

**Supplementary information file D.** The modified hesitant fuzzy linguistic preference relation matrix  $\mathbf{R}_{h,g}$ , the expected 2-tuple linguistic preference relation  $\mathbf{ER}_{h,g}$ , and the additive consistent linguistic preference relation  $\mathbf{CR}_{h,g}$  of respondent  $h$  ( $h = 15, 21, 22, 25, 30$ ) in the  $g$ th consistency improving iteration.

### Respondent No.15

#### Iteration 1

$$\mathbf{R}_{15,1} = \begin{pmatrix} \{s_0(1.00)\} & \{s_3(1.00)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} & \{s_1(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_3(1.00)\} & \{s_{-3}(0.30), s_{-2}(0.40), s_{-1}(0.30)\} \\ \{s_{-3}(1.00)\} & \{s_0(1.00)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-1}(1.00)\} & \{s_1(1.00)\} & \{s_{-4}(0.10), s_{-3}(0.20), s_{-2}(0.30), s_{-1}(0.40)\} \\ \{s_1(0.43), s_2(0.57)\} & \{s_1(0.43), s_2(0.57)\} & \{s_0(1.00)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_2(1.00)\} \\ \{s_{-1}(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_1(0.22), s_2(0.33), s_3(0.45)\} & \{s_0(1.00)\} & \{s_1(0.43), s_2(0.57)\} & \{s_{-1}(1.00)\} & \{s_1(0.43), s_2(0.57)\} \\ \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_1(1.00)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} & \{s_0(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} \\ \{s_{-3}(1.00)\} & \{s_{-1}(1.00)\} & \{s_1(0.22), s_2(0.33), s_3(0.44)\} & \{s_1(1.00)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_0(1.00)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} \\ \{s_1(0.30), s_2(0.40), s_3(0.30)\} & \{s_1(0.40), s_2(0.30), s_3(0.20), s_4(0.10)\} & \{s_2(1.00)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} & \{s_2(0.50), s_3(0.50)\} & \{s_1(0.43), s_2(0.57)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$\mathbf{ER}_{15,1} = \begin{pmatrix} (s_0, 0) & (s_3, 0) & (s_{-2}, 0.43) & (s_1, 0) & (s_3, -0.22) & (s_3, 0) & (s_{-2}, 0) \\ (s_{-3}, 0) & (s_0, 0) & (s_{-2}, 0.43) & (s_{-3}, 0.22) & (s_{-1}, 0) & (s_1, 0) & (s_{-2}, 0) \\ (s_2, -0.43) & (s_2, -0.43) & (s_0, 0) & (s_{-2}, -0.22) & (s_2, 0.22) & (s_{-2}, -0.22) & (s_{-2}, 0) \\ (s_{-1}, 0) & (s_3, -0.22) & (s_2, 0.22) & (s_0, 0) & (s_2, -0.43) & (s_{-1}, 0) & (s_2, -0.43) \\ (s_{-3}, 0.22) & (s_1, 0) & (s_{-2}, -0.22) & (s_{-2}, 0.43) & (s_0, 0) & (s_3, -0.22) & (s_{-3}, 0.50) \\ (s_{-3}, 0) & (s_{-1}, 0) & (s_2, 0.22) & (s_1, 0) & (s_{-3}, 0.22) & (s_0, 0) & (s_{-2}, 0.43) \\ (s_2, 0) & (s_2, 0) & (s_2, 0) & (s_{-2}, 0.43) & (s_3, -0.50) & (s_2, -0.43) & (s_0, 0) \end{pmatrix}$$

$$\mathbf{C}_{R_{15}, 1} = \begin{pmatrix} (s_0, 0) & (s_2, 0.22) & (s_1, 0.04) & (s_0, 0.01) & (s_2, -0.36) & (s_2, -0.38) & (s_0, -0.33) \\ (s_{-2}, -0.22) & (s_0, 0) & (s_{-1}, -0.18) & (s_{-2}, -0.21) & (s_{-1}, 0.42) & (s_{-1}, 0.40) & (s_{-3}, 0.45) \\ (s_{-1}, -0.04) & (s_1, 0.18) & (s_0, 0) & (s_{-1}, -0.03) & (s_1, -0.40) & (s_1, -0.42) & (s_{-1}, -0.37) \\ (s_0, -0.01) & (s_2, 0.21) & (s_1, 0.03) & (s_0, 0) & (s_2, -0.37) & (s_2, -0.39) & (s_0, -0.34) \\ (s_{-2}, 0.36) & (s_1, -0.42) & (s_{-1}, 0.40) & (s_{-2}, 0.37) & (s_0, 0) & (s_0, -0.02) & (s_{-2}, 0.03) \\ (s_{-2}, 0.38) & (s_1, -0.40) & (s_{-1}, 0.42) & (s_{-2}, 0.39) & (s_0, 0.02) & (s_0, 0) & (s_{-2}, 0.05) \\ (s_0, 0.33) & (s_3, -0.45) & (s_1, 0.37) & (s_0, 0.34) & (s_2, -0.03) & (s_2, -0.05) & (s_0, 0) \end{pmatrix}$$

