Appendix A Instructions

Part 1

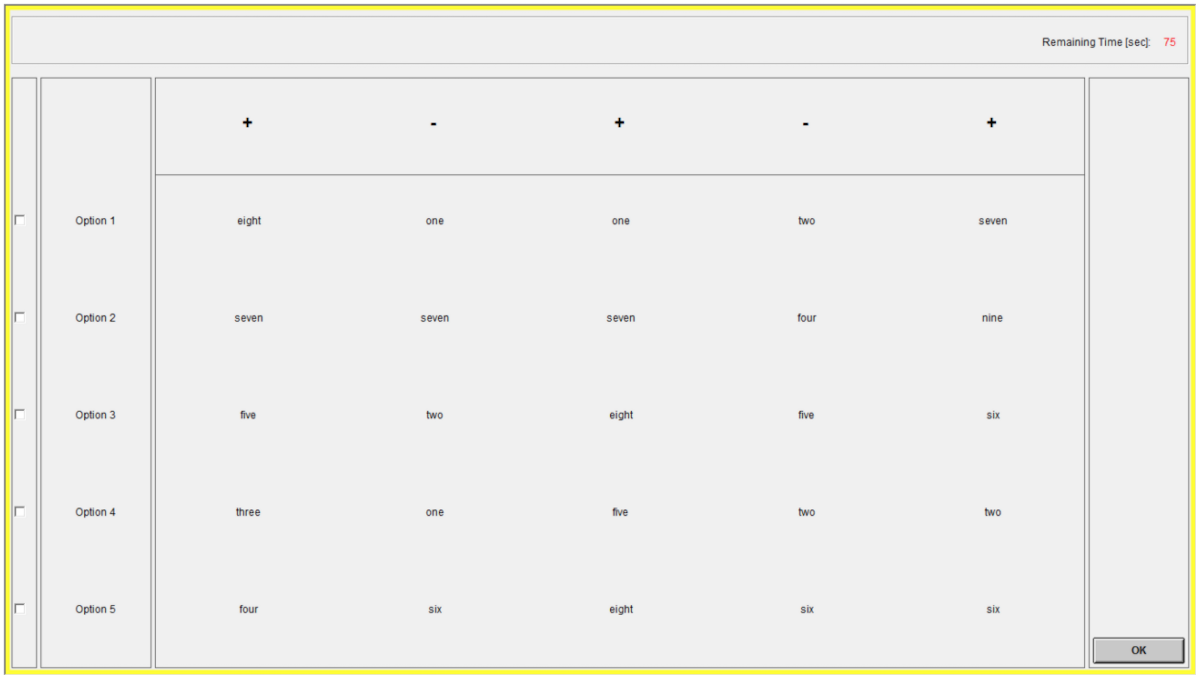
Thank you for participating in this experiment. In this session you will work alone and are not permitted to talk with any other participant. At this time, please be sure that your cell phone is turned off. At no point during the experiment are you permitted to use your cell phone or any other personal electronic device.

The Experiment

The experiment today is broken into two parts. These are the instructions for Part 1 of the experiment. At the conclusion of Part 1, the experimenter will hand out and read instructions for Part 2 before proceeding. Your earnings in Part 1 and Part 2 are independent.

This is an experiment on decision-making. In each of 40 periods, you will be asked to choose one from among a number of options. You will have at most 1 minute and 15 seconds (or 75 seconds) to make this decision in each period. Each option is described by a number of attributes. Attributes take on the numbers 1-9 with each number being equally likely to be shown. The value of each option is the result of the addition and/or subtraction of these attributes and is measured in Experimental Currency Units (or ECU). The exchange rate will be as follows: 1 USD = 10 ECU. You will know whether to add or subtract each attribute based on column headers in the displayed data. While calculating these values, you will not be permitted to use a calculator or pen and paper.

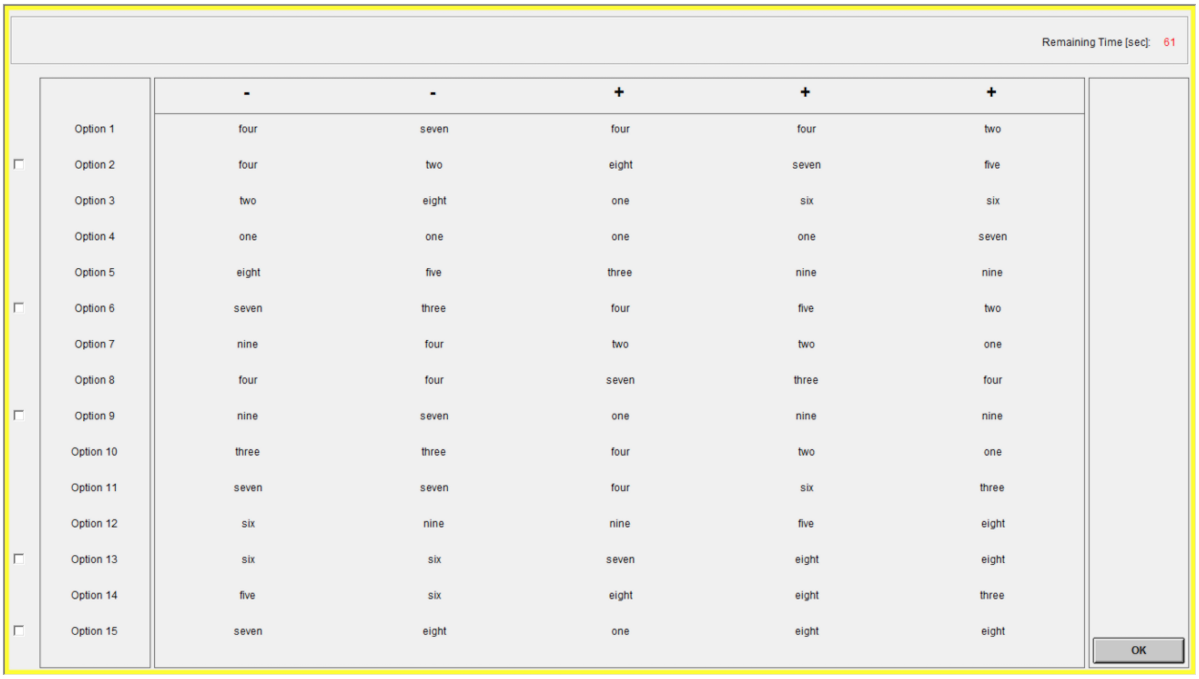
In each period, you will see a screen that looks similar to the one below:



Notice that Option 1 is accompanied by 5 numbers (shown in words) in a grid to its right. The value of Option 1 is simply the result of adding or subtracting the numbers in its corresponding row. You will know whether to add a number or subtract it based on the **plus** or **minus** sign in the column header row. Thus, the value of Option 1 is 13 ECU (or eight - one + one - two + seven = ECU). The values of Options 2-5 can be calculated in a similar way.

