Analysis using Multiple Imputation (scmfcs)

2023-03-29

Table of Contents

[Data Import & Cleaning 3](#_Toc139752292)

[Import data 3](#_Toc139752293)

[Combine dataframes 4](#_Toc139752294)

[Remove duplicate cases 7](#_Toc139752295)

[Remove rows of all NAs 7](#_Toc139752296)

[Number per source 8](#_Toc139752297)

[Inspect final data 8](#_Toc139752298)

[Aggregate Variables 8](#_Toc139752299)

[Personality 8](#_Toc139752300)

[Reverse-code 8](#_Toc139752301)

[Average items 9](#_Toc139752302)

[Visually inspect 10](#_Toc139752303)

[Clothing Interest 11](#_Toc139752304)

[Reverse-code 11](#_Toc139752305)

[Average items 11](#_Toc139752306)

[Visually Inspect 11](#_Toc139752307)

[In-group Identification 12](#_Toc139752308)

[Reverse-code 12](#_Toc139752309)

[Average items 12](#_Toc139752310)

[Visually Inspect 12](#_Toc139752311)

[Values 12](#_Toc139752312)

[Reverse-code 12](#_Toc139752313)

[Recoding scale options 12](#_Toc139752314)

[Average items 14](#_Toc139752315)

[Visually inspect 14](#_Toc139752316)

[Frequency tables 15](#_Toc139752317)

[Socially Desirable Responding 21](#_Toc139752318)

[Reverse-code 21](#_Toc139752319)

[Average items 21](#_Toc139752320)

[Visually inspect 21](#_Toc139752321)

[Consumer Intentions 22](#_Toc139752322)

[Reverse-code 22](#_Toc139752323)

[Average items 22](#_Toc139752324)

[Visually inspect 22](#_Toc139752325)

[Contrast Coding 23](#_Toc139752326)

[Multiple Imputation 24](#_Toc139752327)

[Examine Missingness 24](#_Toc139752328)

[Adding interaction terms 25](#_Toc139752329)

[Imputation model 25](#_Toc139752330)

[Centering continuous predictors 27](#_Toc139752331)

[Regression Analysis (DV = Consumer Intentions) 31](#_Toc139752332)

[Running Model 31](#_Toc139752333)

[Pooled Regression Results 39](#_Toc139752334)

[Pooled Anova Results 51](#_Toc139752335)

[Analysis in each imputed data set 56](#_Toc139752336)

[Imputed Data 1 56](#_Toc139752337)

[Imputed Data 2 80](#_Toc139752338)

[Imputed Data 3 104](#_Toc139752339)

[Imputed Data 4 128](#_Toc139752340)

[Imputed Data 5 152](#_Toc139752341)

[Simple Effects 176](#_Toc139752342)

[Framing Condition 177](#_Toc139752343)

[Norm Condition 180](#_Toc139752344)

[Framing X Norm 184](#_Toc139752345)

[Values Interactions 194](#_Toc139752346)

[Biospheric Values 194](#_Toc139752347)

[Altruistic Values 203](#_Toc139752348)

[Egoistic Values 211](#_Toc139752349)

[Hedonic Values 218](#_Toc139752350)

[Ingroup Identification Interactions 225](#_Toc139752351)

[All cells compared to control 232](#_Toc139752352)

[Gender Interactions (exploratory) 240](#_Toc139752353)

# Data Import & Cleaning

## Import data

raw\_psych\_hum\_subj <- import("data/raw/raw\_psych\_hum\_subj.csv")  
raw\_mktg\_hum\_subj <- import("data/raw/raw\_mktg\_hum\_subj.csv")  
raw\_gen\_uo\_pop <- import("data/raw/raw\_gen\_uo\_pop.csv")  
pre\_fall22 <- import("data/prescreen/dittersdorf\_matches\_f22.csv")  
pre\_winter23 <- import("data/prescreen/dittersdorf\_matches\_w23.csv")  
pre\_spring23 <- import("data/prescreen/dittersdorf\_matches\_s23.csv")  
participant\_list <- import("data/prescreen/dittersdorf\_participants.csv")

Fix age before converting variable types

table(raw\_psych\_hum\_subj$Age) # 18 years old = 18

##   
## 18 18 years old 19 20 21   
## 117 220 1 297 120 76   
## 22 23 24 25 27 28   
## 41 4 3 2 1 1   
## 29 30 31 32 33 50   
## 1 1 1 1 1 1

table(raw\_mktg\_hum\_subj$Age) # 1999 = 24

##   
## 18 19 1999 20 21 22 23 24 25 28 test   
## 11 4 13 1 50 119 66 7 9 3 1 3

table(raw\_gen\_uo\_pop$Age)

##   
## 18 20 21 22 28   
## 2 1 2 1 1

raw\_psych\_hum\_subj$Age[raw\_psych\_hum\_subj$Age == "18 years old"] <- 18  
raw\_mktg\_hum\_subj$Age[raw\_mktg\_hum\_subj$Age == 1999] <- 24  
  
table(raw\_psych\_hum\_subj$Age) # 18 years old = 18

##   
## 18 19 20 21 22 23 24 25 27 28 29 30 31 32 33 50   
## 117 221 297 120 76 41 4 3 2 1 1 1 1 1 1 1 1

table(raw\_mktg\_hum\_subj$Age) # 1999 = 24

##   
## 18 19 20 21 22 23 24 25 28 test   
## 11 4 13 50 119 66 7 10 3 1 3

## Combine dataframes

raw\_psych\_hum\_subj <- raw\_psych\_hum\_subj %>%  
 mutate(Age = as.integer(Age),  
 Gender = as.factor(Gender),  
 framing\_condition\_DO = as.factor(framing\_condition\_DO),  
 norm\_condition\_DO = as.factor(norm\_condition\_DO),  
 consumer\_behaviors = as.factor(consumer\_behaviors),  
 skepticism = as.factor(skepticism),  
 id = as.factor(id),  
 source = strrep("psych\_hsp", times = 1))  
  
levels(raw\_psych\_hum\_subj$framing\_condition\_DO)

## [1] "" "control\_framing" "pro\_env\_framing" "self\_enh\_framing"

raw\_mktg\_hum\_subj <- raw\_mktg\_hum\_subj %>%  
 mutate(Age = as.integer(Age),  
 Gender = as.factor(Gender),  
 Gender\_5\_TEXT = as.character(Gender\_5\_TEXT),  
 Class\_Lvl\_7\_TEXT = as.character(Class\_Lvl\_7\_TEXT),  
 Pol\_Ornt\_8\_TEXT = as.character(Pol\_Ornt\_8\_TEXT),  
 Ethnicity\_8\_TEXT = as.character(Ethnicity\_8\_TEXT),  
 skept\_open = as.character(skept\_open),  
 skepticism = as.factor(skepticism),  
 id = as.factor(id),  
 framing\_condition\_DO = as.factor(framing\_condition\_DO),  
 norm\_condition\_DO = as.factor(norm\_condition\_DO),  
 consumer\_behaviors = as.factor(consumer\_behaviors),  
 source = strrep("mktg\_hsp", times = 1))  
  
raw\_gen\_uo\_pop <- raw\_gen\_uo\_pop %>%  
 mutate(Gender = as.factor(Gender),  
 Gender\_5\_TEXT = as.character(Gender\_5\_TEXT),  
 Class\_Lvl\_7\_TEXT = as.character(Class\_Lvl\_7\_TEXT),  
 Pol\_Ornt\_8\_TEXT = as.character(Pol\_Ornt\_8\_TEXT),  
 skept\_open = as.character(skept\_open),  
 skepticism = as.factor(skepticism),  
 id = as.factor(id),  
 framing\_condition\_DO = as.factor(framing\_condition\_DO),  
 norm\_condition\_DO = as.factor(norm\_condition\_DO),  
 consumer\_behaviors = as.factor(consumer\_behaviors),  
 source = strrep("gen\_UO", times = 1))

Specify unique variables to combine prescreen data sets

# Create unique full\_name variable  
pre\_fall22$full\_name <- paste(pre\_fall22$first\_name, pre\_fall22$last\_name, sep="\_")  
  
pre\_winter23$full\_name <- paste(pre\_winter23$first\_name, pre\_winter23$last\_name, sep="\_")  
  
pre\_spring23$full\_name <- paste(pre\_spring23$first\_name, pre\_spring23$last\_name, sep="\_")  
  
participant\_list$full\_name <- paste(participant\_list$first\_name, participant\_list$last\_name, sep="\_")  
  
# Create column indicating which data set rows came from  
  
pre\_fall22 <- pre\_fall22 %>%  
 mutate(term = "fall22")  
  
pre\_winter23 <- pre\_winter23 %>%  
 mutate(term = "winter23")  
  
pre\_spring23 <- pre\_spring23 %>%  
 mutate(term = "spring23")

Combine prescreen data

combine1 <- smartbind(pre\_fall22, pre\_winter23)  
combined\_prescreen <- smartbind(combine1, pre\_spring23)  
  
# nrow(pre\_fall22) + nrow(pre\_winter23) + nrow(pre\_spring23) # n = 1167  
  
combined\_prescreen\_unique <- combined\_prescreen[!duplicated(combined\_prescreen$full\_name), ] # keeps first row (fall22)

Subset key variables

combined\_prescreen\_key <- combined\_prescreen\_unique %>%  
 dplyr::select(full\_name, term, respecting:gratification, honest:gossip)  
  
participant\_list\_key <- participant\_list %>%  
 dplyr::select(full\_name, survey\_id)

Merge with participant list

merged\_prescreen <- merge(combined\_prescreen\_key, participant\_list\_key, by = "full\_name")

Rename SDR items to match

Convert variable types

merged\_prescreen <- merged\_prescreen %>%  
 mutate(respecting = as.integer(respecting),  
 unity = as.integer(unity),  
 protecting = as.integer(protecting),  
 preventing = as.integer(preventing),  
 equality = as.integer(equality),  
 peace = as.integer(peace),  
 justice = as.integer(justice),  
 helpful = as.integer(helpful),  
 power = as.integer(power),  
 wealth = as.integer(wealth),  
 authority = as.integer(authority),  
 influential = as.integer(influential),  
 ambition = as.integer(ambition),  
 pleasures = as.integer(pleasures),  
 enjoying = as.integer(enjoying),  
 gratification = as.integer(gratification),  
 honest = as.integer(honest),  
 like = as.integer(like),  
 disturbing = as.integer(disturbing),  
 regret = as.integer(regret),  
 lose\_out = as.integer(lose\_out),  
 rational = as.integer(rational),  
 confident = as.integer(confident),  
 lover = as.integer(lover),  
 lies = as.integer(lies),  
 cover\_up = as.integer(cover\_up),  
 advantage = as.integer(advantage),  
 get\_even = as.integer(get\_even),  
 behind\_back = as.integer(behind\_back),  
 private\_talk = as.integer(private\_talk),  
 take\_things = as.integer(take\_things),  
 gossip = as.integer(gossip),  
 id = as.factor(id))

Rename values & socially desirable items in prescreen data to match names in main data:

Combine all data

* First, combine Psych Hum Subj data with Prescreen data based on id
* Second, add Mktg Hum Subj data
* Third, add gen UO Pop data

combine1 <- merge(raw\_psych\_hum\_subj, merged\_prescreen, by = "id")  
combine2 <- smartbind(combine1, raw\_mktg\_hum\_subj)  
combine3 <- smartbind(combine2, raw\_gen\_uo\_pop)

## Remove duplicate cases

Identify duplicate cases

# first, add unique row #s  
combine3 <- combine3 %>%  
 mutate(row = 1:nrow(combine3))  
  
combine3[duplicated(combine3$id),] # Only rows 1 through 858 have unique id #s  
  
# write.csv(combine3, "combined\_data.csv")

Row IDs to remove:

* 13 (participant’s second time completing study)
* 134 (participant didn’t complete study first time)
* 145 (participant didn’t complete study first time)
* 308 (participant’s second time completing study)
* 672 (participant’s second time completing study)
* 743 (participant didn’t complete study first time)
* 790 (participant didn’t complete study first time)
* 800 (participant didn’t complete study first time)

Remove duplicate rows after resolving:

combine3 <- combine3 %>%  
 filter(!row %in% c(13, 134, 145, 308, 672, 743, 790, 800))

## Remove rows of all NAs

Identify completely missing rows:

key\_vars <- combine3 %>%  
 dplyr::select(row, big\_2\_1:big\_2\_65, consumer\_intentions\_1:consumer\_intentions\_9, consumer\_behaviors, clothing\_interest\_1:clothing\_interest\_20, ingroup\_ident\_1:ingroup\_ident\_14, values\_1:values\_16, socially\_desirable\_1:socially\_desirable\_16, source)  
  
ncol(key\_vars) # number of columns - the row # & source column = 141  
  
all\_NA\_rows <- key\_vars[rowSums(is.na(key\_vars)) == 141,] # identify rows with 141 NAs (all missing values), row numbers are preserved  
  
all\_NA\_rows

Removing rows of fully missing data

data <- combine3 %>%  
 dplyr::filter(!row %in% c(859, 860, 900, 926, 927, 941, 1139, 1141, 1142, 1143, 1144, 1146, 1149, 1150, 1152)) %>% # remove rows containing all NAs  
 dplyr::select(-StartDate, -EndDate, -Status, -Progress, -"Duration (in seconds)", -Finished, -RecordedDate, -ResponseId, -DistributionChannel, -UserLanguage, -big\_2\_DO, -consumer\_intentions\_DO, -consumer\_behaviors\_DO, -clothing\_interest\_DO, -ingroup\_ident\_DO, -full\_name, -code, -socially\_desirable\_DO, -values\_DO, -email\_giftcard, -term) # removing variables not in analysis

## Number per source

table(data$source)

##   
## gen\_UO mktg\_hsp psych\_hsp   
## 7 276 850

* 850 = psych human subjects pool
* 276 = mktg human subjects pool
* 7 = general UO pop

Rename variables

data <- data %>%  
 rename("framing\_condition" = "framing\_condition\_DO",   
 "norm\_condition" = "norm\_condition\_DO")

Drop unused levels

Re-order levels of norm condition

data$norm\_condition <- factor(data$norm\_condition, levels = c("control\_norm", "descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"))

## Inspect final data

str(data, list.len = ncol(data))  
  
# write.csv(data, "final\_data.csv")

# Aggregate Variables

## Personality

### Reverse-code

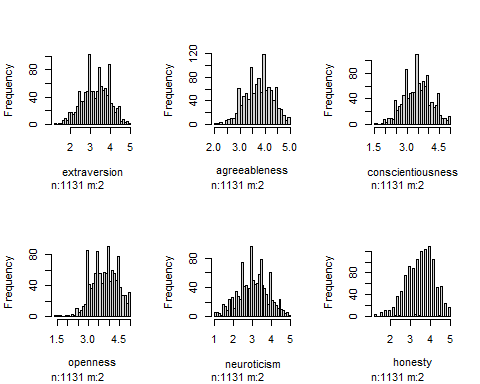
data\_R <- data %>%  
 mutate(across(c(big\_2\_11,  
 big\_2\_16,  
 big\_2\_26,  
 big\_2\_31,  
 big\_2\_36,  
 big\_2\_51,  
 big\_2\_12,  
 big\_2\_17,  
 big\_2\_22,  
 big\_2\_37,  
 big\_2\_42,  
 big\_2\_47,  
 big\_2\_3,  
 big\_2\_8,  
 big\_2\_23,  
 big\_2\_28,  
 big\_2\_48,  
 big\_2\_58,  
 big\_2\_4,  
 big\_2\_9,  
 big\_2\_24,  
 big\_2\_29,  
 big\_2\_44,  
 big\_2\_49,  
 big\_2\_5,  
 big\_2\_25,  
 big\_2\_30,  
 big\_2\_45,  
 big\_2\_50,  
 big\_2\_55,  
 big\_2\_63), ~6 - .)) # replace '6' with the max possible value plus 1 for any particular scale

### Average items

data\_R$extraversion <- data\_R %>%  
 dplyr::select(big\_2\_1, big\_2\_6, big\_2\_11, big\_2\_16, big\_2\_21, big\_2\_26, big\_2\_31, big\_2\_36, big\_2\_41, big\_2\_46, big\_2\_51, big\_2\_56) %>%  
 rowMeans(na.rm = TRUE)   
  
  
data\_R$conscientiousness <- data\_R %>%  
 dplyr::select(big\_2\_3, big\_2\_8, big\_2\_13, big\_2\_18, big\_2\_23, big\_2\_28, big\_2\_33, big\_2\_38, big\_2\_43, big\_2\_48, big\_2\_53, big\_2\_58) %>%  
 rowMeans(na.rm = TRUE)  
  
  
data\_R$agreeableness <- data\_R %>%  
 dplyr::select(big\_2\_2, big\_2\_7, big\_2\_12, big\_2\_17, big\_2\_22, big\_2\_27, big\_2\_32, big\_2\_37, big\_2\_42, big\_2\_47, big\_2\_52, big\_2\_57) %>%  
 rowMeans(na.rm = TRUE)  
  
  
data\_R$neuroticism <- data\_R %>%  
 dplyr::select(big\_2\_4, big\_2\_9, big\_2\_14, big\_2\_19, big\_2\_24, big\_2\_29, big\_2\_34, big\_2\_39, big\_2\_44, big\_2\_49, big\_2\_54, big\_2\_59) %>%  
 rowMeans(na.rm = TRUE)  
  
  
data\_R$openness <- data\_R %>%  
 dplyr::select(big\_2\_5, big\_2\_10, big\_2\_15, big\_2\_20, big\_2\_25, big\_2\_30, big\_2\_35, big\_2\_40, big\_2\_45, big\_2\_50, big\_2\_55, big\_2\_60) %>%  
 rowMeans(na.rm = TRUE)  
  
  
data\_R$honesty <- data\_R %>%  
 dplyr::select(big\_2\_61, big\_2\_62, big\_2\_63, big\_2\_64, big\_2\_65) %>%  
 rowMeans(na.rm = TRUE)

