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Status Buying Responses in a Survey of Students and Variations in Informational Levels

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Abstract.

This article reports on a survey of a large number of undergraduate students in the U.S. They were queried about whether they preferred living in a society where they had high relative income (status) but low purchasing power or a society where they have low status, but high purchasing power.While the overwhelming majority indicate a desire to buy status, the information given about intergenerational mobilty and amenities like health available in the different socities makes a big difference in the responses. The data indicate that that the majority desiring to buy status disappears with better information.

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1. Introduction

The idea that it is a person's relative position in the income distribution and not the absolute level of income that determines her subjective well being has won wide respect in the economics literature. This is so much so that a very recent article that documents how the growth in absolute income in East Germany from 1991 to 2001[1] positively affected perceived levels of well being is entitled "Money Does Matter!" [P. Fritjers, J. Hanken-DeNew & M. Shields 2004].

The bulk of the evidence supporting the idea that relative income is what counts are the large number of studies that show subjective well-being rises with income within countries at a point in time, but that there is little or no rise in average happiness as income increases across time [Easterlin, 1995]. Easterlin's explanation [1974 and 2001] is that an individual utility depends positively on own consumption but negatively on the consumption of others that an individual compares herself with. Moreover as the income and consumption of one's peers rise it requires more income to achieve the same satisfaction. Others such as McBride (2001) emphasize the possibility that individuals also compare their income and consumption levels with informal psychological norms which may be influenced, for instance, by childhood socioeconomic backgrounds as well as the phenomena stressed by Easterlin. McBride does present micro-based evidence from the General Social Survey that income relative to one's parents and relative to one's age cohort are important determinants of subjectively assessed well-being and that own absolute income has a positive but much smaller effect.[2]

Some [Frank 1999] conclude from this that the usual goal of high societal income is a poor one. A rise in everyone's absolute income because of the relative income effects may leave a society no better than where it began – that we are engaged in an economic rat race without meaning or value.

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[1] And in many cases involves the simultaneous decrease in relative income in the newly formed polity.
[2] The Frijefers et al [2004] finding may also be consistent with these findings in that the East Germans studied would undoubtedly have high income relative to their parents after federation and Frijefers et al do not control for changes in the incomes of relevant exterior cohorts, such as the average incomes of those close in age.

It must be pointed out that this is not a valid conclusion to be drawn in all cases. So if absolute income hadn't risen through time, then presumably fewer people would have perceived their standard of living as better than that of their parents and subjective well being could have fallen as a result of this. The strength of the negative effect of larger own cohort income in lowering subjective well being might be insufficient to offset this.[3] But in fact, given McBride's empirical results [2001] it was sufficient in the period 1970-2000 in the U.S.

We have no doubt that positional concerns are important. How one does economically relative to one's parents, fellow family members and close associates are important to subjective well being. If our incomes were far lower than the average incomes of members of our academic department (or from those we consider our peers) our subjective well being would suffer. However, Easterlin's theoretical formulation of positional concerns admits that the weights one places on others incomes can differ. One would suspect them to be much stronger for close associates than for those one contacts but rarely. And so our subjective well being would suffer little at all from an increase in the local hospital president's salary from 300% to 600% of our own. One reason that some empirical studies show that age cohort effects do have effects is that they may well proxy for close associate effects. Does this distinction have any importance?

Its importance lies in the fact that some have used positional concerns to justify the need for extremely progressive taxes on income or consumption. It is presumed that higher income or consumption imposes negative externalities on all those below

