

Table 4.2, Rows 4) - 6)**Comparison of Standard Deviation in Periods 1 to 10 and Periods 41 to 50 (NRS)**

π	QS1			QS2			T		
	S.D. of Choices in Periods 1 - 10	S.D. of Choices in Periods 41 - 50	The sign of difference	S.D. of Choices in Periods 1 - 10	S.D. of Choices in Periods 41 - 50	The sign of difference	S.D. of Choices in Periods 1 - 10	S.D. of Choices in Periods 41 - 50	The sign of difference
1	(0.52, 0.53)	(0.52, 0.42)	(0, -)	(0.53, 0.53)	(0.52, 0.53)	(-, 0)	(0.48, 0.48)	(0.52, 0.52)	(+, +)
2	(0.53, 0.53)	(0.32, 0.42)	(-, -)	(0.42, 0.52)	(0.42, 0.48)	(0, -)	(0.52, 0.53)	(0.48, 0.48)	(-, -)
3	(0.42, 0.53)	(0, 0.42)	(-, -)	(0.52, 0.42)	(0, 0)	(-, -)	(0.48, 0.48)	(0.48, 0.52)	(0, +)
4	(0.48, 0.48)	(0, 0.32)	(-, -)	(0.48, 0.48)	(0, 0)	(-, -)	(0.52, 0.42)	(0.32, 0.32)	(-, -)
5	(0.48, 0.42)	(0, 0.53)	(-, +)	(0.52, 0.42)	(0, 0.32)	(-, -)	(0.48, 0.53)	(0.48, 0.48)	(0, -)
6	(0.48, 0.52)	(0.48, 0)	(0, -)	(0.52, 0.48)	(0.48, 0.42)	(-, -)	(0.48, 0.53)	(0.48, 0.42)	(0, -)
7	(0.32, 0.53)	(0, 0.42)	(-, -)	(0.42, 0.52)	(0.52, 0.52)	(+, 0)	(0.52, 0.32)	(0, 0.32)	(-, 0)
8	(0.42, 0.48)	(0.53, 0)	(+, -)	(0.52, 0.53)	(0.53, 0.53)	(+, 0)	(0.48, 0.48)	(0.32, 0.48)	(-, 0)
9	(0.48, 0.42)	(0, 0)	(-, -)	(0.52, 0.48)	(0, 0)	(-, -)	(0.48, 0.52)	(0.32, 0.32)	(-, -)
10	(0.48, 0.42)	(0.32, 0.42)	(-, 0)	(0.42, 0.52)	(0.42, 0.32)	(0, -)	(0.32, 0.32)	(0.48, 0.52)	(+, +)
11	(0.52, 0.48)	(0.52, 0.48)	(0, 0)	(0.53, 0.42)	(0.48, 0.48)	(-, +)	(0.52, 0.48)	(0, 0)	(-, -)
12	(0.42, 0.52)	(0.53, 0)	(+, -)	(0.53, 0.48)	(0, 0)	(-, -)	(0.52, 0.52)	(0.48, 0)	(-, -)
13	(0.52, 0.53)	(0, 0)	(-, -)	(0.48, 0.48)	(0, 0)	(-, -)	(0.42, 0.52)	(0.32, 0.48)	(-, -)
14	(0.48, 0.52)	(0.32, 0.32)	(-, -)	(0.52, 0.48)	(0.42, 0)	(-, -)	(0.42, 0.52)	(0, 0.32)	(-, -)

0.48

0.26

20

0.49

0.26

20

0.47

0.35

18

Table 4.3: Cognitive and Behavioral Relations for NRS
Answers to the Payoff Questionnaire: Number of dominance and Best Responses

π	QS1		QS2		T	
	Dom/Br	(f^1_d, f^2_d)	Dom/Br	(f^1_d, f^2_d)	Dom/Br	(f^1_d, f^2_d)
1	[Dom, 0]	(6, 8)	[Dom, Dom]	(6, 5)	[Dom, Dom]	(6, 6)
2	[Dom, Dom]	(9, 8)	[Dom, Dom]	(8, 3)	[Dom, Dom]	(3, 7)
3	[Dom, 0]	(10, 8)	[Dom, Dom]	(10, 10)	[Dom, Dom]	(3, 6)
4	[Dom, Dom]	(10, 9)	[Dom, 0]	(0, 0)*	[Dom, Dom]	(9, 9)
5	[Dom, Dom]	(10, 5)	[Dom, Dom]	(10, 9)	[Dom, Br]	(7, 7)
6	[Br, Dom]	(7, 9)	[Dom, Dom]	(3, 8)	[Dom, Dom]	(7, 8)
7	[Br, Br]	(10, 8)	[Dom, 0]	(4, 4)	[Dom, Dom]	(10, 9)
8	[Dom, Dom]	(5, 10)	[Dom, Br]	(5, 5)	[0, Dom]	(9, 7)
9	[Dom, Dom]	(10, 10)	[Dom, Dom]	(10, 10)	[Dom, Dom]	(9, 9)
10	[Dom, Br]	(9, 8)	[Dom, Dom]	(8, 9)	[Dom, Dom]	(7, 4)
11	[Dom, 0]	(6, 7)	[Dom, Dom]	(7, 7)	[0, Dom]	(10, 10)
12	[Dom, Dom]	(5, 10)	[0, Dom]	(0, 0)*	[Dom, Dom]	(7, 10)
13	[Dom, Dom]	(10, 10)	[Dom, Dom]	(10, 9)	[Dom, Dom]	(9, 7)
14	[Dom, Dom]	(9, 9)	[Dom, 0]	(8, 10)	[Dom, Dom]	(10, 9)

Dominance	21	23
Best Response	25	24

f^i_d : Frequency of d choices by subject i in periods 41-50.

*: Pair of subjects who converged to (c, c)

Dom/Br: Dom indicates that d were dominant strategy in the payoff questionnaire.

Similarly, Br indicates that d were best response to other's d choice; and 0 indicates that it was not.

Table 4.5:**Behavioral Comparison Across Period for NRS**

QS1									
	Frequency of d in 10 periods					Rejection w.r.t. periods 41-50			
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40
1	(4, 5)	(9, 9)	(9, 6)	(7, 6)	(6, 8)	not, not	not, not	not, not	not, not
2	(5, 5)	(8, 7)	(6, 5)	(8, 7)	(9, 8)	not, not	not, not	not, not	not, not
3	(8, 5)	(10, 6)	(10, 4)	(10, 8)	(10, 8)	not, not	not, not	not, not	not, not
4	(7, 7)	(6, 7)	(9, 9)	(10, 10)	(10, 9)	not, not	rej, not	not, not	not, not
5	(3, 8)	(9, 6)	(10, 7)	(10, 8)	(10, 5)	rej, not	not, not	not, not	not, not
6	(3, 4)	(7, 10)	(8, 10)	(10, 10)	(7, 9)	not, rej	not, not	not, not	not, not
7	(9, 5)	(9, 9)	(10, 9)	(10, 9)	(10, 8)	not, not	not, not	not, not	not, not
8	(8, 7)	(3, 6)	(5, 6)	(6, 7)	(5, 10)	not, not	not, rej	not, rej	not, not
9	(7, 8)	(4, 10)	(3, 10)	(7, 10)	(10, 10)	not, not	rej, not	rej, not	not, not
10	(7, 2)	(5, 3)	(7, 4)	(9, 7)	(9, 8)	not, rej	not, rej	not, not	not, not
11	(6, 7)	(8, 7)	(5, 9)	(5, 7)	(6, 7)	not, not	not, not	not, not	not, not
12	(8, 4)	(4, 9)	(8, 10)	(6, 9)	(5, 10)	not, rej	not, not	not, not	not, not
13	(6, 5)	(9, 9)	(10, 5)	(6, 9)	(10, 10)	rej, rej	not, not	not, rej	rej, not
14	(3, 6)	(2, 5)	(7, 7)	(9, 8)	(9, 9)	rej, not	rej, not	not, not	not, not
Total Number of Rejections					7	5	3	1	

QS2									
	Frequency of d in 10 periods					Rejection w.r.t. periods 41-50			
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40
1	(5, 5)	(3, 4)	(4, 2)	(6, 6)	(6, 5)	not, not	not, not	not, not	not, not
2	(2, 4)	(2, 5)	(2, 2)	(6, 5)	(8, 3)	rej, not	rej, not	rej, not	not, not
3	(4, 8)	(8, 7)	(8, 10)	(9, 10)	(10, 10)	rej, not	not, not	not, not	not, not
4	(7, 7)	(5, 6)	(0, 0)	(0, 0)	(0, 0)	rej, rej	rej, rej	not, not	not, not
5	(6, 8)	(10, 10)	(10, 10)	(10, 10)	(10, 9)	rej, not	not, not	not, not	not, not
6	(5, 7)	(7, 9)	(8, 9)	(7, 10)	(3, 8)	not, not	not, not	rej, not	not, not
7	(8, 6)	(6, 6)	(5, 6)	(5, 5)	(4, 4)	not, not	not, not	not, not	not, not
8	(6, 5)	(7, 9)	(7, 5)	(5, 1)	(5, 5)	not, not	not, not	not, not	not, not
9	(6, 7)	(10, 9)	(9, 10)	(8, 9)	(10, 10)	rej, not	not, not	not, not	not, not
10	(8, 4)	(7, 6)	(10, 6)	(9, 9)	(8, 9)	not, rej	not, not	not, not	not, not
11	(5, 8)	(9, 6)	(10, 6)	(10, 10)	(7, 7)	not, not	not, not	not, not	not, not
12	(5, 7)	(5, 7)	(0, 0)	(0, 0)	(0, 0)	rej, rej	rej, rej	not, not	not, not
13	(7, 7)	(3, 10)	(10, 9)	(8, 10)	(10, 9)	not, not	rej, not	not, not	not, not
14	(6, 7)	(10, 8)	(10, 6)	(10, 7)	(8, 10)	not, not	not, not	not, rej	not, not
Total Number of Rejections					9	6	3	0	