### Visually inspect

data\_R %>%  
 dplyr::select(extraversion, agreeableness, conscientiousness, openness, neuroticism, honesty) %>%  
 hist()



## Clothing Interest

### Reverse-code

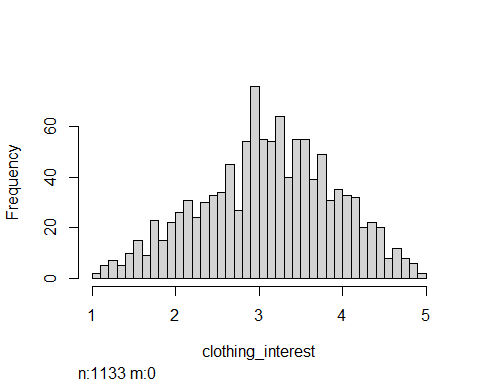
data\_R <- data\_R %>%  
 mutate(across(c(clothing\_interest\_3,  
 clothing\_interest\_5,  
 clothing\_interest\_7,  
 clothing\_interest\_9,  
 clothing\_interest\_12,  
 clothing\_interest\_14,  
 clothing\_interest\_15,  
 clothing\_interest\_16,  
 clothing\_interest\_18,  
 clothing\_interest\_20), ~6 - .)) # replace '#' with the max possible value plus 1 for any particular scale

### Average items

data\_R$clothing\_interest <- data\_R %>%  
 dplyr::select(clothing\_interest\_1:clothing\_interest\_20) %>%  
 rowMeans(na.rm = TRUE)

### Visually Inspect

data\_R %>%  
 dplyr::select(clothing\_interest) %>%  
 hist()



## In-group Identification

### Reverse-code

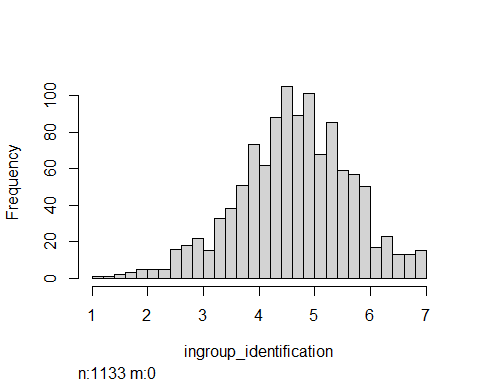
No items need to be reverse-coded.

### Average items

data\_R$ingroup\_identification <- data\_R %>%  
 dplyr::select(ingroup\_ident\_1:ingroup\_ident\_14) %>%  
 rowMeans(na.rm = TRUE)

### Visually Inspect

data\_R %>%  
 dplyr::select(ingroup\_identification) %>%  
 hist()



## Values

### Reverse-code

No items need to be reverse-coded.

### Recoding scale options

Recoding values:

* -3 = 1
* -2 = 2
* -1 = 3
* 0 = 4
* +1 = 5
* +2 = 6
* +3 = 7

table(data\_R$values\_1)

##   
## -3 -2 -1 0 1 2 3   
## 5 10 17 40 176 362 508

data\_R$values\_1\_rec <- recode(data\_R$values\_1, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
  
table(data\_R$values\_1\_rec)

##   
## 1 2 3 4 5 6 7   
## 5 10 17 40 176 362 508

data\_R$values\_2\_rec <- recode(data\_R$values\_2, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_3\_rec <- recode(data\_R$values\_3, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_4\_rec <- recode(data\_R$values\_4, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_5\_rec <- recode(data\_R$values\_5, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_6\_rec <- recode(data\_R$values\_6, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_7\_rec <- recode(data\_R$values\_7, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_8\_rec <- recode(data\_R$values\_8, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_9\_rec <- recode(data\_R$values\_9, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_10\_rec <- recode(data\_R$values\_10, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_11\_rec <- recode(data\_R$values\_11, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_12\_rec <- recode(data\_R$values\_12, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_13\_rec <- recode(data\_R$values\_13, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_14\_rec <- recode(data\_R$values\_14, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_15\_rec <- recode(data\_R$values\_15, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_16\_rec <- recode(data\_R$values\_16, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
  
table(data\_R$values\_16)

##   
## -3 -2 -1 0 1 2 3   
## 4 11 29 116 250 394 312

table(data\_R$values\_16\_rec)

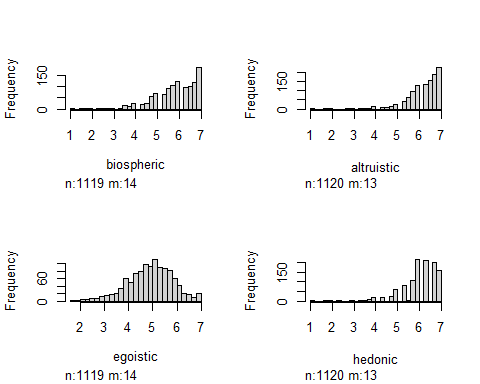
##   
## 1 2 3 4 5 6 7   
## 4 11 29 116 250 394 312

### Average items

data\_R$biospheric <- data\_R %>%  
 dplyr::select(values\_1\_rec:values\_4\_rec) %>%  
 rowMeans(na.rm = TRUE)  
  
data\_R$altruistic <- data\_R %>%  
 dplyr::select(values\_5\_rec:values\_8\_rec) %>%  
 rowMeans(na.rm = TRUE)  
  
data\_R$egoistic <- data\_R %>%  
 dplyr::select(values\_9\_rec:values\_13\_rec) %>%  
 rowMeans(na.rm = TRUE)  
  
data\_R$hedonic <- data\_R %>%  
 dplyr::select(values\_14\_rec:values\_16\_rec) %>%  
 rowMeans(na.rm = TRUE)

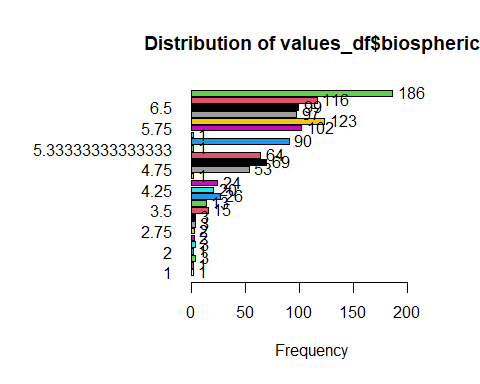
### Visually inspect

values\_df <- data\_R %>%  
 dplyr::select(biospheric, altruistic, egoistic, hedonic)  
  
values\_df %>%  
 hist()



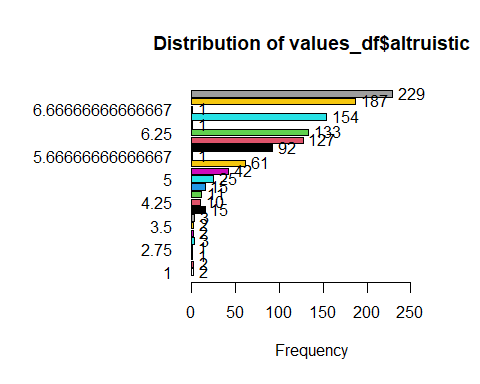
### Frequency tables

# Biospheric values  
tab1(values\_df$biospheric, sort.group = "descending", cum.percent = TRUE, missing = FALSE, horiz = TRUE)



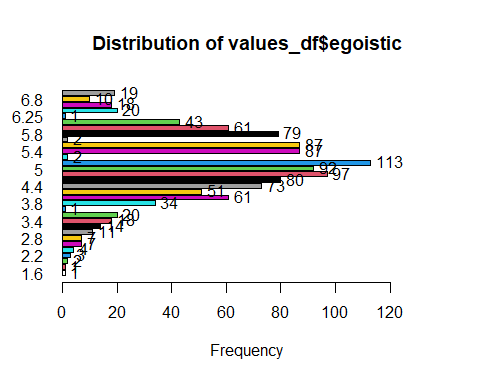
## values\_df$biospheric :   
## Frequency %(NA+) cum.%(NA+) %(NA-) cum.%(NA-)  
## 1 1 0.1 0.1 0.1 0.1  
## 1.5 1 0.1 0.2 0.1 0.2  
## 1.75 3 0.3 0.4 0.3 0.4  
## 2 1 0.1 0.5 0.1 0.5  
## 2.25 3 0.3 0.8 0.3 0.8  
## 2.5 2 0.2 1.0 0.2 1.0  
## 2.75 2 0.2 1.1 0.2 1.2  
## 3 3 0.3 1.4 0.3 1.4  
## 3.25 3 0.3 1.7 0.3 1.7  
## 3.5 15 1.3 3.0 1.3 3.0  
## 3.75 13 1.1 4.1 1.2 4.2  
## 4 26 2.3 6.4 2.3 6.5  
## 4.25 20 1.8 8.2 1.8 8.3  
## 4.5 24 2.1 10.3 2.1 10.5  
## 4.66666666666667 1 0.1 10.4 0.1 10.5  
## 4.75 53 4.7 15.1 4.7 15.3  
## 5 69 6.1 21.2 6.2 21.4  
## 5.25 64 5.6 26.8 5.7 27.2  
## 5.33333333333333 1 0.1 26.9 0.1 27.3  
## 5.5 90 7.9 34.9 8.0 35.3  
## 5.66666666666667 1 0.1 35.0 0.1 35.4  
## 5.75 102 9.0 44.0 9.1 44.5  
## 6 123 10.9 54.8 11.0 55.5  
## 6.25 97 8.6 63.4 8.7 64.2  
## 6.5 99 8.7 72.1 8.8 73.0  
## 6.75 116 10.2 82.3 10.4 83.4  
## 7 186 16.4 98.8 16.6 100.0  
## NaN 14 1.2 100.0 0.0 100.0  
## Total 1133 100.0 100.0 100.0 100.0

# Altruistic values  
tab1(values\_df$altruistic, sort.group = "descending", cum.percent = TRUE, missing = FALSE, horiz = TRUE)



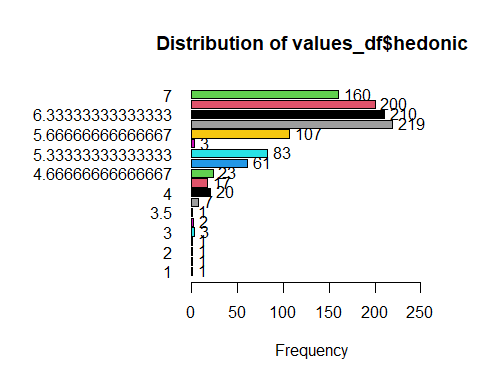
## values\_df$altruistic :   
## Frequency %(NA+) cum.%(NA+) %(NA-) cum.%(NA-)  
## 1 2 0.2 0.2 0.2 0.2  
## 1.75 2 0.2 0.4 0.2 0.4  
## 2 1 0.1 0.4 0.1 0.4  
## 2.75 1 0.1 0.5 0.1 0.5  
## 3 3 0.3 0.8 0.3 0.8  
## 3.25 2 0.2 1.0 0.2 1.0  
## 3.5 2 0.2 1.1 0.2 1.2  
## 3.75 3 0.3 1.4 0.3 1.4  
## 4 15 1.3 2.7 1.3 2.8  
## 4.25 10 0.9 3.6 0.9 3.7  
## 4.5 11 1.0 4.6 1.0 4.6  
## 4.75 15 1.3 5.9 1.3 6.0  
## 5 25 2.2 8.1 2.2 8.2  
## 5.25 42 3.7 11.8 3.8 12.0  
## 5.5 61 5.4 17.2 5.4 17.4  
## 5.66666666666667 1 0.1 17.3 0.1 17.5  
## 5.75 92 8.1 25.4 8.2 25.7  
## 6 127 11.2 36.6 11.3 37.1  
## 6.25 133 11.7 48.4 11.9 48.9  
## 6.33333333333333 1 0.1 48.5 0.1 49.0  
## 6.5 154 13.6 62.0 13.8 62.8  
## 6.66666666666667 1 0.1 62.1 0.1 62.9  
## 6.75 187 16.5 78.6 16.7 79.6  
## 7 229 20.2 98.9 20.4 100.0  
## NaN 13 1.1 100.0 0.0 100.0  
## Total 1133 100.0 100.0 100.0 100.0

# Egoistic values  
tab1(values\_df$egoistic, sort.group = "descending", cum.percent = TRUE, missing = FALSE, horiz = TRUE)



## values\_df$egoistic :   
## Frequency %(NA+) cum.%(NA+) %(NA-) cum.%(NA-)  
## 1.6 1 0.1 0.1 0.1 0.1  
## 1.8 1 0.1 0.2 0.1 0.2  
## 2 2 0.2 0.4 0.2 0.4  
## 2.2 3 0.3 0.6 0.3 0.6  
## 2.4 4 0.4 1.0 0.4 1.0  
## 2.6 7 0.6 1.6 0.6 1.6  
## 2.8 7 0.6 2.2 0.6 2.2  
## 3 11 1.0 3.2 1.0 3.2  
## 3.2 14 1.2 4.4 1.3 4.5  
## 3.4 18 1.6 6.0 1.6 6.1  
## 3.6 20 1.8 7.8 1.8 7.9  
## 3.75 1 0.1 7.9 0.1 8.0  
## 3.8 34 3.0 10.9 3.0 11.0  
## 4 61 5.4 16.2 5.5 16.4  
## 4.2 51 4.5 20.7 4.6 21.0  
## 4.4 73 6.4 27.2 6.5 27.5  
## 4.6 80 7.1 34.2 7.1 34.7  
## 4.8 97 8.6 42.8 8.7 43.3  
## 5 92 8.1 50.9 8.2 51.6  
## 5.2 113 10.0 60.9 10.1 61.7  
## 5.25 2 0.2 61.1 0.2 61.8  
## 5.4 87 7.7 68.8 7.8 69.6  
## 5.6 87 7.7 76.4 7.8 77.4  
## 5.75 2 0.2 76.6 0.2 77.6  
## 5.8 79 7.0 83.6 7.1 84.6  
## 6 61 5.4 89.0 5.5 90.1  
## 6.2 43 3.8 92.8 3.8 93.9  
## 6.25 1 0.1 92.9 0.1 94.0  
## 6.4 20 1.8 94.6 1.8 95.8  
## 6.6 18 1.6 96.2 1.6 97.4  
## 6.8 10 0.9 97.1 0.9 98.3  
## 7 19 1.7 98.8 1.7 100.0  
## NaN 14 1.2 100.0 0.0 100.0  
## Total 1133 100.0 100.0 100.0 100.0

# Hedonic values  
tab1(values\_df$hedonic, sort.group = "descending", cum.percent = TRUE, missing = FALSE, horiz = TRUE)



## values\_df$hedonic :   
## Frequency %(NA+) cum.%(NA+) %(NA-) cum.%(NA-)  
## 1 1 0.1 0.1 0.1 0.1  
## 1.66666666666667 1 0.1 0.2 0.1 0.2  
## 2 1 0.1 0.3 0.1 0.3  
## 2.33333333333333 1 0.1 0.4 0.1 0.4  
## 3 3 0.3 0.6 0.3 0.6  
## 3.33333333333333 2 0.2 0.8 0.2 0.8  
## 3.5 1 0.1 0.9 0.1 0.9  
## 3.66666666666667 7 0.6 1.5 0.6 1.5  
## 4 20 1.8 3.3 1.8 3.3  
## 4.33333333333333 17 1.5 4.8 1.5 4.8  
## 4.66666666666667 23 2.0 6.8 2.1 6.9  
## 5 61 5.4 12.2 5.4 12.3  
## 5.33333333333333 83 7.3 19.5 7.4 19.7  
## 5.5 3 0.3 19.8 0.3 20.0  
## 5.66666666666667 107 9.4 29.2 9.6 29.6  
## 6 219 19.3 48.5 19.6 49.1  
## 6.33333333333333 210 18.5 67.1 18.8 67.9  
## 6.66666666666667 200 17.7 84.7 17.9 85.7  
## 7 160 14.1 98.9 14.3 100.0  
## NaN 13 1.1 100.0 0.0 100.0  
## Total 1133 100.0 100.0 100.0 100.0

