

APPENDIX A

SUPPLEMENTAL INSTRUCTIONS

Decision task

Think of your decision task as consisting of drawing colored balls from urns. There are two urns (Left and Right) from which the individual can draw balls, and there are two equally likely states of the world (Up and Down).

The urns contain some combination of black balls and white balls. In state Up, the Left urn has 4 black balls and 2 white balls and the Right urn has 6 black balls. In state Down, the Left urn has 3 black balls and 3 white balls, while the Right urn has 6 white balls.

You get paid for drawing black balls. You make a draw from either the Left or the Right urn in the 1st decision in the period, and then this ball is put back into the urn. You then make a 2nd draw from either the Left or the Right urn, knowing that if the state was Up (or Down) for the first draw, it is also Up (or Down) for the 2nd draw.

There will be 60 periods in this experiment, in blocks of 10. **There are two draws in each period.** A critical point is that **it is the same state (Up or Down) for both of these draws.**

In the first 50 periods (100 draws), you get paid 30 cents for each black ball drawn from the Left urn and 35 cents for each black ball drawn from the Right urn. In the last 10 periods, this is reversed: you will be paid 35 cents for each black ball drawn from the Left urn and 30 cents for each black ball drawn from the Right urn.

In the first 20 periods, you are restricted for your first draw. In some periods, you must make your 1st draw from the Left urn and in other periods you must make your 1st draw from the Right urn. You are never restricted as to your 2nd draw in the period.

On the computer, we don't have actual urns. We simulate this by having 6 cards on the Left side and 6 cards on the Right side. You will pick one of the cards (on whichever side you wish, subject to the constraint on the 1st draw for the 1st 20 periods), learn the outcome, and the card is replaced (with the 6 cards on that side re-shuffled). You then make the 2nd draw for the period and learn the outcome.

We then move to the next period. The experimental instructions are on the computer screen, but hopefully these supplemental instructions are helpful.

Any questions?

APPENDIX B

AN EXAMPLE OF EXPECTED PAYOFF CALCULATIONS

With two draws in Phase I or Phase II of Treatment 1, first suppose that Right is chosen on the first draw. Then the expected utility of both draws is $17/12$:

$$EU(\text{both draws}) = \frac{1}{2} \times \left(\frac{7}{6} + \frac{7}{6} \right) + \frac{1}{2} \left(\frac{1}{2} \right) = \frac{17}{12}$$

The reasoning is that if a black ball is drawn, the state is UP, so the DM again selects the Right urn on the 2nd draw. However, if a white ball is drawn, the state is Down, so that the DM switches to Left, with a probability of $1/2$ of drawing a black ball on the 2nd draw.

On the other hand, suppose Left is chosen on the first draw. The expected utility of the 1st draw is $7/12$, as before. Note that $\Pr[\text{Up}|\text{black}] = 4/7$ and that $\Pr[\text{Up}|\text{white}] = 2/5$. Suppose the 1st ball drawn is black; this occurs with a probability of $7/12$. Then,

$$EU(\text{Left on 2nd draw}) = \frac{4}{7} \times \frac{2}{3} + \frac{3}{7} \times \frac{1}{2} = \frac{25}{42}$$

However,

$$EU(\text{Right on 2nd draw}) = \frac{4}{7} \times \frac{7}{6} = \frac{28}{42}$$

Thus, if the DM draws a black ball from the Left urn on the 1st draw, it is optimal to switch to the Right urn for your 2nd draw. Now instead suppose that the 1st ball drawn is white; this occurs with a probability of $5/12$. Then,

$$EU(\text{Left on 2nd draw}) = \frac{2}{5} \times \frac{2}{3} + \frac{3}{5} \times \frac{1}{2} = \frac{17}{30}$$

and

$$EU(\text{Right on 2nd draw}) = \frac{2}{5} \times \frac{14}{12} + \frac{3}{5} \times 0 = \frac{14}{30}$$

Thus, if a white ball is drawn from the Left urn on your 1st draw, it is optimal to stay with the Left urn on your 2nd draw. So after starting start with Left,

$$EU(\text{both draws}) = \frac{7}{12} + \left(\frac{7}{12} \times \frac{28}{42} + \frac{5}{12} \times \frac{17}{30} \right) = \frac{87}{72}$$

Since $87/72 < 102/72 = 17/12$, starting with Right is optimal when there are two draws.