T									
	Frequency of d in 10 periods					Rejection w.r.t. periods 41-50			
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40
1	(7, 7)	(9, 8)	(4, 5)	(6, 4)	(6, 6)	not, not	not, not	not, not	not, not
2	(6, 5)	(7, 7)	(8, 5)	(8, 7)	(3, 7)	not, not	not, not	rej, not	rej, not
3	(7, 7)	(7, 9)	(5, 8)	(9, 7)	(3, 6)	not, not	not, not	not, not	rej, not
4	(4, 2)	(9, 9)	(10, 8)	(10, 6)	(9, 9)	rej, rej	not, not	not, not	not, not
5	(7, 5)	(5, 6)	(3, 7)	(6, 9)	(7, 7)	not, not	not, not	not, not	not, not
6	(7, 5)	(8, 7)	(9, 8)	(10, 7)	(7, 8)	not, not	not, not	not, not	not, not
7	(4, 1)	(9, 8)	(6, 10)	(9, 10)	(10, 9)	rej, rej	not, not	rej, not	not, not
8	(7, 7)	(5, 4)	(8, 7)	(6, 6)	(9, 7)	not, not	not, not	not, not	not, not
9	(3, 6)	(4, 8)	(8, 10)	(9, 8)	(9, 9)	rej, not	rej, not	not, not	not, not
10	(1, 9)	(7, 8)	(8, 7)	(4, 5)	(7, 4)	rej, rej	not, not	not, not	not, not
11	(6, 7)	(7, 9)	(10, 7)	(9, 9)	(10, 10)	rej, not	not, not	not, not	not, not
12	(4, 4)	(7, 7)	(7, 7)	(10, 9)	(7, 10)	not, rej	not, not	not, not	not, not
13	(2, 6)	(4, 8)	(8, 7)	(8, 8)	(9, 7)	rej, not	rej, not	not, not	not, not
14	(8, 6)	(5, 9)	(9, 7)	(10, 9)	(10, 9)	not, not	rej, not	not, not	not, not
Total Number of Rejections					10	3	2	2	

Table 4.6: Individualistic vs. Aggregated Behavior (NRS)
Does all individuals follow the same probability of d choices

	QS1									
	Frequency of d in 10 periods					Rejection				
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40	41-50
1	(4, 5)	(9, 9)	(9, 6)	(7, 6)	(6, 8)	[not, not]				
2	(5, 5)	(8, 7)	(6, 5)	(8, 7)	(9, 8)	[not, not]				
3	(8, 5)	(10, 6)	(10, 4)	(10, 8)	(10, 8)	[not, not]	[rej, not]	[not, rej]	[not, not]	[not, not]
4	(7, 7)	(6, 7)	(9, 9)	(10, 10)	(10, 9)	[not, not]				
5	(3, 8)	(9, 6)	(10, 7)	(10, 8)	(10, 5)	[not, not]	[not, not]	[not, not]	[not, not]	[not, rej]
6	(3, 4)	(7, 10)	(8, 10)	(10, 10)	(7, 9)	[not, not]	[not, rej]	[not, not]	[not, not]	[not, not]
7	(9, 5)	(9, 9)	(10, 9)	(10, 9)	(10, 8)	[not, not]				
8	(8, 7)	(3, 6)	(5, 6)	(6, 7)	(5, 10)	[not, not]	[rej, not]	[not, not]	[not, not]	[rej, not]
9	(7, 8)	(4, 10)	(3, 10)	(7, 10)	(10, 10)	[not, not]	[not, rej]	[rej, not]	[not, not]	[not, not]
10	(7, 2)	(5, 3)	(7, 4)	(9, 7)	(9, 8)	[not, rej]	[not, rej]	[not, rej]	[not, not]	[not, not]
11	(6, 7)	(8, 7)	(5, 9)	(5, 7)	(6, 7)	[not, not]	[not, not]	[not, not]	[rej, not]	[not, not]
12	(8, 4)	(4, 9)	(8, 10)	(6, 9)	(5, 10)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, not]
13	(6, 5)	(9, 9)	(10, 5)	(6, 9)	(10, 10)	[not, not]				
14	(3, 6)	(2, 5)	(7, 7)	(9, 8)	(9, 9)	[not, not]	[rej, not]	[not, not]	[not, not]	[not, not]
# of Rejection	-	-	-	-	-	1	6	3	1	3
p_M	0.579	0.700	0.743	0.814	0.839	-	-	-	-	-
Non-Rejection Region	[3, 9]	[4, 9]	[5, 10]	[6, 10]	[6, 10]	-	-	-	-	-

	QS2									
	Frequency of d in 10 periods					Rejection				
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40	41-50
1	(5, 5)	(3, 4)	(4, 2)	(6, 6)	(6, 5)	[not, not]	[rej, not]	[not, rej]	[not, not]	[not, not]
2	(2, 4)	(2, 5)	(2, 2)	(6, 5)	(8, 3)	[rej, not]	[rej, not]	[rej, rej]	[not, not]	[not, rej]
3	(4, 8)	(8, 7)	(8, 10)	(9, 10)	(10, 10)	[not, not]	[not, not]	[not, rej]	[not, rej]	[rej, rej]
4	(7, 7)	(5, 6)	(0, 0)	(0, 0)	(0, 0)	[not, not]	[not, not]	[rej, rej]	[rej, rej]	[rej, rej]
5	(6, 8)	(10, 10)	(10, 10)	(10, 10)	(10, 9)	[not, not]	[rej, rej]	[rej, rej]	[rej, rej]	[rej, not]
6	(5, 7)	(7, 9)	(8, 9)	(7, 10)	(3, 8)	[not, not]	[not, not]	[not, not]	[not, rej]	[rej, not]
7	(8, 6)	(6, 6)	(5, 6)	(5, 5)	(4, 4)	[not, not]				
8	(6, 5)	(7, 9)	(7, 5)	(5, 1)	(5, 5)	[not, not]	[not, not]	[not, not]	[not, rej]	[not, not]
9	(6, 7)	(10, 9)	(9, 10)	(8, 9)	(10, 10)	[not, not]	[rej, not]	[not, rej]	[not, not]	[rej, rej]
10	(8, 4)	(7, 6)	(10, 6)	(9, 9)	(8, 9)	[not, not]	[not, not]	[rej, not]	[not, not]	[not, not]
11	(5, 8)	(9, 6)	(10, 6)	(10, 10)	(7, 7)	[not, not]	[not, not]	[rej, not]	[rej, rej]	[not, not]
12	(5, 7)	(5, 7)	(0, 0)	(0, 0)	(0, 0)	[not, not]	[not, not]	[rej, rej]	[rej, rej]	[rej, rej]
13	(7, 7)	(3, 10)	(10, 9)	(8, 10)	(10, 9)	[not, not]	[rej, rej]	[rej, not]	[not, rej]	[rej, not]
14	(6, 7)	(10, 8)	(10, 6)	(10, 7)	(8, 10)	[not, not]	[rej, not]	[rej, not]	[rej, not]	[not, rej]
# of Rejection	-	-	-	-	-	1	8	15	13	13
p_M	0.607	0.693	0.621	0.661	0.636	-	-	-	-	-
Non-Rejection Region	[4, 9]	[4, 9]	[4, 9]	[4, 9]	[4, 9]	-	-	-	-	-

	T									
	Frequency of d in 10 periods					Rejection				
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40	41-50
1	(7, 7)	(9, 8)	(4, 5)	(6, 4)	(6, 6)	[not, not]	[not, not]	[rej, not]	[not, rej]	[not, not]
2	(6, 5)	(7, 7)	(8, 5)	(8, 7)	(3, 7)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, not]
3	(7, 7)	(7, 9)	(5, 8)	(9, 7)	(3, 6)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, not]
4	(4, 2)	(9, 9)	(10, 8)	(10, 6)	(9, 9)	[not, rej]	[not, not]	[not, not]	[not, not]	[not, not]
5	(7, 5)	(5, 6)	(3, 7)	(6, 9)	(7, 7)	[not, not]	[not, not]	[rej, not]	[not, not]	[not, not]
6	(7, 5)	(8, 7)	(9, 8)	(10, 7)	(7, 8)	[not, not]				
7	(4, 1)	(9, 8)	(6, 10)	(9, 10)	(10, 9)	[not, rej]	[not, not]	[not, not]	[not, not]	[not, not]
8	(7, 7)	(5, 4)	(8, 7)	(6, 6)	(9, 7)	[not, not]	[not, rej]	[not, not]	[not, not]	[not, not]
9	(3, 6)	(4, 8)	(8, 10)	(9, 8)	(9, 9)	[not, not]	[rej, not]	[not, not]	[not, not]	[not, not]
10	(1, 9)	(7, 8)	(8, 7)	(4, 5)	(7, 4)	[rej, rej]	[not, not]	[not, not]	[rej, rej]	[not, rej]
11	(6, 7)	(7, 9)	(10, 7)	(9, 9)	(10, 10)	[not, not]				
12	(4, 4)	(7, 7)	(7, 7)	(10, 9)	(7, 10)	[not, not]				
13	(2, 6)	(4, 8)	(8, 7)	(8, 8)	(9, 7)	[rej, not]	[rej, not]	[not, not]	[not, not]	[not, not]
14	(8, 6)	(5, 9)	(9, 7)	(10, 9)	(10, 9)	[not, not]				
# of Rejection	-	-	-	-	-	5	3	2	3	3
p_M	0.536	0.714	0.736	0.779	0.764	-	-	-	-	-
Non-Rejection Region	[3, 8]	[5, 10]	[5, 10]	[6, 10]	[5, 10]	-	-	-	-	-

Table 5.1, Rows 4) - 6)**Comparison of Standard Deviation in Periods 1 to 10 and Periods 41 to 50 (ARS)**

π	QS1			QS2			T [base: (c,d)]		
	S.D. of Choices in Periods 1 - 10	S.D. of Choices in Periods 41 -	The sign of difference	S.D. of Choices in Periods 1 - 10	S.D. of Choices in Periods 41 -	The sign of difference	S.D. of Choices in Periods 1 - 10	S.D. of Choices in Periods 41 -	The sign of difference
1	(0.42, 0.42)	(0.53, 0)	(+, -)	(0.42, 0)	(0.48, 0.52)	(+, +)	(0.52, 0.52)	(0, 0)	(-, -)
2	(0.52, 0.48)	(0.53, 0.53)	(+, +)	(0.48, 0.48)	(0.32, 0.32)	(-, -)	(0.52, 0.53)	(0.42, 0.42)	(-, -)
3	(0.52, 0.52)	(0.52, 0.48)	(0, -)	(0.52, 0.52)	(0.53, 0.52)	(+, 0)	(0.52, 0.53)	(0.52, 0.53)	(0, 0)
4	(0.48, 0.53)	(0.52, 0.52)	(+, -)	(0.48, 0.48)	(0.52, 0)	(+, -)	(0.53, 0.52)	(0, 0)	(-, -)
5	(0.53, 0.48)	(0.42, 0.42)	(-, -)	(0.52, 0.52)	(0.42, 0)	(-, -)	(0.52, 0.52)	(0.52, 0.53)	(0, +)
6	(0.48, 0.52)	(0, 0.53)	(-, +)	(0.52, 0.92)	(0, 0)	(-, -)	(0.52, 0.42)	(0.52, 0.53)	(0, +)
7	(0.52, 0.52)	(0.42, 0.32)	(-, -)	(0.48, 0.42)	(0.53, 0.32)	(+, -)	(0.48, 0.52)	(0.53, 0.53)	(+, +)
8	(0.52, 0.53)	(0.53, 0.52)	(+, -)	(0.48, 0.32)	(0, 0)	(-, -)	(0.52, 0.52)	(0, 0)	(-, -)
9	(0.48, 0.42)	(0.42, 0.42)	(-, 0)	(0.32, 0.52)	(0.42, 0.48)	(+, -)	(0.53, 0.53)	(0.52, 0.52)	(-, -)
10	(0.52, 0.52)	(0.53, 0.42)	(+, -)	(0.53, 0.53)	(0.52, 0.48)	(-, -)	(0.42, 0.48)	(0.42, 0.52)	(0, +)
11	(0.53, 0.48)	(0.52, 0.52)	(-, +)	(0.48, 0.53)	(0.42, 0.42)	(-, -)	(0.53, 0.48)	(0.48, 0.48)	(-, 0)
12	(0.52, 0.52)	(0, 0.48)	(-, -)	(0.48, 0.48)	(0.42, 0.53)	(-, +)	(0.48, 0.42)	(0, 0)	(-, -)
13	(0.53, 0.53)	(0.97, 1.15)	(+, +)	(0.52, 0.52)	(0.42, 0.48)	(-, -)	(0.48, 0.52)	(0.48, 0.53)	(0, +)
14	(0.32, 0.42)	(0.53, 0.53)	(+, +)	(0.42, 0.52)	(0.53, 0)	(+, -)	(0.48, 0.52)	(0, 0)	(-, -)