## Socially Desirable Responding

### Reverse-code

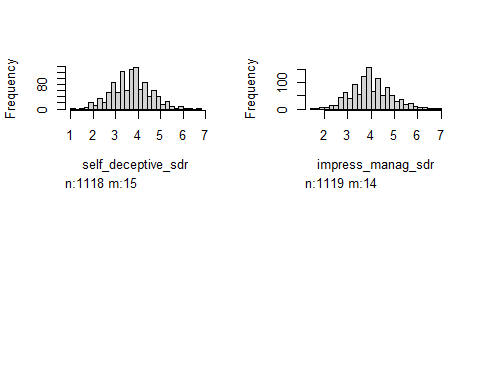
data\_R <- data\_R %>%  
 mutate(across(c(socially\_desirable\_1,  
 socially\_desirable\_3,  
 socially\_desirable\_5,  
 socially\_desirable\_8,  
 socially\_desirable\_9,  
 socially\_desirable\_11,  
 socially\_desirable\_12,  
 socially\_desirable\_13), ~8 - .)) # replace '#' with the max possible value plus 1 for any particular scale

### Average items

data\_R$self\_deceptive\_sdr <- data\_R %>%  
 dplyr::select(socially\_desirable\_1:socially\_desirable\_8) %>%  
 rowMeans(na.rm = TRUE)  
   
data\_R$impress\_manag\_sdr <- data\_R %>%  
 dplyr::select(socially\_desirable\_9:socially\_desirable\_16) %>%  
 rowMeans(na.rm = TRUE)

### Visually inspect

data\_R %>%  
 dplyr::select(self\_deceptive\_sdr, impress\_manag\_sdr) %>%  
 hist()



## Consumer Intentions

### Reverse-code

Higher scores mean better consumer intentions (intentions to *reduce* future consumption):

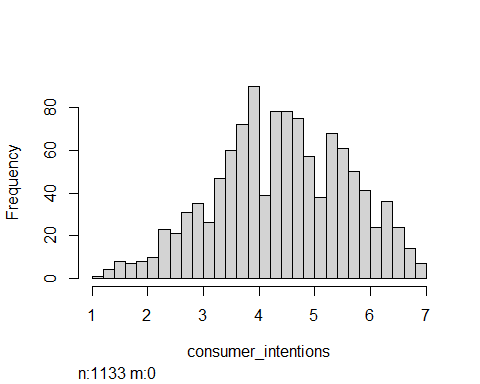
data\_R <- data\_R %>%  
 mutate(across(c(consumer\_intentions\_2,  
 consumer\_intentions\_4,  
 consumer\_intentions\_7,  
 consumer\_intentions\_9), ~8 - .)) # replace '#' with the max possible value plus 1 for any particular scale

### Average items

data\_R$consumer\_intentions <- data\_R %>%  
 dplyr::select(consumer\_intentions\_1:consumer\_intentions\_9) %>%  
 rowMeans(na.rm = TRUE)

### Visually inspect

data\_R %>%  
 dplyr::select(consumer\_intentions) %>%  
 hist()



# Contrast Coding

Subset variables

Contrast Coding using ifelse() approach:

# Framing  
data\_R\_alt$FramingCode1 <- ifelse(data\_R\_alt$framing\_condition == "control\_framing", -1/2, ifelse(data\_R\_alt$framing\_condition == "self\_enh\_framing", 1/2, 0))  
  
data\_R\_alt$FramingCode2 <- ifelse(data\_R\_alt$framing\_condition == "pro\_env\_framing", 2/3, -1/3)  
  
  
# Norm  
data\_R\_alt$NormCode1 <- ifelse(data\_R\_alt$norm\_condition == "moral\_norm", 4, -1)  
  
data\_R\_alt$NormCode2 <- ifelse(data\_R\_alt$norm\_condition == "social\_norm", 3, ifelse(data\_R\_alt$norm\_condition == "moral\_norm", 0, -1))  
  
data\_R\_alt$NormCode3 <- ifelse(data\_R\_alt$norm\_condition == "convention\_norm", 2, ifelse(data\_R\_alt$norm\_condition == "moral\_norm", 0, ifelse(data\_R\_alt$norm\_condition == "social\_norm", 0, -1)))  
data\_R\_alt$NormCode4 <- ifelse(data\_R\_alt$norm\_condition == "descriptive\_norm", 1, ifelse(data\_R\_alt$norm\_condition == "control\_norm", -1, 0))  
  
  
## Adding contrast codes to Framing & Norm Condition  
# Framing  
FrameCode1 <- c(-1/2, 0, 1/2) # control vs self-enhancing  
FrameCode2 <- c(-1/3, 2/3, -1/3) # arbitrary code  
  
contrasts(data\_R\_alt$framing\_condition) <- cbind(FrameCode1, FrameCode2)  
contrasts(data\_R\_alt$framing\_condition)

## FrameCode1 FrameCode2  
## control\_framing -0.5 -0.3333333  
## pro\_env\_framing 0.0 0.6666667  
## self\_enh\_framing 0.5 -0.3333333

# Norm  
contrasts(data\_R\_alt$norm\_condition) <- contr.helmert(5)  
contrasts(data\_R\_alt$norm\_condition) # control vs DN

## [,1] [,2] [,3] [,4]  
## control\_norm -1 -1 -1 -1  
## descriptive\_norm 1 -1 -1 -1  
## convention\_norm 0 2 -1 -1  
## social\_norm 0 0 3 -1  
## moral\_norm 0 0 0 4

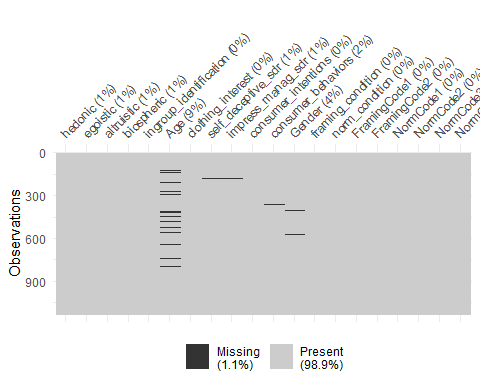
# Gender  
levels(data\_R\_alt$Gender) <- c("Woman", "Man", "Non-binary", "I prefer not to identify", "Other")  
  
data\_R\_alt$Gender[data\_R\_alt$Gender == "Non-binary"] <- NA  
data\_R\_alt$Gender[data\_R\_alt$Gender == "I prefer not to identify"] <- NA  
data\_R\_alt$Gender[data\_R\_alt$Gender == "Other"] <- NA  
  
data\_R\_alt$Gender <- droplevels(data\_R\_alt$Gender)  
  
contrasts(data\_R\_alt$Gender) <- c(1, 0)  
levels(data\_R\_alt$Gender)

## [1] "Woman" "Man"

# Multiple Imputation

## Examine Missingness

data\_R\_alt %>%  
 vis\_miss()



Variables with NO missing data:

* ingroup\_identification
* clothing\_interest
* consumer\_intentions
* framing\_condition
* norm\_condition

## Adding interaction terms

## Imputation model

set.seed(114950518)

* check out mice.impute.smcfcs

## [1] "Outcome variable(s): consumer\_intentions"  
## [1] "Passive variables: framing1Xbiospheric,framing2Xbiospheric,norm1Xbiospheric,norm2Xbiospheric,norm3Xbiospheric,norm4Xbiospheric,framing1Xnorm1Xbiospheric,framing1Xnorm2Xbiospheric,framing1Xnorm3Xbiospheric,framing1Xnorm4Xbiospheric,framing2Xnorm1Xbiospheric,framing2Xnorm2Xbiospheric,framing2Xnorm3Xbiospheric,framing2Xnorm4Xbiospheric,framing1Xaltruistic,framing2Xaltruistic,norm1Xaltruistic,norm2Xaltruistic,norm3Xaltruistic,norm4Xaltruistic,framing1Xnorm1Xaltruistic,framing1Xnorm2Xaltruistic,framing1Xnorm3Xaltruistic,framing1Xnorm4Xaltruistic,framing2Xnorm1Xaltruistic,framing2Xnorm2Xaltruistic,framing2Xnorm3Xaltruistic,framing2Xnorm4Xaltruistic,framing1Xegoistic,framing2Xegoistic,norm1Xegoistic,norm2Xegoistic,norm3Xegoistic,norm4Xegoistic,framing1Xnorm1Xegoistic,framing1Xnorm2Xegoistic,framing1Xnorm3Xegoistic,framing1Xnorm4Xegoistic,framing2Xnorm1Xegoistic,framing2Xnorm2Xegoistic,framing2Xnorm3Xegoistic,framing2Xnorm4Xegoistic,framing1Xhedonic,framing2Xhedonic,norm1Xhedonic,norm2Xhedonic,norm3Xhedonic,norm4Xhedonic,framing1Xnorm1Xhedonic,framing1Xnorm2Xhedonic,framing1Xnorm3Xhedonic,framing1Xnorm4Xhedonic,framing2Xnorm1Xhedonic,framing2Xnorm2Xhedonic,framing2Xnorm3Xhedonic,framing2Xnorm4Xhedonic"  
## [1] "Partially obs. variables: hedonic,egoistic,altruistic,biospheric,Age,self\_deceptive\_sdr,impress\_manag\_sdr,consumer\_behaviors,Gender"  
## [1] "Fully obs. substantive model variables: ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup"  
## [1] "Imputation 1"  
## [1] "Imputing: hedonic using egoistic,altruistic,biospheric,Age,self\_deceptive\_sdr,impress\_manag\_sdr,consumer\_behaviors,Gender,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputing: egoistic using hedonic,altruistic,biospheric,Age,self\_deceptive\_sdr,impress\_manag\_sdr,consumer\_behaviors,Gender,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputing: altruistic using hedonic,egoistic,biospheric,Age,self\_deceptive\_sdr,impress\_manag\_sdr,consumer\_behaviors,Gender,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputing: biospheric using hedonic,egoistic,altruistic,Age,self\_deceptive\_sdr,impress\_manag\_sdr,consumer\_behaviors,Gender,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputing: Age using hedonic,egoistic,altruistic,biospheric,self\_deceptive\_sdr,impress\_manag\_sdr,consumer\_behaviors,Gender,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputing: self\_deceptive\_sdr using hedonic,egoistic,altruistic,biospheric,Age,impress\_manag\_sdr,consumer\_behaviors,Gender,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputing: impress\_manag\_sdr using hedonic,egoistic,altruistic,biospheric,Age,self\_deceptive\_sdr,consumer\_behaviors,Gender,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputing: consumer\_behaviors using hedonic,egoistic,altruistic,biospheric,Age,self\_deceptive\_sdr,impress\_manag\_sdr,Gender,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputing: Gender using hedonic,egoistic,altruistic,biospheric,Age,self\_deceptive\_sdr,impress\_manag\_sdr,consumer\_behaviors,ingroup\_identification,clothing\_interest,framing\_condition,norm\_condition,framing1Xingroup,framing2Xingroup,norm1Xingroup,norm2Xingroup,norm3Xingroup,norm4Xingroup,framing1Xnorm1Xingroup,framing1Xnorm2Xingroup,framing1Xnorm3Xingroup,framing1Xnorm4Xingroup,framing2Xnorm1Xingroup,framing2Xnorm2Xingroup,framing2Xnorm3Xingroup,framing2Xnorm4Xingroup plus outcome"  
## [1] "Imputation 2"  
## [1] "Imputation 3"  
## [1] "Imputation 4"  
## [1] "Imputation 5"

Storing imputed data sets

impobject <- imputationList(imps$impDatasets)

## Centering continuous predictors

# Biospheric values  
impobject$imputations[[1]]$biospheric\_center <- impobject$imputations[[1]]$biospheric - mean(impobject$imputations[[1]]$biospheric)  
  
impobject$imputations[[2]]$biospheric\_center <- impobject$imputations[[2]]$biospheric - mean(impobject$imputations[[2]]$biospheric)  
  
impobject$imputations[[3]]$biospheric\_center <- impobject$imputations[[3]]$biospheric - mean(impobject$imputations[[3]]$biospheric)  
  
impobject$imputations[[4]]$biospheric\_center <- impobject$imputations[[4]]$biospheric - mean(impobject$imputations[[4]]$biospheric)  
  
impobject$imputations[[5]]$biospheric\_center <- impobject$imputations[[5]]$biospheric - mean(impobject$imputations[[5]]$biospheric)  
  
  
# Altruistic values  
impobject$imputations[[1]]$altruistic\_center <- impobject$imputations[[1]]$altruistic - mean(impobject$imputations[[1]]$altruistic)  
  
impobject$imputations[[2]]$altruistic\_center <- impobject$imputations[[2]]$altruistic - mean(impobject$imputations[[2]]$altruistic)  
  
impobject$imputations[[3]]$altruistic\_center <- impobject$imputations[[3]]$altruistic - mean(impobject$imputations[[3]]$altruistic)  
  
impobject$imputations[[4]]$altruistic\_center <- impobject$imputations[[4]]$altruistic - mean(impobject$imputations[[4]]$altruistic)  
  
impobject$imputations[[5]]$altruistic\_center <- impobject$imputations[[5]]$altruistic - mean(impobject$imputations[[5]]$altruistic)  
  
  
# Egoistic values  
impobject$imputations[[1]]$egoistic\_center <- impobject$imputations[[1]]$egoistic - mean(impobject$imputations[[1]]$egoistic)  
  
impobject$imputations[[2]]$egoistic\_center <- impobject$imputations[[2]]$egoistic - mean(impobject$imputations[[2]]$egoistic)  
  
impobject$imputations[[3]]$egoistic\_center <- impobject$imputations[[3]]$egoistic - mean(impobject$imputations[[3]]$egoistic)  
  
impobject$imputations[[4]]$egoistic\_center <- impobject$imputations[[4]]$egoistic - mean(impobject$imputations[[4]]$egoistic)  
  
impobject$imputations[[5]]$egoistic\_center <- impobject$imputations[[5]]$egoistic - mean(impobject$imputations[[5]]$egoistic)  
  
  
# Hedonic values  
impobject$imputations[[1]]$hedonic\_center <- impobject$imputations[[1]]$hedonic - mean(impobject$imputations[[1]]$hedonic)  
  
impobject$imputations[[2]]$hedonic\_center <- impobject$imputations[[2]]$hedonic - mean(impobject$imputations[[2]]$hedonic)  
  
impobject$imputations[[3]]$hedonic\_center <- impobject$imputations[[3]]$hedonic - mean(impobject$imputations[[3]]$hedonic)  
  
impobject$imputations[[4]]$hedonic\_center <- impobject$imputations[[4]]$hedonic - mean(impobject$imputations[[4]]$hedonic)  
  
impobject$imputations[[5]]$hedonic\_center <- impobject$imputations[[5]]$hedonic - mean(impobject$imputations[[5]]$hedonic)  
  
  
  
# Ingroup identification  
impobject$imputations[[1]]$ingroup\_center <- impobject$imputations[[1]]$ingroup\_identification - mean(impobject$imputations[[1]]$ingroup\_identification)  
  
impobject$imputations[[2]]$ingroup\_center <- impobject$imputations[[2]]$ingroup\_identification - mean(impobject$imputations[[2]]$ingroup\_identification)  
  
impobject$imputations[[3]]$ingroup\_center <- impobject$imputations[[3]]$ingroup\_identification - mean(impobject$imputations[[3]]$ingroup\_identification)  
  
impobject$imputations[[4]]$ingroup\_center <- impobject$imputations[[4]]$ingroup\_identification - mean(impobject$imputations[[4]]$ingroup\_identification)  
  
impobject$imputations[[5]]$ingroup\_center <- impobject$imputations[[5]]$ingroup\_identification - mean(impobject$imputations[[5]]$ingroup\_identification)  
  
  
# Age  
impobject$imputations[[1]]$Age\_center <- impobject$imputations[[1]]$Age - mean(impobject$imputations[[1]]$Age)  
  
impobject$imputations[[2]]$Age\_center <- impobject$imputations[[2]]$Age - mean(impobject$imputations[[2]]$Age)  
  
impobject$imputations[[3]]$Age\_center <- impobject$imputations[[3]]$Age - mean(impobject$imputations[[3]]$Age)  
  
impobject$imputations[[4]]$Age\_center <- impobject$imputations[[4]]$Age - mean(impobject$imputations[[4]]$Age)  
  
impobject$imputations[[5]]$Age\_center <- impobject$imputations[[5]]$Age - mean(impobject$imputations[[5]]$Age)  
  
  
  
# Clothing interest  
impobject$imputations[[1]]$clothing\_center <- impobject$imputations[[1]]$clothing\_interest - mean(impobject$imputations[[1]]$clothing\_interest)  
  
impobject$imputations[[2]]$clothing\_center <- impobject$imputations[[2]]$clothing\_interest - mean(impobject$imputations[[2]]$clothing\_interest)  
  
impobject$imputations[[3]]$clothing\_center <- impobject$imputations[[3]]$clothing\_interest - mean(impobject$imputations[[3]]$clothing\_interest)  
  
impobject$imputations[[4]]$clothing\_center <- impobject$imputations[[4]]$clothing\_interest - mean(impobject$imputations[[4]]$clothing\_interest)  
  
impobject$imputations[[5]]$clothing\_center <- impobject$imputations[[5]]$clothing\_interest - mean(impobject$imputations[[5]]$clothing\_interest)  
  
