Hypothesis:

Solution 1: The first hypothesis is that with the modeled principals, participants can perceive the relation of dominance. Thus we have only one factor: whereas the dominance is perceived in the dialogue.

Solution 2: Break the hypothesis for the three principals.

- *H1:* Dominant agents are more demanding
- *H2:* Dominant agents lead the flow of the negotiation
- *H3:* Dominant agents don't care too much about other preferences, while submissive agents are dependent to other.

Statistics:

- **Questionnaire validation:**
a. *Solution1*
    1. Exploratory factor analysis, in order to compute the inter-correlation between the questions of the questionnaire.
        a. For one factor (dominance)
    2. Alpha Cronbach: to evaluate the correlation of the items in one cluster.

b. *Solution2*
    1. In order to compute an exploratory factor analysis, we need at least 3 questions by principal. -> 18 questions.
    2. Alpha Cronbach: evaluate the correlation for each principal.

- **Evaluation:**
    a. *Solution1:* One operational hypothesis, which calculates the score of dominance. (Positive means dominant and vice versa negative means submissive)
    b. *Solution2:* three operational hypotheses *(H1, H2, H3)*.

    c. *Prerequisite:* The data must follow a normal distribution.

    d. *Statistic evaluation:* T- Student test paired group. (pour groupes appariés)