Script R

Human likeness conditie

#### Confirmatorische analyse

library(ggplot2)

library(psych)

library(foreign)

library(GPArotation)

library(semPlot)

library(lavaan)

library(lme4)

library(lmerTest)

library(nlme)

library(readxl)

library(car)

summary(likeness\_battle\_robot)

summary(likeness\_high\_man)

summary(likeness\_lo\_man)

summary(likeness\_mannequin)

summary(likeness\_skeleton)

summary(likeness\_toy\_robot)

summary(likeness\_zombie)

summary(acceptability\_battle\_robot)

summary(acceptability\_high\_man)

summary(acceptability\_lo\_man)

summary(acceptability\_mannequin)

summary(acceptability\_skeleton)

summary(acceptability\_toy\_robot)

summary(acceptability\_zombie)

mean(acceptability\_battle\_robot)

mean(acceptability\_high\_man)

mean(acceptability\_lo\_man)

mean(acceptability\_mannequin)

mean(acceptability\_skeleton)

mean(acceptability\_toy\_robot)

mean(acceptability\_zombie)

mean(likeness\_battle\_robot)

mean(likeness\_high\_man)

mean(likeness\_lo\_man)

mean(likeness\_mannequin)

mean(likeness\_skeleton)

mean(likeness\_toy\_robot)

mean(likeness\_zombie)

var(acceptability\_battle\_robot)

var(acceptability\_high\_man)

var(acceptability\_lo\_man)

var(acceptability\_mannequin)

var(acceptability\_skeleton)

var(acceptability\_toy\_robot)

var(acceptability\_zombie)

var(likeness\_battle\_robot)

var(likeness\_high\_man)

var(likeness\_lo\_man)

var(likeness\_mannequin)

var(likeness\_skeleton)

var(likeness\_toy\_robot)

var(likeness\_zombie)

sqrt(var(acceptability\_battle\_robot))

sqrt(var(acceptability\_high\_man))

sqrt(var(acceptability\_lo\_man))

sqrt(var(acceptability\_mannequin))

sqrt(var(acceptability\_skeleton))

sqrt(var(acceptability\_toy\_robot))

sqrt(var(acceptability\_zombie))

sqrt(var(likeness\_battle\_robot))

sqrt(var(likeness\_high\_man))

sqrt(var(likeness\_lo\_man))

sqrt(var(likeness\_mannequin))

sqrt(var(likeness\_skeleton))

sqrt(var(likeness\_toy\_robot))

sqrt(var(likeness\_zombie))

#names

Naam\_Characters<-c(‘Battle Robot’,’Toy Robot’,’Mannequin’,’Lo Man’,’High Man’,’Zombie’,’Skeleton’)

#means per character type#

Means\_Likeness<-c(mean(likeness\_battle\_robot),mean(likeness\_high\_man),mean(likeness\_lo\_man),mean(likeness\_mannequin),mean(likeness\_skeleton),mean(likeness\_toy\_robot),mean(likeness\_zombie))

Means\_Acceptability<-c(mean(acceptability\_battle\_robot),mean(acceptability\_high\_man),mean(acceptability\_lo\_man),mean(acceptability\_mannequin),mean(acceptability\_skeleton),mean(acceptability\_toy\_robot),mean(acceptability\_zombie))

#lijsten #

Character\_Battle<-c((likeness\_battle\_robot,acceptability\_battle\_robot)

Character\_Toy<-c(likeness\_toy\_robot,acceptability\_toy\_robot)

Character\_Zombie<-c(likeness\_zombie,acceptability\_zombie)

Character\_LoMan<-c(likeness\_lo\_man,acceptability\_lo\_man)

Character\_HighMan<-c(likeness\_high\_man,acceptability\_high\_man)

Character\_Skeleton<-c(likeness\_skeleton,acceptability\_skeleton)

Character\_Mannequin<-c(likeness\_mannequin,acceptability\_mannequin)

L\_Character\_Battle<-c(likeness\_battle\_robot)

L\_Character\_Toy<-c(likeness\_battle\_robot)