[3] It has been the American experience in the 1970-2000 period that McBride focuses upon that the per cent of people that do substantially better than their parents (by his own definition of receiving income that is 50% higher in real terms than their parents and receive less than 50%) is twice the per cent who do substantially worse. Given his results this could raise the probability of subjective well being as being "very happy" on net by (.052 x .14) 1.288% and lower the per cent being not very happy by (.11 x .14) 1.54%. During the same period real average per capita income rose by 83% and this would mean that the loss of cohort income would rise from 10.236 to 10.840 or by .604 and according to his marginal effects this would lower the probability of subjective well being as being very happy by .0845 and raise the probability of being quite unhappy by .0477 [(.604) x (.075)] So on net rising incomes would reduce the per cent very happy by 7.16% and raise the per cent not very happy by 3.23%. The direct effect of a rise in real income would (since it raises log income from 10.133 to 10.737) raise the per cent reporting they are very happy by (0.27 x .604) 1.63% and lower that reporting not too happy by .91%. In total per cent happy would be down by 5.53% and per cent unhappy up by 1.62%.

one in the distribution, since there are more people below the rich than the middle class progressivity is required to counter these externalioties. If it one's position relative to one's close contacts that is important no such conclusions follow. But concern only with how one does relative to parents and close colleagues is perfectly compatible with this empirical finding that subjective well being does not increase across time in a society as income grows and that we are not engaged in a zero or even negative sum rate race. The reason it is compatible is that we would actually be worse off in a lower income society where our health levels, environmental amenities, real leisure time, educational attainments and levels of knowledge of the world about us would be far lower.

Easterlin stresses that there is a difference between choice utility and experience utility. In his context this means people "chose" higher income levels but will not "experience" higher utility therefrom. Returning to the old lower income level would leave subjective well being unchanged because expectations would fall. We would have expected fewer of our children to survive, our life expectancies to be shorter and our real leisure time to be lower so we would be no less happy. George [2003] has recently made much of the distinctions between first order and second order preferences. To satisfy my first order cravings I may consume a high calorie, fat filled meal at a fast food restaurant. This will be inconsistent with my second order preferences for a long healthy life with the ability to take part in exciting but strenuous physical activities. It might be true, as Easterlin contends, that as a society income grows that the income level necessary to achieve any given level of subjective well being grows and average happiness levels remain constant. But a rational, sentient being with the choice between a higher income society with longer life spans, more leisure time, better health and educational levels and a society with lower levels of all of these things will express his secondary preferences and choose the former even if he realizes that on average he will be "no happier" therein.[4]

[4] While there may be some aberrations such as that in the U.S. leisure time may have actually fallen in the last 30 years as real income grew, on average over large periods the fundamental goods like life expectancy, infant survivorship rates, health at give-age levels, leisure time and educational levels have grown with real income. In the Skeptical Environmentalist, Bjorn Lonberg [2001] presents sound evidence for all these associations.

While our contentions that it is only the income of those people near us in the income distribution that affects how well we feel and that people would prefer to live in richer societies are plausible there is some evidence that seemingly contradicts them.

Solnick and Hemenway (1998) surveyed 155 students and 79 staff and faculty at Harvard's School of Public Health in 1995 to determine how important positional concerns were. Questions such as whether the respondents would prefer to live in a society where prices are the same as currently and one (or one's children) had income of $50,000 and the average person had an income of $25,000 or in one where one has income of $100,000 and the average person had an income of $200,000(or where instead of income the comparisons involved weeks of vacation, years of education, IQ levels, etc). The answers about income were quite positional especially among the 159 students where 52% preferred the higher relative income. In other words they claimed to be willing to buy a higher income position at a considerable price. While only 35% of the faculty and staff answered positionally[5], the results would be a powerful piece of evidence for those who contend that there are powerful negative effects throughout the population and across income groups as an individual's income grows if interpreted as evidence that individuals are expressing their considered and knowledgeable preferences. So Solnick and Hemenway imply that reducing capital gains and benefiting the rich and harming
no one else would be poor policy because of these distributional concerns.

It is our contention that the results should <u>not</u> be so interpreted. The fact that the older, more experienced faculty and staff said they were willing to buy relative positions considering less frequently alerts us to the possibility that the student sample is especially positionally conscious. Moreover, as members of an elite school devoted to public service, they may have quite different political inclinations and come from far higher socioeconomic and parental education classes than the typical individual.

