Appendix A

*Pseudocode for Core Agent-Based Model*

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| *Stage 1: Initial Interaction Based on Leadership Schemas* | |
| Step | Description |
| 1 | Interaction clock is set to 0; each agent is assigned all entity variables. |
| 2 | Two agents (*i* and *j)* are randomly selected for dyadic interaction. |
| 3 | Each agent compares its ILT (ILTi) to Individual Attributes (Ci). The closer that ILTi is to Ci, the more likely the agent claims leadership within that interaction. |
| 4 | If agent *j* claimed leadership, agent *i* evaluates agent *j* to determine if they will grant agent *j* ‘s claim. agent *i* then proceeds to step 6. If agent *j* did not claim, agent *i* does not grant. |
| 5 | Agent *i* compares her ILT to agent *j*’s leadership characteristics. The closer they are, the more likely agent *i* moves to step 7. Alternatively, agent *i* does not grant leadership. |
| 6 | Agent *i* uses her follower self-schema to determine if she will grant leadership. The higher the probability, the more likely she will grant leadership. |
| 7 | Steps 5 -7 repeats once for the Agent *j* evaluating agent *i.* |
| 8 | Agent *i and Agent j* each change their leader identity score (LI) from the previous iteration. They add .5 if they granted leadership, subtract .5 if they were not granted leadership, and nothing changes if they did not claim. |
| 9 | Agent *i and Agent j* each change their follower identity score (FI) from the previous iteration. They add .5 if they granted leadership, subtracts .5 of they did not grant leadership, and nothing changes if the other agent did not claim. |
| 10 | Agent *i and Agent j* each change their leadership perception (LP) score for each other from the previous iteration. If the agent granted leadership, they add 1 to their LP score for the other agent. |

Appendix B

*Parameter Sensitivity Testing Plan*

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| Model | Unique Element at Stage 1 |
| **Base Model** | ILT-Self Comparison |
| **Social Interactionist** | Leadership Structure Schemas |
| **Social Cognitive** | Leader/Follower Self-Schemas |
| *Mode of Assessment* | *Variance Accounted for in Outcomes* |