0.491

0.459

14

0.478

0.342

19

0.501

0.321

15

Table 5.2:
Behavioral Comparisons Across Period for ARS

QS1									
Pair	Frequency of d in 10 periods					Rejection w.r.t. periods 41-50			
	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40
1	(2, 2)	(6, 3)	(3, 6)	(3, 4)	(5, 10)	not, rej	not, rej	not, rej	not, rej
2	(4, 3)	(4, 9)	(5, 9)	(5, 5)	(5, 5)	not, not	not, not	not, not	not, not
3	(4, 4)	(7, 5)	(6, 6)	(7, 4)	(4, 3)	not, not	not, not	not, not	not, not
4	(3, 5)	(5, 5)	(2, 4)	(7, 7)	(6, 6)	not, not	not, not	not, not	not, not
5	(5, 7)	(10, 6)	(10, 4)	(10, 4)	(10, 8)	rej, not	not, not	not, not	not, not
6	(7, 4)	(8, 5)	(7, 7)	(9, 3)	(10, 5)	not, not	not, not	not, not	not, not
7	(4, 4)	(4, 9)	(10, 8)	(9, 9)	(8, 9)	not, rej	not, not	not, not	not, not
8	(4, 5)	(1, 4)	(1, 3)	(2, 6)	(5, 4)	not, not	not, not	not, not	not, not
9	(3, 8)	(6, 5)	(7, 7)	(9, 7)	(8, 8)	rej, not	not, not	not, not	not, not
10	(4, 6)	(4, 5)	(4, 7)	(4, 8)	(5, 8)	not, not	not, not	not, not	not, not
11	(5, 3)	(4, 2)	(9, 5)	(6, 2)	(4, 4)	not, not	not, not	rej, not	not, not
12	(4, 6)	(5, 4)	(4, 4)	(5, 7)	(10, 7)	rej, not	rej, not	rej, not	rej, not
13	(5, 5)	(9, 6)	(9, 6)	(9, 5)	(8, 4)	not, not	not, not	not, not	not, not
14	(9, 8)	(10, 8)	(7, 7)	(5, 5)	(5, 5)	not, not	rej, not	not, not	not, not
Total Number of Rejections					5	3	3	2	

QS2									
Pair	Frequency of d in 10 periods					Rejection w.r.t. periods 41-50			
	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40
1	(8, 0)	(8, 0)	(8, 2)	(7, 4)	(7, 6)	not, rej	not, rej	not, not	not, not
2	(3, 7)	(4, 7)	(4, 3)	(5, 6)	(1, 1)	not, rej	not, rej	not, not	not, rej
3	(4, 4)	(4, 4)	(5, 5)	(6, 4)	(5, 4)	not, not	not, not	not, not	not, not
4	(7, 3)	(5, 2)	(5, 2)	(5, 2)	(4, 0)	not, not	not, not	not, not	not, not
5	(4, 4)	(4, 4)	(5, 4)	(0, 0)	(2, 0)	not, rej	not, rej	not, rej	not, not
6	(4, 4)	(6, 4)	(0, 0)	(0, 0)	(0, 0)	rej, rej	rej, rej	not, not	not, not
7	(3, 8)	(4, 7)	(3, 4)	(4, 3)	(5, 1)	not, rej	not, rej	not, not	not, not
8	(7, 9)	(10, 9)	(10, 9)	(10, 9)	(10, 10)	not, not	not, not	not, not	not, not
9	(9, 6)	(7, 9)	(5, 7)	(4, 4)	(8, 3)	not, not	not, rej	not, not	not, not
10	(5, 5)	(7, 6)	(5, 3)	(5, 6)	(4, 3)	not, not	not, not	not, not	not, not
11	(7, 5)	(4, 6)	(7, 7)	(6, 8)	(8, 8)	not, not	not, not	not, not	not, not
12	(3, 3)	(0, 1)	(6, 5)	(2, 4)	(2, 5)	not, not	not, not	not, not	not, not
13	(4, 6)	(3, 7)	(7, 7)	(9, 5)	(8, 3)	not, not	rej, not	not, not	not, not
14	(8, 6)	(10, 6)	(10, 8)	(4, 9)	(5, 10)	not, rej	rej, rej	rej, not	not, not
Total Number of Rejections					7	10	2	1	

T with base (c, d)									
Pair	Frequency of c as BLUE and d as GREEN in 10 periods					Rejection w.r.t. periods 41-50			
	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40
1	(4, 4)	(4, 5)	(2, 2)	(10, 9)	(10, 10)	rej, rej	rej, rej	rej, rej	not, not
2	(6, 5)	(4, 5)	(3, 2)	(9, 3)	(8, 2)	not, not	rej, not	rej, not	not, not
3	(6, 5)	(6, 8)	(5, 6)	(6, 5)	(4, 5)	not, not	not, not	not, not	not, not
4	(5, 6)	(7, 6)	(7, 6)	(8, 6)	(10, 10)	rej, rej	not, rej	not, rej	not, rej
5	(6, 4)	(4, 4)	(6, 5)	(6, 4)	(6, 5)	not, not	not, not	not, not	not, not
6	(6, 2)	(5, 7)	(4, 6)	(3, 5)	(6, 5)	not, not	not, not	not, not	not, not
7	(7, 6)	(5, 6)	(6, 7)	(5, 4)	(5, 5)	not, not	not, not	not, not	not, not
8	(6, 6)	(10, 10)	(10, 10)	(10, 10)	(10, 10)	rej, rej	not, not	not, not	not, not
9	(5, 5)	(3, 6)	(8, 5)	(5, 6)	(4, 6)	not, not	not, not	not, not	not, not
10	(2, 7)	(3, 5)	(6, 7)	(8, 5)	(2, 6)	not, not	not, not	not, not	rej, not
11	(5, 7)	(7, 9)	(6, 7)	(6, 5)	(7, 7)	not, not	not, not	not, not	not, not
12	(7, 2)	(10, 10)	(10, 10)	(10, 10)	(10, 10)	not, not	not, not	not, not	not, not
13	(7, 6)	(8, 6)	(8, 5)	(6, 6)	(7, 5)	not, not	not, not	not, not	not, not
14	(7, 4)	(8, 4)	(3, 5)	(8, 7)	(10, 10)	not, rej	not, rej	rej, rej	not, not
Total Number of Rejections					7	5	6	2	

Table 5.3: Individualistic vs. Aggregated Behavior (ARS)
Does all individuals follow the same probability of d choices

QS1											
	Frequency of d in 10 periods					Rejection					
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40	41-50	
1	(2, 2)	(6, 3)	(3, 6)	(3, 4)	(5, 10)	[not, not]	[not, not]	[not, not]	[not, not]	[not, rej]	
2	(4, 3)	(4, 9)	(5, 9)	(5, 5)	(5, 5)	[not, not]	[not, rej]	[not, not]	[not, not]	[not, not]	
3	(4, 4)	(7, 5)	(6, 6)	(7, 4)	(4, 3)	[not, not]	[not, not]	[not, not]	[not, not]	[not, rej]	
4	(3, 5)	(5, 5)	(2, 4)	(7, 7)	(6, 6)	[not, not]	[not, not]	[rej, not]	[not, not]	[not, not]	
5	(5, 7)	(10, 6)	(10, 4)	(10, 4)	(10, 8)	[not, not]	[rej, not]	[rej, not]	[rej, not]	[rej, not]	
6	(7, 4)	(8, 5)	(7, 7)	(9, 3)	(10, 5)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, not]	
7	(4, 4)	(4, 9)	(10, 8)	(9, 9)	(8, 9)	[not, not]	[not, rej]	[rej, not]	[not, not]	[not, not]	
8	(4, 5)	(1, 4)	(1, 3)	(2, 6)	(5, 4)	[not, not]	[rej, not]	[rej, not]	[rej, not]	[not, not]	
9	(3, 8)	(6, 5)	(7, 7)	(9, 7)	(8, 8)	[not, not]					
10	(4, 6)	(4, 5)	(4, 7)	(4, 8)	(5, 8)	[not, not]					
11	(5, 3)	(4, 2)	(9, 5)	(6, 2)	(4, 4)	[not, not]	[not, rej]	[not, not]	[not, rej]	[not, not]	
12	(4, 6)	(5, 4)	(4, 4)	(5, 7)	(10, 7)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, not]	
13	(5, 5)	(9, 6)	(9, 6)	(9, 5)	(8, 4)	[not, not]	[rej, not]	[not, not]	[not, not]	[not, not]	
14	(9, 8)	(10, 8)	(7, 7)	(5, 5)	(5, 5)	[rej, not]	[rej, not]	[not, not]	[not, not]	[not, not]	
# of Rejection	-	-	-	-	-	1	7	4	3	5	
p_M	0.475	0.568	0.596	0.593	0.639	-	-	-	-	-	
Non-Rejection Region	[2, 8]	[3, 8]	[3, 9]	[3, 9]	[4, 9]	-	-	-	-	-	

