were unaware of the issue, while a substantial proportion would indicate they were concerned about BST, and (2) using the awareness filter would significantly increase the proportions of uninformed consumers who admitted they had not heard about any health problems which may be caused by BST, and using the filter would also reduce the proportions saying they were concerned about BST.

Analysis

Table 1 shows that in response to the standard (unfiltered) concerned question, only 39 percent of the uninformed respondents said they were not aware of the issue, while 29 percent said they were concerned about the use of BST. The table also shows that when first asked the awareness filter, 75 percent of the uninformed consumers admitted they were unaware of the issue, and only 17 percent indicated they were concerned about BST. Thus, using the awareness filters nearly doubled the proportions of uninformed consumers who admitted the had not heard about the issue, and it reduced by over 40% the proportion expressing concerns about BST.

Table 1

Concern Responses of Uninformed Respondents for the No-Filter and Awareness Filter Groups.

BST

Responses	No Filter (n=110)	Aware Filter (n=127)	DIFF
Unaware	39.1%	74.8%	35.7
Not Concerned	31.8%	8.7%	-23.1
Concerned	29.1%	16.5%	-12.6

Chi-square=33.35, df=2, p<.001.

These results are consistent with our hypotheses that in response to standard (unfiltered) concern questions, substantial numbers of consumers who are uninformed about the issues will nonetheless indicate they are concerned, and that using awareness filters can significantly increase the proportions of uninformed consumers who admit they are unaware of the issues and reduce the proportions indicating they are concerned.

Discussion

Opinion questions in surveys and polls are subject to numerous sources of error and bias, and in many cases, there are simply no objective means to identify and gauge such inaccuracies. In these cases, survey researchers, sponsors and users must rely on their own professional judgment and common sense to decide if the results are plausible, meaningful and useful. We believe these criteria often are not satisfied by surveys and polls that encourage people to give opinions about unfamiliar issues which they have not previously considered. As Bogart (1967, p. 337) argued, "what people think about public issues is really secondary to . . . whether they think about them at all."

On the other hand, rather simple and easy to administer filter questions can be used to first determine if people are familiar with a particular issue before asking for their opinions or concerns about the matter. Using awareness filters has two benefits - they can provide more accurate measures of the extent to which the public is ignorant about certain issues, and they can also reduce the tendency for people to express opinions and concerns about issues they neither understand or care about. In policy-oriented research, the former benefit may be the more important.

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Misinterpreting Expressions of Consumer Concern about Food Safety

Studies of consumer concerns typically ask "how concerned are you about ..." when assessing consumer concerns. This question form presupposes that respondents are concerned about the issue or seems to suggest that they should be. This study demonstrates how concern filters deal with this problem, producing a significant shift toward less-concerned responses. The standard question form also assumes respondents are knowledgeable about the issue about which they are being questioned. This study demonstrates the use of awareness filters to encourage the less-knowledgeable to indicate their situation.

Robert O. Herrmann, The Pennsylvania State University[1]

One remedy for the presuppositional problem inherent in such questions as "how concerned are you...?" is to utilize a two-step questioning process or filter. In the first step, the respondent is asked if they are concerned about a particular problem. Those who indicate concern then are asked how concerned they are. The use of a concern filter has been shown to produce response distributions which are significantly different from those obtained with the standard question form. One of the chief effects was to increase the percentage who indicated no concern along with reducing the percentages of those expressed some degree of concern.

Changes in Response Distributions with Concern Filters

In a recent study, we investigated the effects of the use of concern filters in a split-sample experiment in which respondents were questioned about their concern with five food safety issues. For the purposes of our project, respondents were randomly assigned to one of four categories, each of which was administered a different question form. Three of these question forms are described in Table 1 of the previous paper by Rex Warland (1996). The data were collected in a nationwide telephone survey conducted in 1995 (see Appendix).

Salmonella Concern

We first will examine the survey results for Salmonella. Salmonella is a bacterial contaminant of foods of animal origin and is familiar to many of the public. It is one of the most common causes of reported cases of food-borne disease (Flowers, 1988).

One group of respondents was asked questions in the familiar standard form: "how concerned are you about Salmonella?" Three responses describing varying levels of concern were offered and "don't know" responses were accepted when volunteered. On surveys and polls which ask for opinions about issues, a range of non-committal answers are possible (e.g., unaware, no opinion, undecided). These are frequently combined into a single "don't know" category. However, when people are asked about more personal matters, such as food safety hazards, the range of non-committal responses is likely to be more narrow. In our pre-tests, all the "don't know" responses were expressions of unfamiliarity with the hazards dealt with in the questions. For this reason, we decided to use a single "unaware" category.

A second group of respondents was given the concern filter form. Respondents receiving this treatment first were asked whether they were or were not concerned about Salmonella. Those who indicated they were concerned then were asked in a follow-up question to indicate their level of concern. Respondents were offered the same response categories as those for the standard question form, except that the "not concerned" category was not offered. The respondents were not informed that Salmonella is a bacteria.

As can be seen in Table 1, the responses obtained with the concern filter form differed significantly from those obtained with the standard question form. The chief effect of the concern filter was to produce smaller percentages expressing some level of concern and to produce larger percentages expressing no concern. The standard question form produced 8.6 percent indicating no concern with Salmonella, while

Table 1
Salmonella and Listeria Concern with Alternative Question Formats, 1995.

Response Category	Standard Form (n=302)	Concern Filter Form (n=293)	Awareness Filter Form (n=298)
Salmonella			
Very concerned	64.3%	53.6%	45.6%
Somewhat concerned	23.8	24.9	31.6
Not concerned	8.6	19.8	9.7
Unaware	3.3	1.7	13.1
Total	100.0%	100.0%	100.0%
Standard form vs. concern filter $\chi^2 = 17.63$ (3 d.f.) $p = .001$			
Standard form vs. awareness filter $\chi^2 = 30.41$ (3 d.f.) $p = .000$			
Listeria			
Very concerned	41.7%	27.6%	21.8%
Somewhat concerned	24.5	21.5	17.4
Not concerned	11.6	24.6	4.4
Unaware	22.2	26.3	56.4
Total	100.0%	100.0%	100.0%
Standard form vs. concern filter $\chi^2 = 24.02$ (3 d.f.) $p = .000$			
Standard form vs. awareness filter $\chi^2 = 76.79$ (3 d.f.) $p = .000$			

with the concern filter 19.8 percent indicated no concern. Thus, the use of the concern filter form more than doubled the percentage which indicated they were not concerned. At the same time, the percent indicating they were very concerned was reduced.

Listeria Concern

Respondents also were asked about their concern with "Listeria bacteria" in foods they eat. Listeria is another bacterial contaminant of foods and is ubiquitous in nature. While it has received increasing recognition from food scientists in recent years, it still is relatively unknown to the U.S. public. Outbreaks of food-borne disease caused by Listeria have been linked to both dairy products and to vegetables (Lovett & Twedt, 1988).

The question forms used were the same as those employed in the questioning about Salmonella (Table 1). With the standard question form, 11.6 percent said they were not concerned, while with the concern filter 24.6 percent said they were not concerned. The percent which said they were very concerned was 41.7 percent for the standard question form, while it was reduced to 27.6 percent for the concern filter form.

The magnitude of the differences between the standard form and concern filter results are more marked for the questioning about Listeria than for the questioning about Salmonella. We conclude that the effect of the concern filter is stronger when an issue or concern is less familiar. The larger number of volunteered unaware responses for Listeria indicate that it was markedly less familiar than Salmonella.

Changes in Response Distributions with Knowledge Filters

One approach to dealing with less knowledgeable respondents is to use a knowledge filter. With this approach, respondents are asked in an initial filter question if they have heard about an issue or are aware of it. Such a question should be used to identify those who are unfamiliar with an issue, as distinct from those who are familiar with the issue but are unable to make up their minds about it.

The effects of knowledge filters were investigated in our 1995 survey. To assess the effects of knowledge or awareness of an issue area on concern responses, a third group of respondents was given an initial filter question about awareness of the health effects of a hazard followed by a question to assess degree of concern. The results for the questioning about Salmonella and Listeria are reported here. For this form, respondents first were asked if they had heard of any health problems caused by Salmonella (or Listeria bacteria). Those who indicated they had heard of problems then were asked how concerned they were about them.

Salmonella Concern

The results obtained with the awareness filter form were compared to those obtained with the standard question form, described earlier. As can be seen in Table 1, the use of the awareness filter form in questioning about Salmonella concern produced a substantially greater number of unaware responses as compared with the unfiltered standard question form. Only 3.3 percent volunteered that they did not know about Salmonella in response to the standard form. With the awareness filter form which asked directly about awareness of health problems caused by Salmonella on foods, 13.1 percent indicated that they were unaware of problems caused by Salmonella.

Listeria Concern

The differences between the standard and the awareness filter forms were even more marked for Listeria than for Salmonella. With the standard form, 22.2 percent volunteered that they did not know how concerned they were about Listeria. With the awareness filter form which asked directly about their awareness of health problems, 56.4 percent said they were unaware of health problems caused by Listeria in foods. With the standard form 41.7 percent said they were very concerned about Listeria, while with the awareness filter form only 21.8 percent said they were very concerned.

Discussion and Conclusions

We have shown that concern filters as compared to the familiar standard question form produce sharply different response distributions for questions on two food safety concerns: Salmonella and Listeria. There is, moreover, evidence that the effects of concern filtering are more striking for less familiar hazards such as Listeria than for more familiar ones such as Salmonella. These results parallel those reported by Sterngold, Warland and Herrmann from a 1991 survey (1994). In that study, the differences between the two question forms were smaller for more familiar issues (pesticides in food, bacteria in food) than were those for less familiar issues (use of recombinant bovine Somatotropin in dairy cattle).

The use of an awareness filter also produced significant differences in the response distributions for concern with Salmonella and Listeria. Again, the effects seem to be greater for a less familiar issue (Listeria) than for a more familiar one (Salmonella).

We have identified some situations in which use of filters seems desirable. Researchers may wonder about the extra costs involved. We believe that it is not difficult to construct filters which do not disrupt the flow of the interview process. In fact, filter questions may make the interview more similar to a normal conversation. In everyday conversations, we typically ask others about the relevance of a topic before we embark on detailed questions about it. After listening in on a number of telephone interviews and questioning the interviewers who have worked on our surveys, we are convinced that filters have little or no effect on an interview. Nor, do they seem to slow the interview process much, resulting in additional costs.

Appendix

The data were collected in a telephone survey which asked questions about food safety, nutrition and health. Random-digit dialing (RDD) procedures were used in order to reach both listed and unlisted telephone numbers throughout the 48 contiguous states. In the survey, a main general sample provided three-fourths of the numbers called. A supplemental sample provided the other one-fourth of the numbers called. This supplemental sample was drawn from telephone exchanges with above-average proportions of non-white and lower income households and was used because these groups typically are underrepresented in conventional RDD surveys.

Numbers called were randomly assigned to one of four experimental groups. Each of these four groups was asked questions about a set of food safety issues using a different question format (see Table 1). To qualify to be interviewed, respondents had to be household members 18 years of age or older and be English-speaking.

If necessary, three or more call attempts were made on separate days before a number was retired from the active list. Efforts also were made to recontact and interview initial refusals. The interviews were conducted by a commercial telephone survey organization.

Interviews were conducted in late Spring 1995. A total of 3736 numbers were used to produce a completed sample of 1204 interviews. The response rate calculated was 32.2 percent based on final call attempts which resulted in refusals, ring-no-answers, busy signals, unavailable respondents, scheduled callbacks, answering machines, incomplete interviews and completed interviews.

To produce roughly equal numbers of males and females, interviewers asked to speak to male household members in roughly 60 percent of the cases and asked to speak to female members in the other 40 percent. If an individual of the requested sex was not available, interviews were requested with an individual of the other sex. After 604 interviews with females were completed, only males were interviewed. The completed sample consisted of 50 percent females.

We recognize that these sampling procedures, respondent selection methods and eligibility criteria were unlikely to produce unbiased estimates of population parameters. We believe, however, that the approach used was appropriate for our experimental approach which required substantial numbers of various types of respondents in order to ensure adequate cell sizes for the full range of response categories.

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Welfare Reform and Self-Sufficiency in Wisconsin: Will It Work?

Proposed Wisconsin welfare reforms are based on a work first model emphasizing immediate employment over education or skills training. A review of existing evaluation of welfare to work programs shows small earnings gains, but only for a population of AFDC mothers with school age children. The effect of expanding mandatory work programs to AFDC recipients with young children is unknown, but likely to be more costly and less successful than previous demonstration projects.

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Welfare Reform in Perspective

Welfare reforms both at the federal and state level are changing the focus of welfare from a check-issuing income support system back to a social casework model with an emphasis on achieving self-sufficiency through employment. Reducing welfare dependency through employment is a daunting task, given the basic skills employers require for low-skill jobs and the fact that the majority of long-term AFDC recipients are high school dropouts with little work experience (Holzer, 1995). Racism, need for child care and lack of transportation are other barriers to self-sufficiency. A 1991 GAO analysis of single mothers on AFDC concluded that few women with young children work full-time, year-round and that, with low wages and child care costs, 70% of AFDC mothers who work were estimated to have incomes below the poverty line with 40% having incomes $2,400 or more below the poverty line.

Welfare to Work Program Evaluations

Evaluations of seven states' work to welfare programs which used experimental and control groups show consistent though small gains in earnings and decreases in welfare costs for the experimental groups, but little effect on earnings or employment compared to controls five years later (Gueron & Pauly, 1991). Lower cost programs emphasizing broad coverage of AFDC participants and with an emphasis on job search produced greater program cost savings than higher cost education/skills training programs reaching fewer participants. Most of these programs served less than a third of the AFDC population and exempted women with children less than six, so little is known about program costs for programs which make work mandatory for women with young children who require child care.

The Riverside GAIN program employed a work first approach and achieved the largest increases in employment for program costs (Friedlander & Gueron, 1992). The work first approach moves welfare recipients into employment but does not increase earnings to self-sufficiency, i.e. participants do not achieve incomes at least at the poverty level. Most program cost savings come from a reduction in welfare rolls, both from moving current recipients off the rolls and discouraging entry to applicants faced with mandatory job search and time limited benefits (Friedlander & Gueron, 1992; Moffit, 1993). In Michigan Work First programs, average earnings place a family of 2 at 85% of the poverty line and a family of four at 56% of the poverty line (Eberts, 1995).

W-2 - Wisconsin Works Welfare Reform

As in other states, Wisconsin's proposed welfare reforms focus on reducing welfare dependency through mandatory participation in work activities. Given Wisconsin's extremely low unemployment rates, the program should be successful in initially reducing welfare rolls through low-cost job placement and job development activities. W-2 participants will be required to work 40 hours per week in one of four levels of employment with the highest level unsubsidized market employment. Failure to participate will result in grant reductions for every hour missed. Child care subsidies and health care insurance are provided for all working families below 165% of the poverty line, but with a sliding scale of copayments which will result in substantially larger child care costs for many currently employed JOBS participants. In addition, to meet anticipated increases in demand for care, the program authorizes subsidies at half the market rate for care to untrained providers. After the inital drop in welfare rolls, the plan projects that 50% of W-2 participants will be in public service jobs created in the community (CSJs) and 20% will be assigned to transitional activities which may include drug or alcohol treatment. Participants in the lowest transitions level will receive a monthly grant equal to the current average AFDC benefit of $519 for a family of three with no adjustments for family size. Assistance with education or job skills training is limited to short-term programs designed in cooperation with community employers which will produce immediate employment. The expectation is that by moving W-2 participants into the work force, increased work experience will lead to earnings gains over time and to self-sufficiency.

Will W-2 Increase Self-Sufficiency?

The W-2 Wisconsin Works program is a bold experiment which applies the principles used in the most successful welfare to work demonstration project, the Riverside GAIN program on a much broader scale. The W-2 program extends full-time work requirements to the entire AFDC population exempting only mothers with a child less than 12weeks old. Projections of earnings for W-2 participants are based on full-time, year-round work, a norm currently achieved by only 35% of all Wisconsin mothers of children (Cancian & Meyers, 1996). Given the high likelihood of work interruptions due to children's illnesses, loss of child care, and other barriers to employment for low-skilled mothers with young children, it is unlikely that many W-2 participants will achieve earnings above the poverty line. Participants in CSJs and the lowest transitions level will be required by law to work 30 hours per week with an additional 10 hours for education and skills training. Their incomes will be less than half the poverty line for a family of three and monthly grants without reductions for nonparticipation.

It is also not clear how effective community service jobs will be in increasing self-sufficiency or if supply will meet demand for CSJs, particularly in inner city Milwaukee which contains one half of the current AFDC caseload. Homemaker/Home Health Aide subsidized employment projects showed large short-term effects on earnings for participants (Bell & Orr, 1994), but the CETA public sector jobs program resulted in small earnings gains and displacement of existing workers by subsidized CETA employees (Blank, 1994).

If needed CSJs or child care is not available, large proportions of participants may be placed in exemption status, the equivalent of the former AFDC system, but at reduced grant levels and with time limits. An alternative scenario is that work requirements would be enforced without necessary support services, and welfare savings will come from the increased number of participants off the rolls due to sanctions (Handler, 1988). In either case, the main thrust of W-2 is focused on immediate employment to reduce program costs, a strategy which may increase earnings for AFDC recipients but which is unlikely to result in incomes providing self-sufficiency.

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Human Capital Investments of Divorced and Separated Women: Implications for Welfare Reform

An exploration of human capital investments of divorced and separated women as they relate to receipt of public assistance. Significant differences in human capital investments were found.

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Introduction

The negative impact of marital disruption on the economic well-being of women has been well documented in both census data and empirical research over the past three decades. One factor influencing the decline in economic well-being of women following marital disruption that is related to welfare reform proposals is the lack of investments in human capital (Mauldin, et al, 1990).

The increasing number of families receiving AFDC has long been controversial. Recently proposed reforms place emphasis on moving recipients from dependency to self-sufficiency employing various job-training and educational programs, incentives for employment and limitations on the receipt of AFDC (Bane and Ellwood, 1994; Katz, 1994a, 1994b). This presentation will explore differences among maritally disrupted women's investments in human capital, sociodemographic characteristics, and reliance on public assistance.

Methodology

A subsample of 338 young women (from the National Longitudinal Surveys of Work Experience of Young Women) who experienced marital disruption for the first time between the years of 1970 and 1985 were selected such that human capital variables, sociodemographic characteristics, and changes in these variables could be measured in the year of disruption, year prior to disruption, and two years following disruption.

Human capital variables included in this study were educational attainment, job training, health, occupational status, work experience and employment status. Other variables that might affect receipt of public assistance that were included for analysis were whether the young woman was unemployed in the current year and presence of children under the age of six years old.

The variable of primary interest in the analysis was receipt of public assistance or welfare. For each of the five years analyzed the young women are categorized into four groups: 1= did not receive public assistance in previous year or this year; 2= did not receive public assistance in previous year but received public assistance in this year; 3= received public assistance in previous year but not in this year; 4= received public assistance in previous year and in this year. Analysis of covariance was used to determine differences among the four groups in income, human capital variables, and other factors that might affect receipt of public assistance after controlling for age at the time of disruption, number of years married at the time of disruption, race, socioeconomic level of parental family, and whether or not the respondent remarried following disruption.

Results and Implications

Of the 338 young maritally disrupted women, 47.6 percent did not receive public assistance in any of the five years analyzed. About 9 percent of the young women received public assistance only one of the five years, 9.5% received public assistance two of the five years, 10.1% received public assistance three of the five years, 20.1% received public assistance four of the five years, and 4.1% received all five years. These young women were 27 years of age, on average, when marital disruption occurred. They had been married an average of 6.8 years. About 62 percent were white and 38 percent were African American or of other racial and ethnic origins. Only about 29 percent of the young women in this sample remarried within two years of disruption.

In year t-1, or the year in which the disruption occurred at some point, there were significant differences among the four groups of young women on all the human capital variables except job training. There were no significant differences in changes in educational attainment, job training or occupational status. Seventy percent of those who received public assistance in years t-2 and t-1 and 67 percent of those not receiving public assistance in year t-2 but receiving public assistance in year t-1 had children under six years old compared to only 44 percent of those young women who did not received public assistance in either of the two years.

In the year disruption is first reported, year t, differences exist in the human capital variables and in changes in job training. Forty-two percent of those not receiving public assistance in either year received additional job training compared to only 16 percent of those who received public assistance in both years t-1 and t. Differences continued in presence of children under six, and in addition, 23 percent of those who received public assistance in years t-1 and t were unemployed compared to 6 percent who did not receive public assistance in either year and to only one percent of those who moved off public assistance in year t.

The pattern of differences in human capital investments continued in years t+1 and t+2. By year t+2 however, there were no differences among the groups by presence of children under the age of six years old. One difference occurred in changes in job training. Fifty percent of those who did not receive public assistance in year t+1 but received public assistance in t+2 received additional job training compared to only 18 percent of those who received public assistance in both years.

About 52 percent of the subsample in this study received public assistance at some point during the five survey years analyzed. For only a small proportion of the sample did there appear to be long-term reliance on public assistance. Lack of use or reliance on means-tested public assistance does not necessarily reflect lack of financial need. Some of those women not receiving assistance may have been ineligible because they were just slightly over the eligibility limits.

About 48 percent of the sample did not need or did not qualify for public assistance during the five survey years. This group had significantly more human capital upon which they could draw on to provide financially for their families. They also had fewer health problems, fewer children under the age of six and lower unemployment rates.

The results of this study suggest that human capital investments can prevent reliance on public assistance programs. However, what type of educational assistance and job training will be necessary to move "welfare dependent" and "welfare cycler" recipients into jobs that will allow them to be self-sufficient, or more importantly, achieve an acceptable level of living? Occupational status differences exist among the groups in all survey years analyzed. How can those women with lower human capital investments achieve an occupational status that will move them off public assistance programs when the greatest job growth is in part-time and/or temporary jobs which typically do not provide benefits? In order to achieve the objective of self-sufficiency, the short-term costs would appear to be high. Finally, the diversity seen in this sample of maritally disrupted women suggests that public policies or welfare reform cannot be general in nature but specific programs must be provided based on individual circumstances and needs. Some of the women in this study need only minor assistance such as provision of child care, child support assurance, or medical care coverage, while others lack substantial human capital resources and this will require major investments in education and job training in order to move toward self-sufficiency.

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W-2: Consumers Lose Again

This is a summary of a panel presentation at the ACCI annual meeting, March 27, 1996. It comments on the political reality of Wisconsin welfare reform from the perspective of an experienced advocate for children and families. The presentation began with the reading of the following poem, written and submitted by Frances Payne Adler, at a public hearing in LaCrosse, Wisconsin, October 25, 1995.

Patricia Mapp, University of Wisconsin-Milwaukee\Extension[1]

"Wisconsin Works"

we're here to talk about poor women and work, poor
women and work, as if they don't work, but that's
another story, we're here to talk about poor women,
so let's talk, shall we? not in the polite mid-western way,
the smile on our face, how nice we are to find work for
women, the dignity of work for women, how American
we are to find work for women, a way out of welfare, how
nice we are, let's talk, shall we? what's the plan here, work
for women, what work? young people with three college
degrees are out of work, people in their fifties with thirty
years experience are out of work, what jobs, what work is
there for women with no skills, outside of mothering that
is, and we'll make sure it stays that way, we'll cut them off
from college, and we'll build in a little provision here, all
welfare moms who can't find a job, well we'll just find
them a job, won't we, we'll get into bed with industry,
and provide a slave labor force, did I say that? did I say
a drone class, a drudge call, dignity, what dignity, let's talk,
shall we? and once these women, these poor women get
a job, and the working conditions get worse, as they will,
and if these women dare speak out, well, industry will just
fire them, won't they, and then we'll build in another little
provision here, case workers will, and I quote, remove
children from the home if they're not adequately
financially supported, remove them from the home,
and aren't we nice, we'll build orphanages for these
children, and the women, the women, the poor women,
they'll be out on the streets, dignity? do I hear dignity?
do I hear work? work? let's talk straight here:
I believe you're selling an illusion, it's been done before,
it's been done to my people, brought to a concentration
camp, the words above the door, *arbeit mach frei*,
work makes you free, its been done before
in our country, in this state, we do it differently, we do it
politely, we smile and say aren't we nice Americans?

As poor people have become vilified as a perceived common threat, upon which both political parties can focus our national woes, the relevant consumer group, that is, those who consume welfare benefits, women and children, have been completely cut out of the debate on their fate. The omission of the opinions of the consumers of welfare benefits from consideration as W-2 (Wisconsin Works) moved quickly to passage in Wisconsin, portends its failure to remove people from poverty. However, since the goal is not to remove people from poverty, but to remove them from welfare rolls, it will be an instant success.

By deconstructing the terminology of welfare reform, we define predominantly women and children as the consumers. The taxpayer as funder also has a role to play as advocate for quality support services because it is in the public interest to do so. But contrary to the public interest, essential supports of child care and health care were undermined, made less affordable, and in the case of child care, less regulated, in the plan, dubbed W-2, and developed by the Indianapolis based Hudson Institute, proposed by the Governor of Wisconsin, and passed by the Wisconsin legislature in early 1996.[2]

Organizing any of the consumer groups, mothers, children, or the tax paying public, around improving the Wisconsin welfare reform proposal, was a daunting effort. The resulting law is an ideological blueprint which casts Wisconsin as a laboratory for massive behavior modification, and young children as guinea pigs for both politicians and economics researchers.

Contrast the political clout of poor women and children with other sub-groups of consumers of public benefits who have been particularly effective advocates for improvements, expansion, or simply protection of those benefits. Among those who have been most formidable are the elderly vis a vis Social Security, Medicare, Medicaid, and national standards for nursing home care. Environmentalists, likewise have been effective stewards in the public interest, defining all citizens as consumers who benefit from a safe, clean environment.

Although Wisconsin working women and children as consumers of child care made significant progress as a consumer coalition in the past 15 years, their inherent weakness was demonstrated when W-2 repealed all of the legislation which had been initiated and lobbied by a consumer coalition under the umbrella of the Wisconsin Women's Network Child Care Task Force.

The University of Wisconsin's Center for Consumer Affairs has served as a resource to the movement, providing training, research, and technical assistance to achieve the goal of quality child care for all families who need it at a price they can afford. The consumer umbrella was important in the past to defuse divisive issues that have plagued child care professionals and administrators, such as staff to child ratios. In the welfare reform debate, the advocacy legitimacy of the child care consumer groups was divided and conquered by the strategic attack rhetoric which pitted AFDC recipients against working poor and everyone else in the social-economic spectrum.

