svData=read.csv('Expt3\_ChoiceData.csv', header=TRUE)

svData$val=factor(svData$val,levels=c("hv","lv","dist"))

aggregate(svData$prop,list(Reward=svData$val),mean)

Reward x

1 hv 0.5567095

2 lv 0.3390895

3 dist 0.1042010

aggregate(svData$prop,list(Reward=svData$val),sd)

Reward x

1 hv 0.2676636

2 lv 0.2552300

3 dist 0.1209045

**CHOICE PROPORTION ANALYSIS**

**Without random factor with interactions: BEST MODEL**

m=glm(cbind(numbers, (total-numbers))~val\*firstTrain,data=svData,family=binomial(link="logit"))

summary(m)

Call:

glm(formula = cbind(numbers, (total - numbers)) ~ val \* firstTrain,

family = binomial(link = "logit"), data = svData)

Deviance Residuals:

Min 1Q Median 3Q Max

-3.665 -1.445 -0.018 1.161 4.026

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) -0.2877 0.1909 -1.507 0.132

vallv 0.3234 0.2687 1.204 0.229

valdist -2.4204 0.4346 -5.570 2.55e-08 \*\*\*

firstTrainlowVal 1.1654 0.2734 4.263 2.01e-05 \*\*\*

vallv:firstTrainlowVal -2.8688 0.4122 -6.960 3.39e-12 \*\*\*

valdist:firstTrainlowVal -0.3155 0.5432 -0.581 0.561

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 330.05 on 47 degrees of freedom

Residual deviance: 144.20 on 42 degrees of freedom

AIC: 254.95

Number of Fisher Scoring iterations: 5

**SEQUENCE INDEX ANALYSIS**

svSwitch=read.csv('Expt3\_TransitionData.csv')

mean(svSwitch$seqInd)

[1] 0.6557427

sd(svSwitch$seqInd)

[1] 0.2309166

wilcox.test(svSwitch$seqInd,svSwitch$randRef)

Wilcoxon rank sum test with continuity correction

data: svSwitch$seqInd and svSwitch$randRef

W = 192, p-value = 0.008307

alternative hypothesis: true location shift is not equal to 0