**Oral Hygiene Effects Verbal and Nonverbal Displays of Confidence**

**Data Analysis Record**

Introduction

The following documents the analysis presented in the above titled paper. The analysis was completed on the dataset: Data.csv in the statistical software R, using lmer for mixed models and lmertest for ANOVA. Data examined in this study were produced by sociometric badges or by participants completing the questionnaire materials described in the paper. Variables included in the datafile are:

SESSION.NO = Which experimental session

ROUND = Which round-robin round did the interaction take place in

PPT.GROUP = Participant in control (1) or toothpaste (2) group

PPT = Participants’ unique ID.

PRT.GROUP = Partner in control (1) or toothpaste (2) group

PARTNER = Partner’s unique Participant ID

**Pre-Test: Self-rated Confidence / Nervousness**

fPPT = factor(PPT.GROUP)

iPPT = iPPT = as.numeric(as.factor(PPT))

fRound = factor(ROUND)

#Confidence

confidence = aov (CONFI.Y ~ fPPT + Error (iPPT/fPPT))

describeBy(CONFI.Y, group = fPPT)

#Nervousness

nervousness = aov (NERV.Y ~ fPPT + Error (iPPT/fPPT))

describeBy(NERV.Y, group = fPPT)

#Test ancillary hypothesis regarding change over time. Confidence x Time

confidence = aov (CONFI.Y ~ fPPT \* fRound + Error (iPPT/fRound/fPPT))

#Nervousness x Time

nervousness = aov (NERV.Y ~ fPPT \* fRound + Error (iPPT/fRound/fPPT))

**Subjective Preference**

Use the dataset preference.sav (contains the computed averages from the M.SIM1 (i.e., similarity first preference; M.SIM2 second preference, etc.), talk and avoid columns in FinalData.sav. Run one-way t-tests as described in paper.

**Hypothesis Tests**

fPPT = factor(PPT.GROUP)

fPRT = factor(PRT.GROUP)

iPRT = as.numeric(as.factor(PARTNER))

iPPT = as.numeric(as.factor(PPT))

cAttract = meanCenter(ATTRACT.AVE)

**H1: Activity**

BMA = (BM\_ACTIVITY \* 1000)

activity = lmer(BMA ~ fPPT \* fPRT \* cAttract + (1 | iPRT/iPPT) + (1 | DYAD.NO))

anova(activity, ddf="Kenward-Roger")

lsmeans::lsmeans(activity, ~fPPT, ddf="Kenward-Roger", adjust = "none")

d.ci = confint(pairs(lsmeans::lsmeans(activity, ~ fPPT, ddf = "Kenward-Roger"), adjust = "none"))

d.ci = within(d.ci, {

d.upper.CL = upper.CL / sigmaHat(activity)

d.lower.CL = lower.CL / sigmaHat(activity)

d = estimate / sigmaHat(activity)})

d.ci

**H1 Supplementary: Posture**

posture = lmer(POSTURE\_ACTIVITY ~ fPPT \* fPRT \* cAttract + (1 | iPRT/iPPT) + (1 | DYAD.NO))

anova(posture, ddf="Kenward-Roger")

lsmeans::lsmeans(posture, ~fPPT, adjust = "none")

d.ci = confint(pairs(lsmeans::lsmeans(posture, ~ fPPT, ddf = "Kenward-Roger"), adjust = "none"))

d.ci = within(d.ci, {

d.upper.CL = upper.CL / sigmaHat(posture)

d.lower.CL = lower.CL / sigmaHat(posture)

d = estimate / sigmaHat(posture)})

d.ci

**H2: Assertiveness**

volume = lmer(AUDIO\_FRONT\_VOLUME ~ fPPT \* fPRT \* cAttract + (1 | iPRT/iPPT) + (1 | DYAD.NO))

anova(volume, ddf="Kenward-Roger")

**H3: Overlap**

overlap = lmer(SPEECH\_PROFILE\_OVERLAP ~ fPPT \* fPRT \* cAttract + (1 | iPRT/iPPT) + (1 | DYAD.NO))

anova(overlap, ddf="Kenward-Roger")

**H4: Mimicry**

mimicry = lmer(T\_BM\_MIRRORING1 ~ fPPT \* fPRT \* cAttract + (1 | iPRT/iPPT) + (1 | DYAD.NO))

anova(mimicry)

**H4: Supplementary: Mimicry of Posture**

mimicry = lmer(T\_POSTURE\_MIRRORING1 ~ fPPT \* fPRT \* cAttract + (1 | iPRT/iPPT) + (1 | DYAD.NO))

anova(mimicry)

**H5: Individual differences**

As above, but with SSES and RSMS included in the equation.