  
  
# Self deceptive SDR  
impobject$imputations[[1]]$self\_dec\_center <- impobject$imputations[[1]]$self\_deceptive\_sdr - mean(impobject$imputations[[1]]$self\_deceptive\_sdr)  
  
impobject$imputations[[2]]$self\_dec\_center <- impobject$imputations[[2]]$self\_deceptive\_sdr - mean(impobject$imputations[[2]]$self\_deceptive\_sdr)  
  
impobject$imputations[[3]]$self\_dec\_center <- impobject$imputations[[3]]$self\_deceptive\_sdr - mean(impobject$imputations[[3]]$self\_deceptive\_sdr)  
  
impobject$imputations[[4]]$self\_dec\_center <- impobject$imputations[[4]]$self\_deceptive\_sdr - mean(impobject$imputations[[4]]$self\_deceptive\_sdr)  
  
impobject$imputations[[5]]$self\_dec\_center <- impobject$imputations[[5]]$self\_deceptive\_sdr - mean(impobject$imputations[[5]]$self\_deceptive\_sdr)  
  
  
# Impression management SDR  
impobject$imputations[[1]]$impress\_manag\_center <- impobject$imputations[[1]]$impress\_manag\_sdr - mean(impobject$imputations[[1]]$impress\_manag\_sdr)  
  
impobject$imputations[[2]]$impress\_manag\_center <- impobject$imputations[[2]]$impress\_manag\_sdr - mean(impobject$imputations[[2]]$impress\_manag\_sdr)  
  
impobject$imputations[[3]]$impress\_manag\_center <- impobject$imputations[[3]]$impress\_manag\_sdr - mean(impobject$imputations[[3]]$impress\_manag\_sdr)  
  
impobject$imputations[[4]]$impress\_manag\_center <- impobject$imputations[[4]]$impress\_manag\_sdr - mean(impobject$imputations[[4]]$impress\_manag\_sdr)  
  
impobject$imputations[[5]]$impress\_manag\_center <- impobject$imputations[[5]]$impress\_manag\_sdr - mean(impobject$imputations[[5]]$impress\_manag\_sdr)

Convert scmfcs object to a mids object (to make the object compatible with mice, and thus, emmeans):

mids\_obj <- datlist2mids(impobject)

Complete data set:

# Regression Analysis (DV = Consumer Intentions)

## Running Model

mod\_mice <- with(mids\_obj, lm(consumer\_intentions ~ framing\_condition\*norm\_condition\*biospheric\_center + framing\_condition\*norm\_condition\*altruistic\_center + framing\_condition\*norm\_condition\*egoistic\_center + framing\_condition\*norm\_condition\*hedonic\_center + framing\_condition\*norm\_condition\*ingroup\_center + self\_dec\_center + impress\_manag\_center + clothing\_center + Gender + Age\_center))

pool\_obj <- pool(mod\_mice)  
  
pool\_obj

## Class: mipo m = 5   
## term m estimate  
## 1 (Intercept) 5 4.328037857  
## 2 framing\_conditionFrameCode1 5 0.032987976  
## 3 framing\_conditionFrameCode2 5 0.135906932  
## 4 norm\_condition1 5 -0.014645963  
## 5 norm\_condition2 5 0.026841472  
## 6 norm\_condition3 5 -0.042686932  
## 7 norm\_condition4 5 -0.014969883  
## 8 biospheric\_center 5 0.365706125  
## 9 altruistic\_center 5 0.081334468  
## 10 egoistic\_center 5 -0.292334966  
## 11 hedonic\_center 5 -0.108134106  
## 12 ingroup\_center 5 0.025846881  
## 13 self\_dec\_center 5 -0.108712940  
## 14 impress\_manag\_center 5 -0.015570786  
## 15 clothing\_center 5 0.004079897  
## 16 Gender1 5 0.127100963  
## 17 Age\_center 5 -0.053128785  
## 18 framing\_conditionFrameCode1:norm\_condition1 5 0.186797007  
## 19 framing\_conditionFrameCode2:norm\_condition1 5 -0.102814176  
## 20 framing\_conditionFrameCode1:norm\_condition2 5 -0.005168292  
## 21 framing\_conditionFrameCode2:norm\_condition2 5 -0.037412136  
## 22 framing\_conditionFrameCode1:norm\_condition3 5 0.025596442  
## 23 framing\_conditionFrameCode2:norm\_condition3 5 0.024000269  
## 24 framing\_conditionFrameCode1:norm\_condition4 5 0.027728015  
## 25 framing\_conditionFrameCode2:norm\_condition4 5 -0.014800049  
## 26 framing\_conditionFrameCode1:biospheric\_center 5 -0.044763771  
## 27 framing\_conditionFrameCode2:biospheric\_center 5 0.058474514  
## 28 norm\_condition1:biospheric\_center 5 -0.066989668  
## 29 norm\_condition2:biospheric\_center 5 0.075586547  
## 30 norm\_condition3:biospheric\_center 5 -0.049225018  
## 31 norm\_condition4:biospheric\_center 5 -0.042513513  
## 32 framing\_conditionFrameCode1:altruistic\_center 5 0.036672796  
## 33 framing\_conditionFrameCode2:altruistic\_center 5 -0.135448786  
## 34 norm\_condition1:altruistic\_center 5 -0.132189102  
## 35 norm\_condition2:altruistic\_center 5 -0.020098677  
## 36 norm\_condition3:altruistic\_center 5 0.025377889  
## 37 norm\_condition4:altruistic\_center 5 0.065680061  
## 38 framing\_conditionFrameCode1:egoistic\_center 5 -0.019031143  
## 39 framing\_conditionFrameCode2:egoistic\_center 5 0.037189097  
## 40 norm\_condition1:egoistic\_center 5 0.072405985  
## 41 norm\_condition2:egoistic\_center 5 -0.022183252  
## 42 norm\_condition3:egoistic\_center 5 0.014504815  
## 43 norm\_condition4:egoistic\_center 5 0.014580855  
## 44 framing\_conditionFrameCode1:hedonic\_center 5 -0.040105172  
## 45 framing\_conditionFrameCode2:hedonic\_center 5 0.177558889  
## 46 norm\_condition1:hedonic\_center 5 0.002730146  
## 47 norm\_condition2:hedonic\_center 5 0.075470497  
## 48 norm\_condition3:hedonic\_center 5 -0.034041930  
## 49 norm\_condition4:hedonic\_center 5 -0.044196343  
## 50 framing\_conditionFrameCode1:ingroup\_center 5 0.026700207  
## 51 framing\_conditionFrameCode2:ingroup\_center 5 -0.060432197  
## 52 norm\_condition1:ingroup\_center 5 0.004316707  
## 53 norm\_condition2:ingroup\_center 5 -0.010069238  
## 54 norm\_condition3:ingroup\_center 5 0.003030051  
## 55 norm\_condition4:ingroup\_center 5 -0.014573856  
## 56 framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 5 -0.051411050  
## 57 framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 5 0.030688503  
## 58 framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 5 -0.137094164  
## 59 framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 5 0.114832050  
## 60 framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 5 0.147627110  
## 61 framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 5 0.065251517  
## 62 framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 5 0.054678642  
## 63 framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 5 0.114570704  
## 64 framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 5 -0.106511129  
## 65 framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 5 0.221795152  
## 66 framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 5 0.236982512  
## 67 framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 5 0.010386347  
## 68 framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 5 -0.170511279  
## 69 framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 5 -0.060882492  
## 70 framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 5 -0.002395833  
## 71 framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 5 -0.083827498  
## 72 framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 5 0.092210582  
## 73 framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 5 0.099701628  
## 74 framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 5 -0.029195796  
## 75 framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 5 0.169894792  
## 76 framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 5 0.073706204  
## 77 framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 5 0.028980241  
## 78 framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 5 -0.055109663  
## 79 framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 5 -0.036760565  
## 80 framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 5 -0.025902330  
## 81 framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 5 -0.207618028  
## 82 framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 5 -0.101203489  
## 83 framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 5 -0.019130730  
## 84 framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 5 -0.106034557  
## 85 framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 5 -0.016188630  
## 86 framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 5 -0.005399294  
## 87 framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 5 0.032522503  
## 88 framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 5 0.195998579  
## 89 framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 5 0.036989333  
## 90 framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 5 0.117188189  
## 91 framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 5 -0.032438440  
## 92 framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 5 0.039714331  
## 93 framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 5 -0.030293908  
## 94 framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 5 -0.090189087  
## 95 framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 5 0.039954129  
## ubar b t dfcom df riv  
## 1 0.0032789395 0.0000593064766 0.0033501073 1038 909.9044 0.0217045090  
## 2 0.0067097619 0.0000395436074 0.0067572142 1038 1015.8465 0.0070721331  
## 3 0.0048473273 0.0000175803048 0.0048684237 1038 1026.5456 0.0043521645  
## 4 0.0026555643 0.0000325368298 0.0026946085 1038 969.0621 0.0147027866  
## 5 0.0009038483 0.0000033556279 0.0009078751 1038 1026.2052 0.0044551208  
## 6 0.0004568094 0.0000018775710 0.0004590625 1038 1024.5602 0.0049322219  
## 7 0.0002811534 0.0000009023700 0.0002822363 1038 1028.1263 0.0038514348  
## 8 0.0021317921 0.0000535070710 0.0021960005 1038 827.7833 0.0301194879  
## 9 0.0039956777 0.0002496800280 0.0042952938 1038 443.6465 0.0749850349  
## 10 0.0018100862 0.0000334664748 0.0018502460 1038 905.4371 0.0221866613  
## 11 0.0029210007 0.0000660618676 0.0030002749 1038 857.6501 0.0271394120  
## 12 0.0011384462 0.0000031795779 0.0011422617 1038 1029.5798 0.0033514921  
## 13 0.0018241337 0.0000761450103 0.0019155077 1038 631.9226 0.0500917290  
## 14 0.0017574126 0.0000129871831 0.0017729972 1038 1006.9264 0.0088679346  
## 15 0.0020271966 0.0000097167362 0.0020388567 1038 1021.4775 0.0057518266  
## 16 0.0057601595 0.0001446870035 0.0059337839 1038 827.5530 0.0301422910  
## 17 0.0003279902 0.0000316698466 0.0003659940 1038 265.0670 0.1158687482  
## 18 0.0159292326 0.0001516327841 0.0161111920 1038 991.9060 0.0114229822  
## 19 0.0121285839 0.0000366230768 0.0121725316 1038 1028.8046 0.0036234809  
## 20 0.0056941446 0.0000297296498 0.0057298202 1038 1019.3837 0.0062653098  
## 21 0.0038819345 0.0000108636427 0.0038949708 1038 1029.5611 0.0033582152  
## 22 0.0026845956 0.0000010877570 0.0026859009 1038 1035.4390 0.0004862216  
## 23 0.0021086196 0.0000030936208 0.0021123319 1038 1033.3598 0.0017605570  
## 24 0.0017897659 0.0000023400697 0.0017925740 1038 1033.7269 0.0015689670  
## 25 0.0011883973 0.0000022286893 0.0011910717 1038 1032.3345 0.0022504487  
## 26 0.0142218412 0.0002001120294 0.0144619756 1038 951.9536 0.0168849049  
## 27 0.0083426670 0.0000920413376 0.0084531166 1038 979.7144 0.0132391243  
## 28 0.0048508130 0.0002947515240 0.0052045149 1038 456.5611 0.0729159889  
## 29 0.0016982966 0.0000474724457 0.0017552635 1038 793.0505 0.0335435726  
## 30 0.0008347408 0.0000123681023 0.0008495825 1038 944.5520 0.0177800376  
## 31 0.0006231217 0.0000064939171 0.0006309144 1038 984.7789 0.0125059038  
## 32 0.0240877336 0.0006382969145 0.0248536899 1038 810.7763 0.0317986039  
## 33 0.0157485988 0.0003825656476 0.0162076776 1038 837.5517 0.0291504523  
## 34 0.0096756017 0.0011335491228 0.0110358607 1038 204.1198 0.1405864966  
## 35 0.0029949176 0.0000755033684 0.0030855217 1038 826.4383 0.0302525990  
## 36 0.0017301249 0.0000169411049 0.0017504542 1038 989.7980 0.0117502071  
## 37 0.0008568320 0.0000155527942 0.0008754953 1038 909.1908 0.0217818124  
## 38 0.0104638668 0.0000254543251 0.0104944120 1038 1030.7353 0.0029191111  
## 39 0.0072878939 0.0000296842444 0.0073235150 1038 1024.7184 0.0048877075  
## 40 0.0045617757 0.0001829673602 0.0047813365 1038 649.8258 0.0481305628  
## 41 0.0012982599 0.0000191702330 0.0013212642 1038 945.0606 0.0177193174  
## 42 0.0006803471 0.0000012459885 0.0006818423 1038 1032.4509 0.0021976816  
## 43 0.0004299904 0.0000020444091 0.0004324437 1038 1021.6605 0.0057054556  
## 44 0.0175555633 0.0008506217741 0.0185763094 1038 562.9960 0.0581437412  
## 45 0.0125910623 0.0001229136976 0.0127385587 1038 990.0307 0.0117143759  
## 46 0.0079874215 0.0001438514847 0.0081600432 1038 910.7596 0.0216117032  
## 47 0.0023171308 0.0000292450483 0.0023522248 1038 965.7052 0.0151454800  
## 48 0.0012340993 0.0000251597006 0.0012642909 1038 883.8396 0.0244645153  
## 49 0.0006262707 0.0000057228656 0.0006331381 1038 994.7847 0.0109656079  
## 50 0.0066819422 0.0000032526238 0.0066858454 1038 1035.3096 0.0005841338  
## 51 0.0050294347 0.0000118219573 0.0050436210 1038 1030.9851 0.0028206647  
## 52 0.0027584057 0.0000088833262 0.0027690657 1038 1028.0865 0.0038645481  
## 53 0.0009678057 0.0000102789453 0.0009801404 1038 983.1477 0.0127450528  
## 54 0.0004698046 0.0000003576009 0.0004702338 1038 1034.8373 0.0009134032  
## 55 0.0002716741 0.0000005380680 0.0002723198 1038 1032.0502 0.0023766771  
## 56 0.0309173815 0.0031626582569 0.0347125714 1038 245.5738 0.1227526305  
## 57 0.0203367567 0.0006895871519 0.0211642613 1038 721.1327 0.0406900960  
## 58 0.0109063038 0.0004415252307 0.0114361340 1038 645.6850 0.0485801870  
## 59 0.0071098368 0.0000848910704 0.0072117061 1038 971.8567 0.0143279356  
## 60 0.0056596721 0.0001740875182 0.0058685771 1038 758.9186 0.0369111530  
## 61 0.0032400689 0.0000244728501 0.0032694363 1038 1005.8689 0.0090638258  
## 62 0.0045108780 0.0000721892155 0.0045975051 1038 932.3668 0.0192040347  
## 63 0.0022384184 0.0000077713123 0.0022477440 1038 1027.1473 0.0041661445  
## 64 0.0589395876 0.0111799736226 0.0723555560 1038 102.2511 0.2276223654  
## 65 0.0423048411 0.0022833176470 0.0450448223 1038 512.0931 0.0647675562  
## 66 0.0189910478 0.0007578678577 0.0199004892 1038 652.0694 0.0478879017  
## 67 0.0127559076 0.0002296312145 0.0130314651 1038 910.8458 0.0216023403  
## 68 0.0112157680 0.0003977369755 0.0116930523 1038 702.8177 0.0425547650  
## 69 0.0071529218 0.0000151995717 0.0071711613 1038 1031.6466 0.0025499350  
## 70 0.0057945769 0.0001389102396 0.0059612692 1038 841.4046 0.0287669470  
## 71 0.0033592714 0.0000258451270 0.0033902856 1038 1004.9460 0.0092324045  
## 72 0.0297619429 0.0010276683677 0.0309951450 1038 713.7803 0.0414355354  
## 73 0.0186966445 0.0005100472090 0.0193087011 1038 801.2547 0.0327361764  
## 74 0.0076399075 0.0000837216082 0.0077403735 1038 980.3389 0.0131501500  
## 75 0.0059963362 0.0000409882479 0.0060455221 1038 1010.3955 0.0082026584  
## 76 0.0040572342 0.0000478840228 0.0041146950 1038 973.0753 0.0141625612  
## 77 0.0030483776 0.0000046876283 0.0030540028 1038 1033.1914 0.0018452943  
## 78 0.0027708601 0.0000189354367 0.0027935826 1038 1010.4063 0.0082005309  
## 79 0.0018008751 0.0000051610290 0.0018070684 1038 1029.3344 0.0034390140  
## 80 0.0487695083 0.0009657234183 0.0499283764 1038 890.5790 0.0237621445  
## 81 0.0355708350 0.0002579186087 0.0358803373 1038 1007.8146 0.0087010139  
## 82 0.0136377772 0.0003672585798 0.0140784875 1038 805.5291 0.0323154052  
## 83 0.0105751516 0.0001072597300 0.0107038632 1038 987.0279 0.0121711425  
## 84 0.0077916427 0.0000637444187 0.0078681360 1038 1001.6521 0.0098173525  
## 85 0.0052294952 0.0000969523259 0.0053458380 1038 904.8713 0.0222474229  
## 86 0.0038559962 0.0000535295581 0.0039202317 1038 953.7912 0.0166585924  
## 87 0.0027258247 0.0000110830271 0.0027391243 1038 1024.7488 0.0048791225  
## 88 0.0162791698 0.0001706479367 0.0164839473 1038 984.2817 0.0125791135  
## 89 0.0125888471 0.0000111615191 0.0126022409 1038 1034.6023 0.0010639436  
## 90 0.0059847414 0.0000553171377 0.0060511220 1038 993.9995 0.0110916347  
## 91 0.0041774714 0.0000156636384 0.0041962678 1038 1026.0570 0.0044994601  
## 92 0.0028144049 0.0000110596096 0.0028276765 1038 1025.3209 0.0047155729  
## 93 0.0021369101 0.0000019065523 0.0021391980 1038 1034.5916 0.0010706406  
## 94 0.0015825410 0.0000065437474 0.0015903935 1038 1024.4540 0.0049619548  
## 95 0.0012397695 0.0000013808279 0.0012414264 1038 1034.1464 0.0013365336  
## lambda fmi  
## 1 0.0212434308 0.023387701  
## 2 0.0070224692 0.008971688  
## 3 0.0043333052 0.006267492  
## 4 0.0144897470 0.016517416  
## 5 0.0044353608 0.006369989  
## 6 0.0049080144 0.006844820  
## 7 0.0038366582 0.005768843  
## 8 0.0292388294 0.031575807  
## 9 0.0697544919 0.073919958  
## 10 0.0217050977 0.023858896  
## 11 0.0264223256 0.028684749  
## 12 0.0033402971 0.005270724  
## 13 0.0477022413 0.050701970  
## 14 0.0087899856 0.010752921  
## 15 0.0057189323 0.007659982  
## 16 0.0292603180 0.031597892  
## 17 0.1038372554 0.110523366  
## 18 0.0112939714 0.013281508  
## 19 0.0036103987 0.005541752  
## 20 0.0062263001 0.008170333  
## 21 0.0033469753 0.005277424  
## 22 0.0004859853 0.002411017  
## 23 0.0017574629 0.003683903  
## 24 0.0015665092 0.003492636  
## 25 0.0022453956 0.004172801  
## 26 0.0166045388 0.018664106  
## 27 0.0130661401 0.015074727  
## 28 0.0679605763 0.072016792  
## 29 0.0324549186 0.034885782  
## 30 0.0174694305 0.019543260  
## 31 0.0123514379 0.014351174  
## 32 0.0308186149 0.033200551  
## 33 0.0283247723 0.030636766  
## 34 0.1232580756 0.131724113  
## 35 0.0293642540 0.031704719  
## 36 0.0116137432 0.013604856  
## 37 0.0213174791 0.023463264  
## 38 0.0029106147 0.004839715  
## 39 0.0048639340 0.006800527  
## 40 0.0459203887 0.048843311  
## 41 0.0174108097 0.019483650  
## 42 0.0021928624 0.004120152  
## 43 0.0056730881 0.007613881  
## 44 0.0549488117 0.058288239  
## 45 0.0115787382 0.013569455  
## 46 0.0211545180 0.023296975  
## 47 0.0149195167 0.016953325  
## 48 0.0238802954 0.026081640  
## 49 0.0108466676 0.012829367  
## 50 0.0005837928 0.002508876  
## 51 0.0028127309 0.004741554  
## 52 0.0038496709 0.005781905  
## 53 0.0125846606 0.014587231  
## 54 0.0009125696 0.002837895  
## 55 0.0023710419 0.004298734  
## 56 0.1093318574 0.116498085  
## 57 0.0390991479 0.041753084  
## 58 0.0463294917 0.049269811  
## 59 0.0141255457 0.016148150  
## 60 0.0355972186 0.038128730  
## 61 0.0089824108 0.010947022  
## 62 0.0188421887 0.020940099  
## 63 0.0041488598 0.006082275  
## 64 0.1854172519 0.200896098  
## 65 0.0608278829 0.064474494  
## 66 0.0456994509 0.048613037  
## 67 0.0211455470 0.023287822  
## 68 0.0408177743 0.043535706  
## 69 0.0025434494 0.004471560  
## 70 0.0279625499 0.030264852  
## 71 0.0091479470 0.011114029  
## 72 0.0397869422 0.042466182  
## 73 0.0316984890 0.034106436  
## 74 0.0129794680 0.014986956  
## 75 0.0081359222 0.010093429  
## 76 0.0139647841 0.015985192  
## 77 0.0018418955 0.003768486  
## 78 0.0081338292 0.010091319  
## 79 0.0034272277 0.005357945  
## 80 0.0232106106 0.025396851  
## 81 0.0086259593 0.010587494  
## 82 0.0313038099 0.033700004  
## 83 0.0120247871 0.014020640  
## 84 0.0097219091 0.011693294  
## 85 0.0217632468 0.023918259  
## 86 0.0163856309 0.018441700  
## 87 0.0048554323 0.006791984  
## 88 0.0124228451 0.014423444  
## 89 0.0010628128 0.002988285  
## 90 0.0109699599 0.012953973  
## 91 0.0044793056 0.006414127  
## 92 0.0046934406 0.006629230  
## 93 0.0010694955 0.002994975  
## 94 0.0049374554 0.006874403  
## 95 0.0013347496 0.003260544