They are also likely to be fairly uninformed relative to their elders of the way the world works and the question format tends to bias them toward the positional answer. They are literally told to compare themselves to the average person in a

[5] This was significantly less than the student per cent at the 5% level of significance.

society. Even if the average income or other attribute is substantially lower or higher than this, it is unclear in the question as asked that there will be many others with income equal to or close to their own and with whom they will be most likely to associate. Moreover, they are less likely to be aware of the fact that in richer societies the level of public services is higher and life expectancies, health and education levels, etc. higher.

The purpose of this article is to report on a survey of a large number of undergraduate students about their positional concerns. In some ways our survey is much less rich than that of Selnick and Hemenway. So we focus only on concerns about income and ignore positional concerns about physical attractiveness, education, IQ and vacation time. But in some ways it is richer for we are able to focus in on income and see whether many students answers were totally "irrational" and highly unlikely to reflect true considered preference or inconsistent and therefore fairly meaningless.[6] We were also able to obtain information on the individual student's sex, family income, ethnicity, field of main study, parental education and marital status, and political predispositions. Our student sample size is also over five times that of Solnick and Hemenway.

The article proceeds by describing the survey and its results in Section 2. An analysis and interpretation of the data follows in Section 3. The last section contains some concluding remarks and suggestions for future research.

[6] Nearly 20% of the student responses fall into these categories.

2. The Survey

As noted Solnick and Hemenway present the students with a simple either or choice. If the student states a preference for A rather than B they take it as evidence of a real preference for A. This is despite the fact that if the student were asked the same question again and was simply filling in blanks he might express a preference for B. The simple either/or choice also precludes any inference about something if he expresses a preference for the society where both his income and that of others is higher. He could really prefer this because his positional concerns are minimal or he is not willing to pay the price of a higher position or because he is altruistic.

Our survey was administered to all students attending the first day's session of either Principles of Microeconomics or Principles of Macroeconomics at Binghamton University on January 26 or 27, 2004. To make the income figures something comparable to the 1995 survey figures we raised the latter to $60,000, $30,000, $120,000 and $240,000 and asked simply: "In the question below there are three states of the world you are asked to pick the one in which you most prefer to live" with the same other wording as Solnick and Hemenway

State A] your current annual income is $60,000 and others have $30,000 in annual income.

State B] your annual income is $120,000 and others have $240,000 in annual income.

State C] your annual income is $120,000 and others have $120,000 in annual income.

They then confronted another question[7] that asked them to pick the state they'd least prefer to live in from the same three alternatives. If a student answered A and A, B and B or C and C we infer that he is providing us with pure nonsense. A full 5.7% of our students answered in this way.

[7] This was followed by seven socioeconomic questions. The Surveys are in the Appendix.

If a student answered AB we classify him as a rational status buyer (Category I). Of the remaining potentially sensible answers, 28.4% were in this category. If he answers CB (as 28.0% did) we classify him as an Equality Oriented Status Buyer or Category II. (He'd prefer higher income and equality but he would be willing to give up $60,000 real income to be relatively rich.) A student answering BA is classified as Non Status Conscious and Category III (16.5% of the sample) and one answering CA as an Equality Oriented Non Status Buyer (17.6%) or Category IV.

There are two sets of answers that also appear to imply irrationality or inconsistency. An answer of AC (5.3%) implies that the respondent considers position both important and unimportant (since he'd prefer to be relatively poor than witness all others with the same income). An answer of BC (4.2%) would also appear irrational or at best[8] malevolent.

In order to test whether providing better information can change the proportions of answers in all of the four remaining categories four different surveys were administered to approximately equal numbers of students. They were identical except that as compared to Survey A, in the introduction to question one, Survey B added this phrase "In all societies you will associate most closely with people who have income close to yours. In richer societies you will be slightly more likely to associate with people with somewhat higher incomes and you will be aware of the average income of those you do not meet." We would predict that for students providing sensible answers that the percentage that would choose the positional alternative Category I would fall if they were aware that if they had the relatively low income they would mostly interact with others like themselves.