L\_Character\_Zombie<-c(likeness\_zombie)

L\_Character\_LoMan<-c(likeness\_lo\_man)

L\_Character\_HighMan<-c(likeness\_high\_man)

L\_Character\_Skeleton<-c(likeness\_skeleton)

L\_Character\_Mannequin<-c(likeness\_mannequin)

A\_Character\_Battle<-c(acceptability\_battle\_robot)

A\_Character\_Toy<-c(acceptability\_battle\_robot)

A\_Character\_Zombie<-c(acceptability\_zombie)

A\_Character\_LoMan<-c(acceptability\_lo\_man)

A\_Character\_HighMan<-(acceptability\_high\_man)

A\_Character\_Skeleton<-(acceptability\_skeleton)

A\_Character\_Mannequin<-(acceptability\_mannequin)

Character\_Type\_All<-c(Character\_Battle,Character\_Toy,Character\_Zombie,Character\_LoMan,Character\_HighMan,Character\_Skeleton,Character\_Mannequin)

Character\_Type\_Like<-c(L\_Character\_Battle,L\_Character\_Toy,L\_Character\_Zombie,L\_Character\_LoMan,L\_Character\_HighMan,L\_Character\_Skeleton,L\_Character\_Mannequin)

Character\_Type\_Acc<-c(A\_Character\_Battle,A\_Character\_Toy,A\_Character\_Zombie,A\_Character\_LoMan,A\_Character\_HighMan,A\_Character\_Skeleton,A\_Character\_Mannequin)

#lijst gemiddelden per rating

Gemiddeld\_All<- c(mean(likeness\_battle\_robot),mean(likeness\_high\_man),mean(likeness\_lo\_man),mean(likeness\_mannequin),mean(likeness\_skeleton),mean(likeness\_toy\_robot),mean(likeness\_zombie),mean(acceptability\_battle\_robot),mean(acceptability\_high\_man),mean(acceptability\_lo\_man),mean(acceptability\_mannequin),mean(acceptability\_skeleton),mean(acceptability\_toy\_robot),mean(acceptability\_zombie))

Gemiddeld\_Like<-c(mean(likeness\_battle\_robot),mean(likeness\_high\_man),mean(likeness\_lo\_man),mean(likeness\_mannequin),mean(likeness\_skeleton),mean(likeness\_toy\_robot),mean(likeness\_zombie))

Gemiddeld\_Acc<-c(mean(acceptability\_battle\_robot),mean(acceptability\_high\_man),mean(acceptability\_lo\_man),mean(acceptability\_mannequin),mean(acceptability\_skeleton),mean(acceptability\_toy\_robot),mean(acceptability\_zombie))

#modellen

# factoren

Likeness\_ratings<-c(likeness\_battle\_robot+likeness\_high\_man+likeness\_lo\_man+likeness\_mannequin+likeness\_skeleton+likeness\_toy\_robot+likeness\_zombie)

Acceptability\_ratings<-c(acceptability\_battle\_robot+acceptability\_high\_man+acceptability\_lo\_man+acceptability\_mannequin+acceptability\_skeleton+acceptability\_toy\_robot+acceptability\_zombie)

All\_ratings<- c(likeness\_battle\_robot+likeness\_high\_man+likeness\_lo\_man+likeness\_mannequin+likeness\_skeleton+likeness\_toy\_robot+likeness\_zombie+ acceptability\_battle\_robot+acceptability\_high\_man+acceptability\_lo\_man+acceptability\_mannequin+acceptability\_skeleton+acceptability\_toy\_robot+acceptability\_zombie)

#plot

plot(Likeness\_ratings~Acceptability\_ratings,data = Excel\_Data\_HLC)

abline(lm(Likeness\_ratings~Acceptability\_ratings))

#anova

one\_way\_anova<-aov(Likeness\_ratings~Acceptability\_ratings,data =Excel\_Data\_HLC)

summary(one\_way\_anova)

#factoren

Likeness\_ratings<-c(likeness\_battle\_robot+likeness\_high\_man+likeness\_lo\_man+likeness\_mannequin+likeness\_skeleton+likeness\_toy\_robot+likeness\_zombie)