APPENDIX C - CRRA CALCULATIONS

In this Appendix, we address whether risk aversion will cause DMs to make decisions different than those predicted using expected value (assuming risk neutrality). We will assume throughout this section that the utility function of the DM is in terms of gains (losses) and takes the *Constant-Relative-Risk-Aversion* (CRRA) form. This is: $u(\pi) = \pi^{1-\rho}$ where $u(0) = 0$ and ρ is the CRRA coefficient. $\rho = 0$ for a risk-neutral DM.

One way to get ‘a feel’ for the meaning and magnitude of different ρ ’s is to construct a lottery similar to a lottery that is often used in such cases, with prizes of \$0 and \$M, each with a probability of 1/2, and compare to a sure offer of \$S where $0 < S < M$. We can then solve for each given ρ the ratio of M/S that would make such a DM indifferent between the sure prize of S and the lottery. We have:

ρ	M/S
0	2.00
.2	2.38
.4	3.17
.5	4.00
.6	5.66
.7	10.01
.8	32.00
.9	1024.00

For example, $\rho = .7$ implies that such a DM would prefer to walk away with \$10 rather than participate in a lottery that offers her a 50% chance at \$100.

SWITCHING DECISIONS

We start by examining our predictions regarding switching decisions after starting from Right. Here we predict that the DM stays Right after a draw of Black (success) and switches to Left after a draw of White (failure). These predictions do not depend on (will not be reversed by the introduction of) risk aversion.

Here is why: First, note that drawing Black on the first draw from Right resolves all uncertainty and assures that the state of the world is Up. Thus, staying Right assures success with $u(\frac{7}{6})$. Switching to Left (given that the state is Up) yields success with a probability of $\frac{2}{3}$ and a utility of $u(1)$. Such a switch results in expected utility of $\frac{2}{3}u(1) = \frac{2}{3} < u(\frac{7}{6})$.

If White is drawn initially from Right, it is clear that another Right draw will yield zero, with lower expected utility than switching to Left for all values of ρ .

In Phase III we reversed the payoffs, so we need to compare $u(1) = 1$ from staying Right to $\frac{2}{3}u(\frac{7}{6}) = \frac{2}{3} \cdot (\frac{7}{6})^{1-\rho}$, or $\frac{3}{2} = (\frac{7}{6})^{1-\rho}$. Note however, that ρ must be negative for this equation to hold. We conclude that risk aversion will not change our switching predictions when starting from Right. It is easy to see that the same conclusions also hold for Treatments 2 and 3.

Next we examine our predictions regarding switching decisions after starting from the Left.

Treatment 1, Phase I and II

After getting a Black in the first draw from Left we have:

$$\Pr[U | B] = \frac{\Pr[B | U] \cdot \Pr[U]}{\Pr[B | U] \cdot \Pr[U] + \Pr[B | D] \cdot \Pr[D]} = \frac{\frac{2}{3} \cdot \frac{1}{2}}{\frac{2}{3} \cdot \frac{1}{2} + \frac{1}{2} \cdot \frac{1}{2}} = \frac{4}{7}$$
 Similarly, we have that $\Pr[D | B] = \frac{3}{7}$. Staying with Left yields:

$$EU(\text{Staying Left} | \text{Black draw from Left}) = \frac{4}{7} \cdot \frac{2}{3} u(1) + \frac{3}{7} \cdot \frac{1}{2} u(1) = \frac{25}{42}$$

Switching to Right yields $EU(\text{Switching to Right} | \text{Black draw from Left}) = \frac{4}{7} \cdot u(\frac{7}{6}) = \frac{24}{42} \cdot (\frac{7}{6})^{1-\rho}$

Thus, we need to solve $(\frac{7}{6})^{1-\rho} = \frac{25}{24}$, which yields, $\rho = 1 - \frac{\ln \frac{25}{24}}{\ln \frac{7}{6}} = .735$, implying that such a DM would prefer \$10 for certain over a lottery that gives a 50% chance of getting \$137 and a 50% chance of getting \$0.