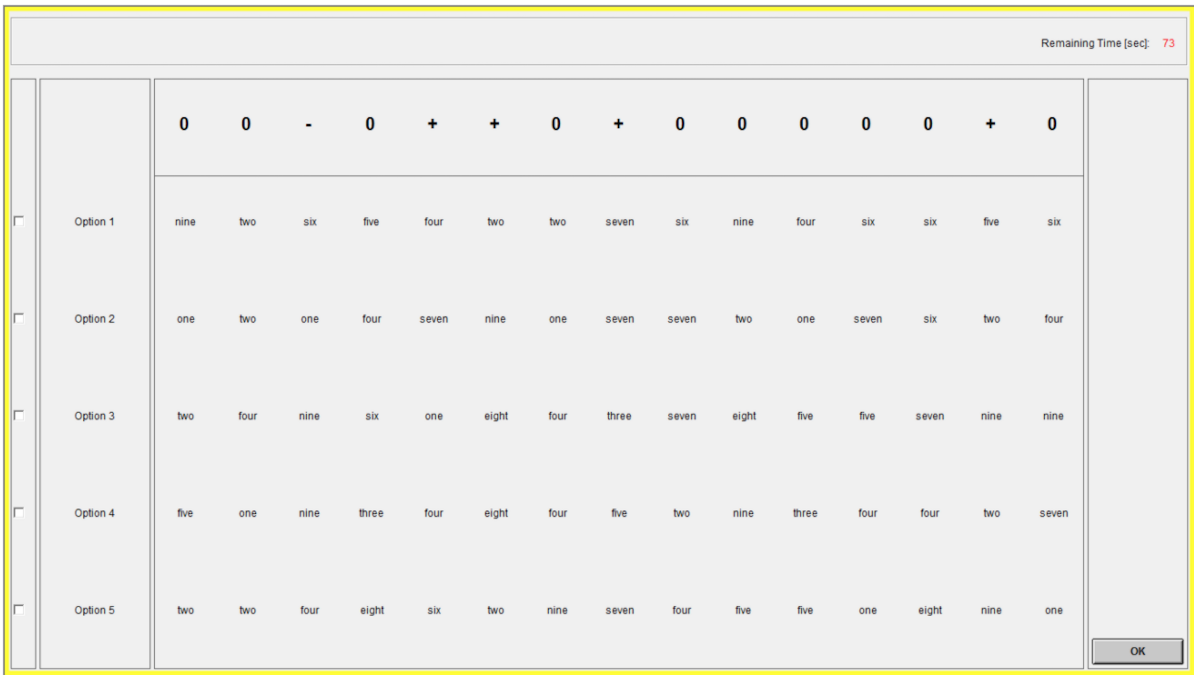
Variations

In each of the 40 periods, the number of available options is the same (5). However, the number of displayed options will vary. In other words, there may be some options displayed on your screen that you will not be able to select. Consider the following example:



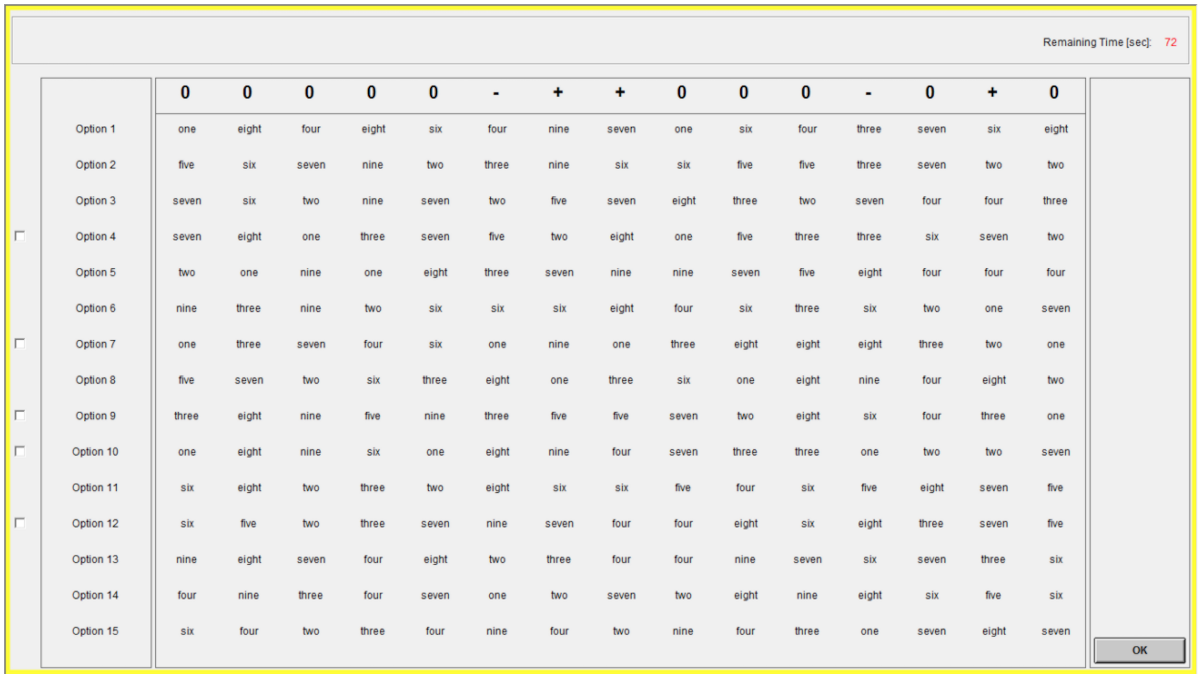
Note that each option still has 5 attributes in the grid. However, now Option 1 cannot be selected (this can be seen from the absence of a checkbox to the left of "Option 1). You may only select one from the following: Option 2, Option 6, Option 9, Option 13, or Option 15. Which options are available will vary between periods. Also note that the value of each option is calculated as in the first example. For example, the value of Option 2 is 14 ECU (or - four - two + eight + seven + five = 14 ECU).