Acceptability\_ratings<-c(acceptability\_battle\_robot+acceptability\_high\_man+acceptability\_lo\_man+acceptability\_mannequin+acceptability\_skeleton+acceptability\_toy\_robot+acceptability\_zombie)

#eta squared

library(lsr)

etaSquared(one\_way\_anova)

#sem

Model2<-‘likeness\_battle\_robot~ acceptability\_battle\_robot

likeness\_high\_man~ acceptability\_high\_man

likeness\_lo\_man~ acceptability\_lo\_man

likeness\_mannequin~ acceptability\_mannequin

likeness\_skeleton~ acceptability\_skeleton

likeness\_toy\_robot~ acceptability\_toy\_robot

likeness\_zombie~ acceptability\_zombie’

Fit2<-lm(Model2,data=Excel\_Data\_HLC)

Exploratorische analyse

Acceptability conditie

#### Confirmatorische analyse

#static mean

Mean(acceptability\_battle\_robot\_static\_b1)

Mean(acceptability\_battle\_robot\_static\_b2)

Mean(acceptability\_battle\_robot\_static\_b3)

Mean(acceptability\_high\_man\_static\_b1)

Mean(acceptability\_high\_man\_static\_b2)

Mean(acceptability\_high\_man\_static\_b3)

Mean(acceptability\_lo\_man\_static\_b1)

Mean(acceptability\_lo\_man\_static\_b2)

Mean(acceptability\_lo\_man\_static\_b3)

Mean(acceptability\_mannequin\_static\_b1)

Mean(acceptability\_mannequin\_static\_b2)

Mean(acceptability\_mannequin\_static\_b3)

Mean(acceptability\_skeleton\_static\_b1)

Mean(acceptability\_skeleton\_static\_b2)

Mean(acceptability\_skeleton\_static\_b3)

Mean(acceptability\_toy\_robot\_static\_b1)

Mean(acceptability\_toy\_robot\_static\_b2)

Mean(acceptability\_toy\_robot\_static\_b3)

Mean(acceptability\_zombie\_static\_b1)

Mean(acceptability\_zombie\_static\_b2)

Mean(acceptability\_zombie\_static\_b3)

#static variantie

var(acceptability\_battle\_robot\_static\_b1)

var(acceptability\_battle\_robot\_static\_b2)

var(acceptability\_battle\_robot\_static\_b3)

var(acceptability\_high\_man\_static\_b1)

var(acceptability\_high\_man\_static\_b2)

var(acceptability\_high\_man\_static\_b3)

var(acceptability\_lo\_man\_static\_b1)

var(acceptability\_lo\_man\_static\_b2)

var(acceptability\_lo\_man\_static\_b3)

var(acceptability\_mannequin\_static\_b1)

var(acceptability\_mannequin\_static\_b2)

var(acceptability\_mannequin\_static\_b3)

var(acceptability\_skeleton\_static\_b1)

var(acceptability\_skeleton\_static\_b2)

var(acceptability\_skeleton\_static\_b3)

var(acceptability\_toy\_robot\_static\_b1)

var(acceptability\_toy\_robot\_static\_b2)

var(acceptability\_toy\_robot\_static\_b3)

var(acceptability\_zombie\_static\_b1)

var(acceptability\_zombie\_static\_b2)

var(acceptability\_zombie\_static\_b3)

#static standaarddeviatie

sqrt(var(acceptability\_battle\_robot\_static\_b1))

sqrt(var(acceptability\_battle\_robot\_static\_b2))

sqrt(var(acceptability\_battle\_robot\_static\_b3))

sqrt(var(acceptability\_high\_man\_static\_b1))

sqrt(var(acceptability\_high\_man\_static\_b2))

sqrt(var(acceptability\_high\_man\_static\_b3))

sqrt(var(acceptability\_lo\_man\_static\_b1))

sqrt(var(acceptability\_lo\_man\_static\_b2))

sqrt(var(acceptability\_lo\_man\_static\_b3))

sqrt(var(acceptability\_mannequin\_static\_b1))