While other interest groups, each with hired lobbyists, achieved some concessions, the child care and women's poverty network were thwarted from recognition throughout the legislative process. Even with the golden political attributes of legitimacy and credibility, this consumer coalition lacked economic clout to counter the heavily funded ideological blitzkrieg that culminated in W-2.

Hospitals pleaded for continued funding of health insurance for pregnant women and their young children, and succeeded in substantially restoring the Medicaid option known as Heathy Start. The insurance industry was granted an automatic transfer of the parent's health insurance co-payment to the insurance carriers. Labor unions, although still dissatisfied with the provision that two categories of employment effectively will pay W-2 workers below the minimum wage, got the bill to prohibit replacement of existing workers with W-2 participants.

The child care provisions of W-2 increase parent co-payments by more than 1000% in some cases, and provide an economic incentive for parents to use untrained providers, who will be reimbursed at 1/2 the rate of a licensed provider. These policies reverse the substantial gains in affordability and quality that the Child Care Task Force achieved in the 1980's.

Even though their work could have countered some of the simplistic assumptions about women workers, the child care profession, and poor children in W-2, the academic community, from those who study consumer behavior to those who research child development, were not part of the debate. The losers in the fray clearly were poor children, who constitute 2/3 of the welfare rolls, and continue as the classic unrepresented group in our democracy. The current and future challenge for the consumer movement is to respect the human capital represented by those women and children in need of basic supports, to weigh in beside them, and thus help balance the scales of justice.

<u>Endnotes</u>

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2. In order to implement the W-2 legislation, Wisconsin must be granted waivers of federal law. As of this writing, the waivers have not been approved.

Welfare Reform in Virginia: YES We Can!

Virginia received a federal waiver which allowed its welfare reform program to go into effect in July 1996. The program is being phased in across the Commonwealth over several years. Virginia Cooperative Extension is involved in job readiness education, which includes money management and consumer education, for welfare recipients who are working to become self-sufficient.

Irene E. Leech, Virginia Tech[1]

Key Elements

Virginia's Welfare Reform law created the Virginia Independence Program which includes the Aid to Families with Dependent Children (AFDC) Program and the Virginia Initiative for Employment Not Welfare (VIEW) program. The Commonwealth was granted a federal waiver to implement this program. Some parts of the program were implemented statewide beginning July 1, 1995; others are being phased in on a district by district basis.

No additional benefits are provided for children born ten or more months after the family begins the program. Unmarried teen parents must live with their parents and attend school to receive benefits. Mothers must identify the father of each child to receive benefits. Two-parent families receive the same benefits as single-parent families. Children of recipients are required to attend school or the family loses its benefits. If the children do not have appropriate immunizations, the family is sanctioned $50 per month for the first child and $25 per month for each additional child.

As the program goes into effect, Virginia AFDC recipients must report to the local Department of Social Services for an initial assessment. They have the choice of joining the program by signing the written individualized Agreement of Personal Responsibility or losing their benefits within three days. In signing the agreement, the recipient: 1) acknowledges responsibility to seek employment to support his or her family, 2) agrees to participate in assignments made by a case manager, 3) agrees to notify the case manager of changes in circumstances, 4) agrees to accept a job offer (failure to do so results in loss of benefits) and 5) agrees to arrange and find transportation and day care. When a recipient signs the agreement, the clock starts ticking. Recipients are expected to obtain a job within 90 days

If a recipient is unsuccessful in finding a job within that time, he or she then actively begins the VIEW Program. The job search continues. The ideal job is full unsubsidized private sector employment. If that is not available, an employer can be reimbursed for providing a job with income equal to the AFDC benefits. The last option is community work experience. Both state and private agencies have been recruited to provide this employment for experience.

While participating in this program, recipients continue to get AFDC for two years. When that time ends, the recipient is ineligible to receive ANY further benefits for at least two years. If they are unsuccessful in finding day care and/or transportation, the case worker helps them receive day care (which can last for up to twelve months past the end of the program), and assistance with transportation (generally provided by a local volunteer group). Medical assistance in the form of Medicaid continues to be available for the duration of the program and up to twelve months of transitional benefits may be available after that time.

If the recipient has anything other than full time unsubsidized employment, he or she begins to participate in a locally designed education program. A local coalition, coordinated by local Social Services staff, plans this program and contracts with appropriate providers. A variety of agencies are involved, each negotiating locally. Local Social Services Departments receive some state funding to support this program. However, the funding was not distributed in relation to the number of recipients so some localities have more funding for these activities than do others. Localities sanction participants who fail to attend sessions or otherwise meet local requirements. The 24-month clock does not stop ticking for the months when recipients lose their benefits in this manner.

Cooperative Extension's Participation

Virginia Cooperative Extension (VCE) determined that it could offer educational assistance to support this effort in several ways.

Job Readiness

VCE's primary goal for this effort is to help participants improve their self-sufficiency by improving their life and job readiness skills. According to the VIEW program, job readiness training is designed to help participants overcome personal and family barriers so they are competitive and successful in the labor market. Topics include: communication skills, life skills, motivational training, problem solving skills, assertiveness, nutrition, money management, parenting, and time management.

Culpeper was the first locality to offer this program. VCE received a contract to provide part of the educational programming. The local Chamber of Commerce, Community College, and Employment Commission were also involved. VCE's nine session education included: the transition, time and household management, scheduling and back-up, money management, meeting family needs, and looking to the future. These sessions are taught by a team of local extension agents, coordinated by an area administrator and supported by on-campus subject matter specialists.

Initial evaluation of this education indicates that participants are generally reluctant to enter fully into the sessions. They are there, not by choice, but because they cannot afford the benefit sanctions. Group make-up is different for each session because as participants obtain employment, they immediately drop out of the educational program. Educators must establish credibility with the audience each session and must respect the experiences and knowledge of participants. Hands-on activities are most appropriate. Participants are most interested in obtaining skills; not in general education which they cannot use immediately.

Parenting

VIEW can include parenting education. VCE can help recipients better communicate with their children and to set up procedures to assure that children are safe and that family responsibilities do not negatively impact work life.

Immunization

VCE can help participants understand the importance of immunization for health and financial well-being.

Earned Income Credit

The statute requires that recipients be informed of the federal Earned Income Credit. VCE offers this education and can provide it to VIEW participants.

Savings

The program allows recipients to have greater savings for future education or to establish a home-based business. VCE can help recipients plan to save and to learn to comparison shop and make decisions concerning where to save the money.

Home-Based Business

VCE has a strong, on-going Home-Based and Micro-Business program. Recipients can participate in this program to learn about establishing such a business, making business plans, financing, etc.

Day Care Provider Training

Sometimes this is part of the Home-Based Business programming, but it is also offered as stand alone programming. VCE and Social Services in Loudoun county have been providing this training. One participant who left welfare and has a viable business has been featured in the Washington Post as a success story for welfare reform.

Medicaid-HMO

The state's Medicaid program is moving to HMO's as providers. VCE is prepared to help recipients understand the differences in procedures and requirements of HMO's and traditional health care.

Electronic Transfers

Virginia is making plans to quickly move to electronic transfers of benefits. VCE can help teach recipients how to manage financial accounts and accept this technology which is new to them.

Community Work Experience

VCE offices and 4-H Centers may serve as sites for community work experience for recipients.

Endnotes

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Panel on Credit Issues and Consumer Welfare

The purchase of consumer durables often involves complex decisions about credit. Credit choices can have profound financial implications on consumers. For example, it estimated that consumers pay over $30 billion in interest on credit care debt per year. This session was designed to address the significant consumer welfare implications of the various credit decisions consumers must make. The session was designed to incorporate an extension perspective, a research perspective as well as the perspective of government officials.

Alan Mathios, Cornell University[1]

Susan Potkai, Federal Reserve Board[2]

Cynthia Fletcher, Iowa State University[3]

Lisa Daniel, Federal Trade Commission[4]

Richard Vosburgh, University of Guelph[5]

Presentation of Susan Potkai

The Federal Reserve Board and the Federal Reserve Banks receive hundreds of consumer complaints annually on consumer credit issues. Credit card issues ranked number one in the top 10 major complaints received by the Federal Reserve System in 1994, and other credit issues (consumer and real estate loans) ranked number two.

The process by which complaints are filed with the Board of Governors was discussed. The presentation focused on the large data bases that have been created by the Federal Reserve and the types of information that can be evaluated over time.

Presentation of Cynthia Fletcher

The second presentation was titled "Putting Consumers in Charge: Credit Education Strategies." Adult consumers face complex decisions about credit use. While bombarded by messages to "buy now, pay later" many consumers lack the knowledge and skills need to make wise credit choices and enhance their well-being. Extensive educational materials are available on consumer credit; however, many community educators lack the skills to select appropriate educational strategies and materials to reach target audiences.

Credit Education Satellite Video Conference

A credit education team composed of the (former) Office of Public Responsibility of the American Express Company, the USDA Cooperative Research, Education, and Extension Service, and extension faculty from seven land-grant universities designed, delivered, and evaluated a national satellite video conference, "Putting Consumers in Charge: Credit Education Strategies." Seven hundred twenty-nine site coordinators signed up to down link the two-hour conference on December 7, 1994.

Nine out of 10 of the site coordinators who completed an evaluation at the conclusion of the conference felt the event was an effective way to bring people together to talk about effective credit education strategies in their local community. To assess the effectiveness of distance education, the credit education team conducted an impact evaluation in late 1995, approximately one year after the video conference. Two hundred eighty-two site coordinators and other conference participants participated in telephone interviews. Nine out of 10 interviewees have continued credit education efforts. More than half have developed a long-term plan for their credit programs and approximately one-third have formed local task forces to work collaboratively to educate consumers.

Approaches to Credit Education

One of the greatest challenges facing community-based credit educators is reaching and motivating adult consumers. Credit educators use seemingly bipolar approaches to credit education. The most common face-to-face education is conducted in individual counseling sessions. Most educators also reported use of mass media to deliver information about credit use to consumers. Many voiced the concern that adults often fail to seek out education or advice until they face credit problems.

When asked to describe the most effective way to educate consumers about credit, a number of themes were identified. Interviewees acknowledged the need to use a variety of teaching strategies and to increase the use of experiential activities in adult education. As one educator stated "(we need to) find ways to get the audience involved in analyzing and making decisions and seeing consequences. We need more showing and less telling."

Timing is another issue. An educator said "People don't come to us for credit education until it is too late. We need to reach them prior to making a major purchase decision." And finally, a credit educator voiced frustration when suggesting the use of mass media as an effective approach. "TV and radio and multiple reinforcement...if (we) could spend as much money as they do for (advertising) products, we could begin to educate."

Implications

Results from the impact evaluation suggest that satellite conferencing is an effective way to bring together community leaders to discuss credit literacy needs and to work collaboratively on educational strategies. Perhaps the overriding issue facing community educators is reaching and motivating consumers with preventive credit education in a marketplace filled with complex, confusing, and competing messages.

Presentation by Lisa Daniel

The third presentation by Dr. Lisa Daniel, issues from the perspective of an economist and from the perspective of an administrator responsible for enforcement of the fair credit laws of the U.S. There has been considerable attention paid in the last few years, both in the press and in the public policy arena, to the issue of race discrimination in the credit market, particularly the home mortgage market.

Home Mortgage Disclosure Act Data: Racial Discrimination or Credit Unworthiness?

This attention has been driven in large part by the use (or misuse) of the Home Mortgage Disclosure Act ("HMDA") data, which consistently show large gross disparities in mortgage loan denial rates by race. These data became available to the public on an annual basis starting in 1989 and reports in the press of HMDA summary statistics rarely do justice to their inherent limitations.

Simultaneously (and not necessarily coincidently), in the four years since the Department of Justice settled its first mortgage discrimination case with Decator Federal Savings and Loan there has been increasing scrutiny by the federal regulatory agencies amid a very active debate among economists -- both academic and government -- as to the extent to which race discrimination accounts for the gross disparities in the percentage of loans granted by race.

Perhaps the most influential, but also perhaps the most controversial, study in this market was performed by the Boston Federal Reserve subsequent to the Decatur Settlement. The results of the Boston Fed study seemed to indicate that a significant percentage of minority loan denials in the Boston area were based on racial discrimination rather than on legitimate lending criteria.

Several subsequent studies have called into question the strength of those conclusions. Most important, they have furthered our understanding of the complexity of the mortgage lending process. Thus, the Bank Regulatory agencies, as well as the Federal Trade Commission, are in some sense caught in the middle between, on the one hand, public perception that there is a big (and seemingly straightforward) problem that the federal agencies should be addressing, and on the other hand, the twin realities that the evidence of a problem is mixed, and that detecting (let alone proving) discrimination is extremely difficult and resource intensive.

Limitations of the Home Mortgage Disclosure Act Data

As a starting point it is important to understand the limitations of the HMDA data. Other than demographic information about the applicant and the loan outcome, the HMDA data basically include two variables: income and loan amount. These two variables actually tell us very little about the creditworthiness of a particular applicant.

Although various studies using HMDA data often tout the fact that racial disparities exist "even controlling for income," in fact, controlling for income alone is virtually worthless. Lenders do not look at income by itself, rather they look at income relative to the demands on that income, or the "debt to income" ratios. Although one can construct a crude "housing debt to income" ratio by using the loan information amount, there may well be other debt (such as car loans or student loans) that is unaccounted for.

In a similar vein, lenders typically do not look at loan amount vacuum either, but rather as part of the "loan to value" ratio, i.e., the amount of the loan relative to the value of the house which serves as collateral. The HMDA data do not reveal this information.

Last, but equally important, the HMDA data do include information about past creditworthiness (i.e. from a credit report) or about job stability. In my view, the HMDA data are truly a case of a little knowledge being a dangerous thing.

Evidence from Other Data Sources

Although the HMDA data tell us little, there have been a number of studies using data sets that go beyond HMDA and include, many, if not all, of the information one expects lenders to based their decisions on. The best known of these is the 1992 Boston Fed Study, which looked at all the major mortgage lending institutions in the Boston area and concluded that, after controlling for economic variables (that are not available in the HMDA data), minorities were still 6 percentage points more likely to be denied than similarly situated white applicants.

A number of studies have followed, calling into question whether the Boston Fed actually obtained all of the explanatory variables (the lenders were asked to fill out questionnaires -- the investigators did not actually see the application files) that might have explained the discrepancy. One particularly telling discovery, noted by David Horne, was that a number of well-qualified minority applicants had actually applied for low-income subsidized loans and been turned down because their incomes were too high. Since the Boston Fed did not have that information, those applicants were treated by the model as being applicants who "should" have been accepted.

Another problem that is endemic to this area is that denied applicant files by definition have incomplete data relative to accepted files. For example, those applicants who do not have acceptable credit histories may never to on to get their homes appraised.

The Complexity of Mortgage Lending

In sum, the lesson both from the current economics literature and the experience of the regulatory agencies is that detecting, let alone proving, discrimination in the context of mortgage lending is extraordinarily difficult and resource-intensive because the process is not readily captured by a simple model and their are inherent data problems. Unfortunately, it is not as simple and straightforward as the press reports using HMDA data seem to suggest.

Presentation of Dick Vosburgh

The fourth presentation was by Dick Vosburgh. This paper focuses on plain language use in consumer loan contracts from major banks, a loan company, and a mortgage lender. This paper examined the "readability" of consumer loan contracts and the ability to change these contracts in order to make them more accessible to the consumer.

Participants demonstrated that contracts can be written so to significantly increase the readability of these contracts. More work is being done on evaluating changes in the comprehension of contracts using plain language.

Endnotes

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Beyond Consumer Whatever: A Contribution to the Consumer Lexicon

Differences in interpretation of terms, or inadequacy of terms, frequently make articulation of ideas and effectiveness of communication difficult. This paper promulgates adoption of consistent interpretation of several terms to improve clarity of communication and expression of important concepts related to the consumer interest.

Edward J. Metzen, University of Missouri, Columbia [1]

Introduction

In the summer of 1982 a national invitational symposium entitled "Consumer Science in Institutions of Higher Education" convened on the campus of the University of Wisconsin-Madison, organized by Dr. Ronald W. Stampfl of that institution and funded by the U. S. Office of Consumer Education (Stampfl, 1983). The symposium brought together "individuals primarily from the national community of university scholars whose interest centered upon the consumer." The objective was "to assess and explore all matters relating to the consumer field in institutions of higher education." Dialogue was continuously interrupted by inability of participants to agree upon an appropriate title for the field--Consumer Science, Consumer Sciences, Consumer Studies, Consumer Affairs, Consumer Economics, and so on. As a convention to facilitate dialogue, participants agreed to adopt the term "Consumer Whatever" as an umbrella term for the field for the duration of the symposium. That conundrum has never been resolved with respect to titles of academic programs, organizations, publications, and so on; and, although absence of a common label for what we are engaged in is perhaps somewhat hurtful to our field, we have managed to live with diversity on this matter.

However, with respect to terminology that has to do with function, rather than title, clarity and commonality of meaning becomes perhaps a bit more significant. The purpose of this paper is to propose adoption and consistent interpretation of terms that will help to standardize meaning and express important concepts in consumer affairs.

About "Consumerism"

The term "consumerism," first coined by some elements of the business community to characterize the burgeoning consumer movement of the 1960's as some sort of unwholesome "ism" that represented a threat to the American way of life, has been interpreted in a variety of ways (Morse, 1993; Swagler, 1994). Given the widespread grassroots concern of the public over issues that affected their well-being as consumers, the early effort to veil the consumer movement in a shroud of ominous portent for our society was largely a failure, and that interpretation fell rather quickly into disuse, although some with an economic interest antithetical to the consumer interest perspective may still use the term with somewhat that type of negative connotation.

Consumer leaders gave the term a positive interpretation, defining it in terms of a range of efforts to improve the lot of people in their role as consumer. Mayer (1989) has defined consumerism as "a diverse and evolving social movement seeking to enhance the economic wellbeing and political power of consumers." He declares that "the goal of consumerism is to empower people -- both as individual buyers trying to get the most for their dollars and as a political force striving to rewrite the rules of the marketplace."

Maynes (1994) has presented a taxonomy of consumerism consisting of three views. One is the "scholar view," exemplified as "the articulation of consumer discontent and the furtherance of corrective measures." A second: "the activists, like Ralph Nader, have a narrower focus, tending to restrict consumerism to efforts directed toward government intervention on behalf of consumers." Thus, "many activists would exclude from the *consumer movement* such consumer information and education organizations as Consumers Union."

Mayer's perspectives are consonant with the Maynes taxonomy, in that both focus on empowerment of the consumer to act more effectively in his/her own interests in the marketplace, on the one hand, and both focus on achieving reforms in the marketplace via the political process, on the other. The two dimensions have an important commonality in that they are both couched in terms of furthering the well-being of consumers as economic and social entities. Both seem to be widely accepted by those committed to enhancing consumer well-being. Both attribute a positive meaning to the term "consumerism" from the standpoint of the consumer interest.

A third extant interpretation of consumerism is what Maynes titles the "moralists' view." It is characterized as "an obsessive interest in goods, akin to materialism." This pejorative definition of the term continues in rather widespread use today, the efforts of consumer spokespersons to limit its interpretation to mean a positive force for the consumer interest notwithstanding. Newspaper reports, editorial commentaries, and cartoons in the popular press, as well as statements of some environmentalists, are rife with usage based on the moralists' interpretation. Pope John Paul II decried consumerism, his criticism rooted in that view. In 1985 the ACCI commissioned a four-person committee, of which this author was a member, to draft a statement clarifying consumer leaders' use of the term to the American Catholics Bishops after it had been used in the pejorative sense in a draft of their Pastoral on the Economy (McEwen, 1995).

A review of definitions of "consumerism" in a variety of dictionaries yields both positive and negative interpretations of the term: "promoting consumer interests," "theory that an increasing consumption of goods is economically desirable," "a preoccupation with and inclination towards the buying of consumer goods," and "a program to promote consumer interests, including protection of the environment, restraints on abuse by business, etc." are examples. Swagler (1994), having nicely chronicled this definitional conundrum, concludes, "Apologists for business failed in their effort to turn *consumerism* into a term of contempt. Whether those concerned with the consumer interest have more success in deflecting the negative association of the term with excessive materialism remains to be seen."

A Proposed Solution to the Definitional Dilemma

When a word has two very different meanings, a straightforward solution seems to exist: coin a new term! With respect to the term "consumerism," Esther Peterson provided a clue for such a development in a speech as the newly-appointed, first Special Assistant to the President for Consumer Affairs, during one of her four regional conferences on the consumer interest. As a delegate to the conference in St. Louis in 1964, I recall that Ms. Peterson, having addressed conditions of the marketplace and the consumer interest, concluded that, given the volume of consumer goods and services sold in this country, "we are undoubtedly a *consumption*-oriented society," and then followed with the question, "but are we a *consumer*-oriented society?"

Definitional clarity would be served by limiting the interpretation of "consumerism" to the range of orientations and actions consonant with enhancing the consumer interest in a positive sense, and labeling obsession with ownership and use of market goods and services as "consumptionism." A simple development like promulgating the term "consumptionism" to represent "excessive materialism," "the frivolous accumulation of goods for their own sake," and similar connotations, can make a significant improvement in clarity of communication about consumer activity and the consumer movement. The term "consumptionism" serves well to differentiate that which is consumption-oriented from that which is consumer-oriented.

Given that "consumerism" is restricted to encompassing the gamut of activities and orientations intended to enhance the cause and condition of the consumer, some purpose may be served by also adopting terminology to differentiate the somewhat diverse interpretations of the term as used even in that sense. Descriptive adjectives have a purpose. Such labels as "macro-consumerism" and "micro-consumerism," or "individual (or personal) consumerism" and "system (or policy or context) consumerism," or "personal empowerment consumerism" and "reform consumerism," might be useful further refinements of the general concept, to delineate the variety of interpretations of the term "consumerism" even among those who hold in common the perspective that it means those elements of the consumer movement that further the consumer interest. Such further refinements of the concept, if merited, await further development.

Filling a Void in the Consumer Interests Vocabulary

The consumer interests field has been devoid of a singular term to denote the degree of effectiveness of individuals in the consumer role. Terms such as "consumer competence" or "consumer efficiency" may be used in discussions of consumers and their actions, but they do not capture what they attempt to convey in a definitive term that is rooted in an accepted conceptual or definitional framework. The intent of such phrases is to convey a sense of efficiency in the consumption process. They convey a suggestion of the relationship between returns (or utility) and outlays (or costs). On the production side, the ratio of product to resource inputs (generally expressed in terms of output per unit of labor input, but conceptually applicable also to product in relation to capital inputs), is labeled "productivity." A logical counterpart of that term on the consumption side is "consumptivity" -- in simple terms, the ratio of returns to outlays. More specifically, the definition of "consumptivity" proposed herein is "the ratio of the present value of all current and future extrinsic and intrinsic benefits derived from a good or service, relative to the present value of all current and future extrinsic and intrinsic costs expended in consumption of a good or service. That is, "consumptivity" is a measure of efficiency in consumption, the counterpart of "productivity" as a measure of efficiency in production.

Just as "production" denotes an activity or a total quantity resulting from that activity and "productivity" reflects a degree of efficiency in the production process, "consumption" denotes an activity or the total quantity resulting from that activity, and "consumptivity" reflects the degree of efficiency in the consumption process. The extrinsic outlays to be included in the consumptivity formula include money (representing labor and capital investment outlays to acquire it), as well as the value of human time absorbed in search, decision, purchase, use, maintenance, and disposal of a product or service.

Intrinsic outlays include frustrations associated with the entire process. Extrinsic benefits consist of material returns from the good or service -- comfort, safety, health, pleasure, nutrition, perhaps increased market value over time because of scarcity, and so on. Intrinsic benefits include the sense of status, well-being, or security that may devolve from the ownership and use of the purchased good or service, and even the pleasure that might be derived from the experience of effectiveness (or even ineffectiveness!) in the process of selection, purchase, use, maintenance, and disposal of it.

Consumptivity as here defined provides a useful tool for the consumer to conceptualize whether in each consumption transaction and in the total of all consumption transactions, he or she has attained the maximizing condition -- that is, marginal benefits exceed or at least equal marginal costs.

The concept of consumptivity could, of course, be constrained to represent the returns only to human effort expended in the search and purchase process. It could also be limited by considering only the material component of returns for the consumer's effort; that is, only the extrinsic component of the utility-providing purchase. Yet another conceptualization might consider only direct financial outlays and extrinsic returns from the purchase itself. The concept might also be useful in identifying the source of the "consumer profit" (the added utility) that is yielded from effective purchase processes over what might have been obtained by a hurried, haphazard purchase. Each of these constrained versions of the concept may merit more refined definition; that is, each concept could combine a descriptive adjective with the term "consumptivity." "Short-term, extrinsic consumptivity," "long-term, comprehensive consumptivity," are possibilities that come to mind.

Further refinements of the concept of consumptivity, if warranted, will require careful specification of terminology. Suffice for now to conceive of "consumptivity" in its broadest sense, that is, the ratio of the present value of all current and future benefits to the present value of all current and future outlays. The concept so framed is equally applicable to the totality of a consumer's purchases, as to individual purchases, albeit with increased complexity.

The concept of consumptivity as here defined is applicable also to consumption of home-produced goods and services, as it is to market-produced goods and services. With household production, in which case the intrinsic components are more significant relative to extrinsic components than in market production, and the boundary between production and consumption is murky because of the consumption aspects that derive from some home production processes, the conceptualization of consumptivity becomes even more subtle than in the case of consumption of market goods and services. Nonetheless, it can be effectively applied in conceptual terms that may affect consumer behavior in important ways even though exact measures and monetary values are not applied to all the factors involved in the consumption equation.

Consumers are unlikely to calculate carefully and in specific terms the kind of benefit-cost ratio suggested by this conceptualization, or attempt to put monetary values on all outlays and returns from them over time. Nevertheless, the concept of consumptivity as here defined provides a useful construct for sensitizing consumers to the important matter of functioning in a manner that enables them to garner maximum total returns from total outlays -- and it does so with a single term that parallels a widely known and widely used counterpart term on the producer side of economic activity. Frame of mind is an important factor in human activity. If promulgating consumptivity as a concept serves to enhance people's functioning in their consumer role, then it matters little that exacting measurements of outcomes are not taken; improved consumer well-being will be sufficient reward for the concept and its label.