**Iteration 2**

$$\mathbf{R}_{15, 2} = \begin{pmatrix} \{s_0(1.00)\} & \{s_3(1.00)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} & \{s_1(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_3(1.00)\} & \{s_{-3}(0.30), s_{-2}(0.40), s_{-1}(0.30)\} \\ \{s_{-3}(1.00)\} & \{s_0(1.00)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-1}(1.00)\} & \{s_1(1.00)\} & \{s_{-4}(0.10), s_{-3}(0.20), s_{-2}(0.30), s_{-1}(0.40)\} \\ \{s_1(0.43), s_2(0.57)\} & \{s_1(0.43), s_2(0.57)\} & \{s_0(1.00)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_2(1.00)\} \\ \{s_{-1}(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_1(0.22), s_2(0.33), s_3(0.45)\} & \{s_0(1.00)\} & \{s_1(0.43), s_2(0.57)\} & \{s_{-1}(1.00)\} & \{s_1(0.43), s_2(0.57)\} \\ \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_1(1.00)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} & \{s_0(1.00)\} & \{s_1(1.00)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} \\ \{s_{-3}(1.00)\} & \{s_{-1}(1.00)\} & \{s_1(0.22), s_2(0.33), s_3(0.44)\} & \{s_1(1.00)\} & \{s_{-1}(1.00)\} & \{s_0(1.00)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} \\ \{s_1(0.30), s_2(0.40), s_3(0.30)\} & \{s_1(0.40), s_2(0.30), s_3(0.20), s_4(0.10)\} & \{s_2(1.00)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} & \{s_2(0.50), s_3(0.50)\} & \{s_1(0.43), s_2(0.57)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$\mathbf{E}_{R_{15}, 2} = \begin{pmatrix} (s_0, 0) & (s_3, 0) & (s_{-2}, 0.43) & (s_1, 0) & (s_3, -0.22) & (s_3, 0) & (s_{-2}, 0) \\ (s_{-3}, 0) & (s_0, 0) & (s_{-2}, 0.43) & (s_{-3}, 0.22) & (s_{-1}, 0) & (s_1, 0) & (s_{-2}, 0) \\ (s_2, -0.43) & (s_2, -0.43) & (s_0, 0) & (s_{-2}, -0.22) & (s_2, 0.22) & (s_{-2}, -0.22) & (s_{-2}, 0) \\ (s_{-1}, 0) & (s_3, -0.22) & (s_2, 0.22) & (s_0, 0) & (s_2, -0.43) & (s_{-1}, 0) & (s_2, -0.43) \\ (s_{-3}, 0.22) & (s_1, 0) & (s_{-2}, -0.22) & (s_{-2}, 0.43) & (s_0, 0) & (s_1, 0) & (s_{-3}, 0.50) \\ (s_{-3}, 0) & (s_{-1}, 0) & (s_2, 0.22) & (s_1, 0) & (s_{-1}, 0) & (s_0, 0) & (s_{-2}, 0.43) \\ (s_2, 0) & (s_2, 0) & (s_2, 0) & (s_{-2}, 0.43) & (s_3, -0.50) & (s_2, -0.43) & (s_0, 0) \end{pmatrix}$$

$$C_{R_{15,2}} = \begin{pmatrix} (s_0, 0) & (s_2, 0.22) & (s_1, 0.04) & (s_0, 0.01) & (s_2, -0.10) & (s_1, 0.37) & (s_0, -0.33) \\ (s_{-2}, -0.22) & (s_0, 0) & (s_{-1}, -0.18) & (s_{-2}, -0.21) & (s_0, -0.33) & (s_{-1}, 0.14) & (s_{-3}, 0.45) \\ (s_{-1}, -0.04) & (s_1, 0.18) & (s_0, 0) & (s_{-1}, -0.03) & (s_1, -0.14) & (s_0, 0.32) & (s_{-1}, -0.37) \\ (s_0, -0.01) & (s_2, 0.21) & (s_1, 0.03) & (s_0, 0) & (s_2, -0.11) & (s_1, 0.36) & (s_0, -0.34) \\ (s_{-2}, 0.10) & (s_0, 0.33) & (s_{-1}, 0.14) & (s_{-2}, 0.11) & (s_0, 0) & (s_{-1}, 0.47) & (s_{-2}, -0.22) \\ (s_{-1}, -0.37) & (s_1, -0.14) & (s_0, -0.32) & (s_{-1}, -0.36) & (s_1, -0.47) & (s_0, 0) & (s_{-2}, 0.31) \\ (s_0, 0.33) & (s_3, -0.45) & (s_1, 0.37) & (s_0, 0.34) & (s_2, 0.22) & (s_2, -0.31) & (s_0, 0) \end{pmatrix}$$

**Respondent No.21**

**Iteration 1**

$$R_{21,1} = \begin{pmatrix} \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_0(1.00)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_3(0.57), s_4(0.43)\} & \{s_1(0.22), s_2(0.33), s_3(0.44)\} & \{s_0(1.00)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_{-4}(1.00)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_0(1.00)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_{-3}(0.44), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_0(1.00)\} & \{s_4(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$E_{R_{21,1}} = \begin{pmatrix} (s_0, 0) & (s_3, -0.50) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_3, -0.50) & (s_{-3}, -0.43) & (s_{-3}, 0.22) \\ (s_{-3}, 0.50) & (s_0, 0) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_3, 0.43) & (s_2, 0.22) & (s_0, 0) \\ (s_3, 0.43) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_{-4}, 0) \\ (s_3, 0.43) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \\ (s_{-3}, 0.50) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_0, 0) & (s_{-3}, -0.43) & (s_{-3}, -0.43) \\ (s_3, 0.43) & (s_{-2}, -0.22) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \\ (s_3, -0.22) & (s_0, 0) & (s_4, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \end{pmatrix}$$