In Survey C, we omitted the extra sentences included in Survey B, but added the phrase "If you earn less than the average income in a society, you and your children will be more likely to have your income move up in the future than if you earn more than the average. The higher the average income in the society the better the

[8] So in total we find more than a seventh, 14.7%, of the answers nonsense, irrational or inconsistent. If the same proportions of answers really contained no information in the Solnick and Hemenway study then only 71 of the 159 or 45% of students gave true positional answers. Our Categories I and II total a little over 43% of the sample.

public services such as education, road maintenance etc. that you will receive." Again we predict that the percentage who would take the positional alternative would fall if they were aware of the facts about inter-temporal and inter-generational income mobility and the idea that in richer societies people would be better educated, more mobile and, although we did not directly mention it, healthier. Finally in Survey D, we included both phrases predicting a stronger negative effect on the choice of positional responses.

3. Results

Table 1 defines all our dependent variables and presents their means and variances.[9] Preliminary estimates showed that the sex, previous economics courses, different majors, educational status of parents and particular class variables displayed no significance in ordinary lease squares estimates of simple linear probability models where we explained the fraction answering successively AB, CB, BA, CA, or any of the four irrational responses. This was also true for multinomial logistic specifications. Therefore, for ease of presentation we present OLS results that explain the percent of rational responses that were in one of the four rational categories in Tables 2 through 5 but only including the ethnic, family income, marital status, political stance and survey form variables.

In Table 6 we present the results of a multinomial logit specification. Here the default category is that of a student answering AB who is dubbed a rational status buyer (Category I). Here the results show the effect of the independent variables on the relative likelihood of the student responding in Categories II, III and IV relative to Category I. For succinctness, we include only ethnic, family income, mother's marital status, political preferences and survey form variables as determinants of the likelihood of choosing one of the three categories.

Table 2 shows the probability that a student who answers rationally will be a pure status buyer decreases as we go from Survey A to C or D. The effect of survey

[9] Since each of the variables is categorical, the means show the percentage of the sample with that characteristic. So for instance, 9% of the respondents were male, 27% of the respondents had family incomes between $60,000 and $100,000 etc.

B's information that a person will mostly associate with those like oneself has a negative effect but this is not significant. Since the coefficient on Survey D is not significantly more negative than that for Survey C this corroborates the idea that people will be significantly less status oriented if they are aware of the dynamics of income distributions and if they are aware that richer societies have better amenity levels. It provides little, however, in way of corroboration of the thesis that relative income effects are only important for those near one in the income distribution.

Sensibly Table 2 also reveals that the richer and poorer classes are more concerned with status. Apparently also people who consider themselves conservative or very conservative are more status conscious, as are those whose mothers never married.

Table 3 generally also reflects the same ideas about Survey C raising the likelihood that a person will not want to purchase status and that it is knowledge of intergenerational mobility and greater amenity levels in richer societies that leads to this. Here, however, there are no other significant determinants of the likelihood of answering in a non status conscious way.

Table 4 shows few significant effects. Survey C has a negative effect on equality oriented status seeking but it is only significant at the 10% level. Very low income students are less likely to answer in this way as are those whose mothers were divorced from their fathers and remarried. Table 5 shows no significant determinants of equality oriented non-status buyers.

The results we display are apparently not driven by the Surveys B, C and D leading to more confusion. Table 6 displays results that imply that survey form does not affect the probability of answering irrationally. Low income status has a small positive effect on answering irrationally.[10] A separated mother has a positive effect, perhaps indicating temporary distraction of the student, since a divorce status lowers the percentage of answers that were irrational.

[10] Alternate specifications where all potential independent variables were included make no material difference for our results or inferences.

As we turn to our multinomial logit specification in Table 7, most of our essential results are preserved. Here we are explaining the relative likelihood that a person will answer in Category I, the rational status buyer. The category for a person who answers as if status is irrelevant is Category III. The rational equality conscious status buyer is Category II and the equality conscious non status buyer is Category IV.