In each of the 40 periods, the number of attributes per option will vary. However, in some periods, some of these attributes may be multiplied by **zeros** instead of being added or subtracted when calculating the value of each option. Consider the following example:



Note that all displayed options are available (you can see this from the checkbox to the left of each option label). However, there are additional attributes for each option (now there are 15). In contrast to the previous examples, some of these attributes are now multiplied by 0 instead of being added or subtracted when determining the value of each option. This can be seen from the zeros in the column header. For example, the value of Option 1 is 12 ECU (-six + four + two + seven + five = 12 ECU). Notice that in this calculation, the first and second attributes (nine and two) were not included because they have a 0 in the column header. The same is true for any value for which there is a zero in the column header. Which attributes have zeros (and pluses or minuses) will vary by period.

Finally, in some periods there will be additional attributes and unavailable options. Consider the following example:



Note that Option 1 is **unavailable** (you can see this from the absence of any checkbox to its left). Also note that there are several columns with **zeros** in the column header. The value of Option 4 is 9 ECU (-five + two + eight -three + seven= 9 ECU). Notice that the 1st through 5th attributes were not included for Option 4 (seven, eight, one, three, and seven) since these have zeros in the column header. The same is true for any column of attributes for which there is a zero in the column header. Again, which columns have zeros (and pluses/minuses) and which options are unavailable will vary by period.

Time Limit

In each period, you have 1 minute and 15 seconds (75 seconds) to submit your choice of option. You must submit your option by checking the checkbox to its left and clicking the OK button at the bottom right of the screen. If you **do not** submit your selection by clicking the OK button prior to the end of the period (i.e. within 75 seconds of the period starting), your selection will not be submitted and **you will be paid nothing** for that period. Only by selecting an option and clicking OK prior to the end of the period will your choice be submitted for the period.

Earnings

In each period, your per-period payoff is simply the value of the option you have chosen. In each of these periods, the values for each option have been chosen so that despite being the sum of both positive and negative numbers, the **value of each available option is positive**. That is, no matter which option you choose, money will never be taken away from you. 10 periods will be chosen at random and your cash earnings will be the sum of the per-period payoffs for these 10 periods, converted to US Dollars. The exchange rate will be as follows: \$1 USD = 10 ECU. Your

total cash earnings will be added to your show-up fee of $7.00 and your earnings from Part 2 of this experiment.

You will be paid your earnings privately in cash before you leave the lab.

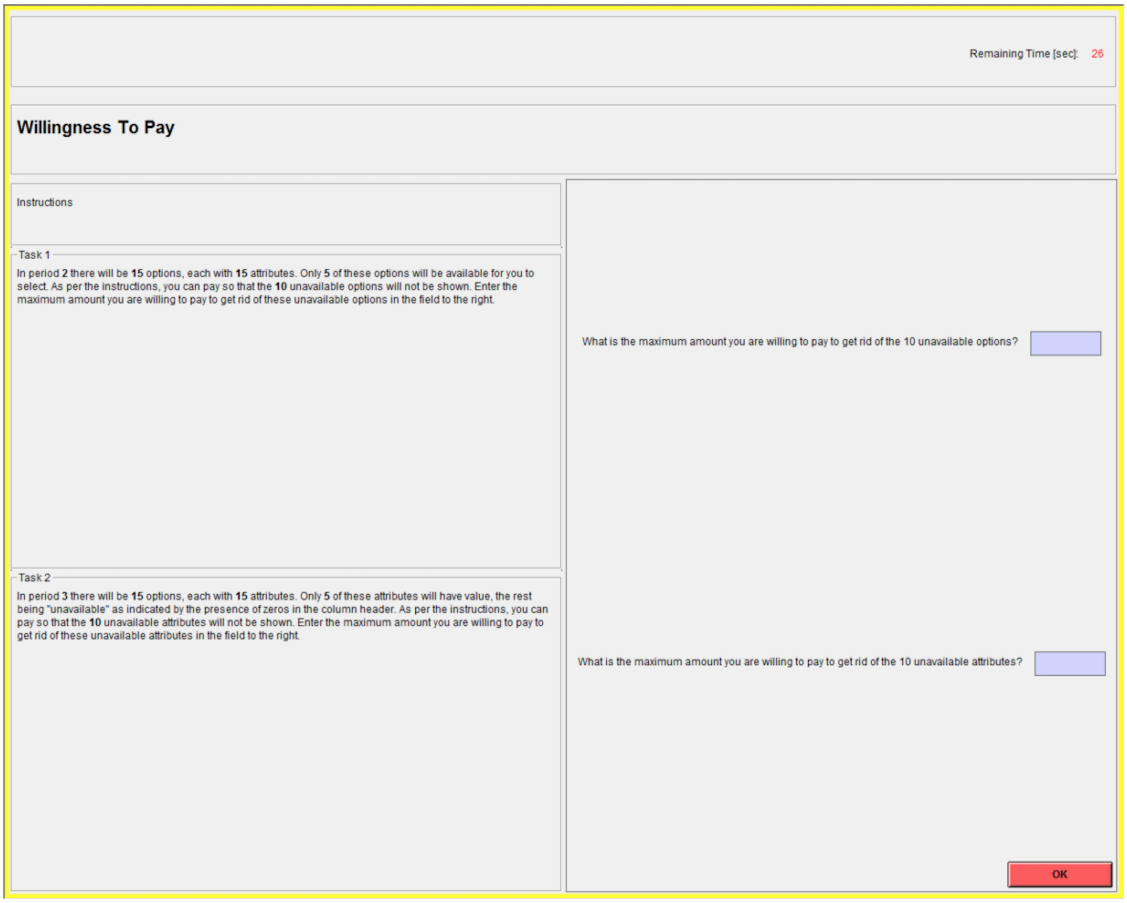
Part 2

Thank you for participating in Part 2 of the experiment.

You will be faced with 3 periods in which you make decisions: **1** period in which you will be asked to submit two numbers (explained in detail below), and **2** periods of decision environments where you will choose from among a number of options, each described by a number of attributes. Some of these options will be unavailable for you to select and some of the attributes will not have value (as indicated by the presence of a zero in the header row). However, you will have the opportunity to pay some amount (in ECU) to get rid of these unavailable options and attributes.