QS2											
	Frequency of d in 10 periods					Rejection					
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40	41-50	
1	(8, 0)	(8, 0)	(8, 2)	(7, 4)	(7, 6)	[not, rej]	[not, rej]	[not, not]	[not, not]	[not, not]	
2	(3, 7)	(4, 7)	(4, 3)	(5, 6)	(1, 1)	[not, not]					
3	(4, 4)	(4, 4)	(5, 5)	(6, 4)	(5, 4)	[not, not]					
4	(7, 3)	(5, 2)	(5, 2)	(5, 2)	(4, 0)	[not, not]	[not, rej]	[not, not]	[not, not]	[not, rej]	
5	(4, 4)	(4, 4)	(5, 4)	(0, 0)	(2, 0)	[not, not]	[not, not]	[not, not]	[rej, rej]	[not, rej]	
6	(4, 4)	(6, 4)	(0, 0)	(0, 0)	(0, 0)	[not, not]	[not, not]	[rej, rej]	[rej, rej]	[rej, rej]	
7	(3, 8)	(4, 7)	(3, 4)	(4, 3)	(5, 1)	[not, not]					
8	(7, 9)	(10, 9)	(10, 9)	(10, 9)	(10, 10)	[not, rej]	[rej, rej]	[rej, rej]	[rej, rej]	[rej, rej]	
9	(9, 6)	(7, 9)	(5, 7)	(4, 4)	(8, 3)	[rej, not]	[not, rej]	[not, not]	[not, not]	[rej, not]	
10	(5, 5)	(7, 6)	(5, 3)	(5, 6)	(4, 3)	[not, not]					
11	(7, 5)	(4, 6)	(7, 7)	(6, 8)	(8, 8)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, rej]	
12	(3, 3)	(0, 1)	(6, 5)	(2, 4)	(2, 5)	[not, not]	[rej, rej]	[not, not]	[not, not]	[not, not]	
13	(4, 6)	(3, 7)	(7, 7)	(9, 5)	(8, 3)	[not, not]	[not, not]	[not, not]	[rej, not]	[rej, not]	
14	(8, 6)	(10, 6)	(10, 8)	(4, 9)	(5, 10)	[not, not]	[rej, not]	[rej, not]	[not, rej]	[not, rej]	
# of Rejection	-	-	-	-	-	3	8	5	8	11	
p_M	0.529	0.529	0.521	0.468	0.439	-	-	-	-	-	
Non-Rejection Region	[2, 8]	[2, 8]	[2, 8]	[2, 8]	[1, 7]	-	-	-	-	-	

T with base (c, d)										
	Frequency of c as BLUE and d as GREEN in 10 periods					Rejection				
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40	41-50
1	(4, 4)	(4, 5)	(2, 2)	(10, 9)	(10, 10)	[not, not]	[not, not]	[rej, rej]	[rej, not]	[rej, rej]
2	(6, 5)	(4, 5)	(3, 2)	(9, 3)	(8, 2)	[not, not]	[not, not]	[not, rej]	[not, rej]	[not, rej]
3	(6, 5)	(6, 8)	(5, 6)	(6, 5)	(4, 5)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, not]
4	(5, 6)	(7, 6)	(7, 6)	(8, 6)	(10, 10)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, rej]
5	(6, 4)	(4, 4)	(6, 5)	(6, 4)	(6, 5)	[not, not]				
6	(6, 2)	(5, 7)	(4, 6)	(3, 5)	(6, 5)	[not, not]	[not, not]	[not, not]	[rej, not]	[not, not]
7	(7, 6)	(5, 6)	(6, 7)	(5, 4)	(5, 5)	[not, not]				
8	(6, 6)	(10, 10)	(10, 10)	(10, 10)	(10, 10)	[not, not]	[rej, rej]	[rej, rej]	[rej, rej]	[rej, rej]
9	(5, 5)	(3, 6)	(8, 5)	(5, 6)	(4, 6)	[not, not]	[rej, not]	[not, not]	[not, not]	[rej, not]
10	(2, 7)	(3, 5)	(6, 7)	(8, 5)	(2, 6)	[not, not]	[rej, not]	[not, not]	[not, not]	[rej, not]
11	(5, 7)	(7, 9)	(6, 7)	(6, 5)	(7, 7)	[not, not]				
12	(7, 2)	(10, 10)	(10, 10)	(10, 10)	(10, 10)	[not, not]	[rej, rej]	[rej, rej]	[rej, rej]	[rej, rej]
13	(7, 6)	(8, 6)	(8, 5)	(6, 6)	(7, 5)	[not, not]				
14	(7, 4)	(8, 4)	(3, 5)	(8, 7)	(10, 10)	[not, not]	[not, not]	[not, not]	[not, not]	[rej, rej]
# of Rejection	-	-	-	-	-	0	6	7	7	14
p_M	0.529	0.625	0.596	0.661	0.696	-	-	-	-	-
Non-Rejection Region	[2, 8]	[4, 9]	[3, 9]	[4, 9]	[5, 9]	-	-	-	-	-

T with base (d, d)										
	Frequency of d in 10 periods					Rejection				
Pair	1-10	11-20	21-30	31-40	41-50	1-10	11-20	21-30	31-40	41-50
1	(9, 3)	(7, 4)	(7, 7)	(5, 6)	(5, 5)	[rej, not]	[not, not]	[not, not]	[not, not]	[not, not]
2	(5, 0)	(5, 6)	(4, 5)	(6, 4)	(5, 3)	[not, rej]	[not, not]	[not, not]	[not, not]	[not, not]
3	(3, 4)	(7, 5)	(8, 7)	(9, 10)	(9, 10)	[not, not]	[not, not]	[not, not]	[not, rej]	[not, rej]
4	(2, 7)	(8, 5)	(6, 5)	(7, 3)	(5, 5)	[not, not]				
5	(3, 7)	(7, 5)	(5, 8)	(3, 7)	(7, 6)	[not, not]				
6	(5, 5)	(4, 6)	(5, 5)	(2, 8)	(5, 4)	[not, not]	[not, not]	[not, not]	[rej, not]	[not, not]
7	(4, 5)	(6, 5)	(5, 8)	(4, 5)	(6, 8)	[not, not]				
8	(7, 7)	(5, 5)	(5, 5)	(5, 5)	(5, 5)	[not, not]				
9	(6, 4)	(4, 5)	(5, 6)	(4, 7)	(5, 7)	[not, not]				
10	(5, 4)	(6, 6)	(7, 6)	(5, 6)	(7, 7)	[not, not]				
11	(8, 8)	(6, 6)	(9, 6)	(7, 6)	(6, 8)	[not, not]				
12	(4, 5)	(5, 5)	(5, 5)	(5, 5)	(5, 5)	[not, not]				
13	(6, 7)	(7, 5)	(3, 8)	(3, 7)	(8, 8)	[not, not]				
14	(6, 5)	(3, 5)	(6, 6)	(5, 6)	(5, 5)	[not, not]				
# of Rejection	-	-	-	-	-	2	0	0	2	1
p_M	0.514	0.546	0.596	0.554	0.604	-	-	-	-	-
Non-Rejection Region	[2, 8]	[3, 8]	[3, 9]	[3, 9]	[3, 9]	-	-	-	-	-

Table 5.4: Dependence upon roles for ARS**Comparison of Choices as BLUE and as GREEN in periods 31-50**

Treatment	QS1			QS2			T		
Pair	Frequency of d as BLUE in periods 31 - 50	Frequency of d as GREEN in periods 31 - 50	Rejection	Frequency of d as BLUE in periods 31 - 50	Frequency of d as GREEN in periods 31 - 50	Rejection	Frequency of d as BLUE in periods 31 - 50	Frequency of c as GREEN in periods 31 - 50	Rejection
1	(4, 7)	(4, 7)	not, not	(8, 8)	(6, 2)	not, rej	(10, 9)	(10, 10)	not, not
2	(6, 4)	(4, 6)	not, not	(1, 4)	(5, 3)	not, not	(8, 4)	(9, 1)	not, not
3	(4, 3)	(7, 4)	not, not	(6, 3)	(5, 5)	not, not	(1, 0)	(9, 10)	rej, rej
4	(5, 5)	(8, 8)	not, not	(5, 1)	(4, 1)	not, not	(8, 9)	(10, 7)	not, not
5	(10, 6)	(10, 6)	not, not	(1, 0)	(1, 0)	not, not	(6, 3)	(6, 6)	not, not
6	(9, 3)	(10, 5)	not, not	(0, 0)	(0, 0)	not, not	(6, 4)	(3, 6)	not, not
7	(8, 9)	(9, 9)	not, not	(0, 4)	(9, 0)	rej, rej	(5, 3)	(5, 6)	not, not
8	(0, 6)	(7, 4)	rej, not	(10, 9)	(10, 10)	not, not	(10, 10)	(10, 10)	not, not
9	(9, 9)	(8, 6)	not, not	(7, 2)	(5, 5)	not, not	(5, 4)	(4, 8)	not, not
10	(3, 7)	(6, 9)	not, not	(5, 5)	(4, 4)	not, not	(4, 4)	(6, 7)	not, not
11	(1, 5)	(9, 1)	rej, not	(7, 7)	(7, 9)	not, not	(5, 4)	(8, 8)	not, not
12	(6, 6)	(9, 8)	not, not	(2, 4)	(2, 5)	not, not	(10, 10)	(10, 10)	not, not
13	(10, 7)	(7, 2)	not, rej	(8, 2)	(9, 6)	not, not	(6, 3)	(7, 8)	not, rej
14	(10, 10)	(0, 0)	rej, rej	(5, 9)	(4, 10)	not, not	(9, 8)	(9, 9)	not, not

Total Number of Rejection

5

Total Number of Rejection

3

Total Number of Rejection

3

Table 5.5: Subjective Understanding of Behavioral Criteria**Analysis on Cognition & Behavior: Comparison of Utility Sum Points, Best Response and Dominance with Behavior**

π	QS1					QS2					T				
	Utility Sum	Dom	Br	(c, c)	(d, d)	Utility Sum	Dom	Br	(c, c)	(d, d)	Utility Sum	Dom	Br	(c, d)	(d, d)
1	(2, 2)	(0, 2)	(0, 2)	0	5	(0, 2)	(1, 1)	(2, 2)	0	3	(2, 1)	(0, 0)	(0, 0)	10	0
2	(0, 2)	(0, 0)	(0, 1)	3	3	(2, 0)	(1, 0)	(2, 1)	9	1	(2, 0)	(0, 1)	(0, 2)	2	2
3	(2, 1)	(2, 0)	(2, 0)	4	1	(0, 0)	(0, 0)	(0, 0)	4	3	(2, 2)	(0, 2)	(1, 2)	0	9
4	(1, 2)	(1, 0)	(2, 1)	1	3	(1, 2)	(0, 0)	(0, 0)	6	0	(2, 2)	(0, 0)	(0, 1)	10	0
5	(0, 1)	(2, 0)	(2, 1)	0	8	(2, 2)	(0, 0)	(0, 0)	8	0	(2, 2)	(0, 0)	(1, 0)	3	4
6	(0, 2)	(1, 0)	(2, 1)	0	5	(2, 2)	(2, 0)	(2, 0)	10	0	(2, 2)	(1, 0)	(1, 1)	4	1
7	(0, 0)	(0, 2)	(1, 2)	0	7	(1, 0)	(0, 0)	(1, 0)	5	1	(2, 2)	(1, 2)	(1, 2)	2	5
8	(1, 2)	(0, 1)	(0, 1)	3	2	(2, 0)	(0, 0)	(2, 1)	0	10	(2, 2)	(1, 0)	(2, 0)	10	0
9	(2, 1)	(2, 1)	(2, 1)	0	6	(1, 2)	(0, 0)	(1, 0)	2	3	(1, 1)	(0, 0)	(0, 1)	3	3
10	(2, 0)	(0, 1)	(0, 1)	1	4	(1, 0)	(1, 0)	(1, 0)	4	1	(2, 2)	(0, 1)	(0, 2)	0	6
11	(1, 1)	(0, 0)	(0, 1)	5	3	(0, 2)	(0, 2)	(0, 2)	0	6	(2, 2)	(0, 1)	(0, 1)	5	4
12	(0, 2)	(2, 0)	(2, 1)	0	7	(1, 1)	(1, 0)	(1, 0)	4	1	(2, 2)	(0, 2)	(1, 2)	10	0
13	(2, 2)	(1, 0)	(1, 1)	0	3	(2, 0)	(2, 1)	(2, 1)	1	2	(1, 1)	(0, 1)	(1, 1)	2	7
14	(0, 0)	(2, 1)	(2, 2)	0	0	(0, 0)	(0, 2)	(2, 2)	0	5	(2, 2)	(1, 1)	(1, 1)	10	0