Iteration 2

$$\mathbf{C}_{R_{21,1}} = \begin{pmatrix} (s_0, 0) & (s_{-1}, 0.38) & (s_{-2}, -0.05) & (s_{-3}, 0.38) & (s_2, -0.35) & (s_{-2}, 0.19) & (s_{-3}, 0.39) \\ (s_1, -0.38) & (s_0, 0) & (s_{-1}, -0.43) & (s_{-2}, 0) & (s_2, 0.28) & (s_{-1}, -0.19) & (s_{-2}, 0.01) \\ (s_2, 0.05) & (s_1, 0.43) & (s_0, 0) & (s_{-1}, 0.43) & (s_4, -0.30) & (s_0, 0.24) & (s_{-1}, 0.44) \\ (s_3, -0.38) & (s_2, 0) & (s_1, -0.43) & (s_0, 0) & (s_4, 0) & (s_1, -0.19) & (s_0, 0.01) \\ (s_{-2}, 0.35) & (s_{-2}, -0.28) & (s_{-4}, 0.30) & (s_{-4}, 0) & (s_0, 0) & (s_{-3}, -0.47) & (s_{-4}, 0) \\ (s_2, -0.19) & (s_1, 0.19) & (s_0, -0.24) & (s_{-1}, 0.19) & (s_3, 0.47) & (s_0, 0) & (s_{-1}, 0.20) \\ (s_3, -0.39) & (s_2, -0.01) & (s_1, -0.44) & (s_0, -0.01) & (s_4, 0) & (s_1, -0.20) & (s_0, 0) \end{pmatrix}$$

$$\mathbf{R}_{21,2} = \begin{pmatrix} \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_0(1.00)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_3(0.57), s_4(0.43)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_0(1.00)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$\mathbf{E}_{R_{21,2}} = \begin{pmatrix} (s_0, 0) & (s_3, -0.50) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_3, -0.50) & (s_{-3}, -0.43) & (s_{-3}, 0.22) \\ (s_{-3}, 0.50) & (s_0, 0) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_3, 0.43) & (s_2, 0.22) & (s_0, 0) \\ (s_3, 0.43) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_{-3}, 0.50) \\ (s_3, 0.43) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \\ (s_{-3}, 0.50) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_0, 0) & (s_{-3}, -0.43) & (s_{-3}, -0.43) \\ (s_3, 0.43) & (s_{-2}, -0.22) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \\ (s_3, -0.22) & (s_0, 0) & (s_3, -0.50) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \end{pmatrix}$$

$$C_{R_{21,2}} = \begin{pmatrix} (s_0, 0) & (s_{-1}, 0.38) & (s_{-2}, -0.26) & (s_{-3}, 0.38) & (s_2, -0.35) & (s_{-2}, 0.19) & (s_{-2}, -0.40) \\ (s_1, -0.38) & (s_0, 0) & (s_{-2}, 0.36) & (s_{-2}, 0) & (s_2, 0.28) & (s_{-1}, -0.19) & (s_{-2}, 0.23) \\ (s_2, 0.26) & (s_2, -0.36) & (s_0, 0) & (s_0, -0.36) & (s_4, -0.08) & (s_0, 0.45) & (s_0, -0.13) \\ (s_3, -0.38) & (s_2, 0) & (s_0, 0.36) & (s_0, 0) & (s_4, 0) & (s_1, -0.19) & (s_0, 0.23) \\ (s_{-2}, 0.35) & (s_{-2}, -0.28) & (s_{-4}, 0.08) & (s_{-4}, 0) & (s_0, 0) & (s_{-3}, -0.47) & (s_{-4}, 0) \\ (s_2, -0.19) & (s_1, 0.19) & (s_0, -0.45) & (s_{-1}, 0.19) & (s_3, 0.47) & (s_0, 0) & (s_{-1}, 0.42) \\ (s_2, 0.40) & (s_2, -0.23) & (s_0, 0.13) & (s_0, -0.23) & (s_4, 0) & (s_1, -0.42) & (s_0, 0) \end{pmatrix}$$

Iteration 3

$$R_{21,3} = \begin{pmatrix} \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_0(1.00)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_3(0.57), s_4(0.43)\} & \{s_1(0.50), s_2(0.50)\} & \{s_0(1.00)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_0(1.00)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} \\ \{s_3(0.57), s_4(0.43)\} & \{s_2(0.50), s_{-1}(0.50)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_0(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$E_{R_{21,3}} = \begin{pmatrix} (s_0, 0) & (s_3, -0.50) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_3, -0.50) & (s_{-3}, -0.43) & (s_{-3}, 0.22) \\ (s_{-3}, 0.50) & (s_0, 0) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_3, 0.43) & (s_2, -0.50) & (s_0, 0) \\ (s_3, 0.43) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_{-3}, 0.50) \\ (s_3, 0.43) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \\ (s_{-3}, 0.50) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_{-3}, -0.43) & (s_0, 0) & (s_{-3}, -0.43) & (s_{-3}, -0.43) \\ (s_3, 0.43) & (s_{-2}, 0.50) & (s_0, 0) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \\ (s_3, -0.22) & (s_0, 0) & (s_3, -0.50) & (s_0, 0) & (s_3, 0.43) & (s_0, 0) & (s_0, 0) \end{pmatrix}$$