Relevance of Proposed Terminology

It is important that concepts and terminology in a discipline or field be as consistent in interpretation as possible, and that they have consonance with each other. The definitions of "consumerism," "consumptionism," and "consumptivity" suggested here meet those criteria. Hopefully they will contribute to clarity of communication regarding consumer activity and the consumer interest, and perhaps help heighten the sensitivity of individuals to the potential that effectiveness in the consumer role has for contributing to the quality of their lives.

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Risk Perception, Money and Gambling: Perspectives and Programs

Carole J. Makela, Colorado State University[1]

A 1993 article in *Advancing the Consumer Interest* stated that "consumer professionals must recognize gambling as an activity that impacts families everyday" (Makela & Tucker, p. 17). Now three years later, we find that consumer professionals continue their exploration of this issue. Educators are developing programs and collaborating with other community agencies. Others are looking at their financial management programs considering the perspectives of risk and "get rich quick" as these pervade society today. With an estimated $482 billion bet legally in 1994 (Shapiro, 1996), consumer and financial management educators need to factor this expenditure into their educational, informational, and counseling agendas. To put this amount into more easily grasped terms, it is $1,850 per capita; six times what is spent annually on spectator sports (Harden and Swardson, 1996). This sum includes casino, lottery, parimutuel, and charitable gambling. If we look at attendance at various leisure activities, casino attendance is second to amusement theme parks. Total attendance at major league baseball games, symphony concerts, National Football league games, and Broadway shows now falls short of casino attendance by eight million a year (Shapiro 1996).

It is surprising to note that despite the size of the monetary expenditure on gambling, it is seldom included in expenditure surveys, financial management literature, or budgeting guides. Historically, at the 1853 International Statistical Congress, Ducpétiaux classified household expenses and included "gambling" as an "expense of a luxurious and improvidential type" (Zimmerman, 1936). At best with the current Consumer Expenditure Survey casino gambling may be classified as "other entertainment services, out-of-town trips" or other gambling as "miscellaneous fees, pari-mutuel losses." Are we dealing with the issue?

Thirty years ago, the only gambling in the United States was at casinos in Nevada. Now 37 states have lotteries, ten states have commercial casinos (as Nevada though some limit the size of bets), 24 states have tribal gambling establishments, and there is the potential for betting over the Internet and a cable television lottery channel.

Gambling is touted as a recreational and travel activity as noted by the recent publication of a directory of 2,000 gambling establishments in North America. Las Vegas has been described as fighting for its market share with new super hotels deploying "high-tech movies, lasers, robots, motion simulators, and fantasy architecture to lure you into synthetic realities" (Wolkomir, 1995, p. 52). This is an example of the competition developing among the 2,000 local and area gambling establishments for the consumer's dollars and leisure time. At the same time the industry is well aware of the competition between segments (casinos versus lotteries), between areas (Las Vegas versus all other areas), among operations (tribal, commercial, and state) to attract and hold the consumer and his/her money. The industry introduces and uses new terms—gaming, all-American entertainment, gimmicks (scent emitting slot machines), games (electronic poker, etc.), and clever promotions in an effort to increase participation. At the same time, various segments of the industry are funding political candidates and grassroots organizations to gain favor for policies.

Collaborative Programs

The impact of gambling, both in dollars and human resources, is not being ignored by researchers and educators. An excellent example of a collaborative effort is found in North Dakota. Motivated in part by holding the record for the highest per capita spending for charitable gaming ($450 in 1994) (Report on Charity Gaming in North America), the Council of Compulsive Gambling in North Dakota was formed. Its members include Gambler's Anonymous, the treatment community, the state gaming division, Lutheran Social Services, Mental Health Association, and North Dakota State University. The Council has developed materials to assist community groups' exploration of the topic "Gambling: Its Effects on Families and Communities in North Dakota" (Jacobson 1995). Materials include videos, brochures, and a series of posters promoting their 800-number helpline.

Another example of educational materials is that developed by Makela and Tucker, "Gambling:

Understanding the Issues" (1995). As with the North Dakota materials, their guide presents gambling-related issues that challenge individuals/families in their roles as voters, taxpayers, gamblers, and employees/employers. These challenges include if and how much money and time one spends on gambling, decisions as to one's stance on initiatives/referendums for expansion/ limitations of gambling in the community or state, and one's views on topics such the extent to which gambling (1) is a painless tax, (2) leads to economic development, (3) changes the work ethic to a luck ethic, (4) is the "new white buffalo" for Native Americans, and (5) is adequately regulated and monitored.

Consumer professionals need to rethink their policy and financial management education against the background of state sponsored and promoted lotteries, the enticements of employment and revenue expansion, hit the jackpot as opposed to "a penny saved is a penny earned" mentality, and the realities of compulsive gambling. Gambling (legal) including state sponsored and promoted lotteries has influenced values for an entire generation. Consumer educators and financial planners must recognize this impact.

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Risk Perception, Money and Gambling: Perspectives and Programs
A Non-formal Educator's Perspective

Non-formal educators should increase their understanding of gaming issues and consider educational strategies in financial education to meet learning needs of diverse audiences.

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Although I live in Texas, my gambling nickels are safely stored in Minnesota --- this spring we'll see if proximity to minus 60 degree weather encourages a better return on nickel slot machines at the local Indian casino! I have always loved nickel slots, since childhood when I won the jackpot on a neighbor's machine at the lake. I hauled them home but my mother made me take them back!

Today's gaming issues expand well beyond nickel slot machines to a world view dominated by a gaming industry that promotes hope through winning (Makela & Tucker, 1993, 1995). As non-formal educators in communities across America, how should we respond? This brief summarizes five considerations for the non-formal educator.

1. The gaming industry is pervasive -- it is big business, so we must learn all we can.

Lottery is big business in Texas, a state with no casinos (Texas lottery, 1995). Just how big?

- Big enough to hold the record for two consecutive years as the lottery that sold more tickets than any other lottery in North America (that means surpassing all other states, Canada and Mexico). Only the national lotteries of Japan, Spain, France and Italy do better.
- Big enough to deposit more than $1 billion into state coffers, based on 12 months' sales, and $2.8 billion since its May 1992 start-up.
- In FY 1995, the Texas Lottery paid more than $1.7 billion in prizes to its players.
- Weekly sales of Lotto Texas average $23 million and weekly sales of scratch tickets average more than $40 million. These weekly sales are the highest in North America.

2. We don't know all of the impacts of gaming on families and communities.......yet, but negative sentiment about gaming is growing.

The signs of anti-gambling sentiment are growing. Not only is there an active National Coalition Against Legalized Gambling, but Congress will name a national commission to study gambling's impact. Little reliable information on the social and economic impacts of gambling are available nationally, so the commission is likely to address three key issues: (1) Does gambling create economic development? (2) What are the social costs? and (3) Does gambling lead to crime? Even the financial planning industry is being encouraged to take a stand against gambling (Simonoff, 1996).

3. Problem and compulsive gambling extract a toll.

Not everyone who gambles or plays the lottery will develop a serious problem. Some states, however, have reported increases in serious gambling problems. The Texas Council on Problem and Compulsive Gambling publishes 10 questions on compulsive gambling, a modification of the 20 questions from Gamblers Anonymous:

1. Have you lost time from work because of gambling?
2. Has gambling every made your home life unhappy?
3. Has gambling ever affected your reputation?
4. Have you ever felt remorse after gambling?
5. Do you ever gamble to get money with which to pay debts or otherwise solve financial difficulties?
6. Does gambling cause your ambition or efficiency to decrease?
7. After losing, do you feel you must return as soon as possible to win back your losses?
8. After winning, do you have a strong urge to return and win more?
9. Do you often gamble until your last dollar is gone?
10. Do you ever borrow to finance your gambling?

4. Promotion is an important element of gambling and lottery activities.

Texas state law prohibits lottery organizers from doing anything that "unduly influences" Texans to buy a ticket, but state law doesn't spell out what "undue influence" is. Nora Linares, the lottery's Executive Director says, *We don't promise to change people's lives. We offer them a way to have fun.* Yet the Texas Lottery spends $40 million a year on advertising, a factor that lottery executives say has helped to make Texas the Number One lottery (Texas lottery hits, 1995).

Is promotion the key to increased lottery sales? A resource economist at Texas A&M maintains the horse racing industry cannot survive in Texas without a program to advertise and promote racing as a sport against other forms of entertainment and advocates the use of a checkoff program similar to those used to promote other agricultural commodities (Chenault, 1995). The generation that controls all the money today in Texas knows very little about parimutuel wagering and doesn't know how to go to the window to place a parimutuel bet.

What are the parameters of undue influence? A marketing columnist for the Houston Chronicle recently cited examples of "going too far." (1) The Illinois State Lottery billboard that was posted in one of Chicago's poorest neighborhoods: *this could be your ticket out.* (2) The ad for Connecticut's Powerball jackpot: *You could get even luckier than you did on prom night.*

5. Non-formal educators can play a key role.

Because Extension educators and other community-based, non-formal educators can play a key role in educating the public, they must::

Identify the audience

Who needs information, education, remediation, policy development or technical assistance?

Identify the content/ desired outcomes

What do they need to know, understand, question, analyze? What should happen as a result of our non-formal education interventions?

Delivery

How should we deliver this education?

Educators would do well to acknowledge that while consumers may view their lottery purchases and gambling activities as recreational pursuits, lottery thinking is pervasive in society. Lottery thinking can cloud reality with its emphasis on the rewards of winning. Lottery thinking reinforces the idea that getting ahead financially is a matter of luck........that if we could just win ....everything would work out. Luck and hope as substitutes for financial planning and action.

Educators can capitalize on the "lottery mania" to teach important financial planning and consumer decision making skills. *What to Do Until You Win the Lottery* is an educational program packet currently in its design phase by this author. When complete later this year, this program will equip Extension educators and other non-formal education specialists to present programs that discuss the gaming industry and its impact on families and communities, involve participants in examining shifting attitudes and values concerning gaming, and challenge participants to develop a personal financial action plan to meet future financial goals.

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Endnotes

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The Importance of Non-Residential Parent Contact for Children of Divorce

This study examines the importance of nonresident parent's contact with their children after divorce to determine if continued father involvement alleviated or exacerbated children's adjustment to their parent's divorce. Using data from the National Survey of Families and Households (NSFH), three measures of children's adjustment were tested. The results show that children's behavior problems are more associated with parental conflict than higher levels of parental involvement.

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Introduction

When a divorce occurs, the impact is felt by everyone in the family system: husband and wife, parents and grandparents of the divorcing couple, brothers and sisters, aunts and uncles. Certainly among those affected are the couple's children. Over one million children each year will experience their parent's marital dissolution, after which about 90% reside with their mothers (U.S. Bureau of the Census, 1995).

Moving from an intact to a divorced family can be an extremely stressful transition for many children (Amato, 1993; Hetherington, 1993; Kelly, 1993; Wallerstein, 1991). Although most children eventually adjust, for a significant minority, parental divorce is associated with long-term negative outcomes in the areas of academic achievement, behavior, social development, self-esteem, and peer relations (Kalter, Kloner, Schreier, & Okla, 1989). As adults, children who experienced parental divorce have poorer psychological adjustment, lower socioeconomic attainment, and greater marital instability (Amato, 1993).

A number of explanations have been proposed to account for children's difficult adjustment to divorce. Among the most frequently suggested are 1) loss of the noncustodial parent, 2) interparental conflict, 3) adjustment of the custodial parent, 4) economic distress, and 5) multiple life changes (Amato, 1993; Demo & Acock, 1988). Other factors that have been proposed to account for children's post-divorce adjustment include the child's gender and developmental level (Camara & Resnick, 1988), age at the time of divorce (Kinard & Reinherz, 1986), the amount of time since parental separation (Hetherington, 1993), remarriage of the custodial parent (Beller & Chung, 1992), social class (Hetherington, 1993), and differences in custody arrangements (Camara & Resnick, 1988).

One persistent line of inquiry has focused on the importance of father involvement in families where mothers maintain physical custody. Early studies indicated that continuing father involvement was positively associated with children's well-being. Hetherington (1993) concluded that unless the father was poorly adjusted or immature, or there was a lot of conflict between parents, frequent contact with the nonresidential father was associated with positive developmental outcomes for children. However, other studies based on large national surveys have found little association between father visitation and child well-being (Furstenberg, Morgan & Allison, 1987) and some researchers found the frequency of visitation to be negatively related to child adjustment (Healy, Malley, & Stewart, 1990).

For most fathers, contact with children drops off sharply following marital separation. Researchers analyzing data from the National Survey of Children reported decreasing levels of father involvement over time, to the extent that most children said they either had no contact or had rarely seen their fathers in the preceding year. Zill, Nord and Prosser (1993) reported only 23% of divorced children visited at least weekly with their nonresident fathers.

It has been speculated that if nonresident fathers remain actively involved, parents may be better able to maintain consistent discipline and supervision over their children. Simons, Whitbeck, Beamon, and Conger (1994) noted that nonresidential fathers who continue to fill the role of parent served to counter the poor communication, weak control and inconsistent discipline displayed by some single mothers. Other researchers have consistently shown low parental monitoring and inept discipline to be related to children's difficulties at school and delinquency. There is strong evidence that single parents tend to make fewer demands on children and utilize less effective disciplinary strategies than parents in intact families (Kalter, et al, 1989).

Other researchers suggest nonresidential fathers have little impact on their children beyond their contribution to the economic well-being of the family. In several studies, once family socioeconomic status was controlled, the negative consequences of father absence was minimal, (Hawkins & Eggebeen, 1991). Because divorce brings substantial economic deprivation to post-divorce, mother-only households (Weitzman, 1985), it could be argued that it is poverty (or at least a dramatic decline in the mother's financial status) that accounts for the scholastic and behavioral problems of many children of divorce (Kalter, et al, 1989). Such a decline might cause the children in her custody to feel depressed and angry, especially when it stands in sharp contrast to advantages enjoyed by the other parent (Wallerstein, 1991). Further, limited means may require moving to neighborhoods with inadequate schools, high crime rates, and a well-developed delinquent subculture (McLanahan & Booth, 1989). Thus the lack of economic resources and the sociocultural factors associated with being economically disadvantaged may themselves account for children's poor academic performance and for behavior problems, quite apart from the other consequences of divorce.

Data and Sample

The purpose of this study was to examine the importance of nonresident parents' involvement with their children and to determine if higher levels of involvement alleviated or exacerbated children's adjustment to their parent's divorce. The data were taken from wave two (n = 12,244) of the the National Survey of Families and Households (NSFH), a national sample survey conducted by the University of Wisconsin-Madison in 1992-1994.

The subsample used in this study are women currently residing with children between the ages of 5 and 18 whose father lives elsewhere were included (n=225). Mothers who were not married to the father of the child at the time of the child's birth were excluded. Fathers' reports on their biochildren living with the child's mother were also excluded due to the high number of nonresponses. All questions regarding the nonresidential parent and the child are in reference to one "focal child" selected randomly from all children in the mother's household.

Variables

In this analysis, children's adjustment is measured by mothers' responses to three questions: is the child difficult to raise; has the mother been asked to meet with a teacher or principal because of a behavior problem in the last 12 months; and has the child seen a doctor or therapist about emotional or behavior problems since 1988. The independent variables are drawn from findings of previous research and include five factors: child, mother and father's characteristics, father involvement, and six conflict variables (see Table 1). A limitation to the study is that mother's and father's incomes and current employment status were not incorporated into the models because of the large numbers of nonresponses. A further limitation is that the analysis uses mothers' reports about fathers' involvement rather than fathers' first-hand accounts.

Analysis

Means, frequencies and correlations were examined to explore the characteristics of the sample and bivariate association between variables (see Table 2). To examine the factors associated with the liklihood of having adjustment problems in different areas, logistic regression analyses were used because the dependent variables are dichotomous. The estimated coefficients indicate the direction of the relationship between independent and dependent variables rather than the magnitude of the relationship (SAS Institute, 1989). Models for each adjustment problem are estimated separately to contrast the results across all four.

Results

Table 2 shows the estimated coefficients (and standard deviations) for all three models. Of the child's characteristics, only gender is significant. Boys were less likely to see a doctor or therapist because of a behavior or emotional problem. This finding runs counter to expectations because, in general, boys' adjustment problems take the form of aggressive, deviant behavior which might lead to a counseling referral. Mother's remarriage influenced outcomes in three different dimensions. If mother had remarried she was less likely to perceive the child as difficult to raise or to be called to school to see a teacher or principal. This strengthens the notion that a warm and supportive stepfather can assist mothers in their parental role, although some researchers would say that the extra resources stepfathers bring into single-mother households has a stronger impact on the quality of

Table 1
Measurement of Variables

Variables	Measurements
Dependent variables:	
Difficult to raise (DIFFICULT)	1 if difficult, 0 otherwise.
Asked to see a teacher/principal (SEETEAC)	1 if was asked to meet a teacher/principal in the last 12 months, 0 otherwise.
Seen a doctor/therapist about emotional/behavioral problem (SEEDOC)	1 if seen a doctor/therapist about emotional/behavioral problem since 1988, 0 otherwise.
Independent variables:	
Child's Characteristics	
Child age (CAGE)	Age of child in years.
Child gender (CGENDER)	1 if male, 0 if female.
Mother's Characteristics	
Maternal age (MAGE)	Mother's age at child's birth.
Marital status (MARRIED)	1 if currently married, 0 otherwise.
White (WHITE)	1 if white, 0 otherwise.
Household size (HHSIZE)	Number of persons in household.
Public assistance (ASSIST)	1 if received AFDC, general assistance, food stamps, or energy assistance, 0 otherwise.
Father's Characteristics	
Education (FEDU)	Number of years of formal education at child's birth.
Marital status (FMARRIED)	1 if currently married, 0 otherwise.
Geographic. Proximity (PROX)	Number of miles from the child's residence to father's residence.
Financial support for child (SUPPORT)	Dollar amount of financial support given to child during the last 12 months.
Father Involvement:	
Telephone/Letter (TELLET)	How often the child talk on the phone/receive a letter from father during the last 12 months/time since the child stop living together; 1 if not al all, 2 if about once a year, 3 if several times a year, 4 if 1 to 3 times a month, 5 if about once a week, and 6 if more than once a week
See father (SEEFAT)	How often the child see his/her father in person; same categories as TELLET
Dad's influence (DADINF)	How much influence the child's father in making major decisions about education, religion and health care; 0 if none, 1 if a little, 2 if some, 3 if pretty much, and 4 if a great deal.
Talk about child with father (TALKDAD)	How often talk about the child with his/her father; 0 if not at all, 2 if about once a year, 3 if several times a year, 4 if 1-3 times a month, 5 if about a once a week, and 6 if more than once a week.
Legal agreement (LEGAL)	1 if there is a legal agreement about child support, alimony, custody, or visitation, 0 otherwise
Conflict with Father:	
Where child live (CLIVE)	1 if there is a conflict about where child lives, 0 otherwise.
How child is raised (CRAISE)	1 if there is a conflict about how child is raised, 0 otherwise.
How father spend time with child (CTIME)	1 if there is a conflict about how father spend time with child, 0 otherwise.
How mother spend money on child (CMSPEND	1 if there is a conflict about how mother spend money on child, 0 otherwise.
How father spend money on child (CFSPEND)	1 if there is a conflict about how father spend money on child, 0 otherwise.
Financial contribution to child's support (CSUPPORT)	1 if there is conflict about how much father contribute to child financially, 0 otherwise.

Table 2

Estimated Results of Probit Analysis for Children's Adjustment: Difficulty in Raising, Seen Teacher/Principal, and Seen Doctor/Therapist (n=225)

Variables	DIFFICULT	SEETEAC	SEEDOC
Child's Characteristics:			
CAGE	0.003 (0.07)	0.12 (0.07)	0.02 (0.07)
CGENDER(male)	-0.34 (0.52)	0.13 (0.47)	-1.37 (0.54)**
Mother's Characteristics:			
MAGE	0.002 (0.058)	-0.10 (0.06)	-0.02 (0.06)
MMARRIED	-1.98 (0.74)**	-1.39 (0.60)**	-0.90 (0.65)
WHITE	-0.24 (0.54)	-0.93 (0.49)	0.52 (0.56)
HHSIZE	0.58 (0.24)*	0.26 (0.19)	0.51 (0.22)*
ASSIST	0.33 (0.61)	0.51 (0.65)	1.45 (0.66)*
Father's Characteristics:			
FEDU	-0.14 (0.12)	-0.06 (0.09)	0.27 (0.12)*
FMARRIED	0.31 (0.62)	0.77 (0.56)	1.33 (0.62)*
PROX	0.0001 (0.0002)	0.003 (0.0002)	0.001 (0.001)
SUPPORT (in $1,000)	-0.03 (0.10)	0.03 (0.11)	-0.02 (0.11)
Father Involvement:			
TELLET	0.23 (0.21)	0.21 (0.21)	0.38 (0.26)
SEEFAT	0.06 (0.25)	0.56 (0.23)**	0.13 (0.26)
DADINF	-0.25 (0.24)	-1.01(0.30)***	-0.11 (0.24)
TALKDAD	0.36 (0.25)	0.22 (0.22)	-0.24 (0.23)
LEGAL	0.89 (0.89)	2.40 (1.29)	1.34 (1.18)
Conflict variables:			
CLIVE	0.21 (0.63)**	0.76 (0.61)	1.79 (0.72)**
CRAISE	0.26 (0.63)	0.84 (0.58)	-0.33 (0.57)
CTIME	0.27 (0.67)	1.76 (0.65)**	2.06 (0.65)**
CMSPEND	-0.97 (0.77)	-0.51 (0.68)	-0.78 (0.68)
CFSPEND	0.67 (0.61)	-1.41 (0.67)*	1.46 (0.63)*
CSUPPORT	-0.91 (0.77)	0.44 (0.63)	0.50 (0.69)
Constant	-4.55 (2.84)	-6.39 (2.82)**	-11.53 (3.09)
Log-likelihood	-74.91	-69.84	-62.41
Chi-square	256.36	203.45	133.44

Note: * $p < .05$ ** $p < .01$ *** $P < .001$

parenting (Bronstein, Clauson, Stoll, & Abrahms, 1993). Household size positively influenced mother's perception that the child was difficult to raise and for the child to see a doctor/therapist. Public assistance was also correlated with seeking counseling perhpas through subsidies for financial help to pay for such care. As father's education level increased, and if the father remarried, the more likely the child was to see a doctor or therapist. It may be that children perceive the stepmother as rival for father's time and attention. Stepmothers may also bring their own children to a remarriage which can lead to its own set of adjustment problems.

Father involvement with children was significant in only one model: the more children saw their father in person more likely the mother was to meet with a teacher or principal. The more influence dad had in decision making, the less likely the mother was to meet with a teacher/ principal. Finally, four conflict variables were positively related to behavior problems in all three models: conflict over where the child lives, conflict over how the father spends time with the child, and conflict over how the father spends money on the child.

Discussion

The process of divorce almost always involves a high degree of conflict and emotional turmoil for both parents and children before and after parental separation. Several studies have found a strong correlation between children's adjustment and parental conflict, regardless of the parent's marital status (Kurdek, 1991). When there is a frequent, recurring friction between parents, children display more adjustment problems (Camara & Resnick, 1988).

These results suggest that it is parental conflict rather than contact that is associated with reported behavior problems among children. Higher levels of father involvement only attained significance with regard to mothers' meeting with teachers and principals and was positively associated with fathers seeing their children in person. But these results are based on mother's reports and therefore may be heavily influenced by her association between father visitation and children's behavior problems at school. Children can often display argumentative or hostile behavior before and after visitation if they are placed in a position of divided loyalty between parents (Ricci, 1981).

All but two measures of parental conflict were associated with children's behavior problems. This suggests that a number of children are caught in the cross fire of their parent's acrimony every year and have the scars to show for it. This points to the need for structured mediation programs, community-based educational workshops and supervised visitation programs aimed at promoting cooperative co-parenting after divorce. Even parents who can't attain cooperation can learn how to avoid conflict. Given that many children from divorced homes get labeled as "troublemakers" by school authorities it is important for school personnel to become more sensitive to the needs of children from this at-risk group and how to help them become functioning and competent adults. Finally, recognizing that there are limits to what the law can do, it can be a tool to create balanced and enforceable support and visitation agreements. To the extent that the legal system promotes conflict and poor co-parental relations, it is damaging to divorcing couples and their children in both the short and the long term.

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Factors that Influence Noncustodial Fathers' Compliance With Child Support Orders

This study explores factors that influence noncustodial fathers' compliance with child support orders. Significant factors include the size of the child support award, the administration of automatic income withholding, and the frequency of visitation. Suggestions for child support policy are offered based on the findings from this study.

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Introduction

The Family Support Act of 1988 established uniform guidelines designed to increase the size of child support awards and thereby lift children out of poverty. Pearson, Thoennes, and Tjaden (1989) evaluated whether the new guidelines successfully increased the levels of support ordered and estimated that child support orders increased an average of 15% after the implementation of the guidelines.

The increases in child support awards that result from the use of uniform guidelines, however, may unintentionally affect the compliance behavior of noncustodial fathers. Several researchers argue that child support legislation has been ineffective because there appears to be a greater resistance from noncustodial fathers to pay child support as the size of support orders increases (Garfinkel, Oellerich, & Robins, 1991; Sonenstein & Calhoun, 1990). If uniform guidelines result in increased noncompliance, then the goal of reducing children's poverty may not be attained for some children. In this context, policy makers need to consider a wide range of factors that influence fathers' willingness to pay child support. This paper uses data obtained from noncustodial fathers to explore the tradeoffs between the size of child support awards and the probability of compliance, while controlling for demographic, psychological, economic, and legal factors that may influence child support compliance.

Research Hypotheses

The theoretical framework used to generate and test hypotheses regarding child support compliance suggests that legal, economic, demographic, and psychological factors may influence compliance rates. The key premise of the framework is that noncustodial parents choose to allocate their resources to their children, subject to their preferences and the constraints they encounter. That is, noncustodial fathers choose to pay or not to pay child support as a result of the interaction between their preferences and their constraints.