Average	1.11	0.75	1.14		1	0.5	0.89		1.75	0.54	0.89				
Freq. of 0	9	14	6		11	18	12		1	16	9				
Freq. of 1	7	7	12		6	6	7		5	9	13				
Freq. of 2	12	7	10		11	4	9		22	3	6				

*Utility Sum Points for QS1 and QS2 are calculated as follows:

if $S(c, c) > S(c, d)$ and $S(c, c) > S(d, c)$, then Utility Sum Points = 2;

if only one hold, than Utility sum points = 1; and if both does not hold, = 0.

*Similarly, Utility Sum Points for T are calculated as follows:

if $S(c, d) > S(c, c)$ and $S(c, d) > S(d, d)$, then Utility Sum Points = 2;

if only one hold, than Utility sum points = 1; and if both does not hold, = 0.

$S(c, d)$ denotes the sum of payoffs for role BLUE and GREEN when action pair is (c, d) .

This number is based on the subjects' answers in the questionnaire

Table 6.1: Independence Tests for NRS (QS1)**Detailed results of the Independence test (Individual based)**

Pair	Role	$p_d^{30 \times 50}$	$q_d^{30 \times 50}$	$L_i^P(T_O)$	$L_i^P(T_E)$	P-Value (T_O)	P-Value (T_E)
1	<i>b</i>	0.667	0.714	1,1,3,1,1,1,4,3	0,0,1,1,1,1,3,1	0.82	0.25
1	<i>g</i>	0.714	0.667	0,0,2,1,3,2,1,1,	0,0,2,1,1,1,3,2	0.56	0.56
2	<i>b</i>	0.81	0.714	0,0,1,1,4,3,5,4	1,1,1,1,0,0,7,6	0.8	0.7
2	<i>g</i>	0.714	0.81	0,0,1,1,1,1,5,4	1,1,0,0,0,0,7,4	0.58	0.14
3	<i>b</i>	1	0.8	0,0,0,0,1,1,1,1	0,0,0,0,1,1,1,1	1	1
3	<i>g</i>	0.8	1	0,0,2,1,0,0,8,7	0,0,2,1,0,0,1,1	0.32*	0.25*
4	<i>b</i>	1	0.952	0,0,0,0,0,0,1,1	0,0,0,0,1,1,1,1	0.61	1
4	<i>g</i>	0.952	1	0,0,0,0,0,0,10,9	0,0,1,1,0,0,1,1	0.24	1
5	<i>b</i>	1	0.667	0,0,0,0,1,1,1,1	0,0,0,0,0,0,1,1	1	0.02
5	<i>g</i>	0.667	1	0,0,1,1,0,0,1,1	0,0,0,0,0,0,10,3	0.14	0
6	<i>b</i>	0.857	1	0,0,1,1,0,0,8,7	0,0,1,1,0,0,8,7	0.96	0.96
6	<i>g</i>	1	0.857	0,0,0,0,1,1,1,1	0,0,0,0,2,1,1,1	1*	0.21*
7	<i>b</i>	1	0.857	0,0,0,0,1,1,1,1	0,0,0,0,1,1,1,1	1	1
7	<i>g</i>	0.857	1	0,0,0,0,0,0,9,8	0,0,1,1,0,0,8,7	0.27	0.96
8	<i>b</i>	0.524	0.81	0,0,3,2,1,1,5,2	1,1,4,1,1,1,4,3	0.74	0.54
8	<i>g</i>	0.81	0.524	1,1,1,1,1,1,5,4	1,1,1,1,2,1,1,1	0.98	0.8
9	<i>b</i>	0.85	1	0,0,0,0,0,0,1,1	0,0,2,1,0,0,8,7	0.1*	0.35*
9	<i>g</i>	1	0.85	0,0,0,0,1,1,1,1	0,0,0,0,1,1,1,1	1	1
10	<i>b</i>	0.905	0.762	0,0,0,0,1,1,4,3	1,1,0,0,1,1,1,1	0.14	0.81
10	<i>g</i>	0.762	0.905	0,0,2,1,0,0,4,3	1,1,2,1,0,0,7,6	0.33	0.72
11	<i>b</i>	0.55	0.714	0,0,3,1,0,0,5,4	0,0,2,1,1,1,2,1	0.22	0.7
11	<i>g</i>	0.714	0.55	1,1,1,1,1,1,5,1	1,1,2,1,1,1,2,1	0.65	0.8
12	<i>b</i>	0.524	0.952	1,1,5,2,0,0,1,1	0,0,0,0,0,0,3,2	0.24	0.07
12	<i>g</i>	0.952	0.524	1,1,0,0,1,1,1,1	0,0,0,0,4,3,1,1	0.96	0.1
13	<i>b</i>	0.81	0.905	0,0,2,1,1,1,7,6	0,0,0,0,1,1,1,1	0.66	0.26
13	<i>g</i>	0.905	0.81	0,0,1,1,1,1,1,1	0,0,0,0,1,1,1,1	0.82	0.37
14	<i>b</i>	0.905	0.857	0,0,1,1,1,1,1,1	0,0,0,0,1,1,4,3	0.84	0.19
14	<i>g</i>	0.857	0.905	0,0,1,1,2,1,7,6	0,0,2,1,0,0,1,1	0.66	0.14

Average of the P-Values	0.63	0.532
Number of Rejections	0	2

Total Number of Double-Rejection

2

*=Rejection; less than or equal to 0.05"

*: Data with missing value

Table 6.1: Independence Tests for NRS (QS2)**Detailed results of the Independence test (Individual based)**

Pair	Role	$p_d^{30 \times 50}$	$q_d^{30 \times 50}$	$L_j^P(T_O)$	$L_j^P(T_E)$	P-Value (T_O)	P-Value (T_E)
1	<i>b</i>	0.571	0.571	1,1,3,2,0,0,1,1	0,0,1,1,5,2,0,0	0.21	0.06
1	<i>g</i>	0.571	0.571	0,0,1,1,3,2,3,2	0,0,5,4,1,1,0,0	0.52	0.04
2	<i>b</i>	0.714	0.381	0,0,1,1,1,1,3,2	0,0,1,1,1,1,2,1	0.41	0.3
2	<i>g</i>	0.381	0.714	2,1,0,0,1,1,3,2	0,0,5,2,0,0,1,1	0.25	0.22
3	<i>b</i>	0.905	1	0,0,0,0,0,0,10,9	0,0,1,1,0,0,1,1	0.41	0.79
3	<i>g</i>	1	0.905	0,0,0,0,0,0,1,1	0,0,0,0,1,1,1,1	0.37	1
4	<i>b</i>	0	0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
4	<i>g</i>	0	0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
5	<i>b</i>	1	0.952	0,0,0,0,1,1,1,1	0,0,0,0,0,0,1,1	1	0.61
5	<i>g</i>	0.952	1	0,0,1,1,0,0,1,1	0,0,0,0,0,0,10,9	1	0.24
6	<i>b</i>	0.5	0.905	0,0,5,1,0,0,5,4	0,0,3,2,0,0,4,3	0.26	0.46
6	<i>g</i>	0.905	0.5	0,0,0,0,5,4,5,4	1,1,0,0,1,1,1,1	0.14	0.83
7	<i>b</i>	0.429	0.429	5,3,2,1,1,1,0,0	3,1,2,1,2,1,0,0	0.43	0.96
7	<i>g</i>	0.429	0.429	5,3,2,1,2,1,1,1	0,0,1,1,0,0,3,1	0.78	0.16
8	<i>b</i>	0.476	0.286	0,0,0,0,0,0,0,0	1,1,0,0,0,0,0,0	0.01	0.01
8	<i>g</i>	0.286	0.476	0,0,0,0,0,0,0,0	5,3,0,0,0,0,0,0	0.41	0.38
9	<i>b</i>	0.905	0.952	0,0,0,0,0,0,1,1	0,0,1,1,0,0,1,1	0.16	0.61
9	<i>g</i>	0.952	0.905	0,0,0,0,1,1,9,8	0,0,1,1,1,1,1,1	0.44	0.99
10	<i>b</i>	0.857	0.857	0,0,1,1,1,1,4,3	0,0,2,1,1,1,1,1	0.8	0.52
10	<i>g</i>	0.857	0.857	0,0,1,1,1,1,8,7	0,0,1,1,1,1,7,6	0.89	0.93
11	<i>b</i>	0.857	0.857	1,1,1,1,2,1,1,1	0,0,0,0,0,9,8	0.95	0.07
11	<i>g</i>	0.857	0.857	1,1,1,1,1,1,1,1	0,0,0,0,0,9,7	0.98	0.04
12	<i>b</i>	0	0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
12	<i>g</i>	0	0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
13	<i>b</i>	0.905	1	0,0,1,1,0,0,8,7	0,0,1,1,0,0,9,8	0.87	1
13	<i>g</i>	1	0.905	0,0,0,0,1,1,1,1	0,0,0,0,1,1,9,8	1*	0.37*
14	<i>b</i>	0.905	1	0,0,1,1,0,0,1,1	0,0,0,0,0,0,4,3	0.79	0.02
14	<i>g</i>	1	0.905	0,0,0,0,1,1,7,5	0,0,0,0,0,0,1,1	0.37*	0.37*

Average of the P-Values 0.623 0.535
Number of Rejections 1 4

Total Number of Double-Rejection 4

=Rejection; less than or equal to 0.05"

* : Data with missing value

Table 6.1: Independence Tests for NRS (T)**Detailed results of the Independence test (Individual based)**