$$C_{R^{21}, 3} = \begin{pmatrix} (s_0, 0) & (s_{-1}, 0.48) & (s_{-2}, -0.26) & (s_{-3}, 0.38) & (s_2, -0.35) & (s_{-2}, 0.08) & (s_{-2}, -0.40) \\ (s_1, -0.48) & (s_0, 0) & (s_{-2}, 0.26) & (s_{-2}, 0) & (s_2, 0.17) & (s_{-1}, -0.40) & (s_{-2}, 0.12) \\ (s_2, 0.26) & (s_2, -0.26) & (s_0, 0) & (s_0, -0.36) & (s_4, -0.08) & (s_0, 0.35) & (s_0, -0.13) \\ (s_3, -0.38) & (s_2, 0.10) & (s_0, 0.36) & (s_0, 0) & (s_4, 0) & (s_1, -0.30) & (s_0, 0.23) \\ (s_{-2}, 0.35) & (s_{-2}, -0.17) & (s_{-4}, 0.08) & (s_{-4}, 0) & (s_0, 0) & (s_{-4}, 0.43) & (s_{-4}, 0) \\ (s_2, -0.08) & (s_1, 0.40) & (s_0, -0.35) & (s_{-1}, 0.30) & (s_4, -0.43) & (s_0, 0) & (s_0, -0.48) \\ (s_2, 0.40) & (s_2, -0.12) & (s_0, 0.13) & (s_0, -0.23) & (s_4, 0) & (s_0, 0.48) & (s_0, 0) \end{pmatrix}$$

## Respondent No.22

### Iteration 1

$$R_{22, 1} = \begin{pmatrix} \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_2(0.50), s_3(0.50)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_2(1.00)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_0(1.00)\} & \{s_{-1}(1.00)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_2(1.00)\} & \{s_3(0.57), s_4(0.43)\} & \{s_2(1.00)\} \\ \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_1(1.00)\} & \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_3(0.57), s_4(0.43)\} & \{s_1(0.22), s_2(0.33), s_3(0.44)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} \\ \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_0(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_2(0.50), s_3(0.50)\} & \{s_1(0.30), s_2(0.40), s_3(0.30)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_2(1.00)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_0(1.00)\} & \{s_2(1.00)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} \\ \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_2(1.00)\} & \{s_0(1.00)\} & \{s_{-1}(1.00)\} \\ \{s_2(1.00)\} & \{s_2(1.00)\} & \{s_1(0.43), s_2(0.57)\} & \{s_{-3}(0.30), s_{-2}(0.40), s_{-1}(0.30)\} & \{s_2(0.50), s_3(0.50)\} & \{s_1(1.00)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$E_{R^{22}, 1} = \begin{pmatrix} (s_0, 0) & (s_3, -0.50) & (s_{-3}, 0.22) & (s_{-3}, 0.22) & (s_3, -0.50) & (s_3, -0.22) & (s_2, 0) \\ (s_{-3}, 0.50) & (s_0, 0) & (s_{-1}, 0) & (s_{-3}, 0.50) & (s_{-2}, 0) & (s_3, 0.43) & (s_{-2}, 0) \\ (s_3, -0.22) & (s_1, 0) & (s_0, 0) & (s_3, -0.50) & (s_3, 0.43) & (s_2, 0.22) & (s_{-2}, 0.43) \\ (s_3, -0.22) & (s_3, -0.50) & (s_{-3}, 0.50) & (s_0, 0) & (s_3, -0.22) & (s_3, -0.50) & (s_2, 0) \\ (s_{-3}, 0.50) & (s_2, 0) & (s_{-3}, -0.43) & (s_{-3}, 0.22) & (s_0, 0) & (s_{-2}, 0) & (s_{-3}, 0.50) \\ (s_{-3}, 0.22) & (s_{-3}, -0.43) & (s_{-2}, -0.22) & (s_{-3}, 0.50) & (s_2, 0) & (s_0, 0) & (s_{-1}, 0) \\ (s_{-2}, 0) & (s_2, 0) & (s_2, -0.43) & (s_{-2}, 0) & (s_3, -0.50) & (s_1, 0) & (s_0, 0) \end{pmatrix}$$

$$\mathbf{CR}_{22,1} = \begin{pmatrix} (s_0, 0) & (s_2, -0.46) & (s_{-1}, 0.12) & (s_{-1}, 0.17) & (s_2, 0.20) & (s_2, 0.02) & (s_0, 0.16) \\ (s_{-2}, 0.46) & (s_0, 0) & (s_{-2}, -0.42) & (s_{-2}, -0.38) & (s_1, -0.34) & (s_0, 0.48) & (s_{-1}, -0.38) \\ (s_1, -0.12) & (s_2, 0.42) & (s_0, 0) & (s_0, 0.04) & (s_3, 0.08) & (s_3, -0.10) & (s_1, 0.04) \\ (s_1, -0.17) & (s_2, 0.38) & (s_0, -0.04) & (s_0, 0) & (s_3, 0.04) & (s_3, -0.15) & (s_1, 0) \\ (s_{-2}, -0.20) & (s_{-1}, 0.34) & (s_{-3}, -0.08) & (s_{-3}, -0.04) & (s_0, 0) & (s_0, -0.18) & (s_{-2}, -0.04) \\ (s_{-2}, -0.02) & (s_0, -0.48) & (s_{-3}, 0.10) & (s_{-3}, 0.15) & (s_0, 0.18) & (s_0, 0) & (s_{-2}, 0.14) \\ (s_0, -0.16) & (s_1, 0.38) & (s_{-1}, -0.04) & (s_{-1}, 0) & (s_2, 0.04) & (s_2, -0.14) & (s_0, 0) \end{pmatrix}$$