In period 1, you will be asked to complete **two tasks** which will affect what you see in periods 2 and 3: **Task 1** is to enter the maximum amount you are willing to pay (in ECU) to get rid of the unavailable options to be presented in period 2, and **Task 2** is to enter the maximum amount you are willing to pay to get rid of the attributes that have no value (as indicated by the zeros in the column header; these will be referred to as unavailable attributes for the remainder of the instructions) to be presented in period 3. Note that decisions in each task will correspond to outcomes in two separate subsequent periods: Task 1 affects what you see in period 2 and Task 2 affects what you see in period 3.

The screenshot below displays what this environment will look like in period 1:



For **Task 1** and **Task 2**, two random numbers will be drawn from 0 ECU to 15 ECU. These two numbers may not be the same. These will be the selling prices for getting rid of the unavailable options or unavailable attributes, respectively. If the maximum amount you are willing to pay to get rid of unavailable options that you entered for Task 1 is above the selling price for Task 1, you pay the selling price and you will not see these unavailable options in period 2. If the maximum amount you are willing to pay to get rid of unavailable attributes is higher than the selling price for Task 2, you pay the selling price and you will not see these unavailable attributes in period 3. However, if either (or both) of the selling prices are above the maximum amount you are willing to pay, entered in period 1 for Task 1 and Task 2, you pay nothing and the unavailable options or unavailable attributes will be shown in the respective period.

Note that you enter both of these numbers indicating your maximum willingness to pay to simplify the environments at the same time and **before** you know the result of either random number draw. That is, when you enter the maximum amount you are willing to pay to get rid of unavailable options, you will not know whether you have been able to get rid of unavailable attributes, and when you enter the maximum amount you are willing to pay to get rid of unavailable attributes, you will not know whether you have been able to get rid of the unavailable options. Also note that it is in your best interest not to overstate (or understate) the maximum amount you are willing to pay in either Task 1 or Task 2. Suppose you are willing to pay at most 5 ECU to

get rid of either unavailable options or attributes. If the random is drawn and you enter exactly 5 ECU, there are two potential outcomes: either the number is higher than 5, in which case you pay nothing and the unavailable options or attributes will be displayed in the respective period, or the number is less than 5 , say 4 ECU. In this case, you pay the 4 ECU and the unavailable options or attributes are not shown. Note that you were willing to pay **at most** 5 ECU, but only had to pay 4 ECU.

Suppose instead that you overstate this amount in either Task 1 or Task 2 by entering, say, 6 ECU. Then it could be the case that the number drawn is 5.5, for example, which is less than 6 (which you have entered) but greater than 5, the true maximum amount that you are willing to pay. Because you have entered 6, you will pay the drawn amount, 5.5 ECU, which is more than you originally were willing to pay - you will have gotten rid of unavailable options or attributes, but paid more than the maximum amount you were willing to pay. On the other hand, suppose you understate this amount by entering 4 ECU. Then if the random number drawn is, say, 4.5 ECU, you will not be able to get rid of the unavailable options or attributes, but would be willing to pay this amount. Only by entering the actual maximum amount you are willing to pay in Task 1 and Task 2 will you both a) prevent having to pay more than this amount (by overstating) and b) prevent missing out on paying a lesser amount when it is profitable to do so (by understating).

Decision Environments

These decision environments will appear exactly as you have seen them in Part 1. Again, you will have 75 seconds to submit your decision. If you do not submit your chosen option by that time, no option will be submitted and you will be paid nothing for that period.

By default, in period 2 there will be 15 options, each with 15 attributes. Only 5 of these options will be available for you to select and only 5 of these attributes will have value (as indicated by the presence of a + or - in the column header). You can pay to have the **10 unavailable options** not displayed in this period. No matter what, each of the displayed options will have 15 attributes, 10 of which will have zeros in the column header. Whether the 10 unavailable options are displayed depends on the result of your choice in Task 1, described in detail above.

By default, in period 3 there will be 15 options, each with 15 attributes. Only 5 of these attributes will have value - the rest are unavailable (as indicated by the presence of zeros in the column header) and only 5 of these options will be available for you to select. You can pay to have the **10 unavailable attributes** not displayed in this period. No matter what, there will be 15 options displayed (5 of which will be available for selection). Whether the 10 unavailable attributes are displayed depends on the result of your choice in Task 2, described in detail above.

Payoff Calculation

In each of periods 2 and 3, your per-period payoff is simply the value of the option you have chosen. In each of these periods, the values for each option have been chosen so that despite being the sum

of both positive and negative numbers, the **value of each available option is positive**. That is, no matter which option you choose, money will never be taken away from you.

Choices in all periods contribute to your payoffs for this part of the experiment. In the first period, if you are able to get rid of either unavailable options or attributes or both, the relevant random number that was drawn is subtracted from your payoffs. In each of the decision periods, the value of the option you have chosen will be added to your payoffs, with the value of each option calculated as in Part 1 of this experiment. The exchange rate will be as follows: \$1 USD = 10 ECU. Your total cash earnings will be added to your show-up fee of \$7.00 and your earnings from Part 1 of this experiment.

You will be paid your earnings privately in cash before you leave the lab.

Appendix B Additional Analyses

B.1 Additional Aggregate Results

Table 17: Mistake Rates: Excluding Timeouts

		O_5	O_{15}
A_5	Mean	0.193	0.201
	Std Error	0.013	0.013
	N	222	222
A_{15}	Mean	0.193	0.299
	Std Error	0.012	0.016
	N	222	222

$p = 0.000$ for $O_{15}A_5 \to O_{15}A_{15}$, $O_5A_{15} \to O_{15}A_{15}$, and $O_5A_5 \to O_{15}A_{15}$
$p > 0.100$ otherwise.