After getting White in the first draw from Left we have:

$$\Pr[U | W] = \frac{\Pr[W | U] \cdot \Pr[U]}{\Pr[W | U] \cdot \Pr[U] + \Pr[W | D] \cdot \Pr[D]} = \frac{\frac{1}{3} \cdot \frac{1}{2}}{\frac{1}{3} \cdot \frac{1}{2} + \frac{1}{2} \cdot \frac{1}{2}} = \frac{2}{5}. \quad \text{Similarly, we}$$

have that $\Pr[D | W] = \frac{3}{5}$. Switching to Right yields:

$$EU(\text{Switching to Right} | \text{White draw from Left}) = \frac{2}{5} \cdot u(\frac{7}{6}) = \frac{2}{5} \cdot (\frac{7}{6})^{1-\rho}$$

Staying Left instead yields:

$$EU(\text{Staying Left} | \text{White draw from Left}) = \frac{2}{5} \cdot \frac{2}{3} u(1) + \frac{3}{5} \cdot \frac{1}{2} u(1) = \frac{17}{30}. \quad \text{However, even}$$

under risk neutrality, ($\rho = 0$) staying Left is preferred, so once again ρ must be negative for this equation to hold. We conclude that risk aversion is not relevant in this case.

Treatments 2 and 3, first Phase

With the change in the mix of balls in the Left urn in the Up state, we now have:

$$\Pr[U | B] = \frac{\Pr[B | U] \cdot \Pr[U]}{\Pr[B | U] \cdot \Pr[U] + \Pr[B | D] \cdot \Pr[D]} = \frac{\frac{2}{3} \cdot \frac{1}{2}}{\frac{2}{3} \cdot \frac{1}{2} + \frac{1}{3} \cdot \frac{1}{2}} = \frac{2}{3}. \quad \text{Similarly, we have}$$

that $\Pr[D | B] = \frac{1}{3}$. Staying with Left yields:

$$EU(\text{Staying Left} | \text{Black draw from Left}) = \frac{2}{3} \cdot \frac{2}{3} u(1) + \frac{1}{3} \cdot \frac{1}{3} u(1) = \frac{5}{9}. \quad \text{Switching to}$$

RIGHT yields: $EU(\text{Switching to Right} | \text{Black draw from Left}) = \frac{6}{9} \cdot u(\frac{7}{6}) > \frac{5}{9}$, so that

switching is preferred for any non-negative ρ . We also have that $\Pr[U | W] = \frac{1}{3}$ and that

$$\Pr[D | W] = \frac{2}{3}. \quad \text{Staying Left after a White draw yields: } EU(\text{Staying Left} | \text{White draw from Left}) = \frac{1}{3} \cdot \frac{2}{3} u(1) + \frac{2}{3} \cdot \frac{1}{3} u(1) = \frac{4}{9}, \text{ while switching to Right yields } EU(\text{Switching to Right} | \text{Black draw from Left}) = \frac{3}{9} \cdot u(\frac{7}{6}) = \frac{3}{9} (\frac{7}{6})^{1-\rho} < \frac{4}{9}, \text{ true for all non-negative values of } \rho.$$

STARTING DECISIONS

Starting from Right

Treatment 1

With a probability of $\frac{1}{2}$, the DM gets Black and $u(\frac{7}{6})$. If the DM stays Right, the DM gets Black again. With a probability of $\frac{1}{2}$, the DM gets White and $u(0)$. Switching to Left gets Black, $u(1)$, with a probability of $\frac{1}{2}$. The expected utility of starting from RIGHT is: $\frac{1}{2}u(\frac{14}{6}) + \frac{1}{4} = \frac{1}{2}(\frac{14}{6})^{1-\rho} + \frac{1}{4}$.

Treatment 2

With a probability of $\frac{1}{2}$, the DM gets Black and $u(\frac{7}{6})$. If the DM stays Right, the DM gets Black again. With a probability of $\frac{1}{2}$, the DM gets White, or $u(0)$. Switching to Left gets Black, $u(1)$, with probability $\frac{1}{3}$. The expected utility of starting from RIGHT is: $\frac{1}{2}u(\frac{14}{6}) + \frac{1}{6} = \frac{1}{2}(\frac{14}{6})^{1-\rho} + \frac{1}{6}$.