The primary hypothesis for this investigation is that as child support awards (AMTOWED) increase, child support compliance will decrease, ceteris paribus (i.e., the own-price effect is negative). Child support legislation mandating uniform award levels often results in higher award amounts being ordered. Noncustodial fathers may become sensitive to the increased cost and choose not to comply with their child support order. Other legal factors that are hypothesized to influence positively child support compliance include the frequency of visitation (VISIT), the type of custody arrangement (JOINT), and whether or not child support payments are automatically withheld from the noncustodial father's paycheck (INCWH).

It may be that fathers who are more involved with their children through frequent visits are also more likely to comply with child support orders. Fathers who share joint-legal custody with the custodial mother may display higher compliance rates because this type of custody arrangement offers them the opportunity to make psychological investments in the day-to-day decisions that affect their children's lives. Automatic-income withholding may improve the enforcement of child support orders, especially if noncustodial fathers have a desire to appear to be in compliance to their employers.

Four economic factors are hypothesized to influence child support compliance. It is hypothesized that compliance will increase with the noncustodial father's income (NCPINC) and educational level (NCPEDUC), as well as with the educational level of the custodial mother (CPEDUC). The custodial mother's income (CPINC), however, is hypothesized to have a negative influence on compliance.

Limitations in the noncustodial father's income may affect the compliance behavior of noncustodial fathers. A noncustodial father may feel less compelled to pay child support, however, when the custodial mother earns more money than he does. With regards to education, well-educated fathers may be more motivated to support their children financially if they have learned the negative outcomes associated with children who are raised in the absence of their fathers and/or in poverty. Mothers with higher education may have developed better negotiation skills and may use them to elicit compliance from noncustodial fathers.

Demographic factors that are hypothesized to be negatively associated with child support compliance are the noncustodial father's current marital status (NCPMAR), the custodial mother's current marital status (CPMAR), and the distance of the father's residence from his children's residence (DISTANCE). The current age of the child (CHLDAGE), the sex of the child (GENDER), whether or not the noncustodial father was married to the custodial mother at the birth of the child (MARBIRTH), and the number of children awarded child support (NUMKIDS) are demographic factors hypothesized to be positively associated with child support compliance.

If noncustodial fathers have remarried, their desire to devote resources to the children from their previous marriage may wane as the desire to invest in their new household increases. Noncustodial fathers may also justify noncompliance upon the remarriage of the custodial mother, given that she is now able to combine income with a new spouse. Noncustodial fathers who live great distances from their children may have less of an incentive to pay children support, given the restricted contact they have with their children. Noncustodial fathers may have stronger preferences to invest resources in older children to whom they have had a long-lasting attachment. With regards to the sex of the child, past research has suggested that noncustodial fathers are less likely to pay child support for male children (Seltzer, 1991). Noncustodial fathers may feel a greater need to invest resources in their daughters who they may view as being more vulnerable. Noncustodial fathers who were married at the time of their children's birth may have developed a better rapport with their children than fathers who were never married to the mother. Finally, compliance may manifest itself as a reflection of the resolve of custodial mothers with more children to secure child support given their greater financial need.

Two psychological factors that may influence child support compliance include whether or not the relationship between the custodial mother and the noncustodial father is characterized by conflict (CONFLICT) and the noncustodial father's perception of satisfaction regarding the number of opportunities he has to visit his children.

Noncompliance may result when the noncustodial father views the payment of child support as associated with conflicts with the custodial mother. On the other hand, high levels of satisfaction regarding visitation may increase compliance with child support. The following section outlines how these hypotheses will be tested.

Methods

Data Set and Sample Selection

The data for this study come from both the 1988 and 1993 waves of the National Survey of Families and Households (NSFH). Using a panel design, the NSFH covers a wide variety of topics on family life in America. The sample size of 454 is limited to males who identify themselves as noncustodial fathers with one or more children under the age of 18 living in the custody of the children's mother at the time of the 1993 interview.

Variable Specification

Noncustodial fathers' compliance with child support orders is the dependent variable in this study. A noncustodial father is defined as compliant if, over the past 12 months, he reports paying child support equal to or greater than what was stipulated in his child support agreement (COMP)[2]. COMP is a categorical variable comparing noncustodial fathers who pay at least the full amount with noncustodial fathers who pay less than the full amount of child support owed.

Seventeen independent variables are included in the empirical model based on the research hypotheses outlined earlier. All of the variables are obtained from the survey responses of the noncustodial fathers. Fathers are singled out in this paper because they make up 97% of all noncustodial parents (U.S. Bureau of the Census, 1993). Many researchers have attempted to understand the compliance behavior of noncustodial fathers, but most have relied on information gathered from custodial mothers (Seltzer & Brandreth, 1994; Sonenstein & Calhoun, 1990). Discrepancies may exist between mothers' and fathers' reports of fathers' activities due to reporter bias. If the viewpoint of the father is never considered, however, the inferences drawn from research may only reflect a picture of child support compliance as depicted by the mother. Of course, interviewing both parents about child support compliance would offer a more accurate view of the problem. Presently, however, there are no nationally representative U.S. data sets that offer independent information from each parent.

Empirical Analysis

A two-stage estimation process involving a probit analysis was chosen for two reasons. First, a probit analysis is an appropriate statistical technique when the dependent variable is categorical (Kinsey, 1984), as is the case with COMP.

Second, the sample construction process dictated by the organization of the survey questions may introduce a sample selection bias. Sample selection bias refers to systematic differences that may exist when those who "participate" in an analysis have different characteristics from those who do not participate. The manner in which the NSFH interview was constructed may inadvertently produce a sample selection bias between noncustodial fathers who have a legal agreement to pay child support and those who do not.

The NSFH interview uses filtering techniques in an effort to prevent respondents from having to answer a series of questions that do not apply to their specific situation. In this case, NSFH asks the 454 noncustodial fathers who report paying child support if they have a legal agreement to do so. The 276 respondents who answer "yes" to this question are then asked the questions used to construct the compliance variables. The 178 respondents who said that they did not have a legal agreement to pay child support, however, are excluded from the questions regarding compliance. This means that 178 observations could not be used in the estimation of the substantive equations because they did not participate in the questions used to generate the dependent variables.

The factors that affect whether a noncustodial father has a legal agreement to pay child support may be some of the same factors that affect the probability that he will comply with that agreement. Systematic differences between noncustodial fathers who have a legal agreement and those who do not may involve a selection bias that threatens both the internal and external validity of the study (Berk, 1983).

In order to ascertain whether this is true for this sample, bivariate analyses were performed to determine if the differences between the two samples are large enough to warrant the use of a procedure that explicitly corrects for selectivity bias. In sum, these analyses confirmed the suspicion that noncustodial fathers with a legal agreement are systematically different from noncustodial fathers without a legal agreement. Based upon these preliminary investigations and recommendations from other researchers regarding appropriate techniques to correct for sample selection bias (Berk, 1983; Heckman, 1979), it was decided to utilize the two-step estimation procedure first developed by James Heckman (1979).

The first step of the analysis is to estimate a probit equation using as the dependent variable the question that serves to filter out the observation of compliance. In this case, the question that designates whether or not the noncustodial father has a legal agreement to pay child support (LEGAGR) is the dependent variable. The equation is written as follows:

$$\begin{aligned}LEGAGR = {} & a0 + a1{*}NCPMAR + a2{*}CHLDAGE \\ & + a3{*}DISTANCE + a4{*}CPMAR + a5{*}CPEDUC \\ & + a6{*}CPINC + a7{*}NCPEDUC + a8{*}NCPINC \\ & + a9{*}CONFLICT + a10{*}NUMKIDS + a11{*}VISIT \\ & + a12{*}SATISFIED + a13{*}MARBIRTH.\end{aligned} \tag{1}$$

The purpose of equation (1) is to create a variable that, when included in the subsequent regression equation, corrects for sample selection bias (Heckman, 1979). The name of this variable is LAMBDA. LAMBDA represents the probability that an observation is excluded from the sample of interest. Biased regression estimates can be minimized by including the LAMBDA variable as a regressor in the substantive equation of interest.

Five of the 13 variables included in equation (1) were statistically significant[3]. In sum, the probability of a noncustodial father having a legal agreement increases with the frequency of visitation, the remarriage of the custodial mother, and if the noncustodial father was married to the custodial mother at the birth of their child. The amount of conflict that custodial and noncustodial parents experience and the age of the child decrease the probability that a noncustodial father will have a legal agreement.

With constructed LAMBDAs from equation (1), noncustodial fathers' compliance with child support payments is estimated using a probit specification. Equation (2) is estimated using only the sample of fathers who report having a legal agreement, but the correction factor, LAMBDA, is also included among the regressors. Mathematically:

$$\begin{aligned}COMP = {} & b0 + b1{*}AMTOWED + b2{*}NCPMAR \\ & + b3{*}CHLDAGE + b4{*}GENDER + b5{*}DISTANCE \\ & + b6{*}MARBIRTH + b7{*}CPMAR + b8{*}CPINC \\ & + b9{*}NCPEDUC + b10{*}CONFLICT + b11{*}NCPINC \\ & + b12{*}NUMKIDS + b13{*}CPEDUC + b14{*}INCWH \\ & + b15{*}VISIT + b16{*}SATISFIED + b17{*}JOINT + \\ & b18{*}LAMBDA.\end{aligned} \tag{2}$$

Garfinkel et al. (1991) suggest that the relationship between child support compliance and the size of the award may not be linear. That is, the relationship between compliance and the independent variables cannot be described by a straight line. They use a quadratic specification to test whether compliance ratios vary in a nonlinear fashion with the size of the award. They find that the probability of compliance with child support awards appears to increase at a declining rate. That is, compliance improves as award size increases until the award size hits a certain threshold, after which compliance begins to decline. Given this evidence, a second polynomial equation is estimated that includes a squared term ($AMTOWED^2$) that allows the compliance measures to vary nonlinearly. The inclusion of a squared term implies the prediction that a curved line better describes the relationship between compliance and the vector of independent variables than a straight line.

Results

Descriptive Statistics

With regards to child support compliance, the weighted descriptive statistics show that 61% of the fathers in this study have legal agreements to pay child support. The average noncustodial father owes $3,005 in annual child support payments and made only six payments during the 12 months preceding the survey. Nearly half (47%) of the noncustodial fathers surveyed did not pay any child support at all. Only 41% of the sample paid at least as much as they were legally obligated to pay. Table 1 presents the weighted descriptive statistics for all of the independent variables for the full sample of noncustodial fathers (N=454) and for the sample of noncustodial fathers with legal agreements to pay child support (N=276).

Results of the Main Effects and Polynomial Models

The results of both the main effects and polynomial models suggest statistically significant trends. The probit results find the chi-square test for overall goodness of fit to be statistically significant (x^2=45.24, p<.001 for the main effects model; x^2=52.7, p<.001 for the polynomial model). Table 2 displays the results for both the weighted main effects model and the weighted polynomial model.

There are five variables found to be significant across both models, AMTOWED, INCWH, VISIT, CPINC, and CONFLICT. Although the size of the child support award is found to be significantly associated with child support compliance, it is not significant in the hypothesized direction. It was hypothesized that higher child support awards will lead to lower compliance rates among noncustodial fathers. It is, therefore, surprising to find that the size of the child support award is positively, instead of negatively, associated with compliance.

The squared term is also highly significant for the polynomial model. Unlike the size of the child support award, however, the squared term is associated with compliance in a negative direction. The results for these two terms are interpreted together to mean that as the size of child support awards increase, noncustodial fathers increase compliance, but the rate at which their compliance increases is declining. The calculated threshold where these two terms intersect is $26,198. This is the point at which the direction of the association between compliance and the award size changes from positive to negative. This threshold implies that noncustodial fathers are more likely to pay at least the full amount of child support if their annual award amount is below $26,198 and above that amount compliance declines.

The results suggest that noncustodial fathers who have their child support payment automatically withheld from their paychecks and sent directly to the court or government agency are more compliant than noncustodial fathers who pay on a voluntary basis. The number of overnight visits is also found to be an important factor. The results indicate that the more overnight visits children have, the more likely their noncustodial fathers are to pay the full amount of child

Table 1
Weighted Descriptive Statistics for All Independent Variables.

	Full Sample (N=454)		Legal Agreement (N=276)	
Variable	Mean	SD	Mean	SD
Legal Factors				
AMTOWED	3005.14	5169.19	4836.28	5972.85
INCWH	.28	.42	.40	.47
VISIT	51.63	71.06	68.80	77.49
JOINT	.32	.45	.52	.48
Economic Factors				
NCPINC	29,680.00	25,979.00	31,957.92	27,429.21
CPINC	17,040.00	7293.75	17,693.85	7666.18
NCPEDUC	12.70	2.10	12.93	2.08
CPEDUC	12.41	1.85	12.56	2.09
Demographic Factors				
NCPMAR .32	.45	.31	.45	
CPMAR .38	.47	.48	.48	
MARBIRTH	.62	.47	.82	.37
DISTANCE	425.30	1000.85	369.99	898.43
NUMKIDS	1.7	.98	1.78	.93
CHLDAGE	10.30	4.60	10.20	4.37
GENDER	.49	.41	.49	.41
Psychological Factors				
CONFLICT	7.42	5.45	6.54	5.40
SATISFIED	.08	.25	.09	.28

Table 2
Determinants of Compliance With Child Support Orders (N=454).

Variable	Main Effects COMP B (t)	Polynomial COMP B (t)
Legal Factors		
AMTOWED	.04 (2.1)*	.09 (3.4)***
AMTOWED²	——	-.002 (-2.5)**
INCWH	.53 (2.9)**	.5 (2.8)**
VISIT	.005 (2.9)**	.005 (2.5)**
JOINT	.14 (.81)	.08 (.49)
Economic Factors		
NCPINC	-.0006 (-.14)	.003 (.58)
CPINC	.03 (2.6)**	.03 (2.1)*
NCPEDUC	.027 (.47)	-.008 (-.14)
CPEDUC	-.07 (-1.59)	-.08 (-1.7)
Demographic Factors		
NCPMAR	.27 (1.3)	.22 (1.1)
CPMAR	.46 (1.5)	.44 (1.4)
MARBIRTH	1.64 (1.7)	1.4 (1.4)
DISTANCE	-.0002 (-1.9)*	-.0002 (-1.7)
NUMKIDS	.023 (.23)	-.007 (-.007)
CHLDAGE	.005 (.2)	.08 (.31)
GENDER	.02 (.086)	.02 (.1)
Psychological Factors		
CONFLICT	-.067 (-2.5)**	-.06 (-2.2)*
SATISFIED	.3 (.87)	.25 (.72)
LAMBDA	2.5 (1.8)	2.2 (1.6)
CONSTANT	-2.5 (-1.3)	-1.9 (-.99)
Pseudo-R^{2a}	.14	.16
x^2	45.24***	52.7***

*p<.05; **p<.01; ***p<.001
[a]Aldrich and Nelson (1984) propose a pseudo-R^2 statistic for probit models.

support owed. The fact that noncustodial fathers' level of satisfaction regarding the number of overnight visits is controlled for in the equations makes this finding even more meaningful.

Noncustodial fathers also appear to be less compliant with child support orders when there is more conflict experienced with custodial mothers. Finally, compliance improves as the custodial mother's income increases.

Policy Agenda

The final part of this paper will present three recommendations stemming from the research presented in this study. Each recommendation will be followed by a statement explaining the reasoning behind it.

Policy makers should incorporate guidelines for setting award sizes with reasonable estimates regarding the expenditures of raising children.

The formulation of uniform child support guidelines is based on the specification of percentages of income that are necessary to cover the expenditures of raising children adequately. Taking inflation into account, the estimates for raising children will inevitably grow higher. The use of higher estimates ultimately may lead to higher award amounts.

Policy makers have been cautioned that as guidelines increase award amounts, noncustodial fathers may become noncompliant. This caution may unnecessarily lead policy makers to choose overly conservative estimates in order to prevent noncompliance. The finding from the polynomial equation that compliance tends to decrease if award amounts rise above the range of $26,198 does offer some evidence that caution is still warranted concerning a negative effect on compliance from award size. The range at which compliance appears to decrease, however, is well above the average amount of child support owed by the majority of noncustodial fathers in this study ($3005). Therefore, policy makers should be able to have lessened anxiety that higher awards will lead to noncompliance for the majority of noncustodial fathers.

Continue the enforcement of child support compliance through methods such as automatic income withholding.

Automatic income withholding has been successful at improving compliance with child support orders since 1985 (Beller & Graham, 1993). Therefore, it should continue to be used. Many states have withholding laws, but not all states actively support their implementation. If all states fully implemented automatic income withholding for all child support orders, then there would probably be a significant decrease in the amount of noncompliance by noncustodial fathers.

Encourage policies that promote equitable contact with the noncustodial father.

The results of this study confirm the hypothesis that noncustodial fathers who see their children more frequently are more likely to pay support. Legal agreements about child support and visitation are generally made in the same court setting, but the processes by which they are determined differ greatly. Child support awards follow presumptive guidelines. This means that judges must observe the guidelines, unless a written reason against their application is given. This process generally reduces inequities in judgments and improves noncustodial fathers' perceptions regarding fairness.

Judgments regarding visitation agreements, however, are generally made under full judicial discretion. If noncustodial fathers perceive that the amount of visitation they are awarded is arbitrarily decided upon and that it is not equitable, given the amount of child support they are ordered to pay, then compliance may suffer as a result. Disseminating this information to judges involved in divorce cases may make them more aware of the impact their decision regarding visitation has on child support compliance.

For the benefit of the next generation, child support policy deserves a high priority from researchers, legislators, and policy makers. This is true because the consequences for children extend into adulthood (King, 1994). The findings and recommendations from this study should help in directing public policy effort to improve child support compliance.

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Endnotes

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2. Additional analyses were conducted using other definitions of compliance. Results are available upon request from the author.
3. Detailed results for equation (1) are available from the author upon request.

Changes in the Child Support Enforcement Environment During the 1980s: Effect on the Educational Attainment of Young Adults

This paper examines changes in the effects of child support payments on the educational attainment of young adults in the United States over the 1980s, using data from the 1979, 1984, and 1988 Current Population Survey. Findings are partially consistent with the hypotheses of a stronger decline in the effect of child support on education after 1984 than before due to stricter child support enforcement bringing more of reluctant fathers into the system.

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Introduction

According to recent estimates, if present trends continue, one out of every two marriages will end in divorce (Cherlin, 1992). In addition, the percentage of never-married mothers out of all single-parent families has increased sharply from 6.5 percent in 1970 to 15.4 percent in 1980, and 31 percent in 1991 (U.S. Bureau of the Census, 1992). Almost half of female-headed families are living below the poverty line, and close to 40 percent will depend on welfare at some given time during the year (Moffitt, 1992). Among those female-headed families above the poverty line, many experience substantial economic hardship due to the loss of a partner's or spouse's income (Duncan & Hoffman, 1985). Poverty and welfare dependence may have a negative effect on our society overall; but, this paper focuses mainly on the effect that the economic insecurity of single-parent families has on the future productivity of children.

Educational attainment is an important component of children's well-being, and also an indicator of future productivity and performance in society. Several studies have found that on average the educational attainment of children from two-parent families exceeds that of those in one-parent families (e.g., Krein & Beller, 1988; McLanahan, 1985; Shaw, 1982). This difference may be due in part to the lower income of the single-parent family. One reason many single-parent families suffer economic hardships (or insecurity) is lack of or low child support payments. Beller and Graham (1993) argue that the public has come to view child support as a significant factor that benefits the general well-being of children, especially their educational outcomes.

The child support enforcement system has been in a state of transition since the 1970s. In 1974, Congress passed the Child Support Act, and the Federal Office of Child Support Enforcement was created. This Act required all states to establish Child Support Enforcement offices at the state level. In 1980, Congress extended federal support to all children eligible for child support, despite income or their status with regard to Aid to Families with Dependent Children (AFDC). In 1984, Congress passed the Child Support Enforcement Amendments, which required all states to establish guidelines to be used by courts to decide child support obligations and to withhold support payments from the wages of delinquent parents.

This paper extends the work of Hernandez, Beller, and Graham (1995), using a mother/child data set extracted from the Current Population Survey (CPS) March/April Match Files. Hernandez et al. (1995) used only two points in time (1979 and 1988), and the results are for the most part consistent with the hypotheses that the beneficial effects on educational attainment of child support have declined over time and that, as a result of stricter enforcement, a somewhat more reluctant group of fathers were paying child support at the end than at the beginning of the decade. Despite the apparent consistency of these results with the hypotheses, the implications of these findings warrant further and more detailed investigation. By adding an intermediate year (1984), we can assess whether the change was in one consistent direction or fluctuated during the 1980s. This may also explain why changes in the effect of child support on educational attainment during the 1980s do not seem dramatic.

Hypotheses

Was this change in the effect of child support income on educational attainment continuous during the 1980s? Did the unobservable characteristics of noncustodial fathers change during the 1980s? The analyses of the 1984 CPS mother/child extract in this paper can help to answer these questions. In this paper with the addition of 1984, we divided the 1979-88 period into two parts--1979 to 1984 and 1984 to 1988. Since the 1984 CPS sample was collected before the Child Support Enforcement Amendments of 1984 were passed, we could examine what happens to the effect of child support on education from 1979 to 1984 before the Amendments. Then, between 1984 and 1988, we could examine what was the effect after the 1984 Amendments. As argued above, it is the stricter enforcement that may bring more reluctant payers into the system, and it is this influx of reluctant payers that may have caused a decline in the effect of child support on education.

The first hypothesis tested in this paper is that the change in the effect of child support on education is larger between 1984 and 1988 than between 1979 and 1984. Although child support enforcement became stricter between 1979 and 1984, we do not expect much change in the effect of child support on education because no laws were passed to increase child support enforcement during this period. After the 1984 Amendments, we speculate that the proportion of reluctant payers in the system would have increased more dramatically. This is due to stricter child support enforcement brought about by the 1984 Amendments. Another hypothesis that we will test is that the change in the effect of child support on education compared with that of other sources of family income between 1984 and 1988 was bigger than the change, between 1979 and 1984.

Data and Descriptive Statistics

We extracted samples from the 1979, 1984, and 1988 CPS March/April Match Files for all mothers and their (eldest) children between the ages of 16 and 19. We excluded children under 16 because schooling is generally compulsory for them. We also excluded children over 19 because in some states they can receive child support only if they are still in school, which creates a possible endogeneity problem.

Our sample of children ages 16 to 19 living with their mother decreased continuously throughout the 1980s. This sample of children ages 16 to 19 decreased from 4,734 in 1979 to 4,443 in 1984, and to 4,169 in 1988. The decrease in the number of all children ages 16 to 19 living with their mother is consistent with the decline in the number of 16-19 year olds in the general population throughout the 1980s (U.S. Bureau of the Census, 1990). Following a similar trend, the number of children living in an intact (two-parent) family decreased constantly from 1979 to 1988. However, the number of children living in a mother-only family in our samples increased from 1,195 in 1979 to 1,372 in 1984, and then decreased to 1,308 in 1988. The trend in the number of children living in mother-only families in our samples is also consistent with the trend in the general population. In general, the divorce rate (per 1,000) and the out-of-wedlock birth rate (per 1,000) increased over the life of the children in our samples. However, the divorce rate slightly decreased between 1984 and 1988, which may explain the change in our samples (U.S. Bureau of the Census, 1992).

With the addition of the 1984 sample, for those deemed eligible by the Census Bureau, the percentage awarded child support was almost the same in 1979, 1984, and 1988. However, the percentage currently due and receiving child support showed a big increase from 1984 to 1988. This increase from 1984 to 1988 could be attributed to stricter enforcement after the Child Support Enforcement Amendments of 1984.

Theoretical and Empirical Models

Theoretical Model

The theoretical framework for this paper originates with Becker's (1965, 1981) human capital and household production theories. According to Becker's theoretical framework, "quality" of children can be viewed as a commodity produced within the household by combining inputs of parental time and market goods and services. One can expect that as income decreases the household will have less access to market goods and services. In addition, in the case of single-parent families, the quantity of parental time available for producing "quality" children is reduced because of the absence of one parent from the household.

Education is an investment in children's human capital produced with inputs of time and market goods and services, and educational attainment is an output measure of this investment. Within the household production theory, "well educated" children can be viewed as a commodity produced within the household by combining inputs of parental time and market goods and services. Child support income contributes to increase the inputs of time and market goods and services, thus increasing educational attainment of the children. Children who receive child support may benefit from a greater input of time from both parents. A mother who receives child support may use some of it to purchase market substitutes for her time in household chores, and thus have more time to spend with her children, while a father who pays child support may have closer and greater contact with his children. It is the potential for and nature of this relationship that we focus on in this paper.

Empirical Model

To measure the impact of child support income on children's education for the child support-eligible population, we estimate the following equation for each year:

$$ED_i^t = \alpha^t SE_i^t + \beta^t INCEXCS_i^t + \delta^{tCS_i^t} + e_i^t \qquad (1)$$

where t represents 1979, 1984, or 1988; (suppressing the superscript) ED_i is an educational outcome for the ith child; SE_i is a vector of socioeconomic characteristics of the child and the mother; $INCEXCS_i$ is total income excluding child support; CS_i is child support income; and e_i is an error term.

We measure ED_i in three different ways: years of schooling completed; whether or not the child is behind in or has dropped out of high school; and whether or not the child has graduated from high school. SE_i includes measures of the quantity of available time inputs, such as mother's employment and number of siblings; measures of the quality of time available, such as mother's education and age at the child's birth; demographic characteristics such as child's age, gender, and race; and control variables measuring current location of residence.

The first hypothesis we test is that the change in δ was larger between 1984 and 1988 than between 1979 and 1984. We can represent this as

$$\frac{\delta^{79}}{\beta^{79}} - \frac{\delta^{84}}{\beta^{84}} < \frac{\delta^{84}}{\beta^{84}} - \frac{\delta^{88}}{\beta^{88}} \qquad (2)$$

where δ is the coefficient of CS. The second hypothesis is that the change in the ratio of child support income to other sources of family income between 1984 and 1988 was bigger than the change, between 1979 and 1984. We can represent this as

$$\frac{\delta^{79}}{\beta^{79}} - \frac{\beta^{84}}{\beta^{84}} < \frac{\delta^{84}}{\beta^{84}} - \frac{\delta^{88}}{\beta^{88}} \qquad (3)$$

where β is the coefficient of INCEXCS.

Variables

Dependent Variables. Three dependent variables are used in measuring educational attainment. The first number of years of schooling completed by the child, is constructed using the highest grade attended and whether that grade was completed or not. The second behind in high school, is coded 1 if the child is behind in school or dropped-out of school, and 0 otherwise. The last probability of high school completion, is coded 1 if the child completed 12th grade, and 0 otherwise.