Table 18: Time: Timeouts Treated as Maximum Time

		O_5	O_{15}
A_5	Mean	49.200	50.405
	Std Error	0.713	0.677
	N	222	222
A_{15}	Mean	53.769	57.374
	Std Error	0.779	0.782
	N	222	222

p = 0.00 for $O_5A_5 \to O_5A_{15}$, $O_{15}A_5 \to O_{15}A_{15}$,
$O_5A_{15} \to O_{15}A_{15}$, $O_5A_5 \to O_{15}A_{15}$, and $O_{15}A_5 \to O_5A_{15}$
$p > 0.10$ for $O_5A_5 \to O_{15}A_5$

Table 19: Time: Correct

		O_5	O_{15}
A_5	Mean	48.240	49.641
	Std Error	0.727	0.662
	N	222	220
A_{15}	Mean	52.615	56.613
	Std Error	0.769	0.776
	N	222	222

p = 0.00 for $O_5A_5 \rightarrow O_5A_{15}$, $O_{15}A_5 \rightarrow O_{15}A_{15}$, $O_5A_{15} \rightarrow O_{15}A_{15}$, $O_5A_5 \rightarrow O_{15}A_{15}$, and $O_{15}A_5 \rightarrow O_5A_{15}$
$p > 0.10$ for $O_5A_5 \rightarrow O_{15}A_5$
Conditional on Correct

B.2 Time Cost Results

Table 20: Time Regressions with Alternative Time Thresholds

	(1) $t < 73$	(2) $t < 70$	(3) $t < 65$
Options	-0.862	0.373	1.605*
	(0.929)	(0.950)	(0.975)
Attributes	4.027***	3.405***	2.821***
	(0.913)	(0.958)	(1.047)
Options * Attributes	1.422***	0.981*	-0.437
	(0.513)	(0.562)	(0.586)
Period	-0.224***	-0.223***	-0.123
	(0.071)	(0.073)	(0.076)
Period^2	-0.001	-0.000	-0.002
	(0.002)	(0.002)	(0.002)
Cognitive Score	10.633***	11.483***	12.505***
	(4.068)	(3.845)	(3.741)
Female	-2.470*	-2.159*	-2.190*
	(1.319)	(1.248)	(1.177)
Economics/Business	-2.272	-2.347	-1.977
	(1.553)	(1.451)	(1.351)
English	-3.075**	-2.450*	-2.288*
	(1.520)	(1.392)	(1.305)
Position	0.131***	0.094**	0.040
	(0.043)	(0.044)	(0.046)
Positive	-1.270***	-0.964***	-0.876***
	(0.267)	(0.262)	(0.268)
Attribute Complexity	0.134	0.181	0.127
	(0.224)	(0.239)	(0.267)
Option Complexity	0.614***	0.276	0.007
	(0.218)	(0.230)	(0.239)
Observations	8169	7438	6312
Session FE	Yes	Yes	Yes

Standard errors in parentheses

Number of Subjects in Each Model: 222

Marginal effects from tobit regressions censored below by 0 and above by 75.

Robust standard errors are clustered at the Subject level

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 21: Time Regressions with Alternative Time Thresholds

	(1) $t < 73$	(2) $t < 70$	(3) $t < 65$
Options	-0.944	0.288	1.302
	(0.984)	(0.980)	(1.004)
Attributes	5.016***	4.748***	3.858***
	(1.082)	(1.147)	(1.250)
Options * Attributes	3.242***	2.981***	1.772***
	(0.532)	(0.545)	(0.530)
Period	-0.157**	-0.162**	-0.074
	(0.066)	(0.067)	(0.067)
Period^2	-0.001	-0.001	-0.003*
	(0.002)	(0.002)	(0.002)
Cognitive Score	6.843**	7.439**	8.741***
	(3.210)	(3.000)	(2.810)
Female	-1.422	-1.153	-1.288
	(1.103)	(1.017)	(0.913)
Economics/Business	-2.704**	-2.948**	-2.571**
	(1.346)	(1.235)	(1.121)
English	-2.033	-1.414	-1.317
	(1.345)	(1.172)	(1.057)
Position	0.186***	0.138***	0.115***
	(0.044)	(0.044)	(0.045)
Positive	-0.946***	-0.800***	-0.745**
	(0.280)	(0.282)	(0.294)
Attribute Complexity	-0.096	-0.198	-0.134
	(0.291)	(0.311)	(0.333)
Option Complexity	0.537**	0.190	-0.087
	(0.236)	(0.246)	(0.259)
Observations	6432	5913	5036
Session FE	Yes	Yes	Yes

Standard errors in parentheses

Number of Subjects in Each Model: 222

Marginal effects from tobit regressions censored below by 0 and above by 75.

Robust standard errors are clustered at the Subject level

All models conditional on Correct

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B.3 GPA Robustness Checks

Table 22: Mistake Rate Regressions with GPA

	(1) Mistake	(2) Mistake	(3) Mistake	(4) Mistake	(5) Mistake†
Options	0.010	0.014	-0.022	-0.045	-0.062**
	(0.011)	(0.012)	(0.013)	(0.029)	(0.029)
Attributes	-0.000	0.003	-0.004	-0.014	0.013
	(0.012)	(0.012)	(0.013)	(0.029)	(0.029)
Options * Attributes	0.086***	0.077***	0.085***	0.086***	0.091***
	(0.018)	(0.018)	(0.019)	(0.019)	(0.019)
Period	-0.007***	-0.007***	-0.008***	-0.007***	-0.012***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Period^2	0.0002***	0.0002***	0.0002***	0.0002***	0.0003***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
GPA		-0.214***	-0.214***	-0.214***	-0.223***
		(0.065)	(0.065)	(0.065)	(0.065)
Female		0.078***	0.078***	0.078***	0.078***
		(0.022)	(0.022)	(0.022)	(0.022)
Economics/Business		-0.010	-0.010	-0.010	0.003
		(0.026)	(0.026)	(0.026)	(0.027)
English		-0.006	-0.006	-0.006	-0.018
		(0.023)	(0.023)	(0.023)	(0.024)
Position			0.005***	0.005***	0.006***
			(0.001)	(0.001)	(0.001)
Positive			-0.032***	-0.034***	-0.033***
			(0.008)	(0.008)	(0.009)
Attribute Complexity				0.003	0.000
				(0.008)	(0.007)
Option Complexity				0.006	0.010
				(0.007)	(0.007)
Observations	8555	8121	8121	8121	8440
Session FE	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

Number of Subjects in Baseline: 222

11 Subjects with missing GPA excluded from models with GPA

†: Timeouts treated as mistakes

Marginal effects from logit regression specifications

Robust standard errors reported are clustered at the Subject level

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 23: Time Regressions with GPA