## Pooled Regression Results

Using mice package:

pool\_summ <- summary(pool(mod\_mice))  
  
pool\_summ %>%  
 knitr::kable(digits = 5)

| term | estimate | std.error | statistic | df | p.value |
| --- | --- | --- | --- | --- | --- |
| (Intercept) | 4.32804 | 0.05788 | 74.77591 | 909.9044 | 0.00000 |
| framing\_conditionFrameCode1 | 0.03299 | 0.08220 | 0.40130 | 1015.8465 | 0.68828 |
| framing\_conditionFrameCode2 | 0.13591 | 0.06977 | 1.94781 | 1026.5456 | 0.05171 |
| norm\_condition1 | -0.01465 | 0.05191 | -0.28214 | 969.0621 | 0.77789 |
| norm\_condition2 | 0.02684 | 0.03013 | 0.89083 | 1026.2052 | 0.37323 |
| norm\_condition3 | -0.04269 | 0.02143 | -1.99232 | 1024.5602 | 0.04660 |
| norm\_condition4 | -0.01497 | 0.01680 | -0.89107 | 1028.1263 | 0.37310 |
| biospheric\_center | 0.36571 | 0.04686 | 7.80398 | 827.7833 | 0.00000 |
| altruistic\_center | 0.08133 | 0.06554 | 1.24102 | 443.6465 | 0.21525 |
| egoistic\_center | -0.29233 | 0.04301 | -6.79620 | 905.4371 | 0.00000 |
| hedonic\_center | -0.10813 | 0.05477 | -1.97416 | 857.6501 | 0.04868 |
| ingroup\_center | 0.02585 | 0.03380 | 0.76476 | 1029.5798 | 0.44459 |
| self\_dec\_center | -0.10871 | 0.04377 | -2.48393 | 631.9226 | 0.01325 |
| impress\_manag\_center | -0.01557 | 0.04211 | -0.36979 | 1006.9263 | 0.71162 |
| clothing\_center | 0.00408 | 0.04515 | 0.09036 | 1021.4775 | 0.92802 |
| Gender1 | 0.12710 | 0.07703 | 1.65000 | 827.5530 | 0.09932 |
| Age\_center | -0.05313 | 0.01913 | -2.77711 | 265.0670 | 0.00588 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.18680 | 0.12693 | 1.47166 | 991.9060 | 0.14143 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.10281 | 0.11033 | -0.93189 | 1028.8046 | 0.35161 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.00517 | 0.07570 | -0.06828 | 1019.3837 | 0.94558 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.03741 | 0.06241 | -0.59946 | 1029.5611 | 0.54900 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.02560 | 0.05183 | 0.49389 | 1035.4390 | 0.62149 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02400 | 0.04596 | 0.52220 | 1033.3598 | 0.60164 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.02773 | 0.04234 | 0.65491 | 1033.7269 | 0.51267 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.01480 | 0.03451 | -0.42884 | 1032.3345 | 0.66813 |
| framing\_conditionFrameCode1:biospheric\_center | -0.04476 | 0.12026 | -0.37223 | 951.9536 | 0.70980 |
| framing\_conditionFrameCode2:biospheric\_center | 0.05847 | 0.09194 | 0.63600 | 979.7144 | 0.52492 |
| norm\_condition1:biospheric\_center | -0.06699 | 0.07214 | -0.92858 | 456.5611 | 0.35360 |
| norm\_condition2:biospheric\_center | 0.07559 | 0.04190 | 1.80415 | 793.0505 | 0.07159 |
| norm\_condition3:biospheric\_center | -0.04923 | 0.02915 | -1.68882 | 944.5520 | 0.09158 |
| norm\_condition4:biospheric\_center | -0.04251 | 0.02512 | -1.69255 | 984.7789 | 0.09086 |
| framing\_conditionFrameCode1:altruistic\_center | 0.03667 | 0.15765 | 0.23262 | 810.7763 | 0.81611 |
| framing\_conditionFrameCode2:altruistic\_center | -0.13545 | 0.12731 | -1.06393 | 837.5517 | 0.28767 |
| norm\_condition1:altruistic\_center | -0.13219 | 0.10505 | -1.25832 | 204.1198 | 0.20971 |
| norm\_condition2:altruistic\_center | -0.02010 | 0.05555 | -0.36183 | 826.4383 | 0.71757 |
| norm\_condition3:altruistic\_center | 0.02538 | 0.04184 | 0.60657 | 989.7980 | 0.54428 |
| norm\_condition4:altruistic\_center | 0.06568 | 0.02959 | 2.21976 | 909.1908 | 0.02668 |
| framing\_conditionFrameCode1:egoistic\_center | -0.01903 | 0.10244 | -0.18577 | 1030.7353 | 0.85266 |
| framing\_conditionFrameCode2:egoistic\_center | 0.03719 | 0.08558 | 0.43457 | 1024.7184 | 0.66397 |
| norm\_condition1:egoistic\_center | 0.07241 | 0.06915 | 1.04713 | 649.8258 | 0.29543 |
| norm\_condition2:egoistic\_center | -0.02218 | 0.03635 | -0.61028 | 945.0606 | 0.54182 |
| norm\_condition3:egoistic\_center | 0.01450 | 0.02611 | 0.55548 | 1032.4509 | 0.57869 |
| norm\_condition4:egoistic\_center | 0.01458 | 0.02080 | 0.70116 | 1021.6605 | 0.48336 |
| framing\_conditionFrameCode1:hedonic\_center | -0.04011 | 0.13629 | -0.29425 | 562.9960 | 0.76867 |
| framing\_conditionFrameCode2:hedonic\_center | 0.17756 | 0.11287 | 1.57319 | 990.0308 | 0.11599 |
| norm\_condition1:hedonic\_center | 0.00273 | 0.09033 | 0.03022 | 910.7596 | 0.97590 |
| norm\_condition2:hedonic\_center | 0.07547 | 0.04850 | 1.55610 | 965.7052 | 0.12001 |
| norm\_condition3:hedonic\_center | -0.03404 | 0.03556 | -0.95739 | 883.8396 | 0.33863 |
| norm\_condition4:hedonic\_center | -0.04420 | 0.02516 | -1.75646 | 994.7847 | 0.07932 |
| framing\_conditionFrameCode1:ingroup\_center | 0.02670 | 0.08177 | 0.32654 | 1035.3096 | 0.74408 |
| framing\_conditionFrameCode2:ingroup\_center | -0.06043 | 0.07102 | -0.85094 | 1030.9851 | 0.39500 |
| norm\_condition1:ingroup\_center | 0.00432 | 0.05262 | 0.08203 | 1028.0865 | 0.93464 |
| norm\_condition2:ingroup\_center | -0.01007 | 0.03131 | -0.32163 | 983.1477 | 0.74780 |
| norm\_condition3:ingroup\_center | 0.00303 | 0.02168 | 0.13973 | 1034.8373 | 0.88890 |
| norm\_condition4:ingroup\_center | -0.01457 | 0.01650 | -0.88315 | 1032.0502 | 0.37736 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.05141 | 0.18631 | -0.27594 | 245.5738 | 0.78283 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.03069 | 0.14548 | 0.21095 | 721.1327 | 0.83299 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.13709 | 0.10694 | -1.28197 | 645.6850 | 0.20031 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.11483 | 0.08492 | 1.35221 | 971.8566 | 0.17662 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.14763 | 0.07661 | 1.92708 | 758.9186 | 0.05434 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.06525 | 0.05718 | 1.14118 | 1005.8689 | 0.25407 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.05468 | 0.06780 | 0.80641 | 932.3668 | 0.42021 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.11457 | 0.04741 | 2.41657 | 1027.1473 | 0.01584 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.10651 | 0.26899 | -0.39597 | 102.2511 | 0.69295 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.22180 | 0.21224 | 1.04503 | 512.0931 | 0.29650 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.23698 | 0.14107 | 1.67990 | 652.0694 | 0.09346 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.01039 | 0.11416 | 0.09098 | 910.8458 | 0.92753 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.17051 | 0.10813 | -1.57685 | 702.8177 | 0.11528 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.06088 | 0.08468 | -0.71895 | 1031.6466 | 0.47234 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | -0.00240 | 0.07721 | -0.03103 | 841.4046 | 0.97525 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.08383 | 0.05823 | -1.43969 | 1004.9460 | 0.15027 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.09221 | 0.17605 | 0.52376 | 713.7803 | 0.60061 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.09970 | 0.13896 | 0.71751 | 801.2547 | 0.47327 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.02920 | 0.08798 | -0.33185 | 980.3389 | 0.74007 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.16989 | 0.07775 | 2.18506 | 1010.3955 | 0.02911 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.07371 | 0.06415 | 1.14904 | 973.0753 | 0.25082 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.02898 | 0.05526 | 0.52441 | 1033.1914 | 0.60011 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.05511 | 0.05285 | -1.04267 | 1010.4063 | 0.29735 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.03676 | 0.04251 | -0.86476 | 1029.3344 | 0.38737 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.02590 | 0.22345 | -0.11592 | 890.5790 | 0.90774 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.20762 | 0.18942 | -1.09607 | 1007.8146 | 0.27331 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.10120 | 0.11865 | -0.85294 | 805.5291 | 0.39395 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.01913 | 0.10346 | -0.18491 | 987.0279 | 0.85334 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.10603 | 0.08870 | -1.19540 | 1001.6521 | 0.23222 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.01619 | 0.07312 | -0.22141 | 904.8713 | 0.82482 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.00540 | 0.06261 | -0.08623 | 953.7912 | 0.93130 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.03252 | 0.05234 | 0.62141 | 1024.7488 | 0.53447 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.19600 | 0.12839 | 1.52659 | 984.2817 | 0.12718 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.03699 | 0.11226 | 0.32950 | 1034.6023 | 0.74185 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.11719 | 0.07779 | 1.50649 | 993.9995 | 0.13226 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03244 | 0.06478 | -0.50076 | 1026.0570 | 0.61665 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.03971 | 0.05318 | 0.74685 | 1025.3209 | 0.45533 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03029 | 0.04625 | -0.65498 | 1034.5916 | 0.51262 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.09019 | 0.03988 | -2.26153 | 1024.4540 | 0.02394 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.03995 | 0.03523 | 1.13397 | 1034.1464 | 0.25707 |

APA style table for regression summary

apa\_table(pool\_summ,  
 caption = "Table 1 Pooled Regression Results",  
 note = "DV = Consumer Intentions")

(#tab:unnamed-chunk-24)