Starting from Left

Treatment 1

With a probability of $\frac{7}{12}$, the DM gets Black and $u(1)$. Given that the first draw from Left is Black, $\Pr[U|B] = \frac{4}{7}$. In this event the DM switches; with a probability of $\frac{4}{7}$ the DM gets $u(\frac{7}{6})$ and with a probability of $\frac{3}{7}$ the DM gets $u(0)$. Collecting terms, we have: $\frac{7}{12} \cdot \frac{4}{7} u(\frac{13}{6}) + \frac{7}{12} \cdot \frac{3}{7} u(1)$. With a probability of $\frac{5}{12}$ the DM gets White and $u(0)$. Given that White is drawn from Left, $\Pr[U|W] = \frac{2}{5}$ and $\Pr[D|W] = \frac{3}{5}$. In this event the DM stays Left and gets $u(1)$ with probability of $\frac{2}{5} \cdot \frac{2}{3} + \frac{3}{5} \cdot \frac{1}{2} = \frac{17}{30}$. So we have $\frac{5}{12} \cdot \frac{17}{30} = \frac{17}{72}$.

The total Expected utility is: $\frac{24}{72} u(\frac{13}{6}) + \frac{35}{72} u(1) + \frac{13}{72} u(0) = \frac{24}{72} (\frac{13}{6})^{1-\rho} + \frac{35}{72}$

To find the equilibrating ρ , we must solve:

$$\frac{24}{72} \cdot (\frac{13}{6})^{1-\rho} + \frac{35}{72} = \frac{36}{72} \cdot (\frac{14}{6})^{1-\rho} + \frac{18}{72}, \text{ or } \frac{24}{72} \cdot (\frac{13}{6})^{1-\rho} + \frac{17}{72} = \frac{36}{72} \cdot (\frac{14}{6})^{1-\rho}, \text{ or}$$

$24 \cdot (13)^{1-\rho} + 17 \cdot (6)^{1-\rho} = 36 \cdot (14)^{1-\rho}$. Thus, for any $\rho < .648$, the DM should start with Right.

Treatment 2

With a probability of $\frac{1}{2}$, the DM gets Black and $u(1)$. Given that the first draw from Left is Black, $\Pr[U|B] = \frac{2}{3}$. In this event the DM switches; with a probability of $\frac{2}{3}$ the DM

gets $u(\frac{7}{6})$ and with a probability of $\frac{1}{3}$ the DM gets $u(0)$. Collecting terms, we have:

$$\frac{1}{2} \cdot \frac{2}{3} u(\frac{13}{6}) + \frac{1}{2} \cdot \frac{1}{3} u(1). \text{ With a probability of } \frac{1}{2} \text{ the DM gets White and } u(0). \text{ Given that}$$

White is drawn from Left, $\Pr[U|W] = \frac{1}{3}$ and $\Pr[D|W] = \frac{2}{3}$. In this event the DM stays

Left and gets $u(1)$ with probability of $\frac{1}{3} \cdot \frac{2}{3} + \frac{2}{3} \cdot \frac{1}{3} = \frac{4}{9}$. So we have $\frac{1}{2} \cdot \frac{4}{9} = \frac{4}{18}$.

$$\text{The total Expected utility is: } \frac{6}{18} u(\frac{13}{6}) + \frac{7}{18} u(1) = \frac{6}{18} (\frac{13}{6})^{1-\rho} + \frac{7}{18}$$

To find the equilibrating ρ , we must solve:

$$\frac{6}{18} \cdot (\frac{13}{6})^{1-\rho} + \frac{7}{18} = \frac{9}{18} \cdot (\frac{14}{6})^{1-\rho} + \frac{3}{18}, \text{ or } \frac{6}{18} \cdot (\frac{13}{6})^{1-\rho} + \frac{4}{18} = \frac{9}{18} \cdot (\frac{14}{6})^{1-\rho}, \text{ or}$$

$6 \cdot (13)^{1-\rho} + 4 \cdot (6)^{1-\rho} = 9 \cdot (14)^{1-\rho}$. Thus, for any $\rho < .710$, the DM should start with Right.