## Iteration 2

$$\mathbf{R}_{22,2} = \begin{pmatrix} \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_2(0.50), s_3(0.50)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_2(1.00)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_0(1.00)\} & \{s_{-1}(1.00)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_2(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_{-2}(1.00)\} \\ \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_1(1.00)\} & \{s_0(1.00)\} & \{s_2(0.50), s_3(0.50)\} & \{s_3(0.57), s_4(0.43)\} & \{s_1(0.22), s_2(0.33), s_3(0.44)\} & \{s_{-2}(0.57), s_{-1}(0.43)\} \\ \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_2(0.50), s_3(0.50)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_0(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_2(0.50), s_3(0.50)\} & \{s_1(0.30), s_2(0.40), s_3(0.30)\} \\ \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_2(1.00)\} & \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_0(1.00)\} & \{s_{-2}(1.00)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} \\ \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-3}(0.45), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_2(1.00)\} & \{s_0(1.00)\} & \{s_{-1}(1.00)\} \\ \{s_{-2}(1.00)\} & \{s_2(1.00)\} & \{s_1(0.43), s_2(0.57)\} & \{s_{-3}(0.30), s_{-2}(0.40), s_{-1}(0.30)\} & \{s_2(0.50), s_3(0.50)\} & \{s_1(1.00)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$ER_{22,2} = \begin{pmatrix} (s_0, 0) & (s_3, -0.50) & (s_{-3}, 0.22) & (s_{-3}, 0.22) & (s_3, -0.50) & (s_3, -0.22) & (s_2, 0) \\ (s_{-3}, 0.50) & (s_0, 0) & (s_{-1}, 0) & (s_{-3}, 0.50) & (s_{-2}, 0) & (s_3, -0.22) & (s_{-2}, 0) \\ (s_3, -0.22) & (s_1, 0) & (s_0, 0) & (s_3, -0.50) & (s_3, 0.43) & (s_2, 0.22) & (s_{-2}, 0.43) \\ (s_3, -0.22) & (s_3, -0.50) & (s_{-3}, 0.50) & (s_0, 0) & (s_3, -0.22) & (s_3, -0.50) & (s_2, 0) \\ (s_{-3}, 0.50) & (s_2, 0) & (s_{-3}, -0.43) & (s_{-3}, 0.22) & (s_0, 0) & (s_{-2}, 0) & (s_{-3}, 0.50) \\ (s_{-3}, 0.22) & (s_{-3}, 0.22) & (s_{-2}, -0.22) & (s_{-3}, 0.50) & (s_2, 0) & (s_0, 0) & (s_{-1}, 0) \\ (s_{-2}, 0) & (s_2, 0) & (s_2, -0.43) & (s_{-2}, 0) & (s_3, -0.50) & (s_1, 0) & (s_0, 0) \end{pmatrix}$$

$$CR_{22,2} = \begin{pmatrix} (s_0, 0) & (s_2, -0.37) & (s_{-1}, 0.12) & (s_{-1}, 0.17) & (s_2, 0.20) & (s_2, -0.07) & (s_0, 0.16) \\ (s_{-2}, 0.37) & (s_0, 0) & (s_{-3}, 0.49) & (s_{-2}, -0.47) & (s_1, -0.43) & (s_0, 0.29) & (s_{-1}, -0.47) \\ (s_1, -0.12) & (s_3, -0.49) & (s_0, 0) & (s_0, 0.04) & (s_3, 0.08) & (s_3, -0.20) & (s_1, 0.04) \\ (s_1, -0.17) & (s_2, 0.47) & (s_0, -0.04) & (s_0, 0) & (s_3, 0.04) & (s_3, -0.24) & (s_1, 0) \\ (s_{-2}, -0.20) & (s_{-1}, 0.43) & (s_{-3}, -0.08) & (s_{-3}, -0.04) & (s_0, 0) & (s_0, -0.28) & (s_{-2}, -0.04) \\ (s_{-2}, 0.07) & (s_0, -0.29) & (s_{-3}, 0.20) & (s_{-3}, 0.24) & (s_0, 0.28) & (s_0, 0) & (s_{-2}, 0.24) \\ (s_0, -0.16) & (s_1, 0.47) & (s_{-1}, -0.04) & (s_{-1}, 0) & (s_2, 0.04) & (s_2, -0.24) & (s_0, 0) \end{pmatrix}$$

### Iteration 3

$$R_{22,3} = \begin{pmatrix} \{s_0 (1.00)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_2 (1.00)\} \\ \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_0 (1.00)\} & \{s_{-1} (1.00)\} & \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_2 (1.00)\} & \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_2 (1.00)\} \\ \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_1 (1.00)\} & \{s_0 (1.00)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_3 (0.57), s_4 (0.43)\} & \{s_1 (0.22), s_2 (0.33), s_3 (0.44)\} & \{s_{-1} (1.00)\} \\ \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_0 (1.00)\} & \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_1 (0.30), s_2 (0.40), s_3 (0.30)\} \\ \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_2 (1.00)\} & \{s_{-4} (0.43), s_{-3} (0.57)\} & \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_0 (1.00)\} & \{s_2 (1.00)\} & \{s_{-3} (0.50), s_{-2} (0.50)\} \\ \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_{-3} (0.45), s_{-2} (0.33), s_{-1} (0.22)\} & \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_2 (1.00)\} & \{s_0 (1.00)\} & \{s_{-1} (1.00)\} \\ \{s_2 (1.00)\} & \{s_2 (1.00)\} & \{s_1 (1.00)\} & \{s_{-3} (0.30), s_{-2} (0.40), s_{-1} (0.30)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_1 (1.00)\} & \{s_0 (1.00)\} \end{pmatrix}$$