Independent variables. The explanatory variables included a set of socioeconomic factors , such as, whether or not the child lives in the northeast, the northcentral, the south, a standard metropolitan statistical area, or a central city ; whether or not the child is male, age 17, age 18, age 19, black, or of Spanish origin; years of schooling completed by the mother, age of the mother at birth of child, whether the mother worked outside the home, and number of siblings. Also the explanatory variables included the amount of family income minus child support received, and the amount of child support income received.

Results and Discussion

Family Structure

Children in both two-parent and child support-eligible families were better off in terms of educational outcomes in 1984 than in 1979 or 1988. Education of children from two-parent (intact) families increased from 1979 to 1984, and then decreased to 1988, except for percent behind in school which continued to improve. For the eligible child support population, by all measures, education increased from 1979 to 1984 and decreased from 1984 to 1988. The educational outcomes fluctuate rather than show a unidirectional change over the 1980s.

During the 1980s families eligible for child support underwent many changes; for instance, the percentage of eligible families receiving child support decreased from 40 percent in 1979 to 38 percent in 1984, and then increased to 45 percent in 1988. The average payment (in 1987 dollars) declined about 20 percent, from \$1,490 in 1978 to \$1,167 in 1983, and then increased 9 percent to \$1,285 in 1987. We speculated that this increase in average payments was due to the effect of the Child Support Enforcement Amendments of 1984, which may have increased the amount of child support paid. We expected that stricter enforcement would increase the number of noncustodial parents paying child support, and that the proportion of reluctant payers in the system would increase.

Next, we examine the difference in educational outcomes between children in intact (two-parent) and in child support-eligible families during the 1980s. Children from eligible child support families overall attained less education than those from intact families, but the magnitude of the educational difference (i.e., disadvantage) between these two family types changed during the 1980s. In 1979, children from eligible child support families completed .37 less years of schooling than children from intact families. In 1984, children from eligible families completed .36 less years of schooling than children from intact families, and in 1988, the difference between the two family types got bigger when eligible children completed .44 less years of schooling than children from intact families. For percent behind in school, children from eligible families were always worse off, however, the differences did not change much from year to year. Our last educational outcome, percent graduating from high school, showed that children from eligible families were also always worse off than children from intact families. In 1979 and 1984, children from eligible families were 11.6 and 11 percent, respectively, less likely to graduate from high school than children from intact families. However, in 1988, eligible children were 13 percent less likely than children from intact families to graduate from high school. These results indicated that the differences in educational outcomes between children from intact and eligible families did not change much from 1979 to 1984. But, between 1984 and 1988, the educational disadvantage suffered by children from eligible families increased for years of schooling completed and percentage graduating from high school.

After controlling for socioeconomic factors and family income, the educational disadvantage of the eligible families decreased in all years. (The complete regressions underlying the results are available upon request.)

The addition of the 1984 data shows a consistent pattern. The educational disadvantage between children from eligible families and intact families barely changed between 1979 and 1984. Nevertheless, for two of our educational outcomes the disadvantage increased between 1984 and 1988. Even after controlling for socioeconomic factors and family income, children from eligible families were worse off in 1988 than in 1984 for all our educational outcomes. We proceed to explore what happened to the effect of child support income on the educational attainment of children in the child support-eligible population throughout the 1980s.

Child Support Income

Table 1 shows how educational outcomes vary among children receiving different amounts of child support for the sample of children eligible for child support. Columns (1), (2), and (3) show the coefficients on the amount of child support received and other family income from the educational outcomes in 1979, 1984, and 1988, respectively.

Table 1
Effect of Child Support and All Other Family Income on the Educational Outcomes of Children Ages 16-19 Eligible for Child Support, 1979, 1984 and 1988.

	1979	1984	1988
Years of Schooling Completed			
Child Support Income	.025**	.030*	.022
Other Family Income	.004*	.008***	.005***
% Behind in School			
Other Family Income	-0.09	-0.27***	-0.21***
Child Support Income	-2.22***	-1.09	-1.13
% Graduated High School			
Child Support Income	0.95	1.32**	-0.49
Other Family Income	0.08	0.33	0.21**
Sample Size	792	902	966

Note: The numbers reported for the last two educational outcomes are partial derivatives obtained by adjusting the probit coefficients.

*, **, *** Denotes statistically significant at the 10 %, 5 %, or 1 % levels, respectively.

Between 1979 and 1984, increases in the amount of child support received generally increase schooling (except for percent behind in school). For instance, a one thousand dollar increase in child support income in 1979 (in 1987 dollars) increases years of school completed by .025, and in 1984 increases schooling by .030. Likewise, a one thousand dollar increase in child support income in 1979 increases the probability of graduating from high school by an insignificant 0.95 percent, but in 1984 the same amount of child support increases the probability by a significant 1.32 percent. In the case of percent behind in school, a one thousand dollar increase in child support income in 1979 lowers the probability of falling behind in school by 2.22 percent, but by only an insignificant 1.09 in 1984.

From 1984 to 1988, increases in the amount of child support received generally decrease schooling (except for percent behind in school). For instance, a one thousand dollar increase in child support income in 1984 (in 1987 dollars) increases years of school completed by .030, but only an insignificant .022 in 1988. Likewise, a one thousand dollar increase in child support income in 1984 increases the probability of graduating from high school by 1.32 percent, but in 1988 it actually lowers the probability by an insignificant 0.49 percent. In the case of percent behind in school, the coefficients for both 1984 and 1988 are insignificant.

The results in Table 1 agree with our hypothesis in Equation 2, that the change in the coefficient of child support was larger between 1984 and 1988 than between 1979 and 1984. For years of schooling completed, the difference in the effect of child support on education between 1984 and 1988 was larger than between 1979 and 1984. The difference between the child support coefficients in 1979 and 1984 was -.005, and the difference between the coefficients in 1984 and 1988 was .008. In the case of the probability of falling behind in school, the difference between the child support coefficients in 1979 and 1984 was -1.13, and the difference between the coefficients in 1984 and 1988 was .04. The results from the probability of graduating from high school are also consistent with the hypothesis. The difference between the child support coefficients in 1979 and 1984 was -.37, and the difference between the coefficients in 1984 and 1988 was 1.81. All these differences indicated a change in direction in the effect of child support income on schooling. Therefore, we can conclude that the effect of child support on education changed directions during the 1980s. Our results need to be interpreted with caution, however, since the changes in the coefficients on CS_i between 1979 and 1984 and between 1984 and 1988 are statistically insignificant.[3]

In general, the relationship between child support income and educational attainment becomes more tenuous over time, except for the percent graduating from high school in 1984. In other words, what seems like a strong (significant) association between the amount of child support income received and educational attainment in 1979 weakens over time. Therefore, these findings support our expectations that child support income becomes less effective at mitigating the educational disadvantage of nonintact families during the 1980s. In addition, our findings partially indicate that the association between the amount of child support income and educational attainment weakens after 1984.

Next, we consider how much stronger the effect of child support is than that of other income and examine what happened to the ratio of these effects between 1979 and 1984 and between 1984 and 1988.[4] In 1979, child support consistently has a much larger (significant) effect on education than equal increments of other sources of income; in 1984 and 1988, child support has a significantly larger effect than other income only on one of the educational measures, years of school completed.[5] Further, the 1979 ratios are significantly larger than the 1984 and 1988 ratios for all outcomes, whereas the 1984 and 1988 ratios are not significantly different from one another.[6] For instance, for years of school completed, dollar for dollar, child support income is 6.25 times as effective as other income in 1979, but only 3.75 times as effective in 1984, and 4.4 times, in 1988; for the probability of falling behind in school, it is 25 times as effective as other income in 1979 but only four times, in 1984, and five times as effective in 1988. Our results are inconsistent with the hypothesis that the change in the effect of child support income relative to other sources of income between 1984 and 1988 was larger than between 1979 and 1984. Actually, our results are the opposite of what we hypothesized: the ratios for all educational outcomes actually decreased dramatically between 1979 and 1984, and changed only moderately between 1984 and 1988. Although our results are opposite to what we hypothesized in this paper relative to the pace of change, they are consistent with our speculation in Hernandez et al. (1995) on the direction of change--that the effect of child support relative to other family income decreased during the 1980s overall.

Conclusion and Implications

The addition of an intermediate year (1984) to the previous two years of data analyzed (1979 and 1988) by Hernandez et al. (1995) allowed us to examine in more detail changes in the effect of child support on education during the 1980s. Since the 1984 CPS data were collected before the Child Support Enforcement Amendments of 1984 were implemented, the population of noncustodial fathers in 1984 was not affected by this stricter child support enforcement. Thus, as our results suggest, the effects of child support on educational attainment increased slightly between 1979 and 1984. This is consistent with our expectations, since we did not expect the effect of child support on education to change much from 1979 to 1984. Then, after 1984, the number of reluctant fathers paying child support would have increased because of stricter child support enforcement and the effect of child support on the educational outcomes decreased. These results confirm our expectations about the direction of the change in the effect of child support on education after 1984.

We find evidence to support our hypothesis that the change in the coefficients for child support received is larger between 1984 and 1988 than between 1979 and 1984. We also find that the magnitude of the effects of child support on education is not constant during the 1980s. The direction of change in the effect of child support on education from before to after 1984 may explain why the changes found in the effect of child support on educational attainment in Hernandez et al. (1995) during the 1980s are only marginally significant in some cases.

The policy implications of our findings are important. Our findings provide some evidence that child support income represents some unobservable characteristics of noncustodial fathers who pay it. Although reforms in child support enforcement brought more reluctant payers into the system, meaning that more families will receive more support, the effect of child support on educational attainment will be decreased with more enforcement.

Policy makers should be realistic about their expectations of any legislation that enforces parental responsibility. Some of the findings in this paper seem to suggest that when fathers pay child support voluntarily (without enforcement), the effect of child support income on education is stronger. The results in this paper further support the need for programs or policies that enhance the relationship between the noncustodial father forced to pay child support and his child(ren).

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Endnotes

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3. Computed from pooled data with a year interaction term on child support received.
4. We noted that the child support income variable and the other family income variable in the case of the probability dependent variables were never significant at the same time. These income variables were examined for correlation, but were never highly correlated in any of our samples.
5. Computed as a t-test on whether the ratio of the coefficients of child support to family income was greater than one (i.e., $\delta/\beta > 1$).
6. Using a pooled sample of two years, interactions of year with the child support and family income variables were created and a t-test between these interaction terms was conducted.

The Determinants of Conflict Escalation and Award Levels in Divorce Disputes

This paper applies a bargaining model with asymmetric information over risk type to divorce and child support disputes. Empirical evidence supports the hypotheses that conflict increases with the payer's income but decreases with the costs of continuing the conflict. The results also support the hypothesis that observable variables impact the final award but do not contribute to conflict escalation and that the conflict level has a positive impact on the amount of the award.

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Introduction

One consequence of the dramatic increase in the divorce rate is an increased burden on the courts and, therefore, taxpayers. Also, the escalation of conflict leads to greater time, financial, and psychological costs to both parties, adding to the increase in welfare loss from divorce. These costs can be particularly important for women, who are shown to suffer more financially as a result of divorce. In addition, Peters et. al (1993) suggests that self-negotiated contracts have a higher probability of the payer making the payments. If self-negotiated contracts are more likely to be self-enforced, the role of the courts is further reduced as court enforcement is not required. In an effort to minimize conflict, the 1988 Family Support Act was passed requiring all states to adopt standard child support guidelines. However, because awards are not completely explained by guideline variables, there remains a margin for disagreement and, therefore, in some cases, conflict.

What determines whether bargaining parties escalate their conflict? Can these factors be influenced by public policy? The bargaining literature provides insight into why settlement may not occur even when settlement could save both parties the additional costs involved in escalating the conflict. Players with similar information concerning the expected outcome of a mediated settlement should be willing to reach an agreement. However, players with asymmetricinformation may fail to settle for strategic reasons.

The related literature on civil torts proposes that asymmetric information could be a source of settlement failure[3]. When asymmetries exist, Hause (1989) argues that the informed party may have the incentive to reveal their information. For example, it might be in an injured plaintiff's interest to communicate the extent of her injury (perhaps by being examined by the defendant's doctor). In light of the expected jury award for such an injury, a bargain could be struck that avoids trial costs. Farmer and Pecorino (1993) point out, however, that risk preferences are not observable. In general, a risk averse person is likely to settle early to avoid the uncertainty of trial, while a risk neutral player is willing to accept the risk of court in an effort to receive her full award. The risk neutral party can't credibly prove she is risk neutral; going to court may be the only way to prove this to her opponent. This important distinction between information on risk type and other types of asymmetries is the reason that risk asymmetries are appropriate to examine in the context of divorce disputes in which both parties are expected to have full information concerning the specifics of the case.

Theoretical Model

This section summarizes the model found in Farmer and Tiefenthaler (1995) which focuses on both the magnitude of the final award and the probability of using the courts to settle disputes. If both parties have identical information then there is no rationale for parties to pay the costs of going to court only to expect a decision that could have been reached independently. Suppose both parties know that a court judgment should be $E(J)$. This value depends on the guidelines as well as on any power differences between the two parties (such as having an attorney). If we define C^M and C^W as the costs of going to court paid by the man and woman, respectively, then he expects to pay $E(J) + C^M$ and she expects to receive $E(J) - C^W$ if the dispute is settled in court. Suppose also that the woman is either risk averse or risk neutral, and only she knows her true type while he is assumed to be risk neutral[4]. If she is risk averse, then she is willing to settle at a lower level (y) in order to avoid the uncertainty associated with court. In a world with perfect information, he can differentiate between those willing to settle for y and those who demand $E(J) - C^W$. To avoid court costs he offers just enough to induce her to settle. However, if her type is unknown then his settlement strategy is less obvious.

Following much of the bargaining literature, the uninformed party (the man) has the power to make a take-it-or-leave-it offer. If she rejects this offer, the case proceeds to the next stage; there may be multiple stages such as employing an attorney, using a mediator, and ultimately, the final stage is court. The man chooses his offer strategically between an offer that he knows will be accepted and a lower offer, y, that will be rejected by a risk neutral woman. His decision is based upon the probability p that she will be risk neutral and reject the lower offer. Thus, conflict is escalated as his probability of making a lower offer rises.

Factors affecting his decision are total costs (C^M+C^W) and the certainty equivalent, y. As costs fall and/or y falls, he is more likely to make the lower offer y. The value of y falls as the woman becomes more risk averse or as the variance of a trial rises. While her risk aversion may be a function of demographic variables, the variance of J depends on guideline variables including income, assets, marriage duration, the number of children and the custody arrangement. While all of these affect J, which, if any, affect the variance of J? Intuitively, as the income of the payer, I^M, increases, the variance is also likely to increase because there is more to disagree over. The number of children might have a similar effect. The predictions from the theoretical model on the determinants of the level of conflict (C.1 - C.4) are summarized below.

(C.1) Costs decrease conflict. Any cost of increasing the conflict such as higher court costs or attorney's fees encourages settlement.

(C.2) As the variance of the court's decision rises, *y* falls and conflict is escalated. Thus, higher income men and families with more children are more likely to use the courts. As the variance of the court's decision rises, the man is more likely to make a low offer to take advantage of the woman's risk aversion.

(C.3) Risk neutral women are less likely to settle. If the woman's income or job security, for example, are measures of her risk aversion and are **not** observable to the other party, we would expect lower income women and women without secure jobs to settle sooner.

(C.4) Observable variables have no effect on conflict escalation. Variables that are observable to both parties will affect the award but will not affect the ability to settle.

Turn now from the conflict level to the magnitude of the final award. The woman's final award is high in one of two cases: either she is risk neutral and goes to court to achieve E(J) - C^W or the man makes the decision to make a high offer. Otherwise, if she is risk averse and his offer is tough, she receives only y. The award predictions (A.1 - A.2) are summarized below.

(A.1) For risk averse women, a higher certainty equivalent raises the award. (a) As the variance of the trial award rises, y falls. As the variance of the expected award rises with his income, not only does the probability of court usage rise, but women who do settle receive a lower average award. **(b) As risk aversion increases, y falls.** Risk averse women, on average, settle for less. Therefore, women with low incomes, insecure jobs, etc. are expected to settle for relatively less.

(A.2) The higher the level of conflict, the greater the award. Since only risk averse women settle early while risk neutral women are likely to reject tough offers and go to court, those who settle earliest and avoid conflict receive lower expected awards.

Data and Empirical Specification

The model's theoretical predictions are tested using the Stanford Child Custody Study which is a three wave, longitudinal study of 1124 families who filed for divorce in two California counties (see Maccoby and Mnookin (1992) for further discussion of this data set). While the data set includes 1124 observations, there are only 835 cases which include all the necessary information.

Recall that the model predicts that the level of conflict depends only on the costs of prolonging the conflict (prediction C.1), the payer's income and the number of children which may affect the variance of the outcome (prediction C.2), and the unknown portion of the risk aversion of the payee (prediction C.3). Any remaining variable that is observable to both parties should have no effect on the conflict; any other variables impact conflict only if they are unobservable (prediction C.4).

The level of conflict is measured in four levels: (1) the parties reached a self-negotiated agreement, (2) the parties reached an agreement through their lawyers, (3) a mediator assisted in the agreement, and (4) the case was decided in court. Although the majority of cases were worked out by the couple on their own, 18% of the child support awards and 10% of the spousal support awards were determined in court. It should be noted that in 92 of the 835 cases, the divorce was not yet final at the final wave of the study. For these cases, the level of dispute is likely underestimated. (See Farmer and Tiefenthaler (1995) for further discussion.)

Testing prediction C.1 is difficult since the data include only divorcing couples in California; hence, different states' divorce laws and court costs cannot be used as proxies for the costs of continuing the dispute. However, a proxy for these costs may be whether a party is involved in another relationship which may indicate that the individual has higher costs to prolonging the dispute. Data is also difficult to obtain for unobservable risk characteristics (C.3). The only variable unobservable to the husband but observable to the econometrician is the payee's assessment of her job security. In addition, observable demographic variables are included as regressors in the conflict equations, but these are not expected to have an effect on the conflict level.

The amount of the award is affected by the state guideline variables, variables which affect the power differential between the payer and the payee, the variance of the awards (prediction A.1a), and the level of conflict between the two parties (predictions A.1b and A.2). In California, the child support guideline at the time of the data collection is that the amount of the child support award should depend on the number of children, the income earned by each parent, and the amount of time the children spend with each parent. The spousal support guideline is that the spousal support award should depend on the duration of the marriage, the incomes of both parties, and their assets. The variance of the court awards cannot be directly tested since the data are from only two counties in California and, therefore, there is little variation in court awards. However, variance is likely to increase with the payer's income and family size as there is more to fight over. Note that income is also a guideline variable and, therefore, is expected to have a positive effect on the award. To capture the effect of the payer's income due to variance specifically, the payer's income squared is included as a regressor and is expected to have a negative effect on the award.

The power differential is proxied by dummy variables capturing whether one party has an attorney and the other does not. Whether or not each party was previously married is also included as an indicator of power. If a party has gone through the divorce process before, their knowledge of the process may enhance their power. Bargaining power may also depend on which party wants out of the marriage. The party that doesn't want the divorce is likely to have more power. Dummy variables are included to capture the possibility that one party wants the divorce while the other does not. The omitted category is that both individuals want the divorce. Finally, several demographic variables are also included in the regressions of the determinants of the amount of the award.

Results

The dependent variable in both conflict equations is coded as four categories with 0 being the lowest conflict level (a self-negotiated agreement) to 3 being the highest conflict level (court). Consequently, the ordered probit technique is the appropriate method for estimating the determinants of the level of conflict over child and spousal support awards. However, since the study was completed before all disputes were settled, there are censored dependent variables in the sample. Consequently, the conflict variable is measured as the level of conflict reached by the end of the study; the ultimate conflict level is **at least** that reached by the end of the study. This form of censoring can be accommodated in the ordered probit model by modifying the log likelihood function and all estimates. The specifics of the ordered probit estimation can be found in Farmer and Tiefenthaler (1995). The findings are summarized below.

According to the model, if the payer makes a tough offer in an effort to extract a risk premium from a risk averse payee, then a risk neutral payee rejects the offer and the level of conflict rises. This is more likely as the costs of escalating the conflict are low (prediction C.1), there is more to extract from a risk averse payee which happens if the variance of the decision rises (prediction C.2), and the payee is risk neutral which is unknown and thus rejects the offer (prediction C.3). Prediction C.1 suggests that the cost variables should have a negative impact on the level of conflict. If the payee is involved in another relationship, the level of conflict, as predicted, is significantly reduced. However, the payer dating has no significant effect on the level of conflict in either equation. From prediction C.2, we expect the payer's income and the number of children to have a positive impact on the level of conflict. The results indicate that the payer's income has a significantly positive effect on the conflict level in both equations[5]. The number of children has the expected positive effect but is insignificant in both equations.

Prediction C.3 implies that unobservable variables that proxy for the risk neutrality of the payee should escalate conflict. The payee's income and job security are included in the regression as proxies for the risk neutrality of the payee; however, it is likely that these variables are observable to the husband and would, therefore, be insignificant. The payee's job security is insignificant in both cases while payee's income has a negative and significant effect in the spousal support equation but is insignificant in the child support equation.

The theory predicts that settlement failure occurs only when there is asymmetric information. Since the facts of the case as well as most demographic variables are known by both parties or would be credibly communicated, it is only court costs, the variance of court decisions, and unobservable risk aversion that are potential sources of settlement failure. The empirical results provide some support for the hypothesis that only these variables affect the level of conflict. Education of the payee has a negative and marginally significant effect on the level of conflict. Several other demographic variables (including age, religion, and race) were initially included; however, because none of these variables had even a marginally significant effect on the conflict in various specifications of the model, they were dropped from the analysis. Because these variables are observable to both parties, the model predicts that they have no effect on the probability of going to court.

We turn now to the model's predictions concerning the magnitude of the awards. Because many payees receive no child support or spousal support there is left censoring at zero in the dependent variable. Consequently, both equations are estimated using Tobit techniques to accommodate the censoring. Note that the samples are smaller in these regressions because the awards which are not finalized by the end of the study are omitted from the sample. Additional observations were dropped due to missing data on independent variables. As previously discussed, this omission may result in underestimation of the effect of the level of conflict on the award. Additionally, endogeneity of the conflict level is an issue that was addressed. These econometric issues as well as the estimation results from the conflict equations are found in Farmer and Tiefenthaler (1995). Table 1 presents the results from estimating the determinants of the magnitude of both child and spousal support awards.

The guideline variables (assumption), the power differential (assumption), the variance of the court awards (prediction A.1a), and the conflict level (predictions A.1b and A.2) are all predicted to affect the child support and spousal support awards. In California, child support guidelines include the number of children, the payer's and payee's income, and the terms of the existing custody arrangement. As expected, the number of children and the payer's income significantly increases the child support award, the income of the payee significantly decreases the amount of the award, and joint physical custody significantly decreases the

Table 1
Determinants of Child Support and Spousal Support Awards.

	Child Support	Spousal Support
Constant	-15.21	-733.37***
Payer's income	0.005***	0.0132***
Payer's income squared	-0.001	-0.001
Payee's income	-0.003***	-0.023***
Joint custody	-127.56***	
Number of children	141.87***	
Duration of marriage		0.053***
Couple owns home		126.43*
Attorney - payer only	-143.22***	-222.99*
Attorney - payee only	-7.78	-19.10
Payer divorced before	-29.93	-30.39
Payee divorced before	50.85*	30.18
Payer wants divorce	23.78	216.60***
Payee wants divorce	-31.72	-19.96
Payer - college degree	6.42	143.14*
Payee - college degree	53.13***	210.35***
Payer - minority	-39.87*	-148.39*
Payee - minority	-12.68	-23.16
Level of conflict	14.86*	206.54***
Observations	679	583

*, **, *** denote statistically significant at the 10%, 5%, and 1% levels, respectively.

award. If the payer has an attorney and the payee doesn't have an attorney the award is significantly lower. The payee being represented by an attorney when the payer isn't is not significant. Another source of power is understanding the divorce process. The results indicate that payees who have gone through divorces before receive significantly higher child support awards. Bargaining power may also result if one individual wants the divorce and the other doesn't. The child support results show the expected signs; however, neither result is significant. The payer's income squared has the expected negative effect on the award but is not significant. The level of conflict has the expected significantly positive effect on the amount of the child support award. A greater conflict level implies a more risk neutral payee and, therefore, a larger payment.

The spousal support guidelines include both the payer's and payee's income, the duration of the marriage, and the couple's assets which are proxied by home ownership. As expected, the income of the payer significantly increases the award, the income of the payee significantly decreases the award, and marriage duration and home ownership significantly increase the award. If the payer has an attorney and the payee doesn't, the payee receives approximately $52 less per month. In addition, if only the payer wants a divorce he appears to have less bargaining power as he pays a significantly higher award. The level of conflict, once again, has a significantly positive effect on the amount of the award. Only a risk neutral woman would reject a tough offer and proceed to court; therefore, those who go to higher stages of conflict receive greater awards.

Conclusions

What determines the level of conflict in settling divorce disputes? In theory, players with similar information should be able to reach an agreement without incurring the costs of escalating conflict. Because risk preferences are not observable, the model predicts that settlement fails if the payer makes a tough offer in order to extract a risk premium from a risk averse payee and the payee is actually risk neutral and, therefore, rejects the offer. The rejection of the offer and, therefore, the escalation of the conflict is more likely to occur if the payee is risk neutral, the risk premium is large (the risk premium increases as the variance of the award increases), and the costs of escalating the conflict are low. In addition to providing predictions concerning the determinants of the level of the conflict, the model predicts that risk aversion also affects the amount of the award. Risk averse payees settle quickly to avoid the costs of conflict and, therefore, they are willing to settle for less.

The Stanford Child Custody Study is used to test the model's predictions. Estimations of the determinants of the conflict level indicate that the payer's income has a significantly positive effect on the level of conflict and the costs of continuing the dispute have a significantly negative effect on conflict. As expected, except for variance and costs, variables that are observable are insignificant; this finding supports the hypothesis that asymmetric information (unobservable risk aversion) is a source of conflict escalation and court usage. The amounts of the spousal support and child support awards are shown to be affected by the level of conflict, providing further support for the hypothesis that risk aversion has an effect on the dispute resolution process. Future empirical work which includes better proxies for asymmetric information on risk preferences that are unobservable (for example, a survey focusing on women's risk preferences) would be a valuable contribution. In addition, a national data set would provide better variables for estimating the effects of increasing court costs and variance in court awards on the level of conflict.