sqrt(var(acceptability\_mannequin\_static\_b2))

sqrt(var(acceptability\_mannequin\_static\_b3))

sqrt(var(acceptability\_skeleton\_static\_b1))

sqrt(var(acceptability\_skeleton\_static\_b2))

sqrt(var(acceptability\_skeleton\_static\_b3))

sqrt(var(acceptability\_toy\_robot\_static\_b1))

sqrt(var(acceptability\_toy\_robot\_static\_b2))

sqrt(var(acceptability\_toy\_robot\_static\_b3))

sqrt(var(acceptability\_zombie\_static\_b1))

sqrt(var(acceptability\_zombie\_static\_b2))

sqrt(var(acceptability\_zombie\_static\_b3))

#lijsten Character Type

Static\_Zombie<-c(acceptability\_zombie\_static\_b1, acceptability\_zombie\_static\_b2, acceptability\_zombie\_static\_b3)

Static\_High<-c(acceptability\_high\_man\_static\_b1, acceptability\_high\_man\_static\_b2, acceptability\_high\_man\_static\_b3)

Static\_Low<-c(acceptability\_lo\_man\_static\_b1, acceptability\_lo\_man\_static\_b2, acceptability\_lo\_man\_static\_b3)

Static\_Battle<-c(acceptability\_battle\_robot\_static\_b1, acceptability\_battle\_robot\_static\_b2, acceptability\_battle\_robot\_static\_b3)

Static\_Toy<-c(acceptability\_toy\_robot\_static\_b1, acceptability\_toy\_robot\_static\_b2, acceptability\_toy\_robot\_static\_b3)

Static\_Mannequin<-c(acceptability\_mannequin\_static\_b1, acceptability\_mannequin\_static\_b2, acceptability\_mannequin\_static\_b3)

Static\_Skeleton<-c(acceptability\_skeleton\_static\_b1, acceptability\_skeleton\_static\_b2, acceptability\_skeleton\_static\_b3)

Static\_All<-c(Static\_Zombie,Static\_High,Static\_Low,Static\_Battle,Static\_Toy,Static\_Mannequin,Static\_Skeleton)

#lijsten Motion

Natural\_Movement\_Zombie<-c(acceptability\_zombie\_m1\_v1,acceptability\_zombie\_m1\_v2,acceptability\_zombie\_m1\_v3,acceptability\_zombie\_m1\_v4,acceptability\_zombie\_m1\_v5,acceptability\_zombie\_m1\_v6)

Natural\_Movement\_Toy<-c(acceptability\_toy\_robot\_m1\_v1,acceptability\_toy\_robot\_m1\_v2,acceptability\_toy\_robot\_m1\_v3,acceptability\_toy\_robot\_m1\_v4,acceptability\_toy\_robot\_m1\_v5,acceptability\_toy\_robot\_m1\_v6)

Natural\_Movement\_Battle<-c(acceptability\_battle\_robot\_m1\_v1,acceptability\_battle\_robot\_m1\_v2,acceptability\_battle\_robot\_m1\_v3,acceptability\_battle\_robot\_m1\_v4,acceptability\_battle\_robot\_m1\_v5,acceptability\_battle\_robot\_m1\_v6)

Natural\_Movement\_High<-c(acceptability\_high\_man\_m1\_v1,acceptability\_high\_man\_m1\_v2,acceptability\_high\_man\_m1\_v3,acceptability\_high\_man\_m1\_v4,acceptability\_high\_man\_m1\_v5,acceptability\_high\_man\_m1\_v6)

Natural\_Movement\_Low<-c(acceptability\_lo\_man\_m1\_v1,acceptability\_lo\_man\_m1\_v2,acceptability\_lo\_man\_m1\_v3,acceptability\_lo\_man\_m1\_v4,acceptability\_lo\_man\_m1\_v5,acceptability\_lo\_man\_m1\_v6)

Natural\_Movement\_Mannequin<-c(acceptability\_mannequin\_m1\_v1,acceptability\_mannequin\_m1\_v2,acceptability\_mannequin\_m1\_v3,acceptability\_mannequin\_m1\_v4,acceptability\_mannequin\_m1\_v5,acceptability\_mannequin\_m1\_v6)