$$\mathbf{ER}_{22,3} = \begin{pmatrix} (s_0, 0) & (s_3, -0.50) & (s_{-3}, 0.22) & (s_{-3}, 0.22) & (s_3, -0.50) & (s_3, -0.22) & (s_2, 0) \\ (s_{-3}, 0.50) & (s_0, 0) & (s_{-1}, 0) & (s_{-3}, 0.50) & (s_{-2}, 0) & (s_3, -0.22) & (s_{-2}, 0) \\ (s_3, -0.22) & (s_1, 0) & (s_0, 0) & (s_3, -0.50) & (s_3, 0.43) & (s_2, 0.22) & (s_{-1}, 0) \\ (s_3, -0.22) & (s_3, -0.50) & (s_{-3}, 0.50) & (s_0, 0) & (s_3, -0.22) & (s_3, -0.50) & (s_2, 0) \\ (s_{-3}, 0.50) & (s_2, 0) & (s_{-3}, -0.43) & (s_{-3}, 0.22) & (s_0, 0) & (s_{-2}, 0) & (s_{-3}, 0.50) \\ (s_{-3}, 0.22) & (s_{-3}, 0.22) & (s_{-2}, -0.22) & (s_{-3}, 0.50) & (s_2, 0) & (s_0, 0) & (s_{-1}, 0) \\ (s_{-2}, 0) & (s_2, 0) & (s_1, 0) & (s_{-2}, 0) & (s_3, -0.50) & (s_1, 0) & (s_0, 0) \end{pmatrix}$$

$$\mathbf{CR}_{22,3} = \begin{pmatrix} (s_0, 0) & (s_2, -0.37) & (s_{-1}, 0.04) & (s_{-1}, 0.17) & (s_2, 0.20) & (s_2, -0.07) & (s_0, 0.25) \\ (s_{-2}, 0.37) & (s_0, 0) & (s_{-3}, 0.41) & (s_{-2}, -0.47) & (s_1, -0.43) & (s_0, 0.29) & (s_{-1}, -0.39) \\ (s_1, -0.04) & (s_3, -0.41) & (s_0, 0) & (s_0, 0.12) & (s_3, 0.16) & (s_3, -0.11) & (s_1, 0.20) \\ (s_1, -0.17) & (s_2, 0.47) & (s_0, -0.12) & (s_0, 0) & (s_3, 0.04) & (s_3, -0.24) & (s_1, 0.08) \\ (s_{-2}, -0.20) & (s_{-1}, 0.43) & (s_{-3}, -0.16) & (s_{-3}, -0.04) & (s_0, 0) & (s_0, -0.28) & (s_{-2}, 0.04) \\ (s_{-2}, 0.07) & (s_0, -0.29) & (s_{-3}, 0.11) & (s_{-3}, 0.24) & (s_0, 0.28) & (s_0, 0) & (s_{-2}, 0.32) \\ (s_0, -0.25) & (s_1, 0.39) & (s_{-1}, -0.20) & (s_{-1}, -0.08) & (s_2, -0.04) & (s_2, -0.32) & (s_0, 0) \end{pmatrix}$$

#### Iteration 4

$$\mathbf{R}_{22,4} = \begin{pmatrix} \{s_0 (1.00)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_2 (1.00)\} \\ \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_0 (1.00)\} & \{s_{-1} (1.00)\} & \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_{-1} (1.00)\} & \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_2 (1.00)\} \\ \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_1 (1.00)\} & \{s_0 (1.00)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_3 (0.57), s_4 (0.43)\} & \{s_1 (0.22), s_2 (0.33), s_3 (0.44)\} & \{s_{-1} (1.00)\} \\ \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_0 (1.00)\} & \{s_2 (0.44), s_3 (0.33), s_4 (0.22)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_1 (0.30), s_2 (0.40), s_3 (0.30)\} \\ \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_1 (1.00)\} & \{s_{-4} (0.43), s_{-3} (0.57)\} & \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_0 (1.00)\} & \{s_2 (1.00)\} & \{s_{-3} (0.50), s_{-2} (0.50)\} \\ \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_{-4} (0.22), s_{-3} (0.33), s_{-2} (0.44)\} & \{s_{-3} (0.45), s_{-2} (0.33), s_{-1} (0.22)\} & \{s_{-3} (0.50), s_{-2} (0.50)\} & \{s_2 (1.00)\} & \{s_0 (1.00)\} & \{s_{-1} (1.00)\} \\ \{s_2 (1.00)\} & \{s_2 (1.00)\} & \{s_1 (1.00)\} & \{s_{-3} (0.30), s_{-2} (0.40), s_{-1} (0.30)\} & \{s_2 (0.50), s_3 (0.50)\} & \{s_1 (1.00)\} & \{s_0 (1.00)\} \end{pmatrix}$$