Table 1 Pooled Regression Results

| term | estimate | std.error | statistic | df | p.value |
| --- | --- | --- | --- | --- | --- |
| (Intercept) | 4.33 | 0.06 | 74.78 | 909.90 | 0.00 |
| framing\_conditionFrameCode1 | 0.03 | 0.08 | 0.40 | 1,015.85 | 0.69 |
| framing\_conditionFrameCode2 | 0.14 | 0.07 | 1.95 | 1,026.55 | 0.05 |
| norm\_condition1 | -0.01 | 0.05 | -0.28 | 969.06 | 0.78 |
| norm\_condition2 | 0.03 | 0.03 | 0.89 | 1,026.21 | 0.37 |
| norm\_condition3 | -0.04 | 0.02 | -1.99 | 1,024.56 | 0.05 |
| norm\_condition4 | -0.01 | 0.02 | -0.89 | 1,028.13 | 0.37 |
| biospheric\_center | 0.37 | 0.05 | 7.80 | 827.78 | 0.00 |
| altruistic\_center | 0.08 | 0.07 | 1.24 | 443.65 | 0.22 |
| egoistic\_center | -0.29 | 0.04 | -6.80 | 905.44 | 0.00 |
| hedonic\_center | -0.11 | 0.05 | -1.97 | 857.65 | 0.05 |
| ingroup\_center | 0.03 | 0.03 | 0.76 | 1,029.58 | 0.44 |
| self\_dec\_center | -0.11 | 0.04 | -2.48 | 631.92 | 0.01 |
| impress\_manag\_center | -0.02 | 0.04 | -0.37 | 1,006.93 | 0.71 |
| clothing\_center | 0.00 | 0.05 | 0.09 | 1,021.48 | 0.93 |
| Gender1 | 0.13 | 0.08 | 1.65 | 827.55 | 0.10 |
| Age\_center | -0.05 | 0.02 | -2.78 | 265.07 | 0.01 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.19 | 0.13 | 1.47 | 991.91 | 0.14 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.10 | 0.11 | -0.93 | 1,028.80 | 0.35 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.01 | 0.08 | -0.07 | 1,019.38 | 0.95 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.04 | 0.06 | -0.60 | 1,029.56 | 0.55 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.03 | 0.05 | 0.49 | 1,035.44 | 0.62 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02 | 0.05 | 0.52 | 1,033.36 | 0.60 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.03 | 0.04 | 0.65 | 1,033.73 | 0.51 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.01 | 0.03 | -0.43 | 1,032.33 | 0.67 |
| framing\_conditionFrameCode1:biospheric\_center | -0.04 | 0.12 | -0.37 | 951.95 | 0.71 |
| framing\_conditionFrameCode2:biospheric\_center | 0.06 | 0.09 | 0.64 | 979.71 | 0.52 |
| norm\_condition1:biospheric\_center | -0.07 | 0.07 | -0.93 | 456.56 | 0.35 |
| norm\_condition2:biospheric\_center | 0.08 | 0.04 | 1.80 | 793.05 | 0.07 |
| norm\_condition3:biospheric\_center | -0.05 | 0.03 | -1.69 | 944.55 | 0.09 |
| norm\_condition4:biospheric\_center | -0.04 | 0.03 | -1.69 | 984.78 | 0.09 |
| framing\_conditionFrameCode1:altruistic\_center | 0.04 | 0.16 | 0.23 | 810.78 | 0.82 |
| framing\_conditionFrameCode2:altruistic\_center | -0.14 | 0.13 | -1.06 | 837.55 | 0.29 |
| norm\_condition1:altruistic\_center | -0.13 | 0.11 | -1.26 | 204.12 | 0.21 |
| norm\_condition2:altruistic\_center | -0.02 | 0.06 | -0.36 | 826.44 | 0.72 |
| norm\_condition3:altruistic\_center | 0.03 | 0.04 | 0.61 | 989.80 | 0.54 |
| norm\_condition4:altruistic\_center | 0.07 | 0.03 | 2.22 | 909.19 | 0.03 |
| framing\_conditionFrameCode1:egoistic\_center | -0.02 | 0.10 | -0.19 | 1,030.74 | 0.85 |
| framing\_conditionFrameCode2:egoistic\_center | 0.04 | 0.09 | 0.43 | 1,024.72 | 0.66 |
| norm\_condition1:egoistic\_center | 0.07 | 0.07 | 1.05 | 649.83 | 0.30 |
| norm\_condition2:egoistic\_center | -0.02 | 0.04 | -0.61 | 945.06 | 0.54 |
| norm\_condition3:egoistic\_center | 0.01 | 0.03 | 0.56 | 1,032.45 | 0.58 |
| norm\_condition4:egoistic\_center | 0.01 | 0.02 | 0.70 | 1,021.66 | 0.48 |
| framing\_conditionFrameCode1:hedonic\_center | -0.04 | 0.14 | -0.29 | 563.00 | 0.77 |
| framing\_conditionFrameCode2:hedonic\_center | 0.18 | 0.11 | 1.57 | 990.03 | 0.12 |
| norm\_condition1:hedonic\_center | 0.00 | 0.09 | 0.03 | 910.76 | 0.98 |
| norm\_condition2:hedonic\_center | 0.08 | 0.05 | 1.56 | 965.71 | 0.12 |
| norm\_condition3:hedonic\_center | -0.03 | 0.04 | -0.96 | 883.84 | 0.34 |
| norm\_condition4:hedonic\_center | -0.04 | 0.03 | -1.76 | 994.78 | 0.08 |
| framing\_conditionFrameCode1:ingroup\_center | 0.03 | 0.08 | 0.33 | 1,035.31 | 0.74 |
| framing\_conditionFrameCode2:ingroup\_center | -0.06 | 0.07 | -0.85 | 1,030.99 | 0.40 |
| norm\_condition1:ingroup\_center | 0.00 | 0.05 | 0.08 | 1,028.09 | 0.93 |
| norm\_condition2:ingroup\_center | -0.01 | 0.03 | -0.32 | 983.15 | 0.75 |
| norm\_condition3:ingroup\_center | 0.00 | 0.02 | 0.14 | 1,034.84 | 0.89 |
| norm\_condition4:ingroup\_center | -0.01 | 0.02 | -0.88 | 1,032.05 | 0.38 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.05 | 0.19 | -0.28 | 245.57 | 0.78 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.03 | 0.15 | 0.21 | 721.13 | 0.83 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.14 | 0.11 | -1.28 | 645.68 | 0.20 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.11 | 0.08 | 1.35 | 971.86 | 0.18 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.15 | 0.08 | 1.93 | 758.92 | 0.05 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.07 | 0.06 | 1.14 | 1,005.87 | 0.25 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.05 | 0.07 | 0.81 | 932.37 | 0.42 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.11 | 0.05 | 2.42 | 1,027.15 | 0.02 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.11 | 0.27 | -0.40 | 102.25 | 0.69 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.22 | 0.21 | 1.05 | 512.09 | 0.30 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.24 | 0.14 | 1.68 | 652.07 | 0.09 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.01 | 0.11 | 0.09 | 910.85 | 0.93 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.17 | 0.11 | -1.58 | 702.82 | 0.12 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.06 | 0.08 | -0.72 | 1,031.65 | 0.47 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | 0.00 | 0.08 | -0.03 | 841.40 | 0.98 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.08 | 0.06 | -1.44 | 1,004.95 | 0.15 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.09 | 0.18 | 0.52 | 713.78 | 0.60 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.10 | 0.14 | 0.72 | 801.25 | 0.47 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.03 | 0.09 | -0.33 | 980.34 | 0.74 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.17 | 0.08 | 2.19 | 1,010.40 | 0.03 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.07 | 0.06 | 1.15 | 973.08 | 0.25 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.03 | 0.06 | 0.52 | 1,033.19 | 0.60 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.06 | 0.05 | -1.04 | 1,010.41 | 0.30 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.04 | 0.04 | -0.86 | 1,029.33 | 0.39 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.03 | 0.22 | -0.12 | 890.58 | 0.91 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.21 | 0.19 | -1.10 | 1,007.81 | 0.27 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.10 | 0.12 | -0.85 | 805.53 | 0.39 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.02 | 0.10 | -0.18 | 987.03 | 0.85 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.11 | 0.09 | -1.20 | 1,001.65 | 0.23 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.02 | 0.07 | -0.22 | 904.87 | 0.82 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.01 | 0.06 | -0.09 | 953.79 | 0.93 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.03 | 0.05 | 0.62 | 1,024.75 | 0.53 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.20 | 0.13 | 1.53 | 984.28 | 0.13 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.04 | 0.11 | 0.33 | 1,034.60 | 0.74 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.12 | 0.08 | 1.51 | 994.00 | 0.13 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03 | 0.06 | -0.50 | 1,026.06 | 0.62 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.04 | 0.05 | 0.75 | 1,025.32 | 0.46 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03 | 0.05 | -0.65 | 1,034.59 | 0.51 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.09 | 0.04 | -2.26 | 1,024.45 | 0.02 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.04 | 0.04 | 1.13 | 1,034.15 | 0.26 |

*Note.* DV = Consumer Intentions

## Pooled Anova Results

## Univariate ANOVA for Multiply Imputed Data (Type 3)   
##   
## lm Formula: consumer\_intentions ~ framing\_condition\*norm\_condition\*biospheric\_center + framing\_condition\*norm\_condition\*altruistic\_center + framing\_condition\*norm\_condition\*egoistic\_center + framing\_condition\*norm\_condition\*hedonic\_center + framing\_condition\*norm\_condition\*ingroup\_center + self\_dec\_center + impress\_manag\_center + clothing\_center + Gender + Age\_center  
## R^2=0.1843   
## ..........................................................................  
## ANOVA Table   
## SSQ df1 df2  
## framing\_condition 4.51950 2 268577.7398  
## norm\_condition 6.46074 4 40533.6108  
## biospheric\_center 71.43882 1 2858.2518  
## altruistic\_center 1.94103 1 838.3527  
## egoistic\_center 53.76240 1 5934.7346  
## hedonic\_center 4.57837 1 5405.5923  
## ingroup\_center 0.67039 1 370149.8872  
## self\_dec\_center 7.41419 1 1714.5682  
## impress\_manag\_center 0.16368 1 52240.9800  
## clothing\_center 0.01369 1 123333.3880  
## Gender 3.21727 1 4154.4785  
## Age\_center 9.87083 1 422.5926  
## framing\_condition:norm\_condition 5.28904 8 21395.2493  
## framing\_condition:biospheric\_center 0.65059 2 6377.0984  
## norm\_condition:biospheric\_center 11.43886 4 332412.7629  
## framing\_condition:altruistic\_center 1.40185 2 2208.7246  
## norm\_condition:altruistic\_center 8.93826 4 69109.3767  
## framing\_condition:egoistic\_center 0.26129 2 76664.5381  
## norm\_condition:egoistic\_center 2.84524 4 1947.4170  
## framing\_condition:hedonic\_center 2.97977 2 7113.4017  
## norm\_condition:hedonic\_center 7.92841 4 220603.8805  
## framing\_condition:ingroup\_center 0.93412 2 362263.1964  
## norm\_condition:ingroup\_center 1.05213 4 164767.7045  
## framing\_condition:norm\_condition:biospheric\_center 17.75147 8 5725.3960  
## framing\_condition:norm\_condition:altruistic\_center 11.92466 8 8485.3132  
## framing\_condition:norm\_condition:egoistic\_center 11.13088 8 357194.9187  
## framing\_condition:norm\_condition:hedonic\_center 4.84476 8 7814.3368  
## framing\_condition:norm\_condition:ingroup\_center 13.57050 8 4675.5447  
## Residual 1181.44016 NA NA  
## F value Pr(>F) eta2  
## framing\_condition 1.9744 0.13885 0.00312  
## norm\_condition 1.3998 0.23115 0.00446  
## biospheric\_center 60.3649 0.00000 0.04932  
## altruistic\_center 1.4832 0.22362 0.00134  
## egoistic\_center 45.9693 0.00000 0.03712  
## hedonic\_center 3.8721 0.04915 0.00316  
## ingroup\_center 0.5821 0.44549 0.00046  
## self\_dec\_center 6.1263 0.01342 0.00512  
## impress\_manag\_center 0.1294 0.71904 0.00011  
## clothing\_center 0.0034 0.95344 0.00001  
## Gender 2.6929 0.10087 0.00222  
## Age\_center 7.6845 0.00582 0.00682  
## framing\_condition:norm\_condition 0.5656 0.80692 0.00365  
## framing\_condition:biospheric\_center 0.2494 0.77931 0.00045  
## norm\_condition:biospheric\_center 2.5034 0.04020 0.00790  
## framing\_condition:altruistic\_center 0.5424 0.58140 0.00097  
## norm\_condition:altruistic\_center 1.9458 0.09986 0.00617  
## framing\_condition:egoistic\_center 0.1053 0.90003 0.00018  
## norm\_condition:egoistic\_center 0.5613 0.69081 0.00196  
## framing\_condition:hedonic\_center 1.2548 0.28520 0.00206  
## norm\_condition:hedonic\_center 1.7324 0.13966 0.00547  
## framing\_condition:ingroup\_center 0.4052 0.66682 0.00064  
## norm\_condition:ingroup\_center 0.2254 0.92431 0.00073  
## framing\_condition:norm\_condition:biospheric\_center 1.9007 0.05549 0.01226  
## framing\_condition:norm\_condition:altruistic\_center 1.2768 0.25045 0.00823  
## framing\_condition:norm\_condition:egoistic\_center 1.2175 0.28374 0.00768  
## framing\_condition:norm\_condition:hedonic\_center 0.5075 0.85164 0.00334  
## framing\_condition:norm\_condition:ingroup\_center 1.4434 0.17290 0.00937  
## Residual NA NA NA  
## partial.eta2  
## framing\_condition 0.00381  
## norm\_condition 0.00544  
## biospheric\_center 0.05702  
## altruistic\_center 0.00164  
## egoistic\_center 0.04352  
## hedonic\_center 0.00386  
## ingroup\_center 0.00057  
## self\_dec\_center 0.00624  
## impress\_manag\_center 0.00014  
## clothing\_center 0.00001  
## Gender 0.00272  
## Age\_center 0.00829  
## framing\_condition:norm\_condition 0.00446  
## framing\_condition:biospheric\_center 0.00055  
## norm\_condition:biospheric\_center 0.00959  
## framing\_condition:altruistic\_center 0.00118  
## norm\_condition:altruistic\_center 0.00751  
## framing\_condition:egoistic\_center 0.00022  
## norm\_condition:egoistic\_center 0.00240  
## framing\_condition:hedonic\_center 0.00252  
## norm\_condition:hedonic\_center 0.00667  
## framing\_condition:ingroup\_center 0.00079  
## norm\_condition:ingroup\_center 0.00089  
## framing\_condition:norm\_condition:biospheric\_center 0.01480  
## framing\_condition:norm\_condition:altruistic\_center 0.00999  
## framing\_condition:norm\_condition:egoistic\_center 0.00933  
## framing\_condition:norm\_condition:hedonic\_center 0.00408  
## framing\_condition:norm\_condition:ingroup\_center 0.01136  
## Residual NA

ANOVA results

anova\_pool %>%  
 knitr::kable(digits = 3)

| x |
| --- |
| 0.184 |

|  | SSQ | df1 | df2 | F value | Pr(>F) | eta2 | partial.eta2 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| framing\_condition | 4.519 | 2 | 268577.740 | 1.974 | 0.139 | 0.003 | 0.004 |
| norm\_condition | 6.461 | 4 | 40533.611 | 1.400 | 0.231 | 0.004 | 0.005 |
| biospheric\_center | 71.439 | 1 | 2858.252 | 60.365 | 0.000 | 0.049 | 0.057 |
| altruistic\_center | 1.941 | 1 | 838.353 | 1.483 | 0.224 | 0.001 | 0.002 |
| egoistic\_center | 53.762 | 1 | 5934.735 | 45.969 | 0.000 | 0.037 | 0.044 |
| hedonic\_center | 4.578 | 1 | 5405.592 | 3.872 | 0.049 | 0.003 | 0.004 |
| ingroup\_center | 0.670 | 1 | 370149.887 | 0.582 | 0.445 | 0.000 | 0.001 |
| self\_dec\_center | 7.414 | 1 | 1714.568 | 6.126 | 0.013 | 0.005 | 0.006 |
| impress\_manag\_center | 0.164 | 1 | 52240.980 | 0.129 | 0.719 | 0.000 | 0.000 |
| clothing\_center | 0.014 | 1 | 123333.388 | 0.003 | 0.953 | 0.000 | 0.000 |
| Gender | 3.217 | 1 | 4154.479 | 2.693 | 0.101 | 0.002 | 0.003 |
| Age\_center | 9.871 | 1 | 422.593 | 7.684 | 0.006 | 0.007 | 0.008 |
| framing\_condition:norm\_condition | 5.289 | 8 | 21395.249 | 0.566 | 0.807 | 0.004 | 0.004 |
| framing\_condition:biospheric\_center | 0.651 | 2 | 6377.098 | 0.249 | 0.779 | 0.000 | 0.001 |
| norm\_condition:biospheric\_center | 11.439 | 4 | 332412.763 | 2.503 | 0.040 | 0.008 | 0.010 |
| framing\_condition:altruistic\_center | 1.402 | 2 | 2208.725 | 0.542 | 0.581 | 0.001 | 0.001 |
| norm\_condition:altruistic\_center | 8.938 | 4 | 69109.377 | 1.946 | 0.100 | 0.006 | 0.008 |
| framing\_condition:egoistic\_center | 0.261 | 2 | 76664.538 | 0.105 | 0.900 | 0.000 | 0.000 |
| norm\_condition:egoistic\_center | 2.845 | 4 | 1947.417 | 0.561 | 0.691 | 0.002 | 0.002 |
| framing\_condition:hedonic\_center | 2.980 | 2 | 7113.402 | 1.255 | 0.285 | 0.002 | 0.003 |
| norm\_condition:hedonic\_center | 7.928 | 4 | 220603.880 | 1.732 | 0.140 | 0.005 | 0.007 |
| framing\_condition:ingroup\_center | 0.934 | 2 | 362263.196 | 0.405 | 0.667 | 0.001 | 0.001 |
| norm\_condition:ingroup\_center | 1.052 | 4 | 164767.704 | 0.225 | 0.924 | 0.001 | 0.001 |
| framing\_condition:norm\_condition:biospheric\_center | 17.751 | 8 | 5725.396 | 1.901 | 0.055 | 0.012 | 0.015 |
| framing\_condition:norm\_condition:altruistic\_center | 11.925 | 8 | 8485.313 | 1.277 | 0.250 | 0.008 | 0.010 |
| framing\_condition:norm\_condition:egoistic\_center | 11.131 | 8 | 357194.919 | 1.218 | 0.284 | 0.008 | 0.009 |
| framing\_condition:norm\_condition:hedonic\_center | 4.845 | 8 | 7814.337 | 0.507 | 0.852 | 0.003 | 0.004 |
| framing\_condition:norm\_condition:ingroup\_center | 13.571 | 8 | 4675.545 | 1.443 | 0.173 | 0.009 | 0.011 |
| Residual | 1181.440 | NA | NA | NA | NA | NA | NA |

| x |
| --- |
| 3 |

## Analysis in each imputed data set

### Imputed Data 1

#data\_imp1a <- complete\_data %>%  
 # filter(.imp == 1)  
  
data\_imp1 <- impobject$imputations[[1]]  
  
mod\_mice\_imp1 <-lm(consumer\_intentions ~ framing\_condition\*norm\_condition\*biospheric\_center + framing\_condition\*norm\_condition\*altruistic\_center + framing\_condition\*norm\_condition\*egoistic\_center + framing\_condition\*norm\_condition\*hedonic\_center + framing\_condition\*norm\_condition\*ingroup\_center + self\_dec\_center + impress\_manag\_center + clothing\_center + Gender + Age\_center, data = data\_imp1)

