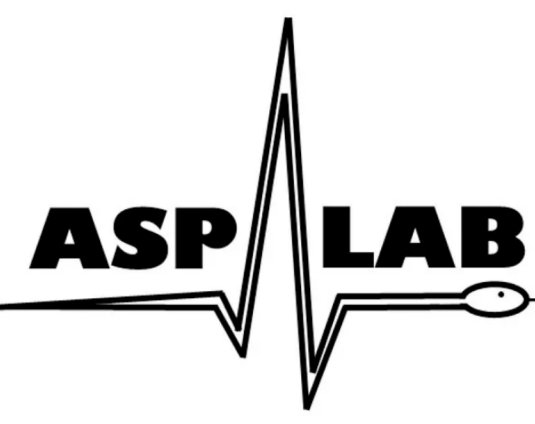




The Use of Non-Verbal Behavior and Normative Information in Trust-Based Predictions



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Introduction

- **Non-verbal behavior (NVB)** refers to the physical elements occurring in an interaction that are beyond the realm of verbal communication; this can consist of facial expressions, hand movements, body positions, and tone of speech. [1]
- **Normative Information** is information regarding what is normal or typical.
- Certain NVBs are predictive of perceptions of trustworthiness and likeability as they appear to play a central role in how we evaluate others. [2,3]
- Previous research suggests that when provided, normative information can influence perceived trust of others. [4]
- Within the existing body of research, little work has examined the constructs of NVB and normative information simultaneously. This set of studies investigated how individuals use both NVB and normative information when making predictions related to trust.
- We predicted that participants would use both NVB and normative information when making predictions in an economic exchange game.

Give Some Game (GSG)

- Pairs of participants are given 4 tokens each to either give to their partner or keep for themselves.
 - If a token is kept, it is worth \$1.
 - If it is given to their partner, it is worth \$2.
- Participants decide how to allocate their tokens in private and are assured they will not see their partner after their decision.
- Participants are compensated in accordance with the number of tokens they keep and receive

NVBs	Study #1	Study #2
Smiling	null	+
Nod Head	null	+
Eye Contact	null	+
Lean Forward	null	+
Arms table	+	+
Laughing	null	null
Arm gesture	null	null
Hand Gesture	null	null
Face Touch	null	null
Body touch	null	null
Hand touch	null	null
Arms crossed	null	null
Lean back	null	-
Look away	null	-
Hands in Lap	-	-
Shake Head	null	-
Hair touch	null	-

NVB informs token-giving predictions
Blue cell indicates significance

Study #1 Methods

- Sixty-six undergraduate students (34 males, 32 females) participated in exchange for course credit.
- Before playing the game, participants were paired off and engaged in five-minute conversations.
- Recordings of the interactions were then analyzed for time spent engaging in 17 different Non-Verbal Behaviors (NVBs).
- Following their interactions, dyads were provided with false normative information about how participants typically behave.
 - **Expect Cooperation Condition** was told the average number of tokens given was 3
 - **Expect Selfishness Condition** was told the average number of tokens given was 1

Study #2 Methods

- Sixty-three undergraduate participants (14 males, 49 females) were assigned to the same Expect Cooperation/Selfishness conditions.
- The normative information was provided before observation of NVBs.
- Participants each watched 32 one-minute clips of the interactions from Study 1.
- For each clip, participants were asked to predict the token allocation of the individual shown in the clip.

Study #1 Results

- A Hierarchical Linear Modeling (HLM) approach was used to account for participants being nested within dyads.
- Compared to the Expect Selfishness condition, participants in the Expect Cooperation condition gave more tokens to their partners. ($B = .589, SE = .228, t(64) = 2.584, p = .015$) and predicted their partners would give more tokens to them ($B = .939, SE = .157, t(64) = 5.966, p < .001$).
- None of the NVBs significantly predicted token-giving behavior and only two were found to predict token-giving predictions (i.e., hands in lap ($B = -.688, SE = .249$) and arms on table ($B = .619, SE = .251$)).

Study #2 Results

- Similar to Study 1, participants in the Expect Selfishness condition predicted fewer tokens would be given ($M = 1.55, SD = 0.32$) compared to the Expect Cooperation condition ($M = 2.51, SD = 0.40$).
- Analyses revealed that 10 of the 17 NVBs examined significantly predicted participants' token-giving predictions.

Discussion

- When normative information was provided after NVB, participants did not appear to consider NVB in their behavior or predictions.
- However, when normative information was provided *before* NVB, participants seemed to consider both when predicting token-giving behavior.
- These findings add nuance to the existing literature, suggesting that the order in which information is received may influence how it is used when making decisions involving trust.
- Future research should test these findings when NVB is observed during direct interactions, as participants in Study 2 viewed videos of others interacting, potentially influencing their attention to and interpretation of NVB.

References

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