$$ER_{22,4} = \begin{pmatrix} (s_0, 0) & (s_3, -0.50) & (s_{-3}, 0.22) & (s_{-3}, 0.22) & (s_3, -0.50) & (s_3, -0.22) & (s_2, 0) \\ (s_{-3}, 0.50) & (s_0, 0) & (s_{-1}, 0) & (s_{-3}, 0.50) & (s_{-1}, 0) & (s_3, -0.22) & (s_{-2}, 0) \\ (s_3, -0.22) & (s_1, 0) & (s_0, 0) & (s_3, -0.50) & (s_3, 0.43) & (s_2, 0.22) & (s_{-1}, 0) \\ (s_3, -0.22) & (s_3, -0.50) & (s_{-3}, 0.50) & (s_0, 0) & (s_3, -0.22) & (s_3, -0.50) & (s_2, 0) \\ (s_{-3}, 0.50) & (s_1, 0) & (s_{-3}, -0.43) & (s_{-3}, 0.22) & (s_0, 0) & (s_{-2}, 0) & (s_{-3}, 0.50) \\ (s_{-3}, 0.22) & (s_{-3}, 0.22) & (s_{-2}, -0.22) & (s_{-3}, 0.50) & (s_2, 0) & (s_0, 0) & (s_{-1}, 0) \\ (s_{-2}, 0) & (s_2, 0) & (s_1, 0) & (s_{-2}, 0) & (s_3, -0.50) & (s_1, 0) & (s_0, 0) \end{pmatrix}$$

$$CR_{22,4} = \begin{pmatrix} (s_0, 0) & (s_1, 0.49) & (s_{-1}, 0.04) & (s_{-1}, 0.17) & (s_2, 0.35) & (s_2, -0.07) & (s_0, 0.25) \\ (s_{-1}, -0.49) & (s_0, 0) & (s_{-2}, -0.45) & (s_{-2}, -0.33) & (s_1, -0.15) & (s_0, 0.44) & (s_{-1}, -0.25) \\ (s_1, -0.04) & (s_2, 0.45) & (s_0, 0) & (s_0, 0.12) & (s_3, 0.30) & (s_3, -0.11) & (s_1, 0.20) \\ (s_1, -0.17) & (s_2, 0.33) & (s_0, -0.12) & (s_0, 0) & (s_3, 0.18) & (s_3, -0.24) & (s_1, 0.08) \\ (s_{-2}, -0.35) & (s_{-1}, 0.15) & (s_{-3}, -0.30) & (s_{-3}, -0.18) & (s_0, 0) & (s_0, -0.42) & (s_{-2}, -0.10) \\ (s_{-2}, 0.07) & (s_0, -0.44) & (s_{-3}, 0.11) & (s_{-3}, 0.24) & (s_0, 0.42) & (s_0, 0) & (s_{-2}, 0.32) \\ (s_0, -0.25) & (s_1, 0.25) & (s_{-1}, -0.20) & (s_{-1}, -0.08) & (s_2, 0.10) & (s_2, -0.32) & (s_0, 0) \end{pmatrix}$$

**Respondent No.25**

**Iteration 1**

$$R_{25,1} = \begin{pmatrix} \{s_0(1.00)\} & \{s_3(1.00)\} & \{s_{-1}(1.00)\} & \{s_0(1.00)\} & \{s_4(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-3}(1.00)\} & \{s_0(1.00)\} & \{s_1(1.00)\} & \{s_0(1.00)\} & \{s_1(1.00)\} & \{s_{-3}(1.00)\} & \{s_{-3}(1.00)\} \\ \{s_1(1.00)\} & \{s_{-1}(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-1}(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_2(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-4}(1.00)\} & \{s_{-1}(1.00)\} & \{s_{-3}(1.00)\} & \{s_2(1.00)\} & \{s_0(1.00)\} & \{s_{-3}(1.00)\} & \{s_2(1.00)\} \\ \{s_0(1.00)\} & \{s_3(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_3(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_0(1.00)\} & \{s_3(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_2(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$\mathbf{E}_{R^{25,1}} = \begin{pmatrix} (s_0, 0) & (s_3, 0) & (s_{-1}, 0) & (s_0, 0) & (s_4, 0) & (s_0, 0) & (s_0, 0) \\ (s_{-3}, 0) & (s_0, 0) & (s_1, 0) & (s_0, 0) & (s_1, 0) & (s_{-3}, 0) & (s_{-3}, 0) \\ (s_1, 0) & (s_{-1}, 0) & (s_0, 0) & (s_0, 0) & (s_3, 0) & (s_0, 0) & (s_0, 0) \\ (s_0, 0) & (s_0, 0) & (s_0, 0) & (s_0, 0) & (s_2, 0) & (s_0, 0) & (s_0, 0) \\ (s_{-4}, 0) & (s_{-1}, 0) & (s_{-3}, 0) & (s_{-2}, 0) & (s_0, 0) & (s_{-3}, 0) & (s_2, 0) \\ (s_0, 0) & (s_3, 0) & (s_0, 0) & (s_0, 0) & (s_3, 0) & (s_0, 0) & (s_0, 0) \\ (s_0, 0) & (s_3, 0) & (s_0, 0) & (s_0, 0) & (s_{-2}, 0) & (s_0, 0) & (s_0, 0) \end{pmatrix}$$

