Project Check-In 1

Team 1 Members:

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Research Question:

In a team with highly extraverted and agreeable individuals, how is team cohesion affected initially and over time?

Task Design:

This is a product design team that has been created after the team leader has met up with a client to discuss the criteria and constraints of the project. It consists of 6 individuals that the team leader was assigned to work with to develop the product and confirm satisfaction with the client. The team is expected to work alongside the client to create various prototypes of the design and expected to modify according to the requests of the client. The first client wants the product to be fully developed and finalized in 6 months. If the team works well, the higher-ups aim to have the team continue to work together in the future as well. They aim to possibly dissolve the team if they don't work well together after 3 total clients.

Specific Task:

The first client is requesting for a modern design of a clock (can be replaced with any product) that will be priced at below the current market value. The team is currently constrained by the cost to develop the product as well as the material cost, and the time constraint. It has to be

highly manufacturable (design can't be too complicated, but still aesthetically pleasing and modern). The product has to be functional and meet a certain level of durability. Quality can be compromised due to lower cost, but should not detract from the overall function and longevity of the product.

Team Composition Variables:

There will be 6 individuals with high scores in extraversion and agreeableness respectively, with relatively lower scores in all other personality traits. We will use AI to randomly assign scores for traits other than the two traits that will remain constant while we are testing. The team is expected to design a product and finalize a working prototype to pitch to the client in 6 months.

Number of Agents: 6

Agent Roles: 3 Product Designer (CAD Designer, Prototype Developer, Industrial Engineer), 1 Lead Designer, 1 Presenter (Interacts with client), 1 Engineer (Individual that figures out if hardware can fit into the design)

Key Attributes: OCEAN Personality Traits

Experimental Variables: Extraversion and Agreeableness | *come up with a conflict*

Outcome Metrics:

- Process metrics: Team feedbacks, Conflict management, Social loafing phenomenon (Team Cohesion)

Team members will evaluate one another at the end to see how well the members' performance and effort was throughout the project. In addition, through that evaluation, ratings will be decreased if we notice that there is a member that slacks off (social loafing theory). If conflicts occur, we should be expected to resolve it however if it takes a wrong turn it will affect how we

performed in regards to confTeam leader is expected to give a rating out 100 for how they view the team's cohesion.

- Performance metrics: Client satisfaction

As the product is developing over time, the client will be able to provide feedback at the end in regards to their satisfaction level, 100 being very satisfied and 0 being not satisfied. Satisfaction will measure the experience working with the team and the final product's alignment with what they requested.

Connection to Course Concepts:

We are already aware from class discussions that highly extroverted people tend to have high cohesion at the start, but diminishes over time. On the flip side, highly agreeable people have the opposite effect, where at the very start, they have less cohesion, but over time, they become more cohesive. This question would aim to test what would result if we combine individuals from both into a team. Would the team be highly cohesive from the start and maintain that cohesion throughout the time they work together? Or would one personality overwrite the other?