APPENDIX D

COST & FREQUENCY OF ERRORS

Error	Treatment	Phase	EV of Error	EV of Alternative	Cost of Error	Frequency of Error
<i>Starting errors*</i>						
Start Left	1	II	1.208	1.417	.209	27.7%
Start Right	1	III	1.292	1.361	.069	54.4%
Start Left	2	II	1.111	1.333	.222	21.7%
Start Left	2	III	1.176	1.194	.018	37.2%
<i>Switch errors (R)</i>						
Left after RB	1	I-II	0.667	1.117	.500	4.7%
Right after RW	1	I-II	0.000	0.500	.500	3.9%
Left after RB	1	III	0.778	1.000	.222	12.4%
Right after RW	1	III	0.000	0.583	.583	4.4%
Left after RB	2	I-II	0.667	1.117	.500	7.0%
Right after RW	2	I-II	0.000	0.333	.333	3.1%
Left after RB	2	III	0.778	1.000	.222	11.2%
Right after RW	2	III	0.000	0.389	.389	1.9%
<i>Switch errors (L)</i>						
Left after LB	1	I-II	0.595	0.667	.072	59.4%
Right after LW	1	I-II	0.467	0.567	.100	33.8%
Right after LB	1	III	0.571	0.694	.123	15.2%
Right after LW	1	III	0.400	0.661	.261	19.7%
Left after LB	2	I-II	0.556	0.778	.222	41.2%
Right after LW	2	I-II	0.389	0.444	.055	54.2%
Left after LB	2	III	0.648	0.667	.019	69.7%
Right after LW	2	III	0.333	0.519	.186	29.4%
Left after L'B'	3	I	0.556	0.778	.222	13.4%
Right after L'W'	3	I	0.389	0.444	.055	41.4%
Left after L'B'	3	II	0.648	0.667	.019	30.1%
Right after L'W'	3	II	0.333	0.519	.186	36.8%

*Expected value for starting errors assumes subsequent optimal (payoff-maximizing)

decisions

APPENDIX E – Individual Behavior

INDIVIDUAL ERROR RATES, STUDY 1

Gender	SE, II	SE, III	LB, I-II	LB, III	LW, I-II	LW, III	All L, III	RB, I-II	RB, III	RW, I-II	RW, III	All R, III	All R, I-III
F	0.03	0.80	0.63	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	0.00	1.00	0.14	-	0.67	-	-	0.00	0.00	0.00	0.00	0.00	0.00
M	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	-	0.00	-	-	0.00
M	0.00	1.00	0.00	-	0.17	-	-	0.00	0.20	0.00	0.00	0.10	0.02
M	0.00	1.00	0.00	-	1.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.10	0.10	0.17	0.00	0.71	0.50	0.11	0.00	0.00	0.04	-	0.00	0.03
F	0.20	0.80	0.13	1.00	0.88	0.00	0.50	0.00	0.00	0.06	0.25	0.13	0.05
M	0.00	1.00	0.71	-	0.67	-	-	0.00	0.00	0.00	0.00	0.00	0.00
M	0.00	1.00	1.00	-	0.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
M	0.03	0.00	0.00	0.00	1.00	0.00	0.00	0.00	-	0.00	-	-	0.00
F	0.60	0.10	0.94	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00
F	0.13	0.00	0.50	0.00	0.63	0.00	0.00	0.00	-	0.00	-	-	0.00
M	0.43	0.30	0.31	0.00	0.71	0.25	0.14	0.00	0.50	0.00	0.00	0.33	0.03
M	0.00	0.90	0.25	-	0.50	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
M	0.00	1.00	0.20	-	0.20	-	-	0.05	0.00	0.00	0.00	0.00	0.02
F	0.07	0.90	0.50	-	0.50	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.02
F	0.63	0.00	0.00	0.88	0.06	0.00	0.70	0.00	-	0.00	-	-	0.00
M	0.40	0.70	0.50	0.00	0.40	0.50	0.33	0.00	0.00	0.14	0.00	0.00	0.06
M	0.47	0.00	0.31	0.00	0.82	0.00	0.00	0.44	-	0.29	-	-	0.35
M	0.47	0.00	0.00	0.00	0.33	0.25	0.10	0.00	-	0.00	-	-	0.00
M	0.87	0.10	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00
M	0.70	0.00	1.00	0.00	0.00	0.00	0.00	0.00	-	0.00	-	-	0.00
F	0.57	0.50	0.69	0.50	0.36	0.00	0.20	0.50	0.50	0.55	0.33	0.40	0.50
M	0.03	1.00	1.00	-	0.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
M	0.60	0.30	0.00	0.00	0.50	-	0.00	0.00	0.00	0.09	0.00	0.00	0.04
F	0.27	0.60	0.08	1.00	0.33	-	1.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0.20	0.40	0.75	0.60	0.50	0.00	0.50	0.05	0.00	0.17	0.00	0.00	0.08