	(1) Time	(2) Time	(3) Time	(4) Time	(5) Time†	(6) Time‡
Options	2.215***	2.158***	1.012**	-1.920*	-1.324	-1.670*
	(0.381)	(0.397)	(0.485)	(0.985)	(0.994)	(0.940)
Attributes	5.655***	5.735***	5.467***	4.993***	5.052***	4.715***
	(0.430)	(0.441)	(0.449)	(0.949)	(1.111)	(0.899)
Options * Attributes	1.734***	1.722***	1.969***	2.096***	3.407***	1.942***
	(0.499)	(0.517)	(0.517)	(0.521)	(0.551)	(0.502)
Period	-0.394***	-0.394***	-0.412***	-0.402***	-0.185***	-0.347***
	(0.078)	(0.081)	(0.081)	(0.081)	(0.069)	(0.076)
$Period^2$	0.002	0.002	0.003	0.003	-0.000	0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
GPA		8.650*	8.648*	8.649*	5.985*	8.765**
		(4.455)	(4.455)	(4.455)	(3.418)	(4.359)
Female		-2.545*	-2.545*	-2.546*	-1.664	-2.560*
		(1.387)	(1.387)	(1.387)	(1.136)	(1.357)
Economics/Business		-1.135	-1.137	-1.137	-2.236*	-1.276
		(1.582)	(1.582)	(1.582)	(1.354)	(1.542)
English		-3.415**	-3.416**	-3.416**	-1.974	-3.226**
		(1.585)	(1.585)	(1.585)	(1.423)	(1.549)
Position			0.161***	0.199***	0.199***	0.186***
			(0.041)	(0.043)	(0.046)	(0.042)
Positive			-1.180***	-1.374***	-0.984***	-1.359***
			(0.275)	(0.280)	(0.273)	(0.269)
Attribute Complexity				0.126	-0.004	0.151
				(0.233)	(0.301)	(0.220)
Option Complexity				0.809***	0.595**	0.751***
				(0.231)	(0.240)	(0.219)
Observations	8880	8440	8440	8440	6332	8440
Session FE	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

Number of Subjects in Baseline: 222

11 Subjects with missing GPA excluded from models with GPA

†: Conditional on Correct

‡: Timeouts treated as Time = 75 seconds

Marginal effects reported from tobit regressions censored below by 0 and above by 75

Robust standard errors are clustered at the Subject level

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 24: WTP Regressions with GPA

	(1) WTP	(2) WTP	(3) WTP	(4) WTP > 0	(5) WTP > 0	(6) WTP > 0
Mistakes	0.413***	0.454***	0.317***	0.379***	0.405***	0.346**
	(0.102)	(0.108)	(0.119)	(0.124)	(0.127)	(0.157)
Time	0.003	0.003	0.003	0.002	0.001	0.002
	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)
Attributes	0.191	0.181	0.317	0.022	0.023	0.209
	(0.156)	(0.164)	(0.279)	(0.159)	(0.175)	(0.299)
High Noise	2.296*	2.470**	1.043	0.793	0.681	1.856
	(1.200)	(1.203)	(2.416)	(1.401)	(1.531)	(3.307)
Female		-0.353	-0.298		0.470	0.456
		(0.450)	(0.441)		(0.514)	(0.503)
GPA		-0.387	-0.454		-0.708	-0.662
		(1.179)	(1.151)		(1.086)	(1.098)
High Noise * Mistakes			0.292			0.117
			(0.205)			(0.248)
High Noise * Time			0.001			-0.002
			(0.004)			(0.005)
High Noise * Attributes			-0.255			-0.436
			(0.334)			(0.339)
Constant	0.394	0.580	1.059	-0.038	0.485	0.240
	(1.281)	(1.436)	(1.735)	(1.363)	(1.698)	(1.839)
Observations	444	422	422	386	366	366
Session FE	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

Number of Subjects in Baseline: 222

11 Subjects with missing GPA dropped from Models 2-6

Additional 29 Subjects dropped from Models 4 - 6 because session FE perfectly predicts WTP > 0

Models 1 - 3: Tobit regression specifications with lower limit of 0 and upper limit of 15

Models 4-6: Logit regression specifications

Robust standard errors reported are clustered at the Subject level

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B.4 Regressions Under Alternative Complexity Measures

In Section 3, we introduce a complexity measure to determine whether the mistake rate in each treatment depended on the number of "skips" in the evaluation process for either attributes or options. In this appendix, we present regression results where we investigate whether mistakes depend on attribute and option complexity under alternative versions of this measure.

First, we introduce "Opt Comp w/ 0" and "Att Comp w/ 0" measures that are the measures we used previously in the body of the text, but including leading and trailing zeros. Second, we introduce "Opt Comp 1st" and "Opt Comp 2nd," with the analogous measures defined for Attributes. These measures take our aggregate measures and split them into the "first half" and "second half" of the evaluation process in each dimension. In other words, "Opt Comp 1st" is "the number of skips in Options for the first 7 Options" and "Opt Comp 2nd" is "the number of skips in Options for the last 8 Options." "Att Comp 1st" and "Att Comp 2nd" are defined analogously.

The hypothesis here is that it is possible, given order effects documented by the effects of the Position variable in previous regressions, that complexity might matter more for the first several options/attributes than for later options/attributes. We find that this is the case for the mistake rate regressions as the coefficient of Opt Comp 1st is higher than that of Opt Comp 2nd and the coefficient of Att Comp 1st is higher than its counterpart in the relevant columns of Table 25. This is also the case for the time regressions in Table 26.

In each of the tables below, models are conducted for observations from our main experiment. Each is restricted to the relevant subsample where the complexity measure is meaningful, as indicated in the last row of the table.

Table 25: Mistake Rate Regressions

	(1)	(2)	(3)	(4)	(5)	(6)
	Mistake	Mistake	Mistake	Mistake	Mistake	Mistake
Period	-0.006***	-0.007***	-0.004*	-0.004**	-0.007***	-0.005**
	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)
Period^2	0.0002***	0.0002***	0.0001**	0.0001***	0.0002***	0.0001**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Cognitive Score	-0.217***	-0.274***	-0.226***	-0.234***	-0.274***	-0.225***
	(0.063)	(0.069)	(0.069)	(0.064)	(0.069)	(0.069)
Female	0.077***	0.086***	0.077***	0.078***	0.087***	0.077***
	(0.021)	(0.023)	(0.024)	(0.022)	(0.023)	(0.024)
Economics/Business	-0.008	-0.013	-0.013	-0.010	-0.013	-0.013
	(0.025)	(0.028)	(0.027)	(0.026)	(0.028)	(0.027)
English	-0.003	-0.001	-0.008	-0.001	-0.001	-0.008
	(0.022)	(0.027)	(0.024)	(0.023)	(0.027)	(0.024)
Opt Comp w/ 0		-0.001		0.019***		
		(0.008)		(0.003)		
Att Comp w/ 0			0.016*	0.019***		
			(0.008)	(0.003)		
Opt Comp 1st					0.025**	
					(0.010)	
Opt Comp 2nd					-0.003	
					(0.009)	
Att Comp 1st						0.039***
						(0.009)
Att Comp 2nd						-0.024**
						(0.011)
Observations	8555	4269	4219	6393	4269	4219
Session FE	Yes	Yes	Yes	Yes	Yes	Yes
Decision Problems	All	$O_{15}A_5$, $O_{15}A_{15}$	O_5A_{15} , $O_{15}A_{15}$	$O_{15}A_5$, $O_{15}A_{15}$, O_5A_{15}	$O_{15}A_5$, $O_{15}A_{15}$	O_5A_{15} , $O_{15}A_{15}$