What are the policy implications of these results? The theoretical model provides several options for decreasing court usage for divorce settlements. First, the legal system should encourage both parties to reveal all relevant information (information about each other as well as information about the process). By resolving information asymmetries, couples are more likely to reach a pretrial agreement. However, since all asymmetries cannot be credibly revealed (such as risk type), policy-makers must also focus on the variance. If the courts adhere to the guidelines, the variance of the court awards is lower and a bilateral settlement is more likely. In addition, increasing court costs reduces the number of cases going to court.

Policy-makers may also be interested in influencing the amounts of child support and child custody awards. Women (more likely to be the payees) have been shown to suffer negative economic consequences from divorce (see, for example, Duncan and Hoffman (1985)). Consequently, for equity reasons or to decrease the welfare burden, policy-makers wanting to encourage larger awards have options other than simply changing the guidelines to increasingly favor the payee. First, the results indicate that if the payer has an attorney and the payee does not, the settlements are lower. Therefore, increasing government legal aid to payees in divorce disputes is likely to increase spousal support and child support awards. In addition, the theory predicts that risk averse women are less likely to create conflict and, therefore, they settle for less. By decreasing the variance of the court's decisions, perhaps by more stringent enforcement of the guidelines, the risk premium paid by risk averse payees is also diminished and, therefore, awards increase.

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Endnotes

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3. See Bebchuk (1984, 1988) and Reinganum and Wilde (1986) for additional asymmetric information models. See Cooter and Rubinfeld (1989) and Farmer and Pecorino (1995) for surveys.
4. The restriction to these two types is unnecessary. See Farmer and Tiefenthaler (1995) for a discussion.
5. This result may also indicate that the players get positive utility from spite and spite is a normal good. Therefore, the level of conflict increases as income increases. However, if this were the case, we would also expect the payee's income to have a positive and significant effect on the level of conflict. Given that we do not observe the latter result, we do not believe spite is a major determinant of the level of conflict.

The Roles of Education and Regulation in Protecting Consumers: A Federal Reserve System Case Study of Uninsured Bank Products

Consumer educators have proposed a model of consumer protection that includes consumer education, legislation and regulation, and voluntary compliance by private sector manufacturers and service providers. In the current legislative environment, concerns are being voiced that too much regulation not only has created significant burdens on organizations and firms but also has resulted in information to consumers in increasingly complex ways. We need to explore ways to get information to consumers without using the traditional legislative/regulatory approach that spawns numerous legal interpretations and paperwork. Simultaneously, we need to develop educational programs that focus on core consumer information to combat concerns about information overload. The challenges and opportunities for consumer educators in this environment are striking.

Jeanne M. Hogarth, Federal Reserve Board[1]

The Situation -- What Do Consumers Know?

Sales of mutual funds at banks through broker-dealers and third party brokers have grown over the past several years, to $56.8 billion in 1994, up from $28.1 billion in 1991. Recent lawsuits (e.g. the $30 million NationsBank settlement (Knight, 1995)) and market surveys (e.g. Prophet Market Research & Consulting (Gasparino, 1996)) have attracted attention to sales practices and consumer awareness of the risks associated with nondeposit investment products sold through banks. For regulators, the question is: do consumers understand that not all bank products are insured by the Federal Deposit Insurance Corporation (FDIC)? Survey data indicates that they do not: as many as two out of five consumers surveyed thought that all bank products, including mutual funds and annuities, were insured by the FDIC, ranging from 18 percent (CFA, 1993) to 33 percent (SEC, 1993).

Associating banks with safe, guaranteed deposits is a message that has been driven home to consumers for years. Federal regulators were faced with the challenge of getting through to consumers that this message did not apply to every product sold at banks. The challenge was further compounded by the fact that the message needed to be conveyed in a way that did not place banks at a decided disadvantage relative to brokers or insurance firms in selling uninsured products.

Agency Responses

Guidelines were set in place by the Federal Reserve System, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation and the Office of Thrift Supervision that included voluntary disclosures and set limits on what were considered acceptable practices by banks in selling uninsured products (see Board of Governors, 1994 and Federal Reserve System, 1995). Requiring disclosures was predictable; what was different was that the Federal Reserve System also decided to launch a multi-dimensional, national education campaign to reach consumers with the critical, core message that not all products sold at financial institutions are insured by the federal government -- that a difference exists between insured deposits and uninsured investments.

The Federal Reserve System's educational program was, in fact, targeted to *both* consumers and sellers (banks). The objective of the consumer outreach portion of the program was to help consumers understand the differences between insured deposits and uninsured investments. The goal of the bankers training program was to provide an overview of uninsured product retail sales and to help them understand and comply with guidelines. It was in everyone's best interests, consumers and bankers alike, to do what was necessary to comply with the guidelines -- a result that would help ensure that bankers were dealing and communicating appropriately with consumers.

The Consumer Seminar materials were developed by a team from the Board of Governors and from the Reserve Banks in Boston, Minneapolis, and Dallas. Four core messages were developed: mutual funds are not deposits; mutual funds are not FDIC insured; mutual funds are not obligations of or guaranteed by banks; and mutual funds are subject to investment risks, including the possible loss of principal. Seminar resources include a prepared script and visuals, an eight minute video, and information on how to plan and implement a consumer seminar. Materials for consumers include the following handouts: a glossary of terms; checklists to help consumers determine whether uninsured products are right for them; a worksheet to compare fees for mutual funds; a bookmark that highlights the four key points; and a list of regulatory agencies to contact with problems or questions. As of the end of February, 1996, 64 seminars have been conducted by Reserve Bank staff throughout the System, reaching over 5200 consumers. Over 8000 copies of the video have been distributed to banks and community education groups.

The bankers' training program resources include: a computer slide presentation; script; a participant resource notebook with supplemental information and documentation to help with voluntary compliance with the interagency guidelines; and compliance checklists to help bankers review the procedures and materials they use in selling uninsured products. Bankers are also encouraged to obtain a copy of the video for use in their customer education efforts. Forty-seven training sessions by Reserve Bank staff reached 1340 bankers; 5800 copies of the compliance checklists have been distributed.

As a result of the seminars, consumers understood more about the products their banks offer. Over 90% (up from 65%) understood that some bank products are not deposits. Ninety percent of participants understood that mutual funds and annuities sold at banks are not insured by the FDIC and that these investments are not guaranteed by the bank, up from 65% and 70% respectively when surveyed prior to the seminars. After the seminar sessions, more consumers also understood that mutual funds involved risk of principal loss. Bankers reported feeling prepared to deal with disclosures and compliance issues as a result of their training sessions.

Impact

Educational programs seem to work, given that consumers attend them. What is the situation among other consumers? In October and November, 1995, Michigan's Survey Research Center collected data from 1007 households on their understanding of uninsured bank products. Specifically, consumers were asked whether or not Certificates of Deposit (CDs), annuities, and mutual funds were covered by FDIC insurance. Furthermore, they were asked about other risks associated with nondeposit products: whether mutual funds were considered deposits in the bank, whether mutual funds were guaranteed by the bank, and whether mutual funds purchased at banks and brokers could lose money.

Persons who plan to buy a mutual fund are more likely to understand FDIC coverage and other risks; 61% of persons who plan to buy mutual funds understand that funds are not covered by FDIC, compared to 22% of those with no plans to buy. Over half (57%) of those persons who do not currently own mutual funds but plan to buy them understand that they are not covered by FDIC.

Owning an asset is associated with better understanding of the risks of that asset. Two-fifths of respondents who owned mutual funds understood that these are not FDIC insured; among respondents who did not own either a CD, annuity, or mutual fund, only 13% understood that mutual funds are not FDIC insured. In a multivariate framework, ownership accounts for much of the variation in understanding among respondents. Among non-owners of a given asset, higher levels of education are associated with higher levels of understanding of the measures of risk.

Only about half (48%) of all respondents correctly identify that CDs are FDIC insured. One out of seven (14%) respondents correctly identify that annuities sold at banks are not FDIC insured. One-fourth (25%) of respondents correctly identify that mutual funds sold at banks are not FDIC insured. Also, while the majority of respondents understand the potential loss of principal associated with mutual funds, a higher proportion of respondents understand this potential loss when mutual funds are purchased through a broker (67%) than when funds are purchased through a bank (55%).

Many respondents were uncertain about the risks associated with bank products: 49% were uncertain about FDIC insurance for CDs, 67% were uncertain about FDIC insurance for annuities, and 57% were uncertain about FDIC insurance for mutual funds. If a respondent was uncertain about FDIC insurance for CDs, he/she was more likely to be uncertain about FDIC insurance on annuities and mutual funds. Most respondents were uncertain on three of the other four mutual fund risk measures in the survey.

What Does the Regulation-Education Continuum Look Like?

This case study has shown that although consumer education works for those exposed to it, there is room among the general public for improvement in their understanding of the risks associated with nondeposit bank products. The question becomes how do you protect these consumers -- through education or through regulation?

What are the determinants of when to implement regulations and when to implement an educational program? How does the level of consumer costs and benefits weigh in? How does the complexity or technological sophistication of the issue factor into the decision to educate or regulate? Furthermore, who do you educate -- buyers only, sellers only, or both? And how do you reach both sides of the marketplace. Finally, what can consumer educators, regulators, and sellers do to determine the optimum mix of regulation, information, and voluntary compliance in order to protect consumers?

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This Deregulation May Be Hazardous To Your Health

Information and education about specific consumer problems are often insufficient because challenges facing consumers exceed the resources they have as individuals. Education about the origin of regulation has more potential. A "consumer purpose test" is a crucial first step to see if consumer defence is a public good. As an example, a regulatory framework for fair markets can protect the consumer from friends and foes alike. None the less, on practical grounds a realistic prospect is "perfect perversity".

Robert R. Kerton, University of Waterloo[1]

Regulation: The Long and the Short of It

Short carrots. Why would the consumer need protection from short carrots? Perhaps Hollywood has the answer. Several years ago a camp movie received attention because it was so bad it was being considered for distinction as the worst film ever made. Its title? "The Attack of the Killer Tomatoes." Can this explain why amendments to Canada's grading regulations for fruits and vegetables would set a minimum length for imported carrots? Were consumers out in the streets demanding protection from the attack of the short carrots?

Of course not. The regulation promulgated "to protect consumers" served only to protect domestic carrot producers from competition.[2] Consumers are "protected" from lower prices and competitive quality. The regulation is a clear illustration of the way that producers can twist the consumer protection argument to achieve an end that can best be described as perfect perversion. If you understand perfect competition you must also understand perfect perversion. How is it achieved?

The GRAS List

Machiavelli instructs the Prince that there are seven rationales for intervening in the marketplace. The first five come under the general heading of "Market Failures". These are five reasons for the failure of a free market, so each is a rationale for regulation. The five: 1. externalities, 2. monopoly, 3. information deficiencies, 4. undersupply of a "public good", 5. incomplete markets. The other two rationales come under the heading of "equity", a desire to bring about fairness: 1. distributional goals, and 2. merit goods. These seven rationales are, from the point of view of economics, Generally Recognized as Sound (GRAS). What the Prince must do, and what every lobbyist must do as the first step, is choose a rationale from the GRAS list so it can be deployed to justify a regulation. The second step is to help draft the regulation. After all, who but the AMA has the expertise to decide on the quantity of doctors to be allowed a license to practice? Milton Friedman used the example of the hypertrichologists of Connecticut who sought to license who would be allowed to "... remove excessive and unsightly hair with the solemnity appropriate to their high-sounding title" [Friedman, 1962: p.139-40; from Gellhorn].

If the Prince is to achieve the ultimate condition of perfection, a third step is required: one must gain the right to administer the regulation . . . preferably at public expense. The carrot example serves well: border guards are to be paid by the public to check for terrorists carrying concealed carrots.

Some Magnitudes

Under "free trade" U.S. consumers gain the benefits from imported steel, right? Not exactly. The President of Stelco, recently demonstrated that to get product into the U.S. market it takes a report of 55,000 lines of computer entries. Is this an unusual example? Hardly: one diligent effort to count non-tariff regulations was by made two independent teams in the European Union. The effort was abandoned when more than 100,000 of these regulatory barriers had been identified (European Commission, 1988).

Regulations: Friends or Foes of Consumers?

Lobbying is the art of concealing the public interest from the public. The easiest way to dress a wolf in sheep's clothing is to clothe the real objective in the consumer interest. On this basis, tens of thousands of regulations will fail a consumer purpose test. If the public could receive the necessary education about which rules to abolish or retain, deregulation would be a clear benefit to consumers.

What about rules that autos must have brakes? What about safety and efficacy tests for new medicines? When Dr. Frances Kelsey of the FDA refused to allow Thalidomide onto the U.S. market - in the face of enormous industry pressure - she saved hundreds, probably thousands of U.S. families from the characteristic birth defects so evident in Germany, France, Canada and many other countries. With this second type of example of regulation we find a clear consumer purpose. The consumer's problem with regulation is the same as The Little Red Riding Hood problem: is the new regulation consumer-friendly or is it a hungry foe wearing a consumer-friendly suit?

Deregulation: Wolf or Sheep?

If consumer education is successful, consumer-unfriendly regulations will be removed. The price of steel, and carrots will go down, while quality and price may improve. But that is not the only prospect: the wolves may be first in line in Washington because they see an urgent need to remove some binding restraints, some of which are amply justified. Remember the deregulation of Savings and Loans (S&Ls) in the 1980s. The change made it easier for charlatans and thieves to get their hands on one of the most attractive incentives in existence: other people's money. A moral hazard problem already existed with deposit insurance but deregulation allowed as few as three persons to own an S&L. With deregulated supervision these owners could lend to related parties while leaving the risk with the Federal Deposit Insurance Commission (FDIC). If the borrowing company struck it rich, its owners did too, paying back the loan. If not, the company declared bankruptcy and FDIC got to reimburse depositors at the S&L. The looting was not small: over 500 billion dollars in most estimates. That's enough for the U.S. to pay its outstanding bill with the United Nations, provide clean water to every village in India, and still have 460 billion left over for health and education programs at home.

There is an important point here about the targets for deregulation, a lesson clearly illustrated by the response of the bank robber Willie Sutton to the question "Why do you rob banks?" His answer: "Because that's where the money is." Why do we change S&L rules instead of deregulating licenses for hair pluckers? The wolf in sheep's clothes is back, this time seeking <u>de</u>regulation. The Red Riding Hood problem returns, with an important difference. Economics teaches that the sub-set of regulations which actually serve the consumer - say by keeping thalidomide off the market or by keeping scam artists from looting S&Ls - those rules may be special targets for deregulation. The reason is that they are binding constraints whose release is worth billions of dollars. In practice, Mr. Wolf is probably more democratic about whom he will devour, but the economics means that deregulation will target those regulations that actually serve consumers. This is the second path to perfect perversion.

Who Wins With Regulation? With Deregulation?

The lesson is that anyone who is doctrinaire about deregulation (or regulation) <u>always</u> being good or bad is part of the problem. The outcome depends critically on whether the original regulation was privately inspired or consumer friendly. The Red Riding Hood problem has the following possibilities:

<u>Payoffs To RRH From Needed, Not Needed Policies</u>

	Regulate	Deregulate
Sheep dressed as sheep	1	2
Regulation not needed by RRH	RRH Loses	RRH Wins
Wolf dressed as sheep	3	4
Regulation needed by RRH	RRH Wins	RRH Loses

Industry-inspired regulations exist in Box 1 harming Red Riding Hood. If these are removed, as in Box 2, she wins in a world of transparency where things are what they purport to be. Box 3 represents the case where an effective regulation, well administered, keeps the wolf from thriving at RRH's expense. If one moves from Box 3 to Box 4, a necessary regulation is removed and so, in the end, is Red Riding Hood.

Policy

In America much of the debate is dominated by persons or groups with a doctrinaire bent. Policy though, is too much in the hands of lobbyists with well specified targets. In developing countries fewer regulations exist, yet some of the earliest rules are dedicated to maintaining the quality of exports (especially food). The sorry state of markets is partly related to the inability to offer what the U.N. Secretary-General calls the "irreducible minimum of consumer protection legislation, covering physical safety ..." (United Nations, 1993). The European Union (which, in contrast, has "too many" regulations) has a logical policy. In the trade area - after the "Cassis de Dijon" case in 1985 - regulations are permitted _if_ they have a health and/or safety function. This is a practical start. All countries need more education to protect consumers from (bad) regulations. This is a demanding task because it needs to move people from the ideological position that regulation is "good" or "bad" to an open-minded assessment of the following: Does the original regulation pass the consumer purpose test? If so, is it efficient in achieving its objective? Is some other method superior?

Some regulation is clearly needed. We need, for example, some rules to ensure that contracts can be enforced, that weigh scales are truthful and so on. And just as the defence of a country is a public good so too, is consumer defence. If one consumer finds from the FDA that thalidomide causes birth defects, other consumers can use that information too, without loss to the first.

Scale economies in search are also important. For any individual, the degree of difficulty in a consumer choice, d, depends on the complexity of the decisions, C, and the decision-making resources, R, available to the consumer: $d = C/R$. "Education" increases R, thereby decreasing d, clearly a general improvement. Yet highly complex decisions like the use of Thalidomide require more investments in R than anyone can make as an individual.

The forces explaining difficulty (d) also explain why there will always be a need for some regulations protecting consumers. Thus there will continue to be the sheep's clothing of consumer protection in which a wolf can conceal the true intent of his quest for regulation . . . or deregulation. The rewards for regulatory "success", millions of dollars or more, are often far greater than a private firm could earn producing real goods and services to meet consumer needs. It is not only the consumer who loses: some firms lose too, especially those which would supply superior goods and services in a fairer marketplace.

Daunting is the task of educating consumers about their own interests in deregulation. But the multitude of wounds - ranging from the small nicks from small carrots to major hemorrhage from S&Ls -provide the lesson that the benefits from avoiding perfect perversion are high indeed.

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2. This is not different from the main point in Stigler's classic "The Theory of Regulation" 1971.

Welfare Reform: Issues, Implications & Public Policy

This paper provides information regarding welfare program components, reform issues, state AFDC program waiver experiments, desired welfare reform outcomes and justification for involvement of family economists in public policy.

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Introduction

The Board of Human Sciences (BoHS) of the National Association of State Universities and Land-Grant Colleges (NASULGC) established a Special Task Force on Welfare Reform. The Task Force works with Terry Nipp from AESOP Enterprises--a Washington-based legislative liaison group hired by NASULGC to represent the Association's interests with Congress.

The initial intent of the Task Force[5] was to focus the experience and expertise of the administrators of programs in the human sciences--within the land-grant system where special interest in children, youth and family issues are paramount--by providing input and responses to legislation addressing welfare reform.

The intent of the current Task Force[6] is to expand beyond the initial response orientation, to write a white paper/manuscript that can be disseminated to academic, legislative and lay audiences. The overall objective of the white paper is to provide an understandable, usable document of relevant literature, program components and issues with implications for recipients, program providers, administrators, researchers, educators, legislators and citizens.

Current Program Components and History

Welfare Program Components

Major federal programs affected by welfare reform legislation currently under consideration are discussed in the Congressional Digest (1995: 166-7).

Aid to Families with Dependent Children. The AFDC Program provides income in the form of cash payments to families with children. Their need must be a result of parental unemployment, absence, death, or incapacity. Additionally, need is based on income standards determined by each state. Originally designed for short term use, it was to support families until they could become economically self-sufficient. Federal and state governments share the costs of the program, but the share paid by each varies, as does the amount paid.

Child Support Enforcement. The CSE program was initiated in 1975 to increase child support payments and reduce AFDC payments. The program also is designed to locate the absent parent and increase the number of support orders. The federal government reimburses each state a portion of the cost of administering its CSE program and refunds to states most of the costs for developing a state system for locating the absent parent and pays the majority of medical laboratory costs of establishing paternity.

Food Stamps. Program provides low-income households with coupons that can be used as cash to purchase food. Food stamps are designed to make up the difference between the amount of food that the household can purchase with cash/income and an amount of food judged to be sufficient to meet the requirements of a low-cost diet (based on the USDA's Thrifty Food Plan). The federal government pays the food stamps.

Foster Care and Adoption. The food stamps for states to be able to provide foster care and adoption assistance for children who would otherwise be eligible for cash aid under AFDC or Supplemental Security Income (SSI), the Federal Foster Care and Adoption Assistance program partially reimburses states for administrative, training and child placement costs. The federal matching rate, nationwide, averages slightly less than 60 percent.

Job Opportunities and Basic Skills. The purpose of the Job Opportunities and Basic Skills (JOBS) Program has been to give AFDC recipients an opportunity to obtain education, training and employment so they could avoid long-term welfare dependency. JOBS offers specified educational services, job skills training, job readiness, job development and placement. It provides matching funds for JOBS-related child care, and makes transitional child care and medical services available to persons leaving AFDC for work. The JOBS program is funded through a cost sharing arrangement between Federal and state funds that varies by state.

Medicaid. The Medicaid program is used by states to provide health care to low-income families with children, the elderly poor and disabled. Costs of the program are shared by federal and state governments on the same basis as AFDC--inversely related to state per capita income. States are required to provide Medicaid to all AFDC and most Supplemental Security Income (SSI) recipients--twelve states still provided Medicaid under more restrictive eligibility established before SSI. Congress, in 1986, extended Medicaid to children and pregnant women in low income families. States determine covered medical services and reimbursement to providers.

Supplemental Security Insurance. In 1974, SSI replaced separate programs assisting the elderly, blind, and permanently disabled. In 1994, the program began guaranteeing a minimum income to the blind, disabled or elderly--over 65 years old. The federal government pays the full cost of the minimum income level. About half of the states supplement the federal minimum level.

History of Programs

Welfare legislation that supports programs in place today have a long history in the United States. They can be grouped according to support for income and employment, food, health and housing. Highlights of these programs cover more than the last 65 years.

During the 1930s.

- 1935 Title IV of the Social Security Act created Aid to Dependent Children (ADC) for women who were widowed.
- FHA begun to insure mortgages; public housing programs began.
- Roosevelt avoided the issue of health care believing the medical profession would not agree on national health care.
- 13 million received food assistance via Food Stamp Plan which disposed of agricultural surpluses and prevented hunger and poor nutrition among the poor.

During the 1940s.

- Veteran's Administration (VA) housing program established as part of Government Issue (GI) Bill of Rights; Housing Act of 1949 was aimed at clearing slums.
- Poor nutrition identified as major factor in lack of healthy recruits for defense.
- National School Lunch, School Breakfasts, Child and Adult Care and Summer Food Service Programs begun to safeguard health and well-being of the nation's children.

During the 1960s.

- President John F. Kennedy initiated programs to fight poverty and encourage vocational training/education as a means to develop employable skills among welfare recipients.
- War on Poverty began with the Economic Opportunity Act of 1964. It provided individuals with employment opportunities.
- Modern Food Stamp Program was authorized in 1964.
- Housing Act of 1965 consolidated federal housing into new a cabinet level department--except for rural housing.
- Medicare was approved with hospital and physician insurance a part of the program.
- 1965 Medicaid provided to poor people--limited health services.
- The Work Incentive (WIN) programs created in 1967, required worker training and work incentives for all AFDC recipients.
- Housing and Urban Development Act of 1968 reaffirmed goal of decent homes for poor citizens.

During the 1970s.

- Utah's Work Experience and Training (WEAT) demonstration project successfully put welfare recipients to work.

- President Nixon called for an end to hunger. 1970 Food Stamp Program became a nationwide federal entitlement program with uniform standards.
- 1971 The WIN law was amended. Thereafter, it required all able-bodied AFDC recipients to register for the program.
- Supplemental Security Income (SSI) passed in 1972 to guarantee income to blind, disabled or elderly persons.
- 1974 Women's, Infants and Children program (WIC) was established with annual funds returning $3 to every dollar invested; counties were required to offer food stamps.
- Housing and Community Development Act

made block grants to allow for housing for low income families and provided for rent supplements.
- Medicare and Medicaid technically joined Health Care Financing Administration in Department of Health Human Services.

During the 1980s.
- President Ronald Reagan strongly supported work requirements for AFDC recipients. In 1981 Congress was not willing to require states to operate a Community Work Experience Program (CWEP) as a part of the federal condition of AFDC.
- In 1987 Manpower Demonstration Research Corporation reported positive employment and earnings gains for welfare recipients and some reduction in state welfare outlays.
- The growing success of state welfare-to-work experiments translates into passage of the Family Support Act of 1988 which created the Job Opportunities and Basic Skills (JOBS) program which provided income for work in an attempt to move single mothers off AFDC.
- Earned Income Tax Credit (EITC) helped low income families get off of public assistance.

During the 1990s.
- A national economic down turn impeded state efforts to implement the JOBS program.
- States begin exploring new options such as "family caps" and relaxed earnings rules.
- 1992 President George Bush's State of the Union address encouraged states' experimentation with welfare programs. Thereafter, the Department of Health and Human Services granted nine waivers to states for welfare experiments.
- January, 1994 U.S. Supreme Court struck down California's welfare experiment that limited benefits paid to welfare recipients who were recently new to the program from out of state.
- In June 1994 President Clinton introduced the Work and Responsibility Act, a $9.3 billion reformed welfare program. Its major proposals were a two-year limit on welfare benefits and transition into the workplace or community jobs.
- Leland Bill authorizing use of electronic transfer (EBT) of food stamp credits and created opportunities for employment, training and purchase of homes passed. Maryland and Minnesota are two states using and testing the EBT systems.

Welfare Reform Issues

AFDC mothers have a difficult time locating and maintaining employment. The reasons are generally well known. First, welfare guarantees a level of income support that creates a work disincentive by competing with earned income/wages--especially given the low earning potential of many AFDC recipients. Second, work related costs, such as child care and transportation, reduce or are greater than income available from employment earnings. Third, most AFDC recipients lose non-cash benefits of AFDC when they take a job. Finally, even with the assistance of training and placement programs, there are not enough stable, entry-level jobs available to employ the number of heads of households on welfare. Ideally, current reforms focus on ways to remove disincentives and promote self-sufficiency.