F	0.33	0.80	0.54	1.00	0.29	1.00	1.00	0.00	1.00	0.00	0.00	0.75	0.16
M	0.50	0.50	0.56	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0.27	0.60	0.73	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0.17	0.40	0.50	1.00	0.43	0.75	0.83	0.76	-	0.28	0.00	0.00	0.46
F	0.17	0.80	0.50	-	0.67	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00
F	0.17	0.80	0.80	-	0.60	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00
F	0.03	1.00	0.80	-	0.50	-	-	0.00	0.00	0.00	0.00	0.00	0.00
M	0.00	0.00	0.86	0.00	0.33	0.00	0.00	0.08	-	0.00	-	-	0.03
F	0.43	0.70	0.83	0.00	0.36	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.03
F	0.27	0.60	0.27	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0.03	0.00	0.80	0.17	0.17	0.00	0.10	0.00	-	0.00	-	-	0.00
M	0.53	0.00	0.93	0.00	0.00	0.00	0.00	0.00	-	0.00	-	-	0.00
M	0.30	0.60	0.45	0.00	0.25	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.03
F	0.17	0.90	0.50	-	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0.20	0.10	0.91	0.40	0.40	0.50	0.44	0.00	-	0.00	0.00	0.00	0.00
F	0.13	1.00	0.86	-	0.43	-	-	0.13	0.67	0.00	0.00	0.40	0.13
F	0.00	1.00	0.00	-	0.00	-	-	0.00	0.00	0.00	0.25	0.10	0.02
M	0.40	0.60	0.64	0.00	0.55	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00
F	0.27	1.00	0.30	-	0.13	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.83	1.00	0.95	-	0.47	-	-	0.00	1.00	0.25	1.00	1.00	0.48
M	0.27	0.60	0.22	1.00	0.11	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
M	0.53	0.00	0.93	0.00	0.00	0.00	0.00	0.00	-	0.00	-	-	0.00
F	0.90	0.00	1.00	0.00	0.00	0.00	0.00	0.00	-	0.00	-	-	0.00
M	0.00	1.00	0.00	-	0.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	1.00	0.75	-	0.83	-	-	0.00	0.00	0.04	0.00	0.00	0.02
F	0.50	0.50	0.69	0.00	0.33	0.00	0.00	0.33	0.00	0.06	0.00	0.00	0.13
F	0.77	0.00	0.16	0.57	0.00	0.00	0.40	0.00	-	0.00	-	-	0.00
F	0.03	1.00	0.80	-	0.67	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.53	0.50	0.82	0.25	0.67	1.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
M	0.00	1.00	1.00	-	0.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.50	0.10	0.27	0.25	0.40	1.00	0.33	0.00	1.00	0.56	-	1.00	0.38
F	0.33	0.50	0.45	0.00	0.44	0.33	0.20	0.00	0.00	0.00	0.00	0.00	0.00