$$\mathbf{C}_{R^{25,1}} = \begin{pmatrix} (s_0, 0) & (s_2, -0.14) & (s_0, 0.43) & (s_1, -0.43) & (s_2, 0.43) & (s_0, 0) & (s_1, -0.29) \\ (s_{-2}, 0.14) & (s_0, 0) & (s_{-1}, -0.43) & (s_{-1}, -0.29) & (s_1, -0.43) & (s_{-2}, 0.14) & (s_{-1}, -0.14) \\ (s_0, -0.43) & (s_1, 0.43) & (s_0, 0) & (s_0, 0.14) & (s_2, 0) & (s_0, -0.43) & (s_0, 0.29) \\ (s_{-1}, 0.43) & (s_1, 0.29) & (s_0, -0.14) & (s_0, 0) & (s_2, -0.14) & (s_{-1}, 0.43) & (s_0, 0.14) \\ (s_{-2}, -0.43) & (s_{-1}, -0.43) & (s_{-2}, 0) & (s_{-2}, 0.14) & (s_0, 0) & (s_{-2}, -0.43) & (s_{-2}, 0.29) \\ (s_0, 0) & (s_2, -0.14) & (s_0, 0.43) & (s_1, -0.43) & (s_2, 0.43) & (s_0, 0) & (s_1, -0.29) \\ (s_{-1}, 0.29) & (s_1, 0.14) & (s_0, -0.29) & (s_0, -0.14) & (s_2, -0.29) & (s_{-1}, 0.29) & (s_0, 0) \end{pmatrix}$$

**Respondent No.30**

**Iteration 1**

$$R_{30,1} = \begin{pmatrix} \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_1(0.22), s_2(0.33), s_3(0.44)\} & \{s_3(0.57), s_4(0.43)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} & \{s_{-3}(0.50), s_{-2}(0.50)\} \\ \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_1(1.00)\} & \{s_0(1.00)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} \\ \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_{-1}(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_{-3}(0.44), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_{-1}(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} & \{s_1(0.22), s_2(0.33), s_3(0.44)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} \\ \{s_{-4}(0.43), s_{-3}(0.57)\} & \{s_0(1.00)\} & \{s_1(1.00)\} & \{s_{-3}(0.44), s_{-2}(0.33), s_{-1}(0.22)\} & \{s_0(1.00)\} & \{s_{-4}(1.00)\} & \{s_{-4}(0.22), s_{-3}(0.33), s_{-2}(0.44)\} \\ \{s_2(0.50), s_3(0.50)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_0(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_4(1.00)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \\ \{s_2(0.50), s_3(0.50)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_0(1.00)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_2(0.44), s_3(0.33), s_4(0.22)\} & \{s_0(1.00)\} & \{s_0(1.00)\} \end{pmatrix}$$

$$ER_{30,1} = \begin{pmatrix} (s_0, 0) & (s_0, 0) & (s_3, -0.22) & (s_2, 0.22) & (s_3, 0.43) & (s_{-3}, 0.50) & (s_{-3}, 0.50) \\ (s_0, 0) & (s_0, 0) & (s_{-3}, 0.22) & (s_1, 0) & (s_0, 0) & (s_{-3}, 0.22) & (s_{-3}, 0.22) \\ (s_{-3}, 0.22) & (s_3, -0.22) & (s_0, 0) & (s_0, 0) & (s_{-1}, 0) & (s_0, 0) & (s_0, 0) \\ (s_{-2}, -0.22) & (s_{-1}, 0) & (s_0, 0) & (s_0, 0) & (s_2, 0.22) & (s_{-3}, 0.22) & (s_{-3}, 0.22) \\ (s_{-3}, -0.43) & (s_0, 0) & (s_1, 0) & (s_{-2}, -0.22) & (s_0, 0) & (s_{-4}, 0) & (s_{-3}, 0.22) \\ (s_3, -0.50) & (s_3, -0.22) & (s_0, 0) & (s_3, -0.22) & (s_4, 0) & (s_0, 0) & (s_0, 0) \\ (s_3, -0.50) & (s_3, -0.22) & (s_0, 0) & (s_3, -0.22) & (s_3, -0.22) & (s_0, 0) & (s_0, 0) \end{pmatrix}$$

$$CR_{30,1} = \begin{pmatrix} (s_0, 0) & (s_2, -0.46) & (s_1, -0.37) & (s_1, 0.43) & (s_2, 0.12) & (s_{-1}, -0.23) & (s_{-1}, -0.06) \\ (s_{-2}, 0.46) & (s_0, 0) & (s_{-1}, 0.10) & (s_0, -0.11) & (s_1, -0.41) & (s_{-3}, 0.23) & (s_{-3}, 0.40) \\ (s_{-1}, 0.37) & (s_1, -0.10) & (s_0, 0) & (s_1, -0.21) & (s_1, 0.49) & (s_{-2}, 0.13) & (s_{-2}, 0.31) \\ (s_{-1}, -0.43) & (s_0, 0.11) & (s_{-1}, 0.21) & (s_0, 0) & (s_1, -0.30) & (s_{-3}, 0.34) & (s_{-2}, -0.48) \\ (s_{-2}, -0.12) & (s_{-1}, 0.41) & (s_{-1}, -0.49) & (s_{-1}, 0.30) & (s_0, 0) & (s_{-3}, -0.35) & (s_{-3}, -0.18) \\ (s_1, 0.23) & (s_3, -0.23) & (s_2, -0.13) & (s_3, -0.34) & (s_3, 0.35) & (s_0, 0) & (s_0, 0.17) \\ (s_1, 0.06) & (s_3, -0.40) & (s_2, -0.31) & (s_2, 0.48) & (s_3, 0.18) & (s_0, -0.17) & (s_0, 0) \end{pmatrix}$$