We see that if the student received Survey C he is considerably less likely to choose the status seeking answer. This effect is significant at the .01% level. While receiving Survey B does lower the likelihood of the status seeking choice, this effect is not significant at traditional confidence levels. Nor is the effect of receiving D statistically significantly stronger than receiving C. Receiving information about intergenerational mobility and the positive connection between higher societal income levels and better amenities lowers the likelihood of status seeking, but this apparently is not true for information that alerts one about one's likely associates.

We also find

A] that having had an economics class before raises the likelihood that you will choose the status category rather than the non status conscious answer, and lowers the probability that you will choose it rather than Category IV. But these effects are significant only at the 10% level.

B] that Asian Americans are more likely to choose the status answer rather than Category III, but again that this is significant only at the 10% level.

C] that Hispanics are less likely to choose the status category rather than the non status one.

D] that the other ethnicity category makes it more likely to choose status rather than Category II.

E] that very low income groups are more likely to choose the status category rather than any of the other categories.

F] that for low incomes this is true and statistically significant only for Category IV.

G] high income groups are more likely to choose status rather than categories II and IV (but not relative to the non-status category).

H] that this is also true for those with very high income.

I] if one's mother was never married it is more likely you will choose a status answer rather than Category II.

J] Conservatives and extreme Conservatives choose status more often relative to Category II (equality oriented non status buying).

K] Conservatives are more likely to choose status than a non status answer or Category III.

4. Conclusion

This article tests whether providing surveyed students with more information will reduce the fraction who express positional concerns. It finds corroboration of the idea that awareness of intertemporal income mobility does lessen positional concerns. It fails to find the knowledge that one will associate mostly with people like ourself does not significantly lower positions concerns.

The survey format used to coincide positional concerns allows the conclusions also that a substantial fraction of the answers are less than fully rational. We suspect that a large fraction are also not answering the questions on the basis of their true positional concerns but merely expressing what they believe are "proper" answers. We intend to test this by altering the "price" of purchasing higher relative positions in future surveys.

Table 1. Summary Statistics on Survey Responses

Variable	N	Mean	Std Dev
q1	798	2.1052632	0.9024975
q2	803	1.7920299	0.6159446
male	802	0.5785536	0.4940989
econClass	798	0.6328321	0.4823351
eWhite	800	0.5912500	0.4919105
eBlack	800	0.0375000	0.1901024
eAsian	800	0.2750000	.04467936
eHisp	800	0.0450000	0.2074338
eOther	800	0.0512500	0.2206452
mUndec	798	0.3208020	0.4670776
mMgtEcon	798	0.3884712	0.4877083
mHum	798	0.1315789	0.3382444
mSci	798	0.0977444	0.2971549
mWat	798	0.0614035	0.2402195
iVLow	791	0.1188369	0.3238013
iLow	791	0.1871049	0.3902425
iMed	791	0.3034134	0.4600231
iHigh	791	0.2338812	0.4235653
iVHigh	791	0.1567636	0.3638078
emVL0w	794	0.0717884	0.2583000
emLow	794	0.1863980	0.3896730
emMed	794	0.2128463	0.4095779
emHigh	794	0.3198992	0.4667313
emVHigh	794	0.2090680	0.4068994
efVLow	794	0.0818640	0.2743302
efLow	794	0.1586902	0.3656172
efMed	794	0.1838791	0.3876297
efHigh	794	0.3035264	0.4600703
efVHigh	794	0.2720403	0.4452910
married	798	0.7907268	0.4070449
separated	796	0.0427136	0.2023377
divorced	795	0.0503145	0.2187307