INDIVIDUAL ERROR RATES, STUDY 2

Gender	SE, II	SE, III	LB, I-II	LB, III	LW, I-II	LW, III	All L, III	RB, I-II	RB, III	RW, I-II	RW, III	All R, III	All R, I-III
F	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	-	-	0.00
F	0.00	0.20	0.00	1.00	0.00	0.50	0.60	0.00	-	0.00	0.00	0.00	0.00
M	0.33	0.40	0.30	0.50	0.40	1.00	0.75	0.00	0.00	0.08	0.00	0.00	0.03
F	0.00	0.60	1.00	-	1.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.40	0.40	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.13	0.00	0.00	0.06
F	0.00	0.60	0.80	-	0.80	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.07	0.70	0.00	-	0.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.53	0.20	0.67	0.80	1.00	0.25	0.56	0.00	1.00	0.07	-	1.00	0.08
F	0.00	0.20	0.50	-	0.75	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.67	0.10	0.14	0.00	0.94	0.00	0.00	0.75	1.00	0.58	0.00	0.50	0.64
M	0.00	0.40	0.00	-	0.14	-	-	0.00	0.00	0.05	0.17	0.10	0.04
F	0.40	0.50	0.67	1.00	0.50	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00
F	0.13	0.30	0.80	0.00	0.44	0.38	0.33	0.00	-	0.05	0.00	0.00	0.03
M	0.00	0.70	0.25	-	1.00	-	-	0.00	0.29	0.00	0.00	0.20	0.04
F	0.00	0.80	0.00	-	0.67	-	-	0.00	0.75	0.00	0.00	0.60	0.12
F	0.03	0.40	0.00	-	0.60	-	-	0.00	0.00	0.06	0.00	0.00	0.02
F	0.27	0.70	0.22	1.00	1.00	1.00	1.00	0.42	0.00	0.46	0.50	0.17	0.42
M	0.00	0.50	0.00	-	1.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
M	0.50	0.40	0.77	1.00	0.33	0.50	0.60	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.60	0.00	-	0.71	-	-	0.00	0.00	0.05	0.00	0.00	0.02
F	0.00	0.30	0.25	-	0.83	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.23	0.10	0.27	1.00	0.17	0.00	0.60	0.00	1.00	0.00	0.00	0.20	0.03
M	0.03	0.00	0.33	1.00	0.38	0.00	0.50	0.00	-	0.00	-	-	0.00
M	0.03	0.60	0.20	-	0.33	-	-	0.05	0.00	0.00	0.00	0.00	0.02
M	0.00	0.10	0.00	0.00	0.00	0.25	0.10	0.00	-	0.00	-	-	0.00
M	0.33	0.50	0.75	1.00	0.17	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0.03	0.70	0.33	-	0.88	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.00	0.50	1.00	-	0.00	-	-	0.00	0.00	0.28	0.00	0.00	0.10

F	0.07	0.10	0.00	0.67	0.50	0.17	0.33	0.04	-	0.15	0.00	0.00	0.08
M	0.07	0.30	0.00	-	0.33	0.00	0.00	0.00	0.67	0.00	0.00	0.29	0.04
F	0.43	0.50	0.18	1.00	0.25	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
F	0.63	0.20	0.75	1.00	0.65	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00
F	0.03	0.60	0.00	-	1.00	-	-	0.88	0.00	0.00	0.00	0.00	0.31
M	0.07	0.50	0.25	-	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	0.70	0.50	0.00	-	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	0.00	0.50	0.00	-	0.00	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.37	0.30	0.67	0.75	0.33	0.00	0.43	0.00	0.00	0.00	-	0.00	0.00
M	0.00	0.10	0.00	1.00	0.20	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00
M	0.00	0.30	0.60	1.00	0.40	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00
M	0.13	0.00	0.14	1.00	0.00	0.00	0.80	0.00	-	0.00	-	-	0.00
M	0.60	0.30	0.50	0.75	0.81	0.50	0.63	0.86	1.00	0.00	0.00	0.50	0.29
F	0.27	0.40	0.67	1.00	0.42	-	1.00	0.13	0.00	0.00	0.00	0.00	0.05
F	0.20	0.40	0.80	1.00	0.67	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
M	0.23	0.40	1.00	1.00	0.20	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00
M	0.23	0.20	0.25	0.33	0.69	0.33	0.33	0.00	-	0.00	0.00	0.00	0.00
M	0.47	0.40	0.26	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	0.23	0.60	0.00	-	1.00	-	-	1.00	1.00	0.00	0.00	0.60	0.47
F	0.40	0.30	1.00	1.00	0.50	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00
F	0.90	0.70	0.06	0.00	1.00	1.00	0.70	1.00	-	0.00	-	-	0.46
F	0.53	0.70	0.77	-	0.23	-	-	0.00	0.00	0.00	0.00	0.00	0.00
F	0.13	0.50	0.83	-	0.88	0.00	0.00	0.21	0.00	0.00	0.33	0.13	0.11
M	0.00	0.20	0.00	1.00	0.00	-	1.00	0.00	0.00	0.00	0.00	0.00	0.00
F	0.43	0.30	0.71	1.00	0.89	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00
F	0.33	0.00	0.22	1.00	0.00	0.00	0.50	0.00	-	0.00	0.00	0.00	0.00