Standard errors in parentheses

Number of Subjects in Each Model: 222

Marginal effects from logit regression specifications

Robust standard errors reported are clustered at the Subject level

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 26: Time Regressions

	(1) Time	(2) Time	(3) Time	(4) Time	(5) Time	(6) Time
Period	-0.261***	-0.180*	-0.232**	-0.176**	-0.190**	-0.246***
	(0.073)	(0.096)	(0.095)	(0.081)	(0.095)	(0.094)
Period^2	-0.0001	-0.001	-0.001	-0.002	-0.001	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Cognitive Score	9.936**	9.587**	13.980***	11.181***	9.590**	13.993***
	(4.143)	(4.223)	(4.477)	(4.249)	(4.223)	(4.473)
Female	-2.537*	-2.542*	-3.193**	-2.691*	-2.540*	-3.183**
	(1.338)	(1.364)	(1.475)	(1.374)	(1.363)	(1.475)
Economics/Business	-2.302	-2.324	-2.051	-2.160	-2.324	-2.050
	(1.585)	(1.596)	(1.721)	(1.613)	(1.596)	(1.719)
English	-3.134**	-3.174**	-3.389**	-3.177**	-3.175**	-3.391**
	(1.536)	(1.512)	(1.609)	(1.527)	(1.512)	(1.608)
Opt Comp w/ 0		0.724***		0.761***		
		(0.213)		(0.072)		
Att Comp w/ 0			0.597***	1.416***		
			(0.220)	(0.101)		
Opt Comp 1st					0.898***	
					(0.298)	
Opt Comp 2nd					0.706***	
					(0.253)	
Att Comp 1st						0.672***
						(0.212)
Att Comp 2nd						0.157
						(0.344)
Observations	8555	4269	4219	6393	4269	4219
Session FE	Yes	Yes	Yes	Yes	Yes	Yes
Decision Problems	All	$O_{15}A_5$, $O_{15}A_{15}$	O_5A_{15} , $O_{15}A_{15}$	$O_{15}A_5$, $O_{15}A_{15}$, O_5A_{15}	$O_{15}A_5$, $O_{15}A_{15}$	O_5A_{15} , $O_{15}A_{15}$

Standard errors in parentheses

Number of Subjects in Each Model: 222

Marginal effects reported from tobit regressions censored below by 0 and above by 75

Robust standard errors are clustered at the Subject level

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix C Learning Effects

In order to investigate the possibility of differential learning across decision problem types, we first run mistake rate model specification 5 from Table 4 separately for each type. These results are included below. Note that our results on Period and Period^2 are qualitatively similar across all decision problem types.

Table 27: Differential Learning: Mistakes

	(1)	(2)	(3)	(4)
	Mistake†	Mistake†	Mistake†	Mistake†
Period	-0.014***	-0.007**	-0.009***	-0.013***
	(0.003)	(0.003)	(0.003)	(0.004)
Period^2	0.0003***	0.0002**	0.0002***	0.0003***
	(0.000)	(0.000)	(0.000)	(0.000)
Observations	2220	2220	2220	2220
Session FE	Yes	Yes	Yes	Yes
Decision Problem Type	O_5A_5	O_5A_{15}	$O_{15}A_5$	$O_{15}A_{15}$

Standard errors in parentheses

Number of Subjects in Each Model: 222

†: Timeouts treated as mistakes

Marginal effects from logit regression specifications

Robust standard errors reported are clustered at the Subject level

Demographic controls, Position, Positive, and Complexity Measures included in each model

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 27 provides initial evidence that learning is similar across all decision problem types. However, note that in our experiment, a subject encountered 40 decision problems, 10 of each of four types. The order was randomized at the session-subject level, so the effect of Period within a decision problem type would not be easily comparable across decision problem types, as the sequences of 10 decision problems of a given type are not conducted across the same Periods. To fix this, we define a new variable Instance as the number of times the subject has seen a decision problem of the current type in a given Period. For example, Instance will be equal to 1 the first time a subject sees a decision problem of type O_5A_5, 2 the second time, and so on, regardless of Period. Instance thus runs from 1 to 10 for each decision problem type.

Figure 3 plots average mistake rates in each instance subjects make decision for each type of decision problem. Since we randomized the order of 40 decision problems which include all four types of decisions, the horizontal axis captures the instance a decision problem occurred within that type of problem rather than the period of occurrence.