Variable	N	Mean	Std Dev
remarried	794	0.0743073	0.2624356
maritalOther	795	0.0377358	0.1906767
pVCon	784	0.0522959	0.2227652
pCon	784	0.1594388	0.3663185
pInd	784	0.4362245	0.4962326
pLib	784	0.2844388	0.4514347
pVLib	784	0.0676020	0.2512220
Class1	812	0.2881773	0.4531932
Class2	812	0.2450739	0.4303961
Class3	812	0.2130542	0.4097180
Class4	812	0.2536946	0.4353930
surveyA	812	0.2389163	0.4266843
surveyB	812	0.2598522	0.4388236
surveyC	812	0.2450739	0.4303961
surveyD	812	0.2561576	0.4367789

Table 2. OLS Regression Results Explaining % of Rational Responses in Category I – Status Buyers

Root MSE	0.45470	R – Square	0.0893
Dependant Mean	0.33073	Adj R-Sq	0.0674
Coeff Var	137.48272	N	640

Variable	**Parameter Estimate**	**t Value**
Intercept	0.28451	5.62
surveyB	-0.05865	-1.13
surveyC	-0.13115	-2.52
surveyD	-0.21971	-4.26
IVLow	0.29738	4.55
ILow	0.12557	2.32
IHigh	0.09658	1.94
IVHigh	0.14047	2.55
separated	-0.02460	-0.24
divorced	0.09321	1.16
remarried	-0.01080	-0.15
maritalOther	0.21304	2.16
pVCon	0.13521	1.59
PCon	0.13191	2.43
PLib	0.04964	1.14
PVLib	-0.04080	-0.55

Table 4. OLS Regression Results Explaining % of Rational Responses in Category II – Equality Oriented Status Buyers

Root MSE	0.46367	R-Square	0.0460
Dependent Mean	0.32605	Adj R-Sq	0.0231
Coeff Var	142.20773	N	640

Variable	**Parameter Estimate**	**t Value**
Intercept	0.45242	8.77
surveyB	0.02135	0.40
surveyC	-0.09833	-1.86
surveyD	0.02266	0.43
IVLow	-0.20313	-3.05
Ilow	-0.06590	-1.19
Ihigh	-0.05340	-1.05
IVHigh	-0.08504	-1.51
separated	0.00975	0.09
divorced	-0.11793	-1.44
remarried	-0.12050	-1.65
maritalOther	-0.12962	-1.29
PVCon	-0.10879	-1.25
Pcon	-0.08939	-1.62
Plib	-0.05266	-1.19
PVLib	0.00090286	0.01

Table 3. OLS Regression Results Explaining % of Rational Responses in Category III – Non Status Buyers

Root MSE	0.34371	R-Square	0.0714
Dependent Mean	0.14509	Adj R-Sq	0.0491
Coeff Var	236.89811	N	640

Parameter Estimates

Variable	Parameter Estimate	t Value
Intercept	0.05168	1.35
surveyB	0.02744	0.70
surveyC	0.20219	5.15
surveyD	0.16561	4.25
IVLow	-0.02553	-0.52
ILow	0.01164	0.28
IHigh	0.00270	0.07
IVHigh	0.00677	0.16
separated	-0.08536	-1.10
divorced	0.01829	0.30
remarried	0.06083	1.13
maritalOther	-0.02925	-0.39
pVCon	-0.02880	-0.45
pCon	-0.04725	-1.15
pLib	-0.01128	-0.34
pVLib	0.05159	0.93

Table 5. OLS Regression Results Explaining the % of Rational Responses in Category IV – Equality Oriented Non Status Buyers

Root MSE	0.40130	R-Square	0.0116
Dependent Mean	0.19813	Adj R-Sq	-0.0121
Coeff Var	202.54765	N	640

Parameter Estimates

Variable	Parameter Estimate	t Value
Intercept	0.21139	4.73
surveyB	0.00986	0.21
surveyC	0.02728	0.60
surveyD	0.03144	0.69
IVLow	-0.06872	-1.19
ILow	-0.07131	-1.49
IHigh	-0.04588	-1.04
IVHigh	-0.06220	-1.28
separated	0.10021	1.10
divorced	0.00644	0.09
remarried	0.07048	1.12
maritalOther	-0.05418	-0.62
pVCon	0.00238	0.03
pCon	0.00472	0.10
pLib	0.01430	0.37
pVLib	-0.01169	-0.18