Welfare Reform Proposal Policy Issues

The major policy issues of past and current reform proposals are outlined and discussed in the Congressional Digest (1995: 164-5).

Incentives to Work. When cash benefits are received, two factors affect a recipient's employment incentive. First, a guaranteed income with zero hours of employment provides an economic incentive to not work, especially if you lose one benefit dollar for each earned income dollar. The income level attainable from employment is affected by the rate at which the income guarantee is reduced as earnings increase. When benefits are reduced at high rates, they discourage work for reportable earnings and encourage work for cash or in the "underground economy." To improve work incentives, the rate at which benefits are reduced as earnings rise can be lowered. However, that allows welfare eligibility at higher income levels and results in increased expenditures on welfare programs unless there is a larger financial benefit to recipients who work more. The Earned Income Tax Credit (EITC) enhances work incentives for families with low earnings and avoids higher AFDC costs and caseloads. EITC costs are built into the income tax system. In 1993, Congress expanded the EITC. The EITC increases as earnings increase until annual earnings reach $6,000. It declines for income above $11,000. If the EITC is greater than the income tax liability, the excess amount is paid to the earner; otherwise, it reduces the amount of taxes owed. Work requirements can alter work incentives if the recipient loses all or part of an income guarantee if certain conditions are not met, e.g., mandatory, unpaid training or work required to receive benefits.

Employability of Recipients. Historically, reform measures have included programs to increase employability by the provision of employment services (e.g., remedial education, job search assistance, skills training) and child care. Yet few recipients, given the extent of their educational and skill deficiencies can make short run increases in employability sufficient to move them to stable employment at a wage that makes earnings a realistic advantage over the guaranteed benefit level of welfare.

Impact on Labor Markets. The "workfare" approach requires recipients to work for benefits. Concern that such programs would displace other workers can be alleviated if jobs could be identified or created that would not otherwise be filled--possibly through block grants that allow states to design programs tailored to their own labor market conditions. A second approach for creating jobs for welfare recipients is by reducing employers' costs by subsidizing the wage paid to the worker. The Targeted Jobs Tax Credit (TJTC) was a now-expired example. This approach could displace other low-skilled job seekers. There has been limited interest by employers.

Incentives for Parental Support of Children. Some argue that AFDC payments to unwed mothers provides an incentive for out-of-wedlock births. Additionally, mothers who give birth to more children while on AFDC are usually eligible for larger benefits. These problematic incentives can be lessened by extending AFDC to low-income, two-parent working families. In 1975, Congress determined to aid these families through the EITC. Food stamps are also available. Since 1990, states are required to cover families with two unemployed parents under AFDC, but program restrictions keep them from qualifying. Other attempts to lessen the AFDC child bearing incentives is to require parental support of children through parent locater services, paternity determination and child support collection. Current proposals deny AFDC to unwed minors and restrict or disallow extra benefits for children born in families already on AFDC.

The Well-Being of Children. While the intent of AFDC was to avoid institutionalization or foster care for poor children and to contribute to their nourishment and shelter, there is a growing concern that extended support through AFDC perpetuates poverty. When children live outside the mainstream economy there may be a poverty culture that develops. Discussions regarding limiting the length of AFDC program participation raises questions about how the program and program limits affects children's well-being. The loss of AFDC could elevate incidences of child abandonment and abuse and result in greater use of institutional care for children. Work requirements increase demand for child care and raise questions about the availability of acceptable quality care and relative advantage of employment verses home time for mothers of infants and small children. The potential consequences of limitations on receipt of AFDC would have to be weighed against the potential problems of long AFDC stays.

State Welfare Experiments

The Congressional Quarterly Researcher (July, 1995) and U. S. General Accounting Office (GAO) (July, 1995) report states' attempts to reform welfare.

- Vermont stops benefits after 30 months. Recipients are placed in public service or community jobs.
- Utah pays a one-time cash payment rather than monthly checks and access to child care, health care and other services.
- Oregon replaces welfare checks and food stamps with similar salary private sector jobs.
- Riverside County, California's program, Greater Avenues for Independence (GAIN), has saved \$2.84 in welfare expenses for every \$1 invested in the job-training program.
- New Jersey has implemented a "family cap," by restricting additional payments to mothers who give birth while on welfare in an effort to limit the size of welfare families.
- Forty-two states are experimenting with increasing the earnings exclusion so families can earn more without reducing their AFDC payment.
- Thirty states are creating jobs for AFDC recipients.
- Twenty-five states plan to implement the welfare cutoffs and work requirements proposed in a current welfare reform proposal.
- Several states are using electronic welfare cards similar to ones used by automated teller machines.
- Wisconsin's Republican governor, Tommy G. Thompson, initiated welfare experiments in 1988 with the "Learnfare" program, which cuts aid to families when the teenagers miss too much school.
- Maryland's families lose some AFDC benefits when they do not immunize their children or keep them in school and if they don't pay the rent on time.

- Ohio has financial penalties used to encourage school attendance of pregnant and parenting teenagers receiving AFDC.
- California's Republican governor Pete Wilson is planning across-the-board cuts in AFDC benefits.
- New Jersey has a two-year-old "child exclusion" rule, or "family cap," which denies additional cash aid to a parent who has a child while receiving welfare benefits.

Should major changes be left to the states?

- AFDC benefit levels are set by the states and vary quite dramatically. There may be a need for federal oversight.
- Under a proposed plan, states would control welfare programs, and the federal government would pay a greater share of Medicaid costs.
- In general, reform shifts responsibilities to the states for funding AFDC, food stamps and the special supplemental food program for Women, Infants and Children (WIC). The food stamps provision was retained at the federal level in the 1996 Farm Bill.
- Federal contributions to welfare programs would likely be block granted to each state.

Outcomes

The stated outcomes of welfare reform are

- Get individuals back to work.
- Strengthen families--assist children and youth.
- Reduce teenage pregnancies--increase paternity responsibility.
- Change the orientation of welfare.

Professionals working with families do not agree that the outcomes will be accomplished with the proposed legislation. Current welfare reform legislation helps to make these shifts in the system. Emphasis is on "deficit reduction" rather than maintenance of and improvement in people's well-being. The system shifts:

FROM:	TO:
Welfare maintenance	Temporary Assistance
Dependence	Independence
Federal determination	State determination (Block-grants)
Multiple programs	Combined Programs
Automatic entitlement	Restricted eligibility

Welfare Reform Agreements

There is broad agreement between Congress and the general public on the need for: Efficiency, flexibility, responsibility, and fraud reduction. There is less agreement among the Congress and general public on how to accomplish the: time limits, work requirements and deficit reduction.

The general goal of reform is to produce self-sufficient families, i.e., programs which require families to obtain, maintain and manage their total resource mix--personal, family community--in a way that serves the family and the economy.

Overview and Implications

Given the complex alternative incentives, disincentives and financial rewards inherent in previously attempted, current and proposed welfare programs, the growing welfare rolls and budget reduction concerns, what is there that family economists can do to respond?

Welfare Statistics

- In 1936, half a million people received AFDC assistance. Today 14 million people, two-thirds of them children, receive assistance. (Congressional Digest, 1995: 167)
- Findings indicate that 70 percent of all AFDC recipients will have spells of welfare that last for two years or less. Only seven percent of recipients who begin a spell of welfare receipt will have a spell that will last for more than eight years. (Congressional Digest, 1995: 167)
- After accounting for inflation, the average monthly AFDC benefit per family was $676 in 1970 and $373 in 1993, a 45 percent reduction. (Congressional Digest, 1995: 167)
- AFDC spending represents less than one percent of the Federal budget. (Congressional Digest, 1995: 167)
- Many of the people who were awarded child support payments did not receive the full amount they were due. In 1989, about half of the five million women owed child support payments received the full amount, about one-quarter received partial payments, and about one-quarter received none at all. (Congressional Digest, 1995: 167)

Overview of Welfare Reform

Aid to Families with Dependent Children --the nation's primary welfare program--was initiated as part of the Social Security Act in 1935. Originally, it was designed to provide temporary assistance to women with young children whose father has died. Today, the largest share of the welfare population is children in families headed by a single parent who is divorced, separated or never married. The increased number of recipients is credited to increased divorce rates, out-of-wedlock births and expanded eligibility.

Many are concerned regarding the lack of resemblance of current programs to the original intent. Current legislation focuses on removing disincentives to work and promoting self-sufficiency. Additionally, there is interest in changing the system, cutting Federal spending, consolidating programs, block-granting the funds to states and reducing eligibility.

Proponents feel the current system does more harm than good and encourages/rewards behavior that is detrimental to recipients and society. Opponents feel the proposed reforms cut programs for the poor without sufficient employment available, children will largely be the ones who suffer the consequences of currently proposed reforms and society will face even higher costs resulting form increased illnesses, premature births, crime, etc. Suggested alternative reforms would focus on expanding entry-level employment that is continuous and includes support for child care and medical services.

Implication for Actions

- Research findings need to be known and incorporated into the debate and resulting public policy.
- Reform needs to include benchmark and periodic measures of effects of policies.
- Professionals need appropriate skills and understanding to implement policy.
- A holistic approach is needed.

Policies will affect families in different communities and states in different ways. Welfare reform and the outcomes of family well-being has implications for professionals associated with family and consumer sciences. Both the consumer and family economics approaches are needed to add value to the discussion. When the programs are block granted, there will be a crucial need for baseline data. There is also a need for understanding policy formulation and education about policies. Thus working within our universities to increase the opportunities for students to have hands-on policy experiences seems prudent.

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Endnotes

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Consumer Information Meets the Information Highway: Old Dog - New Tricks?

An invited panel of representatives from government, academia, consumer advocacy and the private sector met to talk about the role of the information superhighway in consumer information. Based on their personal experiences, panelists described how they have changed the way they do their work in consumer information because of this new technology.

Lydia Shevchuk, Industry Canada[1]

Introduction

Consumer information (the "old dog") has long been a central tool of consumer practitioners. What happens when this old dog meets the technological world of the information superhighway? Can it be taught new tricks?

This was the central theme that four panel members discussed. Based on their area of expertise -- they were representatives from the government sector, private industry, academia and consumer advocacy -- they described how they have changed and adapted their work in consumer education and information in response to this new technology.

The session began with introductory comments by the moderator, Lydia Shevchuk from the Office of Consumer Affairs in Industry Canada who introduced the panel. Panel members were: Jane Schuchardt, National Program Leader for the Cooperative Extension System with the United States Department of Agriculture who represented the government sector; Karen Duncan, Assistant Professor of Family Studies at the University of Manitoba who was the academic representative; Sue Jacobsen, Consumer Affairs Manager for the NutraSweet Company (private sector); and Linda Golodner, President of the National Consumers League who represented the consumer voice.

Summary of Panelists Remarks

Jane Schuchardt, PhD

Using the situation of the fall closure of government offices, Dr. Schuchardt began her presentation by mimicking a government telephone ringing which goes unanswered. However, through the future use of the internet and other new electronic technologies, this should not happen again since it will be possible to have a government that is "partially closed, but virtually open."

Dr. Schuchardt described an initiative -- Americans Communicating Electronically (ACE) -- which aims to give each citizen access to government information resources and education through all electronic media. Currently, more than 20,000 people access the ACE information servers weekly.

While these kind of electronic projects have the potential to provide consumers with information about services, they present other risks. They could result in a reduction of personalized service and a widening of the gap between information have's and information have-not's. At the same time, information providers must ensure that posted information is kept current and that it clearly meets the needs of the audience it intends to serve.

While some surveys show that internet access is still limited to a small percentage of households, it is certain that this situation will be changing rapidly as new government programs allow greater public access. When this happens, it will be possible to provide information via electronic means.

Sue Jacobsen

NutraSweet jumped on the internet bandwagon when they saw it as a way for consumers to be able to communicate with the company. It was also clear that it was an efficient means for making product information widely available which could lead to savings in printing and distribution costs.

Ms Jacobsen described some early obstacles that had to be overcome -- ranging from technical aspects of obtaining domain addresses to content problems of finding information valuable to the readership. Current work involves putting more consumer product information on the site, promoting the internet address on all packaging and print materials, tracking internet correspondence and connecting to other relevant internet sites such as health and nutrition agencies, chat groups and government organizations.

Future work will involve maintaining the website in-house (now it is done by an outside consultant), increasing the amount of information available to consumers, creating useful marketing research surveys, and developing a more efficient way of tracking and responding to consumer enquiries.

The project started as a leap of faith, but now through a strategic approach it demonstrates both a quantitative and qualitative value to NutraSweet and its customers.

Karen Duncan, PhD

In teaching her consumer studies class this year, Dr. Duncan decided to introduce the idea of the internet and consumer information by giving an assignment which involved "surfing the net." Her students were from a generation that did not grow up with computers in schools, so there was some resistance to and inexperience with this new technology.

Their assignment was to find a news group, a website and another site of interest to them. They were to look at each site and critically evaluate it by asking who would use the information, how easy it was to access and how relevant it was. The purpose was to introduce critical thinking in relation to the quality of material available. A secondary purpose was to enable students to become comfortable with new technology.

Dr. Duncan noticed that the assignment encouraged people to share information and to work together to problem solve. Students collaborated on overcoming technical difficulties or coming up with creative solutions such as finding short cuts. Although her students did not like the assignment at first, they appreciated it afterwards. They developed a better understanding of what the everyday consumer faces in a world which can be overwhelmed by information.

Linda Golodner

While previous panelists spoke about the practical applications of the internet in their field of expertise, Ms Golodner introduced a new element into the discussion. Representing the consumer perspective, she mentioned four issues that are important for consumers in the world of the internet and the information superhighway. They are: privacy, parental control over content, intellectual property rights and fraud.

Privacy concerns cover the use and collection of information on the internet and the need for privacy standards. Parental control relates to the concern of parents to understand a technology that may not be familiar to them, but one that is increasingly used by their children. Ms Golodner described "net nanny" software that is being developed and work being done on establishing network standards as an alternative to censorship.

Intellectual property issues (particularly copyright) are not well understood by consumers especially in relation to downloading and distributing information. At the same time, the internet can be an important means for promoting artistic and creative endeavours.

Fraud is an area that is receiving increasing attention as more and more commercial transactions take place on the internet. Con artists are already using the internet for fraud and investment schemes have become popular. At the same time, on-line services are becoming available which allow consumers to report fraud and which link them to consumer protection agencies. Ms Golodner reminded the audience that the same rules that apply for other marketplace transactions (such as not giving out credit card numbers and reporting suspicious behaviour) also should apply for the internet. Consumers want the internet to be a safe place.

Question and Answer Period

Following the panel presentations, the audience had the opportunity to make comments or question panelists further. One participant observed that in-depth academic research is being replaced by information that is easily accessible on the internet. This raised the issue of evaluation of information and whether it is possible to verify the accuracy of information posted. Noting the growing popularity of web pages, one observer said that if you do not have a home page nowadays it's almost as if you forgot your underwear!

The session provided an opportunity to gain an increased understanding of the information highway and its use in consumer information. It allowed the audience to hear first-hand experience of people who use this new technology in their work and to better understand some consumer concerns.

Endnote

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A Loan Form Reconstruction Exercise

"We all agree that we'd like to see the loan form to be simple and straightforward and lay out for us exactly what it is you are going to do, what I'm going to do and how much this is going to cost in the end. When do I pay? How much do I pay? What happens if I don't pay? Are you going to refund my interest and just how does all that work out? And take out the nonsense." Wisconsin Panel member.

Richard Widdows, Purdue University[1]
Sugato Chakravarty, Purdue University[2]
Richard Feinberg, Purdue University[3]

Introduction

The stated purpose of the Truth-in-Lending Act (TILA) was, of course, to enable consumers to shop around for credit (15 U.S.C.A., 1601 et seq., Sec. 102(a)). In the consummation of the Act, the Federal Reserve Board's Regulation Z created the rules for disclosure of information the consumer needs to compare credit deals. In the Appendix to Regulation Z, model loan forms were offered upon which lenders could base their own forms and so stay within the rules.

While the usefulness of TILA is not challenged here, we would like to raise the question, do loan forms modeled upon the standard forms deliver the information consumers require to consumers' satisfaction? Put another way, would consumers, if given a choice, change the forms in any way, and if so how?

Given that loan forms are the personification of the TILA, such a question is relevant to the consumer interest. The transactions costs of the loan process are not trivial, either in terms of consumers' time and effort or lenders' production costs. If the loan forms used by lenders could be redesigned to do the job better, everyone stands to gain.

Methods

The loan form reconstruction exercise was part of a Consumer Panel project, carried out in four US Cities. The purpose of the Panel project was to assess consumer satisfaction with the banking industry. Preliminary results of the satisfaction study have been published elsewhere (Chakravarty, Feinberg and Widdows, 1995).

Briefly, the Panels consisted of twelve members, each of whom was a member of a consumer-oriented interest group. The Panels thus differed from the standard Focus Group, in which members are usually randomly-drawn consumers of a product. The methods of the Focus Group were followed, however, in that the scripts for the group sessions were similar, and common threads in the discussions were sought during the review of transcripts of the sessions.

For the loan form reconstruction exercise, the Panels were given a Bankers' Association approved loan form that was currently in use in a bank within their State. The form each Panel received differed slightly because of customization for the particular bank, but otherwise were essentially the same. The Panel was subdivided into groups of three or four persons for the reconstruction itself. Each subgroup was instructed that they could make any changes they wanted to the form. The subgroups then convened together and reported on what their deliberations. They were asked to turn in their forms with the changes on them after the exercise was complete.

To motivate the group, they were told that their changes would be taken note of by a bank educational foundation, and that what they were doing "could make a difference". This was the truth.

Results

While the course of the discussion differed between each of the groups, each touched on certain areas, to be described here. The areas are organized into three Tables below. Each group started its discussion of the forms with a question as to what they liked about the forms. The items mentioned are given in Table 1.

Three of four groups specifically mentioned the Federal Boxes as items they liked. In fact, no group criticized or even considered changing the Federal Boxes. The only other item to receive endorsement from at least three groups was the use of blue color as highlighter on the forms.

Table 1
What The Panels Liked About The Forms

IN	FL	KS	WI
Federal Box/ Sentences	Federal Box/ Positioning	Federal Box/ Positioning	
Use of Blue	Blue Color	Blue Color	
Readable	Readable	APR in Caps	Facts There
Font Size	Plain Language	Explanation of Terms	Explanation of Laws
Up Front	Under-standable Examples		
Highlighting			
Well Structured			

Other than the Federal Box, the only items of form content to receive endorsement from any group were the supplemental terms and examples used. The panelists in general liked the format and presentation of the forms, and their level of language. As will be seen, the size was the only physical characteristic of the forms which came under criticism.

The panels voiced dislikes about certain things having to do with the forms during their discussions of the changes they would like to see. The dislikes are summarized in Table 2.

The most common dislike was the shift in language in parts of the form from plain language to legal language. This aroused suspicion in two of the groups. The members wondered if the shift to legal language was to protect the lenders' interest as opposed to the consumer interest. One group pointed out that things which seemed to be in the consumer interest were in small print. The other common dislike was the actual size of the form itself, which is long. Two panels found this intimidating.

While not exactly dislikes, all of the panels drew attention to terms which they found confusing or hard to understand on the forms. These are also listed in Table 2. Insurance stands out here as being something which was mentioned by three panels, and in each case with some suspicion. In this case the worry was that consumers were being subjected to pressure sales. Almost all of the terms mentioned on the forms were the subject of confusion to at least one panel, with the result that there were several calls for supplemental glossaries or explanations, as will be seen.

With regard to changes the panels would like to see made to the forms, perhaps the important thing in Table 3 is the dog that did not bark in the night: no-one suggested any change to the Federal Boxes themselves. Rather, there were suggestions to extend the concept of using Boxes for key items. Two panels wanted monthly payments to appear in a Federal-style Box. Two panels wanted to see a clearer link made between the Amount Financed Federal Box and the itemization of loan components, while a third wanted the itemization to be repositioned, but again, no changes to the Box itself.

The idea of clarification of items spilled over from the Boxes to other items. The Kansas panel in particular wanted several items to be in bigger type, and three of the panels wanted more attention drawn to consumer rights or Laws. Related to this were calls from two panels for use of plain language throughout.

A popular idea was the use of supplemental booklets to help the consumer understand the terms and examples used in the forms. Two panels called specifically for Glossaries of terms, and two wanted separate pages or worksheets for examples and calculations. One panel thought samples of filled out forms would help.

Table 2
What The Panels Did Not Like About The Forms

KS	WI	IN	FL
Legalese/ Changes	Verbiage/ Differences	Legalese In One	Two Forms
Paper Size	Small Print/ Consumer Rights	Length Examples	Clutter/
Use of Initial	Use of Red		
CONFUSION ABOUT TERMS			
Insurance/ Credit Property Optionality	Prepayment	Insurance/ Optionality Collateral	Insurance
Assumption	Other Charges	Cosigner	Variable Rate
Appraisal Fee		Assignment	APR
Public Official		Public Official	Finding Fee
Index Rate	Index Rate	Security Interest	

Table 3
Changes The Panels Would Like to See To the Forms

FL	KS	WI	IN
Box for Monthly PMT	Box for Monthly PMT	Have a Numbers Page	Link Amount Financed and Itemization
Reposition Itemization	Bigger Type: Pre-payment Balloon PMT	Provide Worksheet	Offset Calculations
Cross Refer to Laws	"Real Choices" (Clearer)		More Bullet Points
Split into Two Forms			Separate Glossary
Separate Glossary	Do on W.P. Customize Use Separate Forms		Terminology on Back
Examples Booklet	Only Plain English	Lower Level Language	
Sample Complete Form	Special Attention/Options		
	Confirm Read Reverse Side		

Finally, the idea of a multipurpose form came under fire from two of the panels. One wanted to know why the whole process was not computerized, while both wanted different loan types split out into customized forms.

Concluding Comments

The intent of the TILA was to make it easier to shop around for loans. Loan forms contain the information which enables this to take place. It is encouraging that the flagship of Regulation Z, the Federal Boxes, received indirect endorsement from these panels. It should also be mentioned that only one panel took up the matter of comparison shopping directly. It suggested that a worksheet be provided which was capable of being used to draw up side-by-side the key items of loans so that consumers could see right there which was the better deal.

The message that emerged from the panels was: when it comes to loan forms, provide one for each type of loan, make it plain language throughout, and provide supplemental forms of booklets with examples of calculations, sample filled out forms and glossaries of terms. For the most part, keep the format of the forms similar to those examined here in terms of print, color, and positioning, but make the size 8 1/2 by 11. And, do not mess with the Federal Boxes.

The major addition to the forms that consumers wanted to see was the use of a Box for monthly payments. Other than that, the concern was more with clarification of terms. And be sure that consumer rights receive equal treatment with other terms.

A Coda

Despite the cautious endorsement of the forms, panels expressed some doubts as to whether consumers really would be able to absorb the information on the forms sufficiently to make comparisons between loans. Each of the panels at some point became involved in a discussion of the loan process, the complexity of the forms and the role of the loan officers. The implication of these discussions was that customers get too confused or railroaded in the process and may as a result make a quick, suboptimal decision.

Thus, KS: the loan officer's role is vital in the process, and customer service persons may be needed to help the customer deal with the process. WI: we fear that the customer ends up relying on the loan offices to fill out the forms because of the complexity. It should not fall onto the consumer to find things out. If it does, they will just sign anything. IN: the consumer needs to be able to cross-references loans, otherwise they will just sign the one they are dealing with. FL: there needs to be facilities and aids where the consumer can sit alone and figure out the forms. Even so, they will still need help in the filing process.

The final comment, then, is this. The forms are doing a good job as vehicles for TILA, and with changes along the lines suggested by the panels will do an even better job. However, the process of loan-making needs to be looked at in conjunction with the forms if the ends of the TILA are to be achieved.

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Into the Shark Tank: Surviving the Loan Closing Process

One of the earliest pieces of consumer credit legislation is the Truth in Lending Act (TiL). The Act was intended to provide consumers a more efficient means of comparison shopping for credit. In practice, however, the information provided by TiL can easily be obscured. This paper discusses several techniques by which lenders may adhere to the letter of the law and yet still thwart its intent.

Paul L. Camp, Purdue University[1]

Much current economic theory regarding competitive and open markets explicitly assumes perfect information on the part of market participants (Case & Fair, 1989; Scott & Nigro, 1982). Indeed, consumers' ability to act in their own best interests and make rational decisions depends upon their access to accurate information. In an effort to improve the quality of information provided to borrowers, Congress approved the Truth in Lending Act in 1968.

As set forth in the language of the Act, "The Congress finds that economic stabilization would be enhanced and the competition among the various financial institutions and other firms engaged in the extension of consumer credit would be strengthened by the informed use of credit" (Truth in Lending Act, 1968).

Required Disclosures

Under the provisions of TiL, lenders are required to disclose to the borrower certain information regarding the proposed or pending loan. Chief among these is the requirement that lenders disclose the cost of the loan, expressed as an annual percentage rate (APR). It was felt that this statistic would immediately benefit consumers by 1) providing a simple method of comparing competing loan offers, 2) permitting consumers to immediately identify particularly good or bad proposals and 3) allowing borrowers a means of comparing the relative merits of using existing liquid assets versus additional borrowing (Egan, Freeman & Simon, 1971). In addition, lenders were required to disclose an itemized total of the amount financed, the cost of the loan expressed in dollar terms and the number, amount and due dates of the payments required under the terms of the contract (Morganstern, 1972).

In the ideal, the disclosures required by Truth in Lending allow borrowers to make more informed decisions regarding their use of credit. Research, however, suggests that the hoped for increase in comparison shopping for credit has not materialized. Peterson and Black (1981) found that almost 80% of over 3500 respondents surveyed engaged in no search for favorable credit terms prior to borrowing. A more recent study found that consumers tend not to be interest rate sensitive, and tend not to discriminate between lenders based on interest rates (Calem & Mester, 1993).

This continued widespread absence of search behavior creates an environment in which consumers are vulnerable to exploitation. Decades ago, Yntema (1938) cautioned that ignorance of credit terms left borrowers vulnerable to "advertising and the persuasive talk" of lenders. Worden and Sullivan (1987) similarly contend that "the existence of less informed buyers allows some sellers to charge higher prices". The economic losses resulting from this inefficiency are borne to a disproportionate degree by those who can least afford them -- the poor, the elderly and the under educated (Kinsey & McAlister, 1981; Worden & Sullivan, 1987).