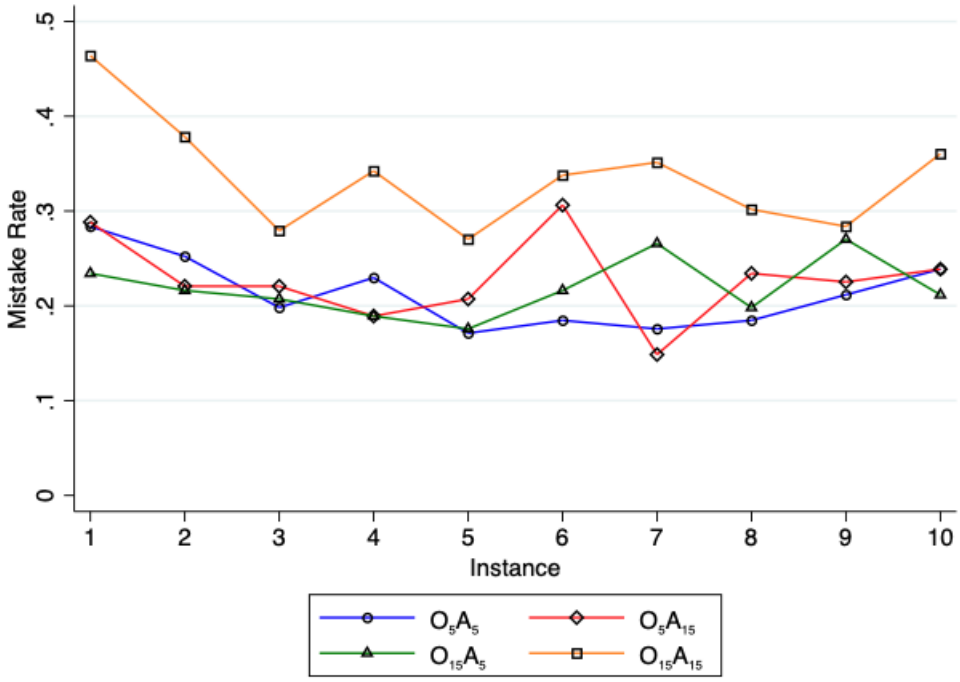


Figure 3: Mistake Rate by Decision Problem Instance

First, we can see from this graph that there is some degree of learning within decision problem type, but that this effect decreases somewhat over time, and appears to reverse in later instances. This is shown in the overall U-shape of this graph for each decision problem type and is in line with the regression results where coefficients of Period and Period^2 are negative and positive, respectively. We take this as evidence that the overall effect of learning would not undo our main result, had we only included more Periods and decision problems. Second, we take this graph to be additional evidence for our main result: the Mistake Rate is higher for $O_{15}A_{15}$ than for any other decision problem type for each Instance. This rules out the possibility that our main effect could have been the result of differential learning across decision problem types.

Appendix D Robustness Checks

For robustness, we conducted an additional six sessions of our main tasks under alternative designs. In this appendix, we present the relevant results used for robustness checks with this additional dataset.

D.1 Aggregate Results: 8 x 8

Table 28: Mistake Rates: Including Timeouts

	O_5	O_8
A_5		
Mean	0.168	0.160
Std Error	0.022	0.021
N	62	62
A_8		
Mean	0.131	0.242
Std Error	0.021	0.022
N	62	62

$p < 0.01$ for $O_5A_8 \to O_8A_8$, $O_8A_5 \to O_8A_8$, $O_5A_5 \to O_8A_8$
$p > 0.10$ otherwise

Table 29: Mistake Rates: Excluding Timeouts

	O_5	O_8
A_5		
Mean	0.159	0.147
Std Error	0.022	0.021
N	62	62
A_8		
Mean	0.108	0.223
Std Error	0.021	0.021
N	62	62

$p < 0.10$ for $O_8A_5 \to O_5A_8$
$p < 0.05$ for $O_5A_5 \to O_8A_8$ and $O_5A_5 \to O_5A_8$
$p < 0.01$ for $O_8A_5 \to O_8A_8$ and $O_5A_8 \to O_8A_8$
$p > 0.10$ otherwise

Table 30: Time: No Timeouts

	O_5	O_8
A_5		
Mean	48.935	49.586
Std Error	1.148	1.126
N	62	62
A_8		
Mean	51.754	55.345
Std Error	1.276	1.180
N	62	62

$p < 0.10$ for $O_5A_5 \rightarrow O_5A_8$
$p < 0.05$ for $O_5A_8 \rightarrow O_8A_8$
$p < 0.01$ for $O_8A_5 \rightarrow O_8A_8$ and $O_5A_5 \rightarrow O_8A_8$

Table 31: Time: Timeouts as Maximum Time

	O_5	O_8
A_5		
Mean	49.124	49.900
Std Error	1.165	1.141
N	62	62
A_8		
Mean	52.289	55.784
Std Error	1.266	1.180
N	62	62

$p < 0.05$ for $O_5A_8 \rightarrow O_8A_8$ and $O_5A_5 \rightarrow O_5A_8$
$p < 0.01$ for $O_8A_5 \rightarrow O_8A_8$ and $O_5A_5 \rightarrow O_8A_8$

Table 32: Time: Correct

	O_5	O_8
A_5		
Mean	48.733	49.209
Std Error	1.096	1.078
N	62	62
A_8		
Mean	51.904	54.914
Std Error	1.207	1.279
N	61	62

$p < 0.10$ for $O_8A_5 \rightarrow O_5A_8$
$p < 0.05$ for $O_5A_8 \rightarrow O_8A_8$ and $O_5A_5 \rightarrow O_5A_8$
$p < 0.01$ for $O_8A_5 \rightarrow O_8A_8$ and $O_5A_5 \rightarrow O_8A_8$

Table 33: Timeouts

	O_5	O_8
A_5		
Mean	0.010	0.015
Std Error	0.005	0.005
N	62	62
A_8		
Mean	0.024	0.026
Std Error	0.006	0.009
N	62	62

$p < 0.10$ for $O_5A_5 \rightarrow O_8A_8$

$p < 0.05$ for $O_5A_5 \rightarrow O_5A_8$

D.2 WTP

Table 34: Willingness to Pay: 8 x 8

	Low Noise		High Noise	
	$WTP(A\|O_5)$	$WTP(O\|A_5)$	$WTP(A\|O_8)$	$WTP(O\|A_8)$
Mean	3.100	2.800	3.219	2.562
Std Error	0.568	0.554	0.588	0.479
N	30	30	32	32

$p > 0.10$ for all relevant comparisons

Table 35: WTP Greater Than Zero: 8 x 8

	Low Noise		High Noise	
	$WTP(A\|O_5)$	$WTP(O\|A_5)$	$WTP(A\|O_8)$	$WTP(O\|A_8)$
Mean	0.633	0.600	0.656	0.625
Std Error	0.089	0.091	0.085	0.087
N	30	30	32	32

$p > 0.10$ for all relevant comparisons

D.3 Alt-High Noise Results

Table 36: Willingness to Pay: 15 x 15

	$WTP(O_{15}A_{15}) \rightarrow WTP(O_5A_5)$
Mean	5.452
Std Error	0.819
N	31

Excludes one observation where WTP = 70 ECU

Table 37: WTP Greater Than Zero

	$WTP(O_{15}A_{15}) \rightarrow WTP(O_5A_5)$
Mean	0.844
Std Error	0.065
N	32