Natural\_Movement\_Skeleton<-c(acceptability\_skeleton\_m1\_v1,acceptability\_skeleton\_m1\_v2,acceptability\_skeleton\_m1\_v3,acceptability\_skeleton\_m1\_v4,acceptability\_skeleton\_m1\_v5,acceptability\_skeleton\_m1\_v6)

Natural\_Movement\_All<-c(Natural\_Movement\_Zombie,Natural\_Movement\_Toy,Natural\_Movement\_Battle,Natural\_Movement\_High,Natural\_Movement\_Low,Natural\_Movement\_Mannequin,Natural\_Movement\_Skeleton)

DistortionA\_Zombie<-c(acceptability\_zombie\_m2\_v1,acceptability\_zombie\_m2\_v2,acceptability\_zombie\_m2\_v3,acceptability\_zombie\_m2\_v4,acceptability\_zombie\_m2\_v5,acceptability\_zombie\_m2\_v6)

DistortionA\_Toy<-c(acceptability\_toy\_robot\_m2\_v1,acceptability\_toy\_robot\_m2\_v2,acceptability\_toy\_robot\_m2\_v3,acceptability\_toy\_robot\_m2\_v4,acceptability\_toy\_robot\_m2\_v5,acceptability\_toy\_robot\_m2\_v6)

DistortionA\_Battle<-c(acceptability\_battle\_robot\_m2\_v1,acceptability\_battle\_robot\_m2\_v2,acceptability\_battle\_robot\_m2\_v3,acceptability\_battle\_robot\_m2\_v4,acceptability\_battle\_robot\_m2\_v5,acceptability\_battle\_robot\_m2\_v6)

DistortionA\_High<-c(acceptability\_high\_man\_m2\_v1,acceptability\_high\_man\_m2\_v2,acceptability\_high\_man\_m2\_v3,acceptability\_high\_man\_m2\_v4,acceptability\_high\_man\_m2\_v5,acceptability\_high\_man\_m2\_v6)

DistortionA\_Low<-c(acceptability\_lo\_man\_m2\_v1,acceptability\_lo\_man\_m2\_v2,acceptability\_lo\_man\_m2\_v3,acceptability\_lo\_man\_m2\_v4,acceptability\_lo\_man\_m2\_v5,acceptability\_lo\_man\_m2\_v6)

DistortionA\_Mannequin<-c(acceptability\_mannequin\_m2\_v1,acceptability\_mannequin\_m2\_v2,acceptability\_mannequin\_m2\_v3,acceptability\_mannequin\_m2\_v4,acceptability\_mannequin\_m2\_v5,acceptability\_mannequin\_m2\_v6)

DistortionA\_Skeleton<-c(acceptability\_skeleton\_m2\_v1,acceptability\_skeleton\_m2\_v2,acceptability\_skeleton\_m2\_v3,acceptability\_skeleton\_m2\_v4,acceptability\_skeleton\_m2\_v5,acceptability\_skeleton\_m2\_v6)

DistortionA\_All<-c(DistortionA\_Zombie,DistortionA\_Toy,DistortionA\_Battle,DistortionA\_High,DistortionA\_Low,DistortionA\_Mannequin,DistortionA\_Skeleton)

DistortionB\_Zombie<-c(acceptability\_zombie\_m3\_v1,acceptability\_zombie\_m3\_v2,acceptability\_zombie\_m3\_v3,acceptability\_zombie\_m3\_v4,acceptability\_zombie\_m3\_v5,acceptability\_zombie\_m3\_v6)

DistortionB\_Toy<-c(acceptability\_toy\_robot\_m3\_v1,acceptability\_toy\_robot\_m3\_v2,acceptability\_toy\_robot\_m3\_v3,acceptability\_toy\_robot\_m3\_v4,acceptability\_toy\_robot\_m3\_v5,acceptability\_toy\_robot\_m3\_v6)