Pair	Role	$p_d^{30 \times 50}$	$q_d^{30 \times 50}$	$L_i^P(T_O)$	$L_i^P(T_E)$	P-Value (T_O)	P-Value (T_E)
1	<i>b</i>	0.619	0.476	0,0,1,1,1,1,3,2	0,0,0,0,2,1,1,1	0.3	0.05
1	<i>g</i>	0.476	0.619	2,1,0,0,3,1,3,2	1,1,3,1,1,1,1,1	0.89	0.03
2	<i>b</i>	0.571	0.667	0,0,2,1,2,1,5,2	0,0,5,3,1,1,1,1	0.86	0.28
2	<i>g</i>	0.667	0.571	0,0,2,1,1,1,5,4	1,1,3,2,5,3,1,1	0.45	0.93
3	<i>b</i>	0.571	0.667	0,0,1,1,3,1,1,1	0,0,5,2,1,1,3,2	0.16	0.53
3	<i>g</i>	0.667	0.571	1,1,3,2,1,1,3,2	0,0,2,1,5,2,3,2	0.94	0.59
4	<i>b</i>	0.952	0.762	0,0,1,1,0,0,1,1	0,0,0,0,1,1,5,4	0.66	0.14
4	<i>g</i>	0.762	0.952	0,0,0,0,0,0,9,5	0,0,1,1,0,0,1,1	0.02	0.23
5	<i>b</i>	0.667	0.81	0,0,4,3,0,0,5,4	0,0,3,2,0,0,1,1	0.31	0.22
5	<i>g</i>	0.81	0.667	0,0,1,1,1,1,5,2	0,0,1,1,1,1,4,3	0.27	0.64
6	<i>b</i>	0.857	0.762	0,0,0,0,3,2,1,1	1,1,0,0,1,1,8,7	0.11	0.81
6	<i>g</i>	0.762	0.857	0,0,1,1,0,0,6,5	0,0,0,0,0,0,8,7	0.31	0.02
7	<i>b</i>	0.952	0.952	0,0,0,0,1,1,9,8	0,0,1,1,0,0,1,1	0.57	0.87
7	<i>g</i>	0.952	0.952	0,0,1,1,0,0,1,1	0,0,0,0,1,1,9,8	0.87	0.57
8	<i>b</i>	0.75	0.667	2,1,0,0,1,1,4,3	0,0,1,1,1,1,2,1	0.63*	0.36*
8	<i>g</i>	0.667	0.75	1,1,1,1,0,0,1,1	0,0,1,1,3,1,3,1	0.29	0.27
9	<i>b</i>	0.905	0.857	0,0,1,1,1,1,1,1	0,0,0,0,1,1,9,7	0.84	0.23
9	<i>g</i>	0.857	0.905	0,0,1,1,1,1,7,5	0,0,1,1,0,0,9,8	0.82	0.51
10	<i>b</i>	0.571	0.429	2,1,1,1,1,1,3,1	0,0,0,0,1,1,3,2	0.67	0.07
10	<i>g</i>	0.429	0.571	2,1,2,1,0,0,3,2	2,1,3,1,0,0,3,2	0.89	0.88
11	<i>b</i>	0.952	0.952	0,0,1,1,0,0,1,1	0,0,0,0,1,1,9,8	0.87	0.57
11	<i>g</i>	0.952	0.952	0,0,0,0,1,1,9,8	0,0,1,1,0,0,1,1	0.57	0.87
12	<i>b</i>	0.857	0.905	0,0,2,1,0,0,1,1	0,0,1,1,1,1,7,5	0.14	0.82
12	<i>g</i>	0.905	0.857	0,0,0,0,1,1,8,7	0,0,1,1,1,1,1,1	0.49	0.84
13	<i>b</i>	0.857	0.762	0,0,1,1,1,1,7,5	0,0,2,1,1,1,1,1	0.69	0.41
13	<i>g</i>	0.762	0.857	0,0,1,1,1,1,7,4	0,0,1,1,1,1,3,2	0.58	0.73
14	<i>b</i>	1	0.905	0,0,0,0,1,1,1,1	0,0,0,0,0,0,1,1,	1	0.37
14	<i>g</i>	0.905	1	0,0,1,1,0,0,1,1	0,0,0,0,0,0,5,4	0.79	0.1

Average of the P-Values 0.571 0.441
Number of Rejections 1 3

Total Number of Double-Rejection 4

 =Rejection; less than or equal to 0.05"

* : Data with missing value

Table 6.2 Row 1): Independence Tests for ARS (QS1)

Detailed results of the Independence test

Pair	Role in round 31	$p_d^{30 \times 50}$	$q_d^{30 \times 50}$	$L_i^P(T_O)$	$L_i^P(T_E)$	P-Value (T_O)	P-Value (T_E)
1	<i>b</i>	0.381	0.667	3,1,3,1,0,0,2,1	0,0,3,2,0,0,3,2	0.98	0.48
1	<i>g</i>	0.667	0.381	0,0,0,0,1,1,1,1	0,0,1,1,1,1,1,1	0.02	0.21
2	<i>b</i>	0.524	0.524	0,0,2,1,0,0,4,3	4,1,1,1,0,0,1,1	0.31	0.08
2	<i>g</i>	0.524	0.524	0,0,0,0,1,1,2,1	2,1,1,1,1,1,2,1	0.13	0.69
3	<i>b</i>	0.571	0.381	4,1,1,1,1,1,1,1	3,1,0,0,3,1,2,1	0.33	0.66
3	<i>g</i>	0.381	0.571	0,0,0,0,2,1,1,1	1,1,3,1,0,0,0,0	0.17	0.2
4	<i>b</i>	0.619	0.667	1,1,1,1,0,0,4,3	0,0,3,2,4,1,3,2	0.29	0.63
4	<i>g</i>	0.667	0.619	0,0,1,1,4,1,4,3	0,0,1,1,1,1,3,1	0.23	0.19
5	<i>b</i>	1	0.571	0,0,0,0,1,1,1,1	0,0,0,0,1,1,1,1	1	1
5	<i>g</i>	0.571	1	0,0,4,1,0,0,6,5	0,0,4,1,0,0,6,5	0.3	0.3
6	<i>b</i>	0.905	0.429	0,0,1,1,1,1,1,1	0,0,0,0,1,1,1,1	0.82	0.33
6	<i>g</i>	0.429	0.905	0,0,0,0,0,0,4,3	0,0,2,1,1,1,3,1	0.19	0.48
7	<i>b</i>	0.857	0.905	0,0,2,1,1,1,1,1	0,0,1,1,1,1,4,3	0.62	0.85
7	<i>g</i>	0.905	0.857	0,0,1,1,1,1,7,6	0,0,1,1,1,1,8,7	0.91	0.95
8	<i>b</i>	0.333	0.476	6,5,2,1,0,0,0,0	0,0,0,0,0,0,0,0	0.37	0.41
8	<i>g</i>	0.476	0.333	2,1,0,0,4,3,0,0	0,0,0,0,3,2,1,1	0.53	0.13
9	<i>b</i>	0.857	0.762	0,0,1,1,1,1,5,3	0,0,1,1,1,1,7,6	0.48	0.87
9	<i>g</i>	0.762	0.857	0,0,1,1,0,0,1,1	0,0,0,0,1,1,7,4	0.13	0.15
10	<i>b</i>	0.476	0.81	0,0,7,5,0,0,2,1	0,0,3,2,0,0,5,1	0.65	0.44
10	<i>g</i>	0.81	0.476	0,0,1,1,7,4,1,1	0,0,1,1,1,1,5,4	0.37	0.67
11	<i>b</i>	0.476	0.333	9,8,0,0,0,0,1,1	0,0,1,1,0,0,0,0	0.02	0.01
11	<i>g</i>	0.333	0.476	9,5,0,0,0,0,0,0	0,0,0,0,1,1,0,0	0.45	0.09
12	<i>b</i>	0.762	0.667	0,0,4,3,1,1,1,1	0,0,0,0,4,3,5,3	0.64	0.17
12	<i>g</i>	0.667	0.762	0,0,1,1,2,1,2,1	1,1,2,1,0,0,1,1	0.57	0.38
13	<i>b</i>	0.947	0.588	0,0,0,0,5,3,2,1	0,0,1,1,0,0,1,1	0.01	0.6
13	<i>g</i>	0.588	0.947	0,0,5,4,0,0,0,0	0,0,0,0,0,0,3,1	0.02	0.01
14	<i>b</i>	0.476	0.524	0,0,0,0,0,0,0,0	0,0,1,1,0,0,0,0	0.01	0.01
14	<i>g</i>	0.524	0.476	0,0,1,1,0,0,0,0	0,0,0,0,0,0,0,0	0	0

Average of the P-Values 0.377
 Number of Rejections 6 0.393

Total Number of Double-Rejection 6

"=Rejection; less than or equal to 0.05"

Table 6.2 Row 1): Independence Tests for ARS (QS2)