Table 6. OLS Results for %o Not Rational

Root MSE	0.34567	R- Square	0.0803
Dependent Mean	0.14518	Adj R-Sq	0.0385
Coff Var	238.09086	N	736

Parameter Estimates

Variable	Parameter Estimates	t Value
Intercept	0.04317	0.71
surveyB	0.01801	0.48
surveyC	0.02002	0.54
surveyD	0.03845	1.05
male	0.00984	0.37
econClass	0.02492	0.91
eBlack	0.07041	0.98
eAsian	0.06850	2.08
eHisp	0.22399	3.33
eOther	0.22558	3.68
IVLow	0.00603	0.12
ILow	0.04552	1.12
IHigh	0.01971	0.55
IVHigh	0.00731	0.18
emVLow	0.04584	0.69
emLow	0.08968	2.11
emHigh	0.03890	1.05
emVHigh	0.03508	0.84
efVLow	-0.01834	-0.29
efLow	-0.01194	-0.26
efHigh	-0.02215	-0.56
efVHigh	-0.08555	-2.04

Variable	**Parameter Estimates**	**t Value**
separated	0.06160	0.88
divorced	-0.13129	-2.11
remarried	0.00593	0.11
maritalOther	-0.00871	-0.12
pVCon	0.01972	0.32
pCon	0.03521	0.91
pLib	0.01458	0.47
pVLib	-0.04200	-0.77
class1	-0.02186	-0.61
class2	-0.00193	-0.05
class3	0.00203	0.05

Table 7. Analysis of Maximum Likelihood Estimates: Explaining the Likelihood of Choosing One of the Other Rational Responses instead of that of Rational Status Buying

Parameter	Estimate	Std. Error	Chi- Square	Pr > Chi Sq
Intercept I	-3.5445	1.0512	11.37	0.0007
IV	-2.4851	1.0927	5.17	0.0230
III	-0.7989	1.3655	0.34	0.5585
SurveyB I	-0.0901	0.1410	0.41	0.5230
IV	-0.0719	0.1699	0.18	0.6724
III	-0.4720	0.2807	2.83	0.0927
SurveyC I	-0.0103	0.1536	0.00	0.9465
IV	-0.2409	0.1698	2.01	0.1560
III	-1.2581	0.2548	24.38	<.0001
SurveyD I	-0.4094	0.1519	7.27	0.0070
IV	-0.4192	0.1739	5.81	0.0160
III	-1.3257	0.2607	25.85	<.0001
Male I	0.1343	0.1087	1.52	0.2170
IV	-0.1369	0.1285	1.14	0.2866
III	0.0932	0.1449	0.41	0.5200
EconClass I	-0.1038	0.1110	0.87	0.3497
IV	-0.2194	0.1309	2.81	0.0937
III	0.2757	0.1460	3.57	0.0589
EBlack I	-0.0635	0.3301	0.04	0.8473
IV	-0.2382	0.3430	0.48	0.4873
III	-0.5265	0.3784	1.94	0.1642
EAsian I	0.1338	0.1341	1.00	0.3185
IV	0.2825	0.1650	2.93	0.0869
III	-0.1089	0.1814	0.36	0.5481
EHisp I	0.4114	0.3829	1.15	0.2826
IV	0.1598	0.3839	0.17	0.6772
III	-0.9206	0.3413	7.28	0.0070