DistortionB\_Battle<-c(acceptability\_battle\_robot\_m3\_v1,acceptability\_battle\_robot\_m3\_v2,acceptability\_battle\_robot\_m3\_v3,acceptability\_battle\_robot\_m3\_v4,acceptability\_battle\_robot\_m3\_v5,acceptability\_battle\_robot\_m3\_v6)

DistortionB\_High<-c(acceptability\_high\_man\_m3\_v1,acceptability\_high\_man\_m3\_v2,acceptability\_high\_man\_m3\_v3,acceptability\_high\_man\_m3\_v4,acceptability\_high\_man\_m3\_v5,acceptability\_high\_man\_m3\_v6)

DistortionB\_Low<-c(acceptability\_lo\_man\_m3\_v1,acceptability\_lo\_man\_m3\_v2,acceptability\_lo\_man\_m3\_v3,acceptability\_lo\_man\_m3\_v4,acceptability\_lo\_man\_m3\_v5,acceptability\_lo\_man\_m3\_v6)

DistortionB\_Mannequin<-c(acceptability\_mannequin\_m3\_v1,acceptability\_mannequin\_m3\_v2,acceptability\_mannequin\_m3\_v3,acceptability\_mannequin\_m3\_v4,acceptability\_mannequin\_m3\_v5,acceptability\_mannequin\_m3\_v6)

DistortionB\_Skeleton<-c(acceptability\_skeleton\_m3\_v1,acceptability\_skeleton\_m3\_v2,acceptability\_skeleton\_m3\_v3,acceptability\_skeleton\_m3\_v4,acceptability\_skeleton\_m3\_v5,acceptability\_skeleton\_m3\_v6)

DistortionB\_All<-c(DistortionB\_Zombie,DistortionB\_Toy,DistortionB\_Battle,DistortionB\_High,DistortionB\_Low,DistortionB\_Mannequin,DistortionB\_Skeleton)

DistortionC\_Zombie<-c(acceptability\_zombie\_m4\_v1,acceptability\_zombie\_m4\_v2,acceptability\_zombie\_m4\_v3,acceptability\_zombie\_m4\_v4,acceptability\_zombie\_m4\_v5,acceptability\_zombie\_m4\_v6)

DistortionC\_Toy<-c(acceptability\_toy\_robot\_m4\_v1,acceptability\_toy\_robot\_m4\_v2,acceptability\_toy\_robot\_m4\_v3,acceptability\_toy\_robot\_m4\_v4,acceptability\_toy\_robot\_m4\_v5,acceptability\_toy\_robot\_m4\_v6)

DistortionC\_Battle<-c(acceptability\_battle\_robot\_m4\_v1,acceptability\_battle\_robot\_m4\_v2,acceptability\_battle\_robot\_m4\_v3,acceptability\_battle\_robot\_m4\_v4,acceptability\_battle\_robot\_m4\_v5,acceptability\_battle\_robot\_m4\_v6)

DistortionC\_High<-c(acceptability\_high\_man\_m4\_v1,acceptability\_high\_man\_m4\_v2,acceptability\_high\_man\_m4\_v3,acceptability\_high\_man\_m4\_v4,acceptability\_high\_man\_m4\_v5,acceptability\_high\_man\_m4\_v6)

DistortionC\_Low<-c(acceptability\_lo\_man\_m4\_v1,acceptability\_lo\_man\_m4\_v2,acceptability\_lo\_man\_m4\_v3,acceptability\_lo\_man\_m4\_v4,acceptability\_lo\_man\_m4\_v5,acceptability\_lo\_man\_m4\_v6)

DistortionC\_Mannequin<-c(acceptability\_mannequin\_m4\_v1,acceptability\_mannequin\_m4\_v2,acceptability\_mannequin\_m4\_v3,acceptability\_mannequin\_m4\_v4,acceptability\_mannequin\_m4\_v5,acceptability\_mannequin\_m4\_v6)

DistortionC\_Skeleton<-c(acceptability\_skeleton\_m4\_v1,acceptability\_skeleton\_m4\_v2,acceptability\_skeleton\_m4\_v3,acceptability\_skeleton\_m4\_v4,acceptability\_skeleton\_m4\_v5,acceptability\_skeleton\_m4\_v6)