In the lending process, the potential for exploiting the consumer is at its peak during the actual signing of the loan contract, a process known in the trade as "closing the loan". By subtly manipulating the terms of the interaction, it is possible for lenders to conduct the closing in a manner that ensures compliance with Truth in Lending while clearly subjugating TiL's intent. The purpose of this paper is to more clearly illuminate some of these techniques and provide consumers and consumer educators with a means of combating them.

Techniques to Defeat the Intent of Truth in Lending[2]

Figure 1 is a reproduction of the sample Truth in Lending disclosure form presented in the Act itself. Included is an itemization of the amount financed (bottom of the form), the cost of the loan expressed in dollar terms and as an annual percentage rate (top) and the amounts and due dates of the loan (center). Thus,

Figure 1.
Sample Truth-in-Lending Disclosure Form. From: Board of Governors of the Federal Reserve System (1989). Truth in Lending. Washington, DC: Author.

Everyone's Credit Union Date: april 1, 1981

ANNUAL PERCENTAGE RATE The cost of your credit as a yearly rate.	FINANCE CHARGE The dollar amount the credit will cost you.	Amount Financed The amount of credit provided to you or on your behalf.	Total of Payments The amount you will have paid after you have made all payments as scheduled.
15 %	$1285.06	$5177.73	$6462.79

Your payment schedule will be:

Number of Payments	Amount of Payments	When Payments Are Due
35	$179.53	Monthly starting 5-1-81
1	$179.24	4-1-84

Insurance
Credit life insurance and credit disability insurance are not required to obtain credit, and will not be provided unless you sign and agree to pay the additional cost.

Type	Premium	Signature	
Credit Life		I want credit life insurance.	Signature
Credit Disability	$177.73	I want credit disability insurance.	Joseph Day Signature

Security: You are giving a security interest in: ☐ the goods or property being purchased.
☒ your automobile.

Late Charge: If a payment is late, you will be charged 20% of the interest due with a minimum charge of $.05.

Prepayment: If you pay off early, you will not have to pay a penalty.

See your contract documents for any additional information about nonpayment, default, any required repayment in full before the scheduled date, and prepayment refunds and penalties.

e means an estimate

Itemization of the Amount Financed of $ 5177.73

$ 1000 — Amount given to you directly
$ 3000 — Amount paid on your account

Amount paid to others on your behalf
$ ______ to public officials
$ 500 — to Coop Credit Union
$ 500 to Acme Finance Co.
$ 177.73 to Pan-Galactic Ins. Co.
$ ______ for credit report

$ ______ Prepaid finance charge

such a form satisfies the disclosure requirements of the Truth in Lending Act. However, by appropriate management of the loan closing process, the effects can often be somewhat different than Congress envisioned in 1968 when TiL was written into law.

The Technique of Directed Attention

Communication theorists have long contended that power is an important component of human interaction (Millar & Rogers, 1976). Bochner, Cissna and Garko (1991) state that interpersonal communication can be viewed as "...a problem of control [emphasis in the original] in which self seeks to control the outcomes of other (p. 21)." They go on to say that "...interpersonal communication is described as a rational, goal-oriented activity in which the probability of success or effectiveness is determined largely by whether self has enough social knowledge and/or social skill to predict and control [emphasis in the original] other's responses (p. 21)."

Consider the power differential inherent in the typical consumer credit transaction. The loan officer (and by extension, the lending institution) has a tremendous advantage over the credit applicant. First, loan officers by virtue of their job duties are invested with a certain amount of "expert power" (French & Raven, 1956). Applications must be investigated and evaluated prior to any approval decision. Credit bureau reports must be reviewed, employment and residence data must be evaluated, and an assessment must be made of the applicant's ability to make payments on the pending loan in addition to existing credit obligations and current spending.

All of these activities require a certain amount of specialized knowledge, skill and training, and the loan officer's very employment is evidence to the customer that such expertise exists. Second, the loan officer is imbued with a certain degree of "reward power" (French & Raven, 1956). In the customer's eyes, the loan officer ultimately controls access to the desired reward, specifically, the proceeds of the loan. Central to the concept of reward power is the understanding that a person wielding such power can either bestow or withhold rewards depending on another's behavior. Third, the loan officer wields a certain amount of "coercive power" (French & Raven, 1956). Central here is the understanding that not only does the loan officer have the ability to bestow desired rewards upon the customer following a positive evaluation of the applicant, but also has the ability to coerce and change another's behavior by potentially withholding the desired reward following undesirable behavior. Thus, it is clearly in the customer's best interests to ensure that the loan officer sees only the customer's most positive attributes.

Now imagine that there are aspects of this contract that the customer might not deem desirable and that as a result the lender might wish to de-emphasize (e.g., a high interest rate). Truth in Lending requires that the institution inform the customer of the interest rate to be paid, but does not specify the manner of this disclosure. By using a pencil as a pointer, the loan officer can easily direct the attention of the customer to specific areas of the contract as they are discussed. More important, though, is that the power differential in this situation often causes customers to become more concerned with keeping their attention current with the pointer than with fully considering the details of the loan contract being presented. As a result, many of the "disclosures" required under Truth in Lending are considered by the consumer only briefly and partially, and are more often misunderstood than when they are considered more fully (Kinsey & McAlister, 1981).

<u>The Pace of the Disclosure</u>

This technique is typically employed simultaneously with the Technique of Directed Attention. Together, they form a powerful one-two punch. Consider that the loan officer is already using a pointer, and the customer is dutifully following along through the contract. The loan officer now simply increases the pace of the disclosure. The result is that even though the required disclosures are being made, the customer is often more determined than ever to keep pace with the pointer, and absorbs still less of the information presented. The effect is to create a sense of "information overload", where so many details are presented in such a short time that virtually nothing is retained by the customer. To use a boxing analogy, the rapid pace is designed to keep customers "back on their heels", a posture from which it is very difficult to mount an effective counterattack.

<u>Did I Not Mention That?</u>

Truth in Lending requires that certain disclosures be made at the time credit is granted, yet as has been noted, there is no specific requirement regarding the manner of these disclosures. Thus, pointing to a box and saying "This will be your interest rate" before moving on to the next topic is the legal equivalent of saying "Your interest rate will be thirty-six percent per year". Clearly, more information is contained in the second statement, yet the former will often be used because it is less likely to attract the consumer's attention to the omitted information. Less attention is a desirable outcome as it means less potentially sticky questions, less objections and less loan business lost to another lender.

<u>Mandatory Optional Insurance Coverage</u>

Many lenders offer credit insurance for sale with their loans. Usually, such policies fall into one of two categories. Credit life insurance policies state that if the borrower dies with any portion of the loan outstanding, the insurance company is obligated to repay the balance. Credit disability insurance requires the insurance company to make the regularly scheduled loan payments in the event that the borrower becomes disabled during the time the loan is outstanding. Many lenders include the insurance premiums with the requested loan amount so that the customer is not forced to pay the premiums out-of-pocket. In effect, the lender loans the premiums to the customer in addition to the amount originally requested, and charges interest on the now larger total amount borrowed.

It is important to understand that loan officers and branch managers are evaluated, among other things, on a statistic known as "insurance penetration". This is the percentage of new loans written for which borrowers accept credit life and disability insurance coverage. Furthermore, sale of these policies generates commission dollars for the loan officer and typically for the branch manager as well. Thus, an incentive clearly exists for both to maintain a high insurance penetration ratio.

One of the ways to accomplish this is to write the coverage into the amount financed as a matter of policy for every new loan. Premiums are then deleted from the amount financed only for those customers who specifically decline the coverage. By forcing customers to decline unwanted coverage rather than depending on customers to request desired coverage, insurance penetration numbers are maintained at higher levels than would otherwise be the case.

When presenting the itemization of the amount financed, the loan officer simply acknowledges presence of the premiums, provides a brief description of the coverage, and directs the customer's attention to the next part of the loan contract. The loan officer never actually states that the coverage are mandatory, yet the fact that these coverage are completely optional is also not volunteered. This fact will be acknowledged only if the customer specifically asks whether the coverage are mandatory. Such questions occur infrequently as they require the customer to seize control of the interaction and re-direct attention to a previously discussed portion of the contract. Such actions clearly work against the power differential present during the loan closing.

If the borrower ultimately does decide to decline the coverage, the lender is legally obligated to remove the premiums. Doing so, however, creates an entirely new set of problems for the borrower relating to the issue of time.

The Money Value of Time

The idea that the value of money varies as a function of time is an idea basic to the study of finance. It is equally true, however, that time has a money value. At the minimum, an opportunity cost perspective suggests that time has a value equal to the market earnings foregone while engaged in some other behavior (Becker, 1965; Bryant, 1990; Zick & Bryant, 1983).

Consider that the typical lending institution is open only during "normal" business hours. Thus, once the application has been approved, the customer is faced with a dilemma: how to sign the loan contract and pick up a check for the proceeds given that "normal" business hours often overlap with "normal" working hours. Typically, the customer must either a) take time off from work or b) come to the institution over the lunch hour to conclude the loan process. Either solution implies that the customer must operate within a time constraint. In both cases, minimizing the opportunity cost of time involves minimizing the time spent away from work and the loan becomes more costly to the borrower the longer it takes to close. This is true both in terms of earnings foregone and, perhaps more importantly, in terms of the negative effect of time away from the job. Poor employee performance reviews due to excessive absenteeism can be the cause of fewer and lower raises, lost promotions and in extreme cases, termination of employment. Therefore, it is clearly advantageous for the borrower to minimize the amount of time spent away from work.

Consider the case of the borrower coming to the lender's office over the lunch hour. Typically the loan will be sold, in part, on the basis of convenience. The customer is told that the papers will be ready to sign immediately upon arrival at the office. The contract will be entered into the computer ahead of time and the check for the proceeds will be ready for the customer to pick up. It is stressed to the customer that the advance preparation is to minimize the amount of time spent in the office, an idea usually attractive to the borrower.

Now consider a brief itemization of the lunch hour. Assume it takes the borrower five minutes to get from desk to car and leave the parking lot. Consider also that a mere three mile drive to the lender's office through urban lunch hour traffic can take as long as ten minutes. These two activities alone have consumed fifteen minutes of the lunch hour. Given that the trip back to work will take about the same amount of time, thirty of the sixty minutes available have already been spent. Finally, the borrower will likely want to actually eat something over the lunch hour. Even utilizing drive through service, getting out of traffic, picking up the food and getting back on the road likely consumes another 5-10 minutes. By this time, forty of the sixty minutes of the lunch hour have been consumed, and the borrower has yet to even enter the lender's office.

On arriving at the lender's office, the customer sees that the contract sits on the loan officer's desk as promised, along with the computer-generated check. The closing goes as planned until the itemization of the amount financed. The customer asks whether the credit insurance coverage included in the amount financed are mandatory, and is told that the coverage are, in fact, optional. Now assume that the customer wishes to decline the insurance package. The loan officer is willing to comply with the request. But the first loan has already been entered on the computer, and now, the customer is told, the old loan and check must be voided. Only then can a new loan be entered into the computer and a new check printed and signed. Then, the new contract must be reviewed with the customer, in accordance with TiL. All of this will take time (thus delaying return to work), and the borrower knows it. Many will refuse the offer of a new contract and accept the original, though it contains insurance coverage neither desired nor requested.

For the lender, insurance penetration numbers increase, commission dollars are generated, and profits increase as interest is charged on the premiums in addition to the amount originally requested. The consumer, however, faces higher payments and has borrowed (and must repay) more than originally planned. Clearly, the end result between the two parties is not equal.

You Can't Always Get What You Want[3]

This technique also depends for its success on the money value of time. Once the credit investigation has been completed, most lenders have a fairly definite sense of how much new credit, if any, can be advanced to a particular applicant. Often, the lender can immediately approve the application for the amount requested. There is a dilemma, however, when the borrower does not qualify for the amount requested, yet can be approved for a somewhat smaller sum. Clearly, it is in the lender's interest to make a smaller loan and collect some interest income instead of rejecting the application outright and collecting none. The difficulty is in getting the applicant to accept a smaller (and presumably insufficient for their purposes) loan than originally requested.

The lender's goal in this situation is to make it as inconvenient as possible for the borrower to reject the smaller loan offer. Since rejecting an unsatisfactory loan offer from one's living room can be done with relative ease, the borrower will be told that the application has been approved (which isn't untrue). The customer then travels across town to the lender's office incurring the same "costs" as before (time is spent, traffic is battled, etc.) and importantly, operating under the incorrect assumption that the amount requested will be delivered. This misconception will not be clarified until the loan contract is reviewed with the customer. Only at that time does the loan officer reveal that the customer does not qualify for the amount originally requested, yet qualifies for some smaller amount. The contract will have been prepared for this smaller dollar figure, and the check will have been placed directly on top of the contract, in full view of the borrower.

Understanding the role of the borrower's expectations in this transaction is crucial. First, the customer expects to leave the lender's office with a check. Second, the borrower has invested some degree of time and effort into coming to the office, and expects some form of return on that investment to balance the scales, specifically in the form of the loan proceeds. Many borrowers will accept the smaller loan rather than leave the lender's office empty-handed. Those customers depart with a legal obligation to repay a loan which is insufficient to meet their needs and which may therefore result in additional borrowing.

Recommendations

Addressing these problems via additional disclosure laws is not likely to have a meaningful impact in reducing borrower exploitation. First, much of the potential that exists for such exploitation to occur comes not from a lack of available information, but rather from aggregate borrower behavior. The information necessary to defeat any of the techniques discussed in this paper is readily available to the borrower under the provisions of existing federal legislation. Unfortunately, to a large extent, consumers do not utilize this information by actively shopping for credit. Second, even if new and tougher disclosure legislation were entered into law, enterprising lenders would ultimately be able to devise new and different ways to skirt the legalities of such legislation. Those who are motivated to exploit legislative loopholes in search of profit will likely continue to do so, regardless of the breadth of any legislation before them. It is not likely that any legislative package will ever be drafted that is so far reaching and all inclusive that no possibility for exploitation of this sort exists.

Rather, it would seem that changing consumer behavior in this area would be a more productive avenue of approach. In order to achieve this goal, consumer education programs should be designed that focus on the following:

1. Borrowers should be encouraged to read the contract at their own pace. Consumers should be cautioned not to allow their attention to be led elsewhere in the interest of behaving in a socially acceptable fashion.

2. Borrowers should be made wary of amounts financed that differ from the amount requested. Borrowers should therefore closely examine the merits of any unrequested loan features before proceeding.

3. Borrowers should be advised to allow sufficient time for reviewing and finalizing the loan. Borrowers should be cautioned to never allow time pressures to enter into the decision making process.

4. Borrowers should be advised to confirm the exact terms of the offer (e.g., number of payments, interest rate, amount financed) prior to traveling to the lender's office. The terms should at least be similar to those desired by the consumer. If they differ markedly, borrowers should be urged to determine the reason. Then a carefully reasoned decision can be made whether to invest the time and energy involved in traveling to the lending institution to close the loan.

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Endnotes

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2. I do not propose that all lenders engage in or endorse the practices described above. However, I know from three years' personal experience in the consumer credit industry that at least some do. Regardless of whether a loan officer is engaging in these practices as a matter of institutional policy or to pursue a personal agenda, the end result for the consumer is the same: credit becomes much more expensive to obtain. This may cause new financial problems to develop and existing difficulties to worsen. It is therefore crucial that consumers be made aware of the concealed pitfalls that exist in the loan closing process and the means to avoid them.
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Banking Laws and the Consumer

This study attempts to determine consumer awareness of the regulatory environment surrounding banks. Using a sample of a little under a thousand responses of bank customers around the nation, we find, among other things, that consumers are aware of the existence of banking laws and recognize that these laws provide the highest benefit to them, while simultaneously providing the least benefit to banks. Our results have important policy considerations.

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Introduction

Twenty-five years have passed since the first federal consumer protection statutes affecting banking was enacted. The Fair Housing Act in 1968 followed by the Truth in Lending Act in 1969 were the first in what became a steady flow of laws and regulations intended for the protection of "common" folks from lending agencies and to confer other public benefits. At present there are more than a dozen federal laws and an even greater number of regulations constituting a massive body of complex rules that must be executed by banks in the course of doing business.

Over the last few years, however, the financial institutions have become increasingly unhappy over what they consider an overly high cost of executing government sanctioned regulations, and in the light of their concern, the mood of Congress, the media and the regulatory agencies has been to entertain the notion that costs of the regulatory requirements in general may outweigh the benefits derived from them. This has taken on new urgency, especially in the light of the fact that American banks have been steadily losing ground to their counterparts in the world stage. For example, in the Thomson Bank Directory's list of the top 100 banks of 1994, there are no U.S. banks in the top 30. The first U.S. bank to crack the list is Citibank at number 31.

In this backdrop, this study attempts to determine consumers' awareness of the regulatory environment surrounding banks and to determine consumer attitudes towards laws supposedly meant for their own protection and betterment. The following section discusses the focus group interviews that went into the creation of a mail questionnaire. Section 3 discusses the results relevant to the question posed in this paper. Section 4 concludes with some policy recommendations for bank lobbyists.

Focus Groups and Questionnaire

In order to establish consumer awareness of the legal environment surrounding banks, and their attitudes toward the laws, we designed a study using a technique widely used in consumer opinion research - focus groups. Focus groups involve conversational interaction among randomly selected small groups of consumers, guided by a script designed to probe the research question. The exercise is repeated with several different groups and the focus aspect is the common themes that emerge from repeated interactions. Specifically, we held focus group sessions in Indianapolis, Indiana; Tampa Bay, Florida; Kansas City, Kansas; and Madison, Wisconsin. The details about this part of the project, including a list of the participants, are provided in Chakravarty, Feinberg and Widdows (1995).

To probe awareness in focus groups, several versions of a "pop quiz" on factual aspects of laws were developed. The more detailed were these questions, the poorer was the score. The final version used in the questionnaire was a description of the ten most common consumer protection laws in banking and asked who the main beneficiary of those laws was and if their own state of residence had enacted a law like that described. In reality all states have enacted these laws. For attitudes to the laws, a 5-point ratings scheme was developed. The conclusions from the focus group exercise were then validated by mail survey to a nationally representative sample of 5000 bank customers. A little under one thousand returned surveys could be used for the analysis.

Table 1
Percentage responses from the mail survey broken down by states. Percentages created from an overall sample size of 933 respondents.

State	**Percentage Responded**	**State**	**Percentage Responded**	**State**	**Percentage Responded**
Alabama	0.6	Louisiana	1.6	New York	6.6
Alaska	0.2	Massachusetts	3.7	Ohio	6.0
Arkansas	0.2	Maryland	1.7	Oklahoma	0.6
Arizona	0.8	Maine	0.7	Oregon	1.4
California	7.7	Michigan	3.4	Pennsylvania	4.1
Colorado	2.8	Minnesota	4.5	Rhode Island	0.7
Connecticut	0.9	Missouri	3.7	South Carolina	1.4
Delaware	0.4	Mississippi	0.2	South Dakota	0.2
Georgia	1.5	Montana	0.2	Tennessee	1.3
Hawaii	0.1	North Carolina	3.0	Texas	10.3
Iowa	0.8	North Dakota	0.6	Utah	0.9
Idaho	0.5	Nebraska	1.6	Virginia	0.7
Illinois	3.9	New Hampshire	0.9	Vermont	0.1
Indiana	0.8	New Jersey	1.9	Washington	1.4
Kansas	0.5	New Mexico	0.3	Wisconsin	3.1
Kentucky	1.5	Nevada	0.3	West Virginia	1.3

Table 2
Demographic distribution of respondents. Based on an overall sample size of 933 respondents.

A. Highest level of education.

High School (1)	College (2)	Post-College (3)	Mean	Standard Deviation
291	450	264	1.97	0.74

B. Gender

Female (1)	Male (2)	Mean	Standard Deviation
421	584	1.58	0.49

C. Age-group

under 25 (1)	26-35 (2)	36-50 (3)	51-65 (4)	66-75 (5)	over 75 (6)	Mean	Std.Dev
10	135	436	317	103	4	3.38	0.89

D. Total annual family income (before taxes).

Under \$20,000 (1)	\$20,000-\$34,999 (2)	\$35,000-\$49,999 (3)	\$50,000-\$74,999 (4)	over \$75,000 (5)	Mean	Std Dev
55	171	331	249	199	3.36	1.14

Results

Table 1 reports the percentage distribution of the respondents to the mail survey broken down by the states of the union. Among other things, there is a generally nice distribution of responses across the United States with 48 out of 50 states represented in the sample. Next we present some demographic characteristics of the sample based on gender, education, age-group and total annual family income (Table 2). From table 2, the demographic characteristic of the average respondent can be summarized as having at least a college degree, equally likely to be a male or female, between 36-50 years old and earning between $35,000 and $50,000 annually. It is likely that the sample reflects a selection bias in the sub-sample of the overall sample surveyed that returned the survey. One way to detect this bias would be to compare demographic characteristics of the survey sample with that of the response sample. But this is not possible.

Table 3 shows the respondents' perceived importance of several laws pertaining to banks and banking. Importance was rated on a 5-point scale, with 5 indicating that the law was perceived to have high benefits to the respective constituency (banks, consumers, government or business), and 1 indicating low benefits. The numbers in Table 3 are averages for those who filled out an answer to the question. In addition, Table 1 shows the numbers of people who thought such a law existed, did not exist, or were unsure.

The most striking feature of Table 3 is that in all cases, respondents saw the laws as providing highest benefit to consumers. The average scores were, with one exception, greater than 4.00, and therefore in the highest category of perceived importance. Two in particular were perceived to be extremely important to consumers, namely "a law requiring banks to carry deposit insurance", and "a law which requires banks to reveal important information about interest rates before customers sign up for credit cards". The exception referred to above, the only law not rated in the highest interval of importance to consumers, "a law which makes banks have special loan programs for low and moderate income neighborhoods".

Respondents rated the perceived importance of the laws to the banks lower than that to all other constituents. In six of the cases, the average score was below 3.00, the midpoint of the importance scale. The two laws rated most important to banks were the requirement to carry deposit insurance, and "a law which prohibits discrimination in mortgage loans".

The laws were rated generally in the range of 3.00 to 4.00 in terms of importance to government and business. Respondents thus recognize the usefulness of the laws to these two constituencies. As they did for banks and consumers, respondents rated the requirement for deposit insurance in the highest category of importance for government and business. Other than that, the only rating over 4.00 was for truth in savings to business.

The focus group portion of the study had lead us to believe that most respondents would be unaware or uncertain of the existence of the laws. The results did not confirm this expectation. The majority of respondents correctly identified the existence of the laws, while incorrect assessments constituted less than ten percent of the sample. The number unsure about the existence of the laws did vary from one question to the next however, which has interesting implications for banks.

First of all, the law rated most important to consumers (and indeed to the other constituents) was one requiring deposit insurance. The same law had the second highest number of respondents that were unsure of its existence and the second lowest number of respondents aware of its existence. In this lies a marketing opportunity for banks in advertising the current credit insurance coverage offered to consumers. The same phenomenon applies to the laws rated second and third in importance to consumers, namely truth in lending and limitations on credit card liability. There was a relatively high degree of uncertainty among consumers as to the existence of such laws. Banks therefore stand to gain in consumers' eyes by promoting the existence of these protections.

The second implication for banks lies in the respondents' being very aware of the existence of "a law toward special loan programs for low and moderate income neighborhoods", yet giving this law the lowest rating in terms of importance to consumers. Such a finding may be of importance to banks' lobby effort over this law.

A third finding with interesting implications is that respondents were very aware of two laws, and rated them of high importance to consumers. These laws, namely truth in savings and credit card billing requirements, could therefore be regarded as "sacred cows" and left alone by banks lobbyists. There is little marketing opportunity to be made by claiming credit for the laws, while opposing such laws may upset consumers.

On the other hand, anti-discrimination laws receive fairly high importance ratings to consumers, but awareness of the existence of the laws is not high. This points to a marketing opportunity for banks interested in reaching this segment of the market.

Table 3

Mail Survey Respondents' average rating of the importance of certain laws to banks, consumers, government and business, and the numbers who thought such a law existed in their own state.

Importance scale = 1 to 5; 5 = highest benefit. Sample size = 933.

		Average Importance rating to:			Law in State?		
Law	**Banks**	**Consumers**	**Government**	**Business**	**Yes**	**No**	**Unsure**
1. Truth in Savings	2.96	4.56	3.31	4.01	653	118	162
2. Collection Practices	2.32	4.33	2.69	3.01	536	113	280
3. Special Loans	2.65	3.80	3.23	3.14	681	104	134
4. Discrimination	3.57	4.44	3.95	3.88	316	26	579
5. Card Liability	2.59	4.61	2.96	3.04	491	61	373
6. Card Discrimination	3.28	4.34	3.41	3.77	478	49	377
7. Truth in Lending	2.99	4.77	3.36	3.75	494	34	388
8. Loan Practices	2.82	4.10	3.98	3.61	590	27	261
9. Billing	3.18	4.55	3. 25	3.68	701	63	149
10. Insurance	4.10	4.82	4.11	4.37	392	12	514

Finally, a general implication of the overall high importance ratings for non-bank constituencies (consumers, government, business) would indicate that caution is necessary when lobbying against laws relating to banking. There is little scope for gaining the public's sympathy on these results, and every prospect of upsetting the public, especially where the aforementioned sacred cows are concerned. Discretion in lobbying, with varying policies depending on the law under consideration seems to be the order of the day.

Conclusion

The purpose of this study is to determine consumer awareness of the regulatory environment surrounding banks and to determine consumer attitudes towards laws supposedly meant for their own (consumer) protection and betterment. Using a sample of a little under a thousand returned questionnaires of bank customers around the nation, we find that the average bank customer with at least a college education, 36-50 years old and making $36,000-$50,000

- seems aware of the existence of the banking laws and recognizes these laws as providing the highest benefit to them (the consumers).
- recognizes that these same laws are least useful to banks.
- views two laws, in particular the truth in savings act and the credit card billing requirements as very important
- gives anti-discrimination laws high-importance ratings but his awareness of the existence of such laws is not high.

Overall our results suggest that little is to be gained by lobbying for the abolition of banking laws especially with regard to the ones related to credit card liability and truth in savings. On the other hand, the banking image could receive a shot in the arm by promoting anti-discrimination, especially in the minority segment of the population.

Acknowledgments

This research was made possible by a grant from the Prochnow Educational Foundation, Madison, WI. We would like to thank James Scott for research assistance.

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