Detailed results of the Independence test

Pair	Role in round 31	$p_d^{30 \times 50}$	$q_d^{30 \times 50}$	$L_i^P(T_O)$	$L_i^P(T_E)$	P-Value (T_O)	P-Value (T_E)
1	<i>b</i>	0.714	0.476	2,1,0,0,2,1,1,1	0,0,1,1,3,1,1,1	0.35	0.17
1	<i>g</i>	0.476	0.714	2,1,1,1,0,0,2,1	0,0,3,1,4,1,0,0	0.67	0.56
3	<i>b</i>	0.286	0.333	7,3,2,1,0,0,1,1	0,0,0,0,0,0,3,1	0.22	0.67
3	<i>g</i>	0.333	0.286	7,2,0,0,1,1,0,0	4,1,0,0,1,1,3,1	0.21	0.34
4	<i>b</i>	0.571	0.381	3,1,0,0,1,1,2,1	2,1,2,1,5,4,0,0	0.44	0.77
4	<i>g</i>	0.381	0.571	1,1,0,0,0,0,0,0	2,1,5,2,1,1,0,0	0.06	0.39
5	<i>b</i>	0.476	0.095	0,0,0,0,1,1,0,0	1,1,0,0,5,1,0,0	0	0.05
5	<i>g</i>	0.095	0.476	0,0,0,0,0,0,1,1	0,0,5,1,0,0,0,0	0.06	0.5
6	<i>b</i>	0.095	0	0,0,0,0,1,1,0,0	10,1,0,0,0,0,0,0	0.02	1
6	<i>g</i>	0	0.095	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
7	<i>b</i>	0	0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
7	<i>g</i>	0	0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
8	<i>b</i>	0.476	0.19	10,9,0,0,0,0,0,0	0,0,0,0,0,0,0,0	0.02	0.01
8	<i>g</i>	0.19	0.476	5,2,0,0,0,0,0,0	0,0,0,0,0,0,0,0	0.47	0.6
9	<i>b</i>	1	0.905	0,0,0,0,0,0,1,1	0,0,0,0,1,1,1,1	0.37	1
9	<i>g</i>	0.905	1	0,0,0,0,0,0,10,9	0,0,1,1,0,0,1,1	0.41	0.79
10	<i>b</i>	0.619	0.381	2,1,0,0,1,1,4,1	4,3,0,0,1,1,3,1	0.3	0.36
10	<i>g</i>	0.381	0.619	0,0,3,2,0,0,0,0	2,1,3,2,0,0,3,1	0.42	0.89
11	<i>b</i>	0.476	0.476	0,0,3,1,4,3,0,0	1,1,3,2,2,1,0,0	0.43	0.48
11	<i>g</i>	0.476	0.476	2,1,2,1,3,1,1,1	0,0,0,0,3,1,1,1	0.86	0.14
12	<i>b</i>	0.714	0.762	0,0,1,1,0,0,3,2	1,1,1,1,3,2,2,1	0.16	0.95
12	<i>g</i>	0.762	0.714	0,0,1,1,3,2,3,2	1,1,1,1,2,1,1,1	0.72	0.82
13	<i>b</i>	0.238	0.429	0,0,5,2,0,0,0,0	0,0,2,1,0,0,2,1	0.55	0.36
13	<i>g</i>	0.429	0.238	0,0,0,0,5,4,0,0	5,2,1,1,2,1,2,1	0.22	0.88
14	<i>b</i>	0.857	0.381	1,1,1,1,1,1,5,4	1,1,0,0,7,5,1,1	0.98	0.62
14	<i>g</i>	0.381	0.857	0,0,3,2,0,0,0,0	0,0,7,4,0,0,1,1	0.38	0.11
15	<i>b</i>	0.476	0.952	0,0,0,0,0,0,5,4	0,0,3,1,0,0,1,1	0.05	0.11
15	<i>g</i>	0.952	0.476	0,0,0,0,1,1,5,4	0,0,1,1,1,1,1,1	0.15	0.96

Average of the P-Values 0.411 0.59
Number of Rejections 4 2

Total Number of Double-Rejection 4

=Rejection; less than or equal to 0.05"

Table 6.2 Row 1): Independence Tests for ARS (T)

Detailed results of the Independence test

Pair	Role in round 31	$p_d^{30 \times 50}$	$q_d^{30 \times 50}$	$L_i^P(T_O)$	$L_i^P(T_E)$	P-Value (T_O)	P-Value (T_E)
1	<i>b</i>	0.476	0.571	0,0,1,1,0,0,0,0	0,0,0,0,0,0,0,0	0.01	0.02
1	<i>g</i>	0.571	0.476	0,0,0,0,10,1,0,0	0,0,1,1,1,1,1,1	0	0.04
2	<i>b</i>	0.524	0.381	8,7,0,0,1,1,1,1	0,0,1,1,0,0,0,0	0.04	0
2	<i>g</i>	0.381	0.524	2,1,1,1,0,0,1,1	0,0,0,0,2,1,0,0	0.04	0.5
3	<i>b</i>	0.905	1	0,0,1,1,0,0,9,8	0,0,0,0,0,0,10,9	1	0.41
3	<i>g</i>	1	0.905	0,0,0,0,1,1,1,1	0,0,0,0,0,0,1,1	1	0.37
4	<i>b</i>	0.619	0.429	1,1,1,1,1,1,1,1	0,0,0,0,8,1,2,1	0.4	0.02
4	<i>g</i>	0.429	0.619	2,1,0,0,0,0,0,0	0,0,4,3,0,0,2,1	0.39	0.55
5	<i>b</i>	0.476	0.619	0,0,3,2,1,1,1,1	0,0,2,1,0,0,4,3	0.06	0.51
5	<i>g</i>	0.619	0.476	1,1,1,1,3,2,3,1	2,1,2,1,1,1,2,1	0.77	0.94
6	<i>b</i>	0.333	0.571	3,2,0,0,1,1,0,0	2,1,5,1,3,2,0,0	0.07	0.71
6	<i>g</i>	0.571	0.333	3,1,0,0,1,1,3,2	2,1,3,1,5,4,0,0	0.44	0.7
7	<i>b</i>	0.524	0.667	0,0,2,1,1,1,4,3	1,1,4,3,0,0,4,1	0.52	0.29
7	<i>g</i>	0.667	0.524	3,2,1,1,1,1,2,1	1,1,0,0,4,3,2,1	0.88	0.46
8	<i>b</i>	0.524	0.476	0,0,1,1,0,0,0,0	0,0,0,0,0,0,0,0	0	0
8	<i>g</i>	0.476	0.524	0,0,0,0,0,0,0,0	0,0,1,1,0,0,0,0	0.02	0.01
9	<i>b</i>	0.429	0.714	0,0,5,1,2,1,3,2	1,1,3,1,0,0,3,1	0.87	0.48
9	<i>g</i>	0.714	0.429	0,0,2,1,5,2,1,1	3,1,1,1,1,1,1,1	0.26	0.67
10	<i>b</i>	0.571	0.619	1,1,2,1,1,1,5,2	4,3,1,1,0,0,2,1	0.74	0.52
10	<i>g</i>	0.619	0.571	2,1,1,1,2,1,5,3	4,3,1,1,0,0,4,3	0.97	0.44
11	<i>b</i>	0.667	0.714	1,1,1,1,1,1,2,1	0,0,0,0,2,1,3,2	0.8	0.19
11	<i>g</i>	0.714	0.667	0,0,1,1,2,1,4,3	0,0,1,1,1,1,6,5	0.59	0.37
12	<i>b</i>	0.524	0.476	0,0,1,1,0,0,0,0	0,0,0,0,0,0,0,0	0	0
12	<i>g</i>	0.476	0.524	0,0,0,0,0,0,0,0	0,0,1,1,0,0,0,0	0.02	0.01
13	<i>b</i>	0.571	0.762	2,1,4,3,0,0,4,3	0,0,2,1,1,1,5,1	0.85	0.46
13	<i>g</i>	0.762	0.571	2,1,0,0,4,3,4,3	1,1,1,1,1,1,5,3	0.64	0.83
14	<i>b</i>	0.476	0.524	1,1,1,1,0,0,0,0	2,1,0,0,0,0,0,0	0.01	0.21
14	<i>g</i>	0.524	0.476	1,1,0,0,8,1,0,0	2,1,1,1,0,0,1,1	0.01	0.18

Average of the P-Values 0.407 0.353
 Number of Rejections 10 9

Total Number of Double-Rejection 11

"=Rejection; less than or equal to 0.05"

Table 6.2 Row 2): Independence Tests for ARS (QS1)**Detailed results of the Independence test--Allowing Role Dependence**

Pair	Role in round 31	$(p_{d,b}, p_{d,g})^{31 \times 50}$	$(p_{d,b}, p_{d,g})^{30 \times 49}$	$L_i^P(T_O)$	$L_i^P(T'_E)$	P-Value (T_O)	P-Value (T'_E)
1	<i>b</i>	0.4, 0.4	0.4, 0.4	3,1,3,1,0,0,2,1	0,0,3,2,0,0,3,2	0.98	0.53
1	<i>g</i>	0.7, 0.7	0.6, 0.7	0,0,0,0,1,1,1,1	0,0,1,1,1,1,1,1	0.03	0.08
2	<i>b</i>	0.6, 0.4	0.6, 0.5	0,0,2,1,0,0,4,3	4,1,1,1,0,0,1,1	0.42	0.08
2	<i>g</i>	0.4, 0.6	0.5, 0.6	0,0,0,0,1,1,2,1	2,1,1,1,1,1,2,1	0.24	0.72
3	<i>b</i>	0.4, 0.7	0.4, 0.7	4,1,1,1,1,1,1,1	3,1,0,0,3,1,2,1	0.12	0.64
3	<i>g</i>	0.3, 0.4	0.4, 0.4	0,0,0,0,2,1,1,1	1,1,3,1,0,0,0,0	0.13	0.21
4	<i>b</i>	0.5, 0.8	0.5, 0.7	1,1,1,1,0,0,4,3	0,0,3,2,4,1,3,2	0.36	0.6
4	<i>g</i>	0.5, 0.8	0.6, 0.8	0,0,1,1,4,1,4,3	0,0,1,1,1,1,3,1	0.61	0.16
5	<i>b</i>	1, 1	1, 1	0,0,0,0,1,1,1,1	0,0,0,0,1,1,1,1	1	1
5	<i>g</i>	0.6, 0.6	0.6, 0.6	0,0,4,1,0,0,6,5	0,0,4,1,0,0,6,5	0.23	0.23
6	<i>b</i>	0.9, 1	0.9, 0.9	0,0,1,1,1,1,1,1	0,0,0,0,1,1,1,1	0.85	0.32
6	<i>g</i>	0.3, 0.5	0.4, 0.5	0,0,0,0,0,0,4,3	0,0,2,1,1,1,3,1	0.19	0.44
7	<i>b</i>	0.8, 0.9	0.8, 0.9	0,0,2,1,1,1,1,1	0,0,1,1,1,1,4,3	0.52	0.86
7	<i>g</i>	0.9, 0.9	0.9, 0.9	0,0,1,1,1,1,7,6	0,0,1,1,1,1,8,7	0.9	0.98
8	<i>b</i>	0, 0.7	0, 0.6	6,5,2,1,0,0,0,0	0,0,0,0,0,0,0,0	0.65	1
8	<i>g</i>	0.6, 0.4	0.5, 0.4	2,1,0,0,4,3,0,0	0,0,0,0,3,2,1,1	0.59	0.15
9	<i>b</i>	0.9, 0.8	0.9, 0.8	0,0,1,1,1,1,5,3	0,0,1,1,1,1,7,6	0.63	0.85
9	<i>g</i>	0.9, 0.6	0.9, 0.6	0,0,1,1,0,0,1,1	0,0,0,0,1,1,7,4	0.15	0.5
10	<i>b</i>	0.3, 0.6	0.3, 0.7	0,0,7,5,0,0,2,1	0,0,3,2,0,0,5,1	0.74	0.52
10	<i>g</i>	0.7, 0.9	0.8, 0.9	0,0,1,1,7,4,1,1	0,0,1,1,1,1,5,4	0.76	0.7
11	<i>b</i>	0.1, 0.9	0.1, 0.9	9,8,0,0,0,0,1,1	0,0,1,1,0,0,0,0	0.64	0.88
11	<i>g</i>	0.5, 0.1	0.5, 0.1	9,5,0,0,0,0,0,0	0,0,0,0,1,1,0,0	0.75	0.38
12	<i>b</i>	0.6, 0.9	0.6, 0.9	0,0,4,3,1,1,1,1	0,0,0,0,4,3,5,3	0.49	0.42
12	<i>g</i>	0.6, 0.8	0.5, 0.8	0,0,1,1,2,1,2,1	1,1,2,1,0,0,1,1	0.56	0.62
13	<i>b</i>	1, 0.875	1, 0.875	0,0,0,0,5,3,2,1	0,0,1,1,0,0,1,1	0.07	0.33
13	<i>g</i>	0.778, 0.286	0.778, 0.286	0,0,5,4,0,0,0,0	0,0,0,0,0,0,3,1	0.77	0.28
14	<i>b</i>	1, 0	1, 0	0,0,0,0,0,0,0,0	0,0,1,1,0,0,0,0	1	1
14	<i>g</i>	1, 0	1, 0	0,0,1,1,0,0,0,0	0,0,0,0,0,0,0,0	1	1