DistortionC\_All<-c(DistortionC\_Zombie,DistortionC\_Toy,DistortionC\_Battle,DistortionC\_High,DistortionC\_Low,DistortionC\_Mannequin,DistortionC\_Skeleton)

DistortionD\_Zombie<-c(acceptability\_zombie\_m5\_v1,acceptability\_zombie\_m5\_v2,acceptability\_zombie\_m5\_v3,acceptability\_zombie\_m5\_v4,acceptability\_zombie\_m5\_v5,acceptability\_zombie\_m5\_v6)

DistortionD\_Toy<-c(acceptability\_toy\_robot\_m5\_v1,acceptability\_toy\_robot\_m5\_v2,acceptability\_toy\_robot\_m5\_v3,acceptability\_toy\_robot\_m5\_v4,acceptability\_toy\_robot\_m5\_v5,acceptability\_toy\_robot\_m5\_v6)

DistortionD\_Battle<-c(acceptability\_battle\_robot\_m5\_v1,acceptability\_battle\_robot\_m5\_v2,acceptability\_battle\_robot\_m5\_v3,acceptability\_battle\_robot\_m5\_v4,acceptability\_battle\_robot\_m5\_v5,acceptability\_battle\_robot\_m5\_v6)

DistortionD\_High<-c(acceptability\_high\_man\_m5\_v1,acceptability\_high\_man\_m5\_v2,acceptability\_high\_man\_m5\_v3,acceptability\_high\_man\_m5\_v4,acceptability\_high\_man\_m5\_v5,acceptability\_high\_man\_m5\_v6)

DistortionD\_Low<-c(acceptability\_lo\_man\_m5\_v1,acceptability\_lo\_man\_m5\_v2,acceptability\_lo\_man\_m5\_v3,acceptability\_lo\_man\_m5\_v4,acceptability\_lo\_man\_m5\_v5,acceptability\_lo\_man\_m5\_v6)

DistortionD\_Mannequin<-c(acceptability\_mannequin\_m5\_v1,acceptability\_mannequin\_m5\_v2,acceptability\_mannequin\_m5\_v3,acceptability\_mannequin\_m5\_v4,acceptability\_mannequin\_m5\_v5,acceptability\_mannequin\_m5\_v6)

DistortionD\_Skeleton<-c(acceptability\_skeleton\_m5\_v1,acceptability\_skeleton\_m5\_v2,acceptability\_skeleton\_m5\_v3,acceptability\_skeleton\_m5\_v4,acceptability\_skeleton\_m5\_v5,acceptability\_skeleton\_m5\_v6)

DistortionD\_All<-c(DistortionD\_Zombie,DistortionD\_Toy,DistortionD\_Battle,DistortionD\_High,DistortionD\_Low,DistortionD\_Mannequin,DistortionD\_Skeleton)

Motion\_All<-c(Natural\_Movement\_All,DistortionA\_All,DistortionB\_All,DistortionC\_All,DistortionD\_All)

# onafhankelijke variabele

Acc\_ratings<-c(Static\_All,Motion\_All)

# tabel informatie

# gemiddelden

mean(Natural\_Movement\_Zombie)

mean(Natural\_Movement\_Toy)

mean(Natural\_Movement\_Battle)

mean(Natural\_Movement\_High)

mean(Natural\_Movement\_Low)

mean(Natural\_Movement\_Mannequin)

mean(Natural\_Movement\_Skeleton)

mean(DistortionA\_Zombie)

mean(DistortionA\_Toy)

mean(DistortionA\_Battle)

mean(DistortionA\_High)

mean(DistortionA\_Low)

mean(DistortionA\_Mannequin)

mean(DistortionA\_Skeleton)

mean(DistortionB\_Zombie)

mean(DistortionB\_Toy)

mean(DistortionB\_Battle)

mean(DistortionB\_High)

mean(DistortionB\_Low)

mean(DistortionB\_Mannequin)

mean(DistortionB\_Skeleton)

mean(DistortionC\_Zombie)

mean(DistortionC\_Toy)

mean(DistortionC\_Battle)

mean(DistortionC\_High)

mean(DistortionC\_Low)

mean(DistortionC\_Mannequin)

mean(DistortionC\_Skeleton)

mean(DistortionD\_Zombie)

mean(DistortionD\_Toy)

mean(DistortionD\_Battle)

mean(DistortionD\_High)

mean(DistortionD\_Low)

mean(DistortionD\_Mannequin)

mean(DistortionD\_Skeleton)