INDIVIDUAL ERROR RATES, STUDY 3

Gender	F, I	U, I	F, II	U, II
F	0.00	0.00	0.00	0.00
F	0.13	0.50	1.00	1.00
F	0.11	0.79	1.00	1.00
F	0.00	1.00	0.00	1.00
F	0.00	0.00	0.00	0.00
F	0.34	0.69	0.60	1.00
F	0.21	0.78	0.20	1.00
F	0.50	0.42	0.17	0.00
F	0.00	0.09	0.00	0.00
F	0.29	0.23	0.25	0.83
F	0.06	0.10	0.00	0.25
F	0.09	0.89	0.00	1.00
F	0.38	0.50	0.33	0.57
F	0.39	0.11	0.80	0.00
F	0.24	0.41	1.00	0.14
F	0.17	0.15	0.12	0.00
F	0.32	0.64	0.17	1.00
F	0.27	0.53	0.20	1.00
F	0.00	0.00	0.00	0.00
F	0.53	0.33	0.57	0.33
F	0.14	0.67	0.17	0.75
F	0.26	0.44	0.57	0.00
F	0.55	0.88	1.00	0.71
F	0.00	0.13	0.00	0.00
F	0.23	0.40	0.00	0.00
F	0.00	0.14	0.00	0.00
F	0.00	0.28	0.25	0.00
F	0.30	0.59	0.00	0.62
F	0.00	0.56	1.00	0.00
M	0.05	0.33	0.67	1.00
M	0.03	0.06	0.00	0.00
M	0.18	0.17	0.67	0.14
M	0.00	0.21	1.00	0.62
M	0.03	1.00	1.00	0.00
M	0.00	0.05	0.00	0.00
M	0.00	0.00	0.20	0.00
M	0.03	0.00	0.00	0.00
M	0.00	0.00	0.00	0.00
M	0.00	0.03	0.00	0.00
M	0.00	0.19	0.00	0.25
M	0.00	0.56	0.00	0.67
M	0.40	0.58	0.40	0.60
M	0.00	0.41	0.00	0.17
M	0.00	1.00	0.00	1.00
M	0.14	0.63	0.75	0.17
M	0.15	0.53	0.50	0.12
M	0.00	0.42	0.00	0.20
M	0.00	0.42	0.00	0.20
M	0.09	0.80	0.60	1.00
M	0.20	0.83	0.17	0.50
M	0.00	0.13	0.40	0.00
M	0.18	0.72	1.00	0.17

APPENDIX F

ERROR RATES BY GENDER

Error	Size of Loss	Male Error Rate	Female Error Rate	Difference	Wilcoxon Test Z
<i>Treatment 1</i>					
Start Left, 21-50	.208	.251	.298	-.047	-1.28
Start Right, 51-60	.069	.523	.561	-.038	-0.12
Left after R, Black, 1-50	.500	.018	.052	-.034	-0.07
Right after R, White, 1-50	.500	.020	.053	-.033	-1.85*
Right after L, White, 1-50	.194	.291	.371	-.080	-1.41
Left after L, Black, 1-50	.071	.611	.585	.026	-0.11
Left after R, Black, 51-60	.222	.029	.194	-.165	-0.98
Right after R, White, 51-60	.583	.000	.076	-.076	-1.72*
Right after L, White, 51-60	.261	.028	.337	-.309	-0.37
Right after L, Black, 51-60	.123	.094	.203	-.109	-2.91***
<i>Treatment 2</i>					
Start Left, 21-50	.222	.180	.242	-.062	-1.04
Start Left, 51-60	.019	.391	.359	.032	-0.78
Left after R, Black, 1-50	.500	.056	.081	-.025	-0.85
Right after R, White, 1-50	.333	.005	.046	-.041	-1.30
Right after L, White, 1-50	.056	.438	.608	-.170	-1.95**
Left after L, Black, 1-50	.222	.299	.479	-.180	-2.02**
Left after R, Black, 51-60	.222	.159	.083	.076	0.31
Right after R, White, 51-60	.389	.015	.021	-.006	-0.31
Right after L, White, 51-60	.185	.233	.339	-.106	-0.12
Left after L, Black, 51-60	.019	.744	.661	.083	-0.06
<i>Treatment 3</i>					
Right after L, 'White', 1-70	.056	.397	.445	-.048	-0.52
Left after L, 'Black', 1-70	.222	.065	.194	-.129	-2.88***
Right after L, 'White', 71-80	.185	.300	.302	-.002	-0.56
Left after L, 'Black', 71-80	.019	.277	.458	-.181	-0.25

*significant at $p = 0.10$ (two-tailed test) ** significant at $p = 0.05$ *** significant at p

= 0.01