#### Regression summary

summary\_imp1 <- summary(mod\_mice\_imp1)  
summary\_imp1

##   
## Call:  
## lm(formula = consumer\_intentions ~ framing\_condition \* norm\_condition \*   
## biospheric\_center + framing\_condition \* norm\_condition \*   
## altruistic\_center + framing\_condition \* norm\_condition \*   
## egoistic\_center + framing\_condition \* norm\_condition \* hedonic\_center +   
## framing\_condition \* norm\_condition \* ingroup\_center + self\_dec\_center +   
## impress\_manag\_center + clothing\_center + Gender + Age\_center,   
## data = data\_imp1)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -3.16222 -0.70808 0.04771 0.72147 2.79578   
##   
## Coefficients:  
## Estimate  
## (Intercept) 4.3263962  
## framing\_conditionFrameCode1 0.0238896  
## framing\_conditionFrameCode2 0.1346243  
## norm\_condition1 -0.0077887  
## norm\_condition2 0.0271307  
## norm\_condition3 -0.0405656  
## norm\_condition4 -0.0153619  
## biospheric\_center 0.3671223  
## altruistic\_center 0.0784854  
## egoistic\_center -0.2831525  
## hedonic\_center -0.1118705  
## ingroup\_center 0.0227354  
## self\_dec\_center -0.1127837  
## impress\_manag\_center -0.0193180  
## clothing\_center 0.0011663  
## Gender1 0.1283778  
## Age\_center -0.0596210  
## framing\_conditionFrameCode1:norm\_condition1 0.1922047  
## framing\_conditionFrameCode2:norm\_condition1 -0.1077558  
## framing\_conditionFrameCode1:norm\_condition2 0.0038033  
## framing\_conditionFrameCode2:norm\_condition2 -0.0387941  
## framing\_conditionFrameCode1:norm\_condition3 0.0246104  
## framing\_conditionFrameCode2:norm\_condition3 0.0216756  
## framing\_conditionFrameCode1:norm\_condition4 0.0287822  
## framing\_conditionFrameCode2:norm\_condition4 -0.0162866  
## framing\_conditionFrameCode1:biospheric\_center -0.0392310  
## framing\_conditionFrameCode2:biospheric\_center 0.0573995  
## norm\_condition1:biospheric\_center -0.0709195  
## norm\_condition2:biospheric\_center 0.0729761  
## norm\_condition3:biospheric\_center -0.0492863  
## norm\_condition4:biospheric\_center -0.0428356  
## framing\_conditionFrameCode1:altruistic\_center 0.0469514  
## framing\_conditionFrameCode2:altruistic\_center -0.1330240  
## norm\_condition1:altruistic\_center -0.1388219  
## norm\_condition2:altruistic\_center -0.0259110  
## norm\_condition3:altruistic\_center 0.0202718  
## norm\_condition4:altruistic\_center 0.0670047  
## framing\_conditionFrameCode1:egoistic\_center -0.0182185  
## framing\_conditionFrameCode2:egoistic\_center 0.0283867  
## norm\_condition1:egoistic\_center 0.0756174  
## norm\_condition2:egoistic\_center -0.0295147  
## norm\_condition3:egoistic\_center 0.0143438  
## norm\_condition4:egoistic\_center 0.0125237  
## framing\_conditionFrameCode1:hedonic\_center -0.0260893  
## framing\_conditionFrameCode2:hedonic\_center 0.1798103  
## norm\_condition1:hedonic\_center -0.0092286  
## norm\_condition2:hedonic\_center 0.0763002  
## norm\_condition3:hedonic\_center -0.0358267  
## norm\_condition4:hedonic\_center -0.0431348  
## framing\_conditionFrameCode1:ingroup\_center 0.0269299  
## framing\_conditionFrameCode2:ingroup\_center -0.0577588  
## norm\_condition1:ingroup\_center 0.0042202  
## norm\_condition2:ingroup\_center -0.0050978  
## norm\_condition3:ingroup\_center 0.0034978  
## norm\_condition4:ingroup\_center -0.0146882  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center -0.0418365  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.0384113  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -0.1535975  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.1173464  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.1403237  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.0681324  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.0489937  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.1163815  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center -0.1408154  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.2368413  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.2265591  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.0205384  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -0.1575356  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.0568555  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.0001011  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -0.0849802  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.0947822  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.0914470  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.0435430  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.1810447  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.0618888  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.0282053  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -0.0516839  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.0349074  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center -0.0583550  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -0.1931651  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.1034552  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.0211642  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -0.1061244  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.0097370  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center -0.0098166  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.0307537  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.2124541  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.0397561  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.1222510  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.0342435  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.0434401  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.0319690  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -0.0927788  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.0420212  
## Std. Error  
## (Intercept) 0.0575631  
## framing\_conditionFrameCode1 0.0820022  
## framing\_conditionFrameCode2 0.0696684  
## norm\_condition1 0.0516377  
## norm\_condition2 0.0300781  
## norm\_condition3 0.0213596  
## norm\_condition4 0.0167982  
## biospheric\_center 0.0461077  
## altruistic\_center 0.0633659  
## egoistic\_center 0.0426161  
## hedonic\_center 0.0540802  
## ingroup\_center 0.0337040  
## self\_dec\_center 0.0425690  
## impress\_manag\_center 0.0418107  
## clothing\_center 0.0449891  
## Gender1 0.0761363  
## Age\_center 0.0178790  
## framing\_conditionFrameCode1:norm\_condition1 0.1264154  
## framing\_conditionFrameCode2:norm\_condition1 0.1101849  
## framing\_conditionFrameCode1:norm\_condition2 0.0754429  
## framing\_conditionFrameCode2:norm\_condition2 0.0622888  
## framing\_conditionFrameCode1:norm\_condition3 0.0518058  
## framing\_conditionFrameCode2:norm\_condition3 0.0458842  
## framing\_conditionFrameCode1:norm\_condition4 0.0424134  
## framing\_conditionFrameCode2:norm\_condition4 0.0345188  
## framing\_conditionFrameCode1:biospheric\_center 0.1188209  
## framing\_conditionFrameCode2:biospheric\_center 0.0912084  
## norm\_condition1:biospheric\_center 0.0693414  
## norm\_condition2:biospheric\_center 0.0412817  
## norm\_condition3:biospheric\_center 0.0289408  
## norm\_condition4:biospheric\_center 0.0247898  
## framing\_conditionFrameCode1:altruistic\_center 0.1559746  
## framing\_conditionFrameCode2:altruistic\_center 0.1257453  
## norm\_condition1:altruistic\_center 0.0995464  
## norm\_condition2:altruistic\_center 0.0548992  
## norm\_condition3:altruistic\_center 0.0416516  
## norm\_condition4:altruistic\_center 0.0292157  
## framing\_conditionFrameCode1:egoistic\_center 0.1023233  
## framing\_conditionFrameCode2:egoistic\_center 0.0853723  
## norm\_condition1:egoistic\_center 0.0676808  
## norm\_condition2:egoistic\_center 0.0359728  
## norm\_condition3:egoistic\_center 0.0260762  
## norm\_condition4:egoistic\_center 0.0207403  
## framing\_conditionFrameCode1:hedonic\_center 0.1325647  
## framing\_conditionFrameCode2:hedonic\_center 0.1122210  
## norm\_condition1:hedonic\_center 0.0894004  
## norm\_condition2:hedonic\_center 0.0481773  
## norm\_condition3:hedonic\_center 0.0352292  
## norm\_condition4:hedonic\_center 0.0250119  
## framing\_conditionFrameCode1:ingroup\_center 0.0816687  
## framing\_conditionFrameCode2:ingroup\_center 0.0708456  
## norm\_condition1:ingroup\_center 0.0523977  
## norm\_condition2:ingroup\_center 0.0311259  
## norm\_condition3:ingroup\_center 0.0216686  
## norm\_condition4:ingroup\_center 0.0164626  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.1746568  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.1422607  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.1047235  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.0843260  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.0753935  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.0569900  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.0666281  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.0470729  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.2469728  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.2069549  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.1385748  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.1131019  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.1061281  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.0846597  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.0759304  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.0578756  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.1731896  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.1368136  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.0871569  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.0773824  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.0636150  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.0551914  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.0526844  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.0424423  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.2212547  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.1883764  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.1169101  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.1028822  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.0885953  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.0724238  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.0620681  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.0521880  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.1272497  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.1120872  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.0773716  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.0646484  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.0530632  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.0462192  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.0396964  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.0351772  
## t value  
## (Intercept) 75.159  
## framing\_conditionFrameCode1 0.291  
## framing\_conditionFrameCode2 1.932  
## norm\_condition1 -0.151  
## norm\_condition2 0.902  
## norm\_condition3 -1.899  
## norm\_condition4 -0.914  
## biospheric\_center 7.962  
## altruistic\_center 1.239  
## egoistic\_center -6.644  
## hedonic\_center -2.069  
## ingroup\_center 0.675  
## self\_dec\_center -2.649  
## impress\_manag\_center -0.462  
## clothing\_center 0.026  
## Gender1 1.686  
## Age\_center -3.335  
## framing\_conditionFrameCode1:norm\_condition1 1.520  
## framing\_conditionFrameCode2:norm\_condition1 -0.978  
## framing\_conditionFrameCode1:norm\_condition2 0.050  
## framing\_conditionFrameCode2:norm\_condition2 -0.623  
## framing\_conditionFrameCode1:norm\_condition3 0.475  
## framing\_conditionFrameCode2:norm\_condition3 0.472  
## framing\_conditionFrameCode1:norm\_condition4 0.679  
## framing\_conditionFrameCode2:norm\_condition4 -0.472  
## framing\_conditionFrameCode1:biospheric\_center -0.330  
## framing\_conditionFrameCode2:biospheric\_center 0.629  
## norm\_condition1:biospheric\_center -1.023  
## norm\_condition2:biospheric\_center 1.768  
## norm\_condition3:biospheric\_center -1.703  
## norm\_condition4:biospheric\_center -1.728  
## framing\_conditionFrameCode1:altruistic\_center 0.301  
## framing\_conditionFrameCode2:altruistic\_center -1.058  
## norm\_condition1:altruistic\_center -1.395  
## norm\_condition2:altruistic\_center -0.472  
## norm\_condition3:altruistic\_center 0.487  
## norm\_condition4:altruistic\_center 2.293  
## framing\_conditionFrameCode1:egoistic\_center -0.178  
## framing\_conditionFrameCode2:egoistic\_center 0.333  
## norm\_condition1:egoistic\_center 1.117  
## norm\_condition2:egoistic\_center -0.820  
## norm\_condition3:egoistic\_center 0.550  
## norm\_condition4:egoistic\_center 0.604  
## framing\_conditionFrameCode1:hedonic\_center -0.197  
## framing\_conditionFrameCode2:hedonic\_center 1.602  
## norm\_condition1:hedonic\_center -0.103  
## norm\_condition2:hedonic\_center 1.584  
## norm\_condition3:hedonic\_center -1.017  
## norm\_condition4:hedonic\_center -1.725  
## framing\_conditionFrameCode1:ingroup\_center 0.330  
## framing\_conditionFrameCode2:ingroup\_center -0.815  
## norm\_condition1:ingroup\_center 0.081  
## norm\_condition2:ingroup\_center -0.164  
## norm\_condition3:ingroup\_center 0.161  
## norm\_condition4:ingroup\_center -0.892  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center -0.240  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.270  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -1.467  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 1.392  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 1.861  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 1.196  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.735  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 2.472  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center -0.570  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 1.144  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 1.635  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.182  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -1.484  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.672  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.001  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -1.468  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.547  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.668  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.500  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 2.340  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.973  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.511  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -0.981  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.822  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center -0.264  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -1.025  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.885  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.206  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -1.198  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.134  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center -0.158  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.589  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 1.670  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.355  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 1.580  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.530  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.819  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.692  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -2.337  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 1.195  
## Pr(>|t|)  
## (Intercept) < 0.0000000000000002  
## framing\_conditionFrameCode1 0.770858  
## framing\_conditionFrameCode2 0.053587  
## norm\_condition1 0.880137  
## norm\_condition2 0.367262  
## norm\_condition3 0.057818  
## norm\_condition4 0.360671  
## biospheric\_center 0.00000000000000441  
## altruistic\_center 0.215772  
## egoistic\_center 0.00000000004910463  
## hedonic\_center 0.038831  
## ingroup\_center 0.500106  
## self\_dec\_center 0.008185  
## impress\_manag\_center 0.644153  
## clothing\_center 0.979323  
## Gender1 0.092066  
## Age\_center 0.000884  
## framing\_conditionFrameCode1:norm\_condition1 0.128710  
## framing\_conditionFrameCode2:norm\_condition1 0.328325  
## framing\_conditionFrameCode1:norm\_condition2 0.959803  
## framing\_conditionFrameCode2:norm\_condition2 0.533546  
## framing\_conditionFrameCode1:norm\_condition3 0.634850  
## framing\_conditionFrameCode2:norm\_condition3 0.636742  
## framing\_conditionFrameCode1:norm\_condition4 0.497536  
## framing\_conditionFrameCode2:norm\_condition4 0.637155  
## framing\_conditionFrameCode1:biospheric\_center 0.741339  
## framing\_conditionFrameCode2:biospheric\_center 0.529276  
## norm\_condition1:biospheric\_center 0.306660  
## norm\_condition2:biospheric\_center 0.077395  
## norm\_condition3:biospheric\_center 0.088866  
## norm\_condition4:biospheric\_center 0.084294  
## framing\_conditionFrameCode1:altruistic\_center 0.763460  
## framing\_conditionFrameCode2:altruistic\_center 0.290354  
## norm\_condition1:altruistic\_center 0.163451  
## norm\_condition2:altruistic\_center 0.637045  
## norm\_condition3:altruistic\_center 0.626574  
## norm\_condition4:altruistic\_center 0.022021  
## framing\_conditionFrameCode1:egoistic\_center 0.858720  
## framing\_conditionFrameCode2:egoistic\_center 0.739575  
## norm\_condition1:egoistic\_center 0.264139  
## norm\_condition2:egoistic\_center 0.412135  
## norm\_condition3:egoistic\_center 0.582386  
## norm\_condition4:egoistic\_center 0.546087  
## framing\_conditionFrameCode1:hedonic\_center 0.844019  
## framing\_conditionFrameCode2:hedonic\_center 0.109396  
## norm\_condition1:hedonic\_center 0.917802  
## norm\_condition2:hedonic\_center 0.113558  
## norm\_condition3:hedonic\_center 0.309409  
## norm\_condition4:hedonic\_center 0.084902  
## framing\_conditionFrameCode1:ingroup\_center 0.741659  
## framing\_conditionFrameCode2:ingroup\_center 0.415101  
## norm\_condition1:ingroup\_center 0.935822  
## norm\_condition2:ingroup\_center 0.869936  
## norm\_condition3:ingroup\_center 0.871792  
## norm\_condition4:ingroup\_center 0.372486  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.810738  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.787209  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.142762  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.164348  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.062996  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.232158  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.462304  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.013582  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.568689  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.252717  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.102368  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.855939  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.138009  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.502002  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.998938  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.142319  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.584308  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.504023  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.617467  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.019493  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.330847  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.609428  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.326817  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.410999  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.792028  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.305403  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.376409  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.837056  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.231247  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.893077  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.874363  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.555797  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.095303  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.722895  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.114400  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.596441  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.413175  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.489291  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.019618  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.232532  
##   
## (Intercept) \*\*\*  
## framing\_conditionFrameCode1   
## framing\_conditionFrameCode2 .   
## norm\_condition1   
## norm\_condition2   
## norm\_condition3 .   
## norm\_condition4   
## biospheric\_center \*\*\*  
## altruistic\_center   
## egoistic\_center \*\*\*  
## hedonic\_center \*   
## ingroup\_center   
## self\_dec\_center \*\*   
## impress\_manag\_center   
## clothing\_center   
## Gender1 .   
## Age\_center \*\*\*  
## framing\_conditionFrameCode1:norm\_condition1   
## framing\_conditionFrameCode2:norm\_condition1   
## framing\_conditionFrameCode1:norm\_condition2   
## framing\_conditionFrameCode2:norm\_condition2   
## framing\_conditionFrameCode1:norm\_condition3   
## framing\_conditionFrameCode2:norm\_condition3   
## framing\_conditionFrameCode1:norm\_condition4   
## framing\_conditionFrameCode2:norm\_condition4   
## framing\_conditionFrameCode1:biospheric\_center   
## framing\_conditionFrameCode2:biospheric\_center   
## norm\_condition1:biospheric\_center   
## norm\_condition2:biospheric\_center .   
## norm\_condition3:biospheric\_center .   
## norm\_condition4:biospheric\_center .   
## framing\_conditionFrameCode1:altruistic\_center   
## framing\_conditionFrameCode2:altruistic\_center   
## norm\_condition1:altruistic\_center   
## norm\_condition2:altruistic\_center   
## norm\_condition3:altruistic\_center   
## norm\_condition4:altruistic\_center \*   
## framing\_conditionFrameCode1:egoistic\_center   
## framing\_conditionFrameCode2:egoistic\_center   
## norm\_condition1:egoistic\_center   
## norm\_condition2:egoistic\_center   
## norm\_condition3:egoistic\_center   
## norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:hedonic\_center   
## framing\_conditionFrameCode2:hedonic\_center   
## norm\_condition1:hedonic\_center   
## norm\_condition2:hedonic\_center   
## norm\_condition3:hedonic\_center   
## norm\_condition4:hedonic\_center .   
## framing\_conditionFrameCode1:ingroup\_center   
## framing\_conditionFrameCode2:ingroup\_center   
## norm\_condition1:ingroup\_center   
## norm\_condition2:ingroup\_center   
## norm\_condition3:ingroup\_center   
## norm\_condition4:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center .   
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center \*   
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center \*   
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center .   
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center \*   
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 1.066 on 1038 degrees of freedom  
## Multiple R-squared: 0.2613, Adjusted R-squared: 0.1944   
## F-statistic: 3.907 on 94 and 1038 DF, p-value: < 0.00000000000000022