#variantie

var(Natural\_Movement\_Zombie)

var(Natural\_Movement\_Toy)

var(Natural\_Movement\_Battle)

var(Natural\_Movement\_High)

var(Natural\_Movement\_Low)

var(Natural\_Movement\_Mannequin)

var(Natural\_Movement\_Skeleton)

var(DistortionA\_Zombie)

var(DistortionA\_Toy)

var(DistortionA\_Battle)

var(DistortionA\_High)

var(DistortionA\_Low)

var(DistortionA\_Mannequin)

var(DistortionA\_Skeleton)

var(DistortionB\_Zombie)

var(DistortionB\_Toy)

var(DistortionB\_Battle)

var(DistortionB\_High)

var(DistortionB\_Low)

var(DistortionB\_Mannequin)

var(DistortionB\_Skeleton)

var(DistortionC\_Zombie)

var(DistortionC\_Toy)

var(DistortionC\_Battle)

var(DistortionC\_High)

var(DistortionC\_Low)

var(DistortionC\_Mannequin)

var(DistortionC\_Skeleton)

var(DistortionD\_Zombie)

var(DistortionD\_Toy)

var(DistortionD\_Battle)

var(DistortionD\_High)

var(DistortionD\_Low)

var(DistortionD\_Mannequin)

var(DistortionD\_Skeleton)

#standaarddeviaties

sqrt(var(Natural\_Movement\_Zombie))

sqrt(var(Natural\_Movement\_Toy))

sqrt(var(Natural\_Movement\_Battle))

sqrt(var(Natural\_Movement\_High))

sqrt(var(Natural\_Movement\_Low))

sqrt(var(Natural\_Movement\_Mannequin))

sqrt(var(Natural\_Movement\_Skeleton))

sqrt(var(DistortionA\_Zombie))

sqrt(var(DistortionA\_Toy))

sqrt(var(DistortionA\_Battle))

sqrt(var(DistortionA\_High))

sqrt(var(DistortionA\_Low))

sqrt(var(DistortionA\_Mannequin))

sqrt(var(DistortionA\_Skeleton))

sqrt(var(DistortionB\_Zombie))

sqrt(var(DistortionB\_Toy))

sqrt(var(DistortionB\_Battle))

sqrt(var(DistortionB\_High))

sqrt(var(DistortionB\_Low))

sqrt(var(DistortionB\_Mannequin))

sqrt(var(DistortionB\_Skeleton))

sqrt(var(DistortionC\_Zombie))

sqrt(var(DistortionC\_Toy))

sqrt(var(DistortionC\_Battle))

sqrt(var(DistortionC\_High))

sqrt(var(DistortionC\_Low))

sqrt(var(DistortionC\_Mannequin))

sqrt(var(DistortionC\_Skeleton))

sqrt(var(DistortionD\_Zombie))

sqrt(var(DistortionD\_Toy))

sqrt(var(DistortionD\_Battle))

sqrt(var(DistortionD\_High))

sqrt(var(DistortionD\_Low))

sqrt(var(DistortionD\_Mannequin))

sqrt(var(DistortionD\_Skeleton))

#anova – character,motion,interactie

Two\_way\_anova<-aov(Acc\_ratings~Static\_All + Motion\_All++Static\_All:Motion\_All)

summary(Two-way\_anova)

GREENHOUSE-GEISSER!!!

//

CharacterType<-factor(c(“BattleRobot”,”ToyRobot”,”HighQualityMan”,”LowQualityMan”,”Mannequin”,”Skeleton”,”Zombie”)