Parameter	Estimate	Std. Error	Chi- Square	Pr > Chi Sq
EOther I	0.9010	0.4131	4.76	0.0292
IV	-0.1218	0.2740	0.20	0.6568
III	-0.0641	0.3319	0.04	0.8468
IVLow I	0.8159	0.2311	12.46	0.0004
IV	0.4867	0.2333	4.35	0.0370
III	0.5063	0.2839	3.18	0.0746
ILow I	0.2437	0.1684	2.09	0.1479
IV	0.3657	0.1948	3.52	0.0605
III	0.0348	0.2190	0.03	0.8739
Ihigh I	0.2300	0.1470	2.45	0.1177
IV	0.3366	0.1678	4.02	0.0449
III	0.0971	0.2004	0.23	0.6280
IVHigh I	0.3532	0.1626	4.72	0.0298
IV	0.4420	0.1879	5.53	0.0187
III	0.1757	0.2165	0.66	0.4171
EmVLow I	0.1181	0.2725	0.19	0.6646
IV	0.4039	0.3418	1.40	0.2373
III	0.2344	0.3966	0.35	0.5545
EmLow I	0.0507	0.1762	0.08	0.7735
IV	0.1770	0.2039	0.75	0.3855
III	0.2592	0.2471	1.10	0.2943
EmHigh I	0.1806	0.1503	1.44	0.2295
IV	0.0495	0.1729	0.08	0.7747
III	0.1286	0.1993	0.42	0.5185
EmVHigh I	0.2380	0.1703	1.95	0.1622
IV	-0.00122	0.1908	0.00	0.9949
III	0.0859	0.2168	0.16	0.6919
EfVLow I	-0.0976	0.2688	0.13	0.7165
IV	-0.3231	0.2988	1.17	0.2797
III	0.2794	0.3986	0.49	0.4834

Parameter	Estimate	Std. Error	Chi- Square	Pr > Chi Sq
EfLow I	-0.0440	0.1985	0.05	0.8247
IV	-0.2130	0.2165	0.97	0.3252
III	-0.0999	0.2659	0.14	0.7073
EfHigh I	-0.1322	0.1640	0.65	0.4200
IV	0.0803	0.1881	0.18	0.6693
III	-0.2662	0.2195	1.47	0.2252
EfVHigh I	-0.1542	0.1683	0.84	0.3596
IV	-0.0735	0.1899	0.15	0.6987
III	-0.1036	0.2268	0.21	0.6477
Separated I	-0.0463	0.3046	0.02	0.8791
IV	-0.2182	0.3204	0.46	0.4958
III	0.7489	0.5786	1.68	0.1956
Divorced I	0.3907	0.2430	2.59	0.1078
IV	0.1324	0.2575	0.26	0.6070
III	0.1704	0.3127	0.30	0.5858
Remarried I	0.2247	0.2400	0.88	0.3491
IV	-0.1047	0.2306	0.21	0.6498
III	-0.3188	0.2608	1.49	0.2216
MaritalOther I	0.5106	0.2898	3.10	0.0781
IV	0.5186	0.3522	2.17	0.1409
III	0.4685	0.4268	1.20	0.2723
PVCon I	0.3768	0.2603	2.12	0.1458
IV	0.3486	0.2749	1.61	0.2047
III	0.4652	0.3438	1.83	0.1760
PCon I	0.3319	0.1562	4.52	0.0336
IV	0.2509	0.1752	2.05	0.1521
III	0.3992	0.2231	3.20	0.0736
PLib I	0.1629	0.1268	1.65	0.1989
IV	0.0589	0.1448	0.17	0.6842
III	0.1854	0.1693	1.20	0.2735

Parameter	Estimate	Std. Error	Chi- Square	Pr > Chi Sq
PVLib I	-0.1149	0.2230	0.27	0.6063
IV	0.1028	0.2701	0.14	0.7034
III	-0.1362	0.2792	0.24	0.6257
Class1 I	-0.1936	0.1483	1.70	0.1917
IV	0.2239	0.1658	1.82	0.1769
III	-0.1081	0.1926	0.32	0.5746
Class2 I	-0.1458	0.1515	0.93	0.3359
IV	0.1921	0.1682	1.30	0.2535
III	0.1759	0.2148	0.67	0.4130
Class3 I	-0.1393	0.1649	0.71	0.3980
IV	0.0690	0.1749	0.16	0.6930
III	-0.2334	0.2055	1.29	0.2561

N = 630

Likelihood Ratio = 1473.32

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