Average of the P-Values 0.549
Number of Rejections 1 0

Total Number of Double-Rejection 1

"=Rejection; less than or equal to 0.05"

Table 6.2 Row 2): Independence Tests for ARS (QS2)**Detailed results of the Independence test--Allowing Role Dependence**

Pair	Role in round 31	$(p_{d,b}, p_{d,g})^{31 \times 50}$	$(p_{d,b}, p_{d,g})^{30 \times 49}$	$L_i^P(T_O)$	$L_i^P(T'_E)$	P-Value (T_O)	P-Value (T'_E)
1	<i>b</i>	0.8, 0.6	0.8, 0.6	2,1,0,0,2,1,1,1	0,0,1,1,3,1,1,1	0.65	0.16
1	<i>g</i>	0.8, 0.2	0.7, 0.2	2,1,1,1,0,0,2,1	0,0,3,1,4,1,0,0	0.84	0.59
2	<i>b</i>	0.1, 0.5	0.1, 0.5	7,3,2,1,0,0,1,1	0,0,0,0,0,0,3,1	0.26	0.71
2	<i>g</i>	0.4, 0.3	0.4, 0.3	7,2,0,0,1,1,0,0	4,1,0,0,1,1,3,1	0.27	0.3
3	<i>b</i>	0.6, 0.5	0.6, 0.6	3,1,0,0,1,1,2,1	2,1,2,1,5,4,0,0	0.46	0.76
3	<i>g</i>	0.3, 0.5	0.3, 0.5	1,1,0,0,0,0,0,0	2,1,5,2,1,1,0,0	0.05	0.49
4	<i>b</i>	0.5, 0.4	0.5, 0.5	0,0,0,0,1,1,0,0	1,1,0,0,5,1,0,0	0.01	0.05
4	<i>g</i>	0.1, 0.1	0.1, 0.1	0,0,0,0,0,0,1,1	0,0,5,1,0,0,0,0	0.06	0.87
5	<i>b</i>	0.1, 0.1	0.1, 0	0,0,0,0,1,1,0,0	10,1,0,0,0,0,0,0	0.03	0.65
5	<i>g</i>	0, 0	0, 0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
6	<i>b</i>	0, 0	0, 0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
6	<i>g</i>	0, 0	0, 0	0,0,0,0,0,0,0,0	0,0,0,0,0,0,0,0	1	1
7	<i>b</i>	0, 0.9	0, 0.9	10,9,0,0,0,0,0,0	0,0,0,0,0,0,0,0	0.74	1
7	<i>g</i>	0.4, 0	0.4, 0	5,2,0,0,0,0,0,0	0,0,0,0,0,0,0,0	0.62	1
8	<i>b</i>	1, 1	1, 1	0,0,0,0,0,0,1,1	0,0,0,0,1,1,1,1	1	1
8	<i>g</i>	0.9, 1	0.8, 1	0,0,0,0,0,0,10,9	0,0,1,1,0,0,1,1	0.65	1
9	<i>b</i>	0.7, 0.5	0.7, 0.6	2,1,0,0,1,1,4,1	4,3,0,0,1,1,3,1	0.41	0.4
9	<i>g</i>	0.2, 0.5	0.3, 0.5	0,0,3,2,0,0,0,0	2,1,3,2,0,0,3,1	0.45	0.84
10	<i>b</i>	0.5, 0.4	0.5, 0.5	0,0,3,1,4,3,0,0	1,1,3,2,2,1,0,0	0.37	0.62
10	<i>g</i>	0.5, 0.4	0.6, 0.4	2,1,2,1,3,1,1,1	0,0,0,0,3,1,1,1	0.72	0.15
11	<i>b</i>	0.7, 0.7	0.7, 0.7	0,0,1,1,0,0,3,2	1,1,1,1,3,2,2,1	0.34	0.92
11	<i>g</i>	0.7, 0.9	0.6, 0.9	0,0,1,1,3,2,3,2	1,1,1,1,2,1,1,1	0.62	0.85
12	<i>b</i>	0.2, 0.2	0.2, 0.3	0,0,5,2,0,0,0,0	0,0,2,1,0,0,2,1	0.6	0.73
12	<i>g</i>	0.4, 0.5	0.4, 0.5	0,0,0,0,5,4,0,0	5,2,1,1,2,1,2,1	0.05	0.75
13	<i>b</i>	0.8, 0.9	0.8, 0.9	1,1,1,1,1,1,5,4	1,1,0,0,7,5,1,1	0.99	0.77
13	<i>g</i>	0.2, 0.6	0.2, 0.6	0,0,3,2,0,0,0,0	0,0,7,4,0,0,1,1	0.52	0.42
14	<i>b</i>	0.5, 0.4	0.5, 0.4	0,0,0,0,0,0,5,4	0,0,3,1,0,0,1,1	0.04	0.23
14	<i>g</i>	0.9, 1	0.9, 1	0,0,0,0,1,1,5,4	0,0,1,1,1,1,1,1	0.46	0.86

Average of the P-Values 0.508
Number of Rejections 5 1

Total Number of Double-Rejection 5

=Rejection; less than or equal to 0.05"

Table 6.2 Row 2): Independence Tests for ARS (T)**Detailed results of the Independence test--Allowing Role Dependence**

Pair	Role in round 31	$(p_{d,b}, p_{d,g})^{31 \times 50}$	$(p_{d,b}, p_{d,g})^{30 \times 49}$	$L_i^P(T_O)$	$L_i^P(T'_E)$	P-Value (T_O)	P-Value (T'_E)
1	<i>b</i>	0, 1	0, 0.9	0,0,1,1,0,0,0,0	0,0,0,0,0,0,0,0	1	1
1	<i>g</i>	0.1, 1	0.2, 1	0,0,0,0,10,1,0,0	0,0,1,1,1,1,1,1	0.74	0.57
2	<i>b</i>	0.2, 0.9	0.2, 0.8	8,7,0,0,1,1,1,1	0,0,1,1,0,0,0,0	0.28	0.54
2	<i>g</i>	0.6, 0.1	0.7, 0.1	2,1,1,1,0,0,1,1	0,0,0,0,2,1,0,0	0.12	0.82
3	<i>b</i>	0.9, 0.9	0.9, 1	0,0,1,1,0,0,9,8	0,0,0,0,0,0,10,9	1	0.65
3	<i>g</i>	1, 1	1, 1	0,0,0,0,1,1,1,1	0,0,0,0,0,0,1,1	1	1
4	<i>b</i>	0.2, 1	0.2, 1	1,1,1,1,1,1,1,1	0,0,0,0,8,1,2,1	0.32	0.8
4	<i>g</i>	0.1, 0.7	0.2, 0.7	2,1,0,0,0,0,0,0	0,0,4,3,0,0,2,1	0.82	0.7
5	<i>b</i>	0.4, 0.6	0.4, 0.6	0,0,3,2,1,1,1,1	0,0,2,1,0,0,4,3	0.12	0.42
5	<i>g</i>	0.7, 0.6	0.6, 0.6	1,1,1,1,3,2,3,1	2,1,2,1,1,1,2,1	0.74	0.95
6	<i>b</i>	0.4, 0.3	0.4, 0.3	3,2,0,0,1,1,0,0	2,1,5,1,3,2,0,0	0.06	0.69
6	<i>g</i>	0.6, 0.6	0.5, 0.6	3,1,0,0,1,1,3,2	2,1,3,1,5,4,0,0	0.4	0.81
7	<i>b</i>	0.5, 0.5	0.5, 0.5	0,0,2,1,1,1,4,3	1,1,4,3,0,0,4,1	0.41	0.32
7	<i>g</i>	0.7, 0.6	0.8, 0.6	3,2,1,1,1,1,2,1	1,1,0,0,4,3,2,1	0.86	0.67
8	<i>b</i>	0, 1	0, 1	0,0,1,1,0,0,0,0	0,0,0,0,0,0,0,0	1	1
8	<i>g</i>	0, 1	0, 1	0,0,0,0,0,0,0,0	0,0,1,1,0,0,0,0	1	1
9	<i>b</i>	0.5, 0.4	0.5, 0.4	0,0,5,1,2,1,3,2	1,1,3,1,0,0,3,1	0.89	0.54
9	<i>g</i>	0.6, 0.8	0.6, 0.8	0,0,2,1,5,2,1,1	3,1,1,1,1,1,1,1	0.48	0.47
10	<i>b</i>	0.6, 0.6	0.6, 0.5	1,1,2,1,1,1,5,2	4,3,1,1,0,0,2,1	0.85	0.44
10	<i>g</i>	0.6, 0.7	0.5, 0.7	2,1,1,1,2,1,5,3	4,3,1,1,0,0,4,3	0.97	0.38
11	<i>b</i>	0.5, 0.8	0.5, 0.8	1,1,1,1,1,1,2,1	0,0,0,0,2,1,3,2	0.61	0.4
11	<i>g</i>	0.6, 0.8	0.7, 0.8	0,0,1,1,2,1,4,3	0,0,1,1,1,1,6,5	0.67	0.46
12	<i>b</i>	0, 1	0, 1	0,0,1,1,0,0,0,0	0,0,0,0,0,0,0,0	1	1
12	<i>g</i>	0, 1	0, 1	0,0,0,0,0,0,0,0	0,0,1,1,0,0,0,0	1	1
13	<i>b</i>	0.4, 0.7	0.4, 0.7	2,1,4,3,0,0,4,3	0,0,2,1,1,1,5,1	0.9	0.62
13	<i>g</i>	0.7, 0.8	0.7, 0.8	2,1,0,0,4,3,4,3	1,1,1,1,1,1,5,3	0.65	0.82
14	<i>b</i>	0.1, 0.9	0.1, 0.8	1,1,1,1,0,0,0,0	2,1,0,0,0,0,0,0	0.52	0.8
14	<i>g</i>	0.2, 0.9	0.2, 0.9	1,1,0,0,8,1,0,0	2,1,1,1,0,0,1,1	0.83	0.64

Average of the P-Values 0.687 0.697
Number of Rejections 0 0

Total Number of Double-Rejection 0

=Rejection; less than or equal to 0.05"