Succinct summary

summary\_imp1$coefficients %>%  
 knitr::kable(digits = 3)

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.326 | 0.058 | 75.159 | 0.000 |
| framing\_conditionFrameCode1 | 0.024 | 0.082 | 0.291 | 0.771 |
| framing\_conditionFrameCode2 | 0.135 | 0.070 | 1.932 | 0.054 |
| norm\_condition1 | -0.008 | 0.052 | -0.151 | 0.880 |
| norm\_condition2 | 0.027 | 0.030 | 0.902 | 0.367 |
| norm\_condition3 | -0.041 | 0.021 | -1.899 | 0.058 |
| norm\_condition4 | -0.015 | 0.017 | -0.914 | 0.361 |
| biospheric\_center | 0.367 | 0.046 | 7.962 | 0.000 |
| altruistic\_center | 0.078 | 0.063 | 1.239 | 0.216 |
| egoistic\_center | -0.283 | 0.043 | -6.644 | 0.000 |
| hedonic\_center | -0.112 | 0.054 | -2.069 | 0.039 |
| ingroup\_center | 0.023 | 0.034 | 0.675 | 0.500 |
| self\_dec\_center | -0.113 | 0.043 | -2.649 | 0.008 |
| impress\_manag\_center | -0.019 | 0.042 | -0.462 | 0.644 |
| clothing\_center | 0.001 | 0.045 | 0.026 | 0.979 |
| Gender1 | 0.128 | 0.076 | 1.686 | 0.092 |
| Age\_center | -0.060 | 0.018 | -3.335 | 0.001 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.192 | 0.126 | 1.520 | 0.129 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.108 | 0.110 | -0.978 | 0.328 |
| framing\_conditionFrameCode1:norm\_condition2 | 0.004 | 0.075 | 0.050 | 0.960 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.039 | 0.062 | -0.623 | 0.534 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.025 | 0.052 | 0.475 | 0.635 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.022 | 0.046 | 0.472 | 0.637 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.029 | 0.042 | 0.679 | 0.498 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.016 | 0.035 | -0.472 | 0.637 |
| framing\_conditionFrameCode1:biospheric\_center | -0.039 | 0.119 | -0.330 | 0.741 |
| framing\_conditionFrameCode2:biospheric\_center | 0.057 | 0.091 | 0.629 | 0.529 |
| norm\_condition1:biospheric\_center | -0.071 | 0.069 | -1.023 | 0.307 |
| norm\_condition2:biospheric\_center | 0.073 | 0.041 | 1.768 | 0.077 |
| norm\_condition3:biospheric\_center | -0.049 | 0.029 | -1.703 | 0.089 |
| norm\_condition4:biospheric\_center | -0.043 | 0.025 | -1.728 | 0.084 |
| framing\_conditionFrameCode1:altruistic\_center | 0.047 | 0.156 | 0.301 | 0.763 |
| framing\_conditionFrameCode2:altruistic\_center | -0.133 | 0.126 | -1.058 | 0.290 |
| norm\_condition1:altruistic\_center | -0.139 | 0.100 | -1.395 | 0.163 |
| norm\_condition2:altruistic\_center | -0.026 | 0.055 | -0.472 | 0.637 |
| norm\_condition3:altruistic\_center | 0.020 | 0.042 | 0.487 | 0.627 |
| norm\_condition4:altruistic\_center | 0.067 | 0.029 | 2.293 | 0.022 |
| framing\_conditionFrameCode1:egoistic\_center | -0.018 | 0.102 | -0.178 | 0.859 |
| framing\_conditionFrameCode2:egoistic\_center | 0.028 | 0.085 | 0.333 | 0.740 |
| norm\_condition1:egoistic\_center | 0.076 | 0.068 | 1.117 | 0.264 |
| norm\_condition2:egoistic\_center | -0.030 | 0.036 | -0.820 | 0.412 |
| norm\_condition3:egoistic\_center | 0.014 | 0.026 | 0.550 | 0.582 |
| norm\_condition4:egoistic\_center | 0.013 | 0.021 | 0.604 | 0.546 |
| framing\_conditionFrameCode1:hedonic\_center | -0.026 | 0.133 | -0.197 | 0.844 |
| framing\_conditionFrameCode2:hedonic\_center | 0.180 | 0.112 | 1.602 | 0.109 |
| norm\_condition1:hedonic\_center | -0.009 | 0.089 | -0.103 | 0.918 |
| norm\_condition2:hedonic\_center | 0.076 | 0.048 | 1.584 | 0.114 |
| norm\_condition3:hedonic\_center | -0.036 | 0.035 | -1.017 | 0.309 |
| norm\_condition4:hedonic\_center | -0.043 | 0.025 | -1.725 | 0.085 |
| framing\_conditionFrameCode1:ingroup\_center | 0.027 | 0.082 | 0.330 | 0.742 |
| framing\_conditionFrameCode2:ingroup\_center | -0.058 | 0.071 | -0.815 | 0.415 |
| norm\_condition1:ingroup\_center | 0.004 | 0.052 | 0.081 | 0.936 |
| norm\_condition2:ingroup\_center | -0.005 | 0.031 | -0.164 | 0.870 |
| norm\_condition3:ingroup\_center | 0.003 | 0.022 | 0.161 | 0.872 |
| norm\_condition4:ingroup\_center | -0.015 | 0.016 | -0.892 | 0.372 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.042 | 0.175 | -0.240 | 0.811 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.038 | 0.142 | 0.270 | 0.787 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.154 | 0.105 | -1.467 | 0.143 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.117 | 0.084 | 1.392 | 0.164 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.140 | 0.075 | 1.861 | 0.063 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.068 | 0.057 | 1.196 | 0.232 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.049 | 0.067 | 0.735 | 0.462 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.116 | 0.047 | 2.472 | 0.014 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.141 | 0.247 | -0.570 | 0.569 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.237 | 0.207 | 1.144 | 0.253 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.227 | 0.139 | 1.635 | 0.102 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.021 | 0.113 | 0.182 | 0.856 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.158 | 0.106 | -1.484 | 0.138 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.057 | 0.085 | -0.672 | 0.502 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | 0.000 | 0.076 | 0.001 | 0.999 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.085 | 0.058 | -1.468 | 0.142 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.095 | 0.173 | 0.547 | 0.584 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.091 | 0.137 | 0.668 | 0.504 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.044 | 0.087 | -0.500 | 0.617 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.181 | 0.077 | 2.340 | 0.019 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.062 | 0.064 | 0.973 | 0.331 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.028 | 0.055 | 0.511 | 0.609 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.052 | 0.053 | -0.981 | 0.327 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.035 | 0.042 | -0.822 | 0.411 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.058 | 0.221 | -0.264 | 0.792 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.193 | 0.188 | -1.025 | 0.305 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.103 | 0.117 | -0.885 | 0.376 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.021 | 0.103 | -0.206 | 0.837 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.106 | 0.089 | -1.198 | 0.231 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.010 | 0.072 | -0.134 | 0.893 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.010 | 0.062 | -0.158 | 0.874 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.031 | 0.052 | 0.589 | 0.556 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.212 | 0.127 | 1.670 | 0.095 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.040 | 0.112 | 0.355 | 0.723 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.122 | 0.077 | 1.580 | 0.114 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.034 | 0.065 | -0.530 | 0.596 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.043 | 0.053 | 0.819 | 0.413 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.032 | 0.046 | -0.692 | 0.489 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.093 | 0.040 | -2.337 | 0.020 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.042 | 0.035 | 1.195 | 0.233 |

APA style table for regression summary

apa\_summ\_imp1 <- apa\_print(summary\_imp1)  
  
apa\_summ\_imp1$table %>%  
apa\_table(caption = "Table 2 Regression Results Using Imputed Data 1",  
 note = "DV = Consumer Intentions")

(#tab:unnamed-chunk-30)

Table 2 Regression Results Using Imputed Data 1

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.33 | [4.21, 4.44] | 75.16 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.02 | [-0.14, 0.18] | 0.29 | 1038 | .771 |
| Framing conditionFrameCode2 | 0.13 | [0.00, 0.27] | 1.93 | 1038 | .054 |
| Norm condition1 | -0.01 | [-0.11, 0.09] | -0.15 | 1038 | .880 |
| Norm condition2 | 0.03 | [-0.03, 0.09] | 0.90 | 1038 | .367 |
| Norm condition3 | -0.04 | [-0.08, 0.00] | -1.90 | 1038 | .058 |
| Norm condition4 | -0.02 | [-0.05, 0.02] | -0.91 | 1038 | .361 |
| Biospheric center | 0.37 | [0.28, 0.46] | 7.96 | 1038 | < .001 |
| Altruistic center | 0.08 | [-0.05, 0.20] | 1.24 | 1038 | .216 |
| Egoistic center | -0.28 | [-0.37, -0.20] | -6.64 | 1038 | < .001 |
| Hedonic center | -0.11 | [-0.22, -0.01] | -2.07 | 1038 | .039 |
| Ingroup center | 0.02 | [-0.04, 0.09] | 0.67 | 1038 | .500 |
| Self dec center | -0.11 | [-0.20, -0.03] | -2.65 | 1038 | .008 |
| Impress manag center | -0.02 | [-0.10, 0.06] | -0.46 | 1038 | .644 |
| Clothing center | 0.00 | [-0.09, 0.09] | 0.03 | 1038 | .979 |
| Gender1 | 0.13 | [-0.02, 0.28] | 1.69 | 1038 | .092 |
| Age center | -0.06 | [-0.09, -0.02] | -3.33 | 1038 | .001 |
| Framing conditionFrameCode1 Norm condition1 | 0.19 | [-0.06, 0.44] | 1.52 | 1038 | .129 |
| Framing conditionFrameCode2 Norm condition1 | -0.11 | [-0.32, 0.11] | -0.98 | 1038 | .328 |
| Framing conditionFrameCode1 Norm condition2 | 0.00 | [-0.14, 0.15] | 0.05 | 1038 | .960 |
| Framing conditionFrameCode2 Norm condition2 | -0.04 | [-0.16, 0.08] | -0.62 | 1038 | .534 |
| Framing conditionFrameCode1 Norm condition3 | 0.02 | [-0.08, 0.13] | 0.48 | 1038 | .635 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.07, 0.11] | 0.47 | 1038 | .637 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.05, 0.11] | 0.68 | 1038 | .498 |
| Framing conditionFrameCode2 Norm condition4 | -0.02 | [-0.08, 0.05] | -0.47 | 1038 | .637 |
| Framing conditionFrameCode1 Biospheric center | -0.04 | [-0.27, 0.19] | -0.33 | 1038 | .741 |
| Framing conditionFrameCode2 Biospheric center | 0.06 | [-0.12, 0.24] | 0.63 | 1038 | .529 |
| Norm condition1 Biospheric center | -0.07 | [-0.21, 0.07] | -1.02 | 1038 | .307 |
| Norm condition2 Biospheric center | 0.07 | [-0.01, 0.15] | 1.77 | 1038 | .077 |
| Norm condition3 Biospheric center | -0.05 | [-0.11, 0.01] | -1.70 | 1038 | .089 |
| Norm condition4 Biospheric center | -0.04 | [-0.09, 0.01] | -1.73 | 1038 | .084 |
| Framing conditionFrameCode1 Altruistic center | 0.05 | [-0.26, 0.35] | 0.30 | 1038 | .763 |
| Framing conditionFrameCode2 Altruistic center | -0.13 | [-0.38, 0.11] | -1.06 | 1038 | .290 |
| Norm condition1 Altruistic center | -0.14 | [-0.33, 0.06] | -1.39 | 1038 | .163 |
| Norm condition2 Altruistic center | -0.03 | [-0.13, 0.08] | -0.47 | 1038 | .637 |
| Norm condition3 Altruistic center | 0.02 | [-0.06, 0.10] | 0.49 | 1038 | .627 |
| Norm condition4 Altruistic center | 0.07 | [0.01, 0.12] | 2.29 | 1038 | .022 |
| Framing conditionFrameCode1 Egoistic center | -0.02 | [-0.22, 0.18] | -0.18 | 1038 | .859 |
| Framing conditionFrameCode2 Egoistic center | 0.03 | [-0.14, 0.20] | 0.33 | 1038 | .740 |
| Norm condition1 Egoistic center | 0.08 | [-0.06, 0.21] | 1.12 | 1038 | .264 |
| Norm condition2 Egoistic center | -0.03 | [-0.10, 0.04] | -0.82 | 1038 | .412 |
| Norm condition3 Egoistic center | 0.01 | [-0.04, 0.07] | 0.55 | 1038 | .582 |
| Norm condition4 Egoistic center | 0.01 | [-0.03, 0.05] | 0.60 | 1038 | .546 |
| Framing conditionFrameCode1 Hedonic center | -0.03 | [-0.29, 0.23] | -0.20 | 1038 | .844 |
| Framing conditionFrameCode2 Hedonic center | 0.18 | [-0.04, 0.40] | 1.60 | 1038 | .109 |
| Norm condition1 Hedonic center | -0.01 | [-0.18, 0.17] | -0.10 | 1038 | .918 |
| Norm condition2 Hedonic center | 0.08 | [-0.02, 0.17] | 1.58 | 1038 | .114 |
| Norm condition3 Hedonic center | -0.04 | [-0.10, 0.03] | -1.02 | 1038 | .309 |
| Norm condition4 Hedonic center | -0.04 | [-0.09, 0.01] | -1.72 | 1038 | .085 |
| Framing conditionFrameCode1 Ingroup center | 0.03 | [-0.13, 0.19] | 0.33 | 1038 | .742 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.20, 0.08] | -0.82 | 1038 | .415 |
| Norm condition1 Ingroup center | 0.00 | [-0.10, 0.11] | 0.08 | 1038 | .936 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.06] | -0.16 | 1038 | .870 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.05] | 0.16 | 1038 | .872 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.89 | 1038 | .372 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.04 | [-0.38, 0.30] | -0.24 | 1038 | .811 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.04 | [-0.24, 0.32] | 0.27 | 1038 | .787 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.15 | [-0.36, 0.05] | -1.47 | 1038 | .143 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.12 | [-0.05, 0.28] | 1.39 | 1038 | .164 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.14 | [-0.01, 0.29] | 1.86 | 1038 | .063 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.07 | [-0.04, 0.18] | 1.20 | 1038 | .232 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.05 | [-0.08, 0.18] | 0.74 | 1038 | .462 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.12 | [0.02, 0.21] | 2.47 | 1038 | .014 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.14 | [-0.63, 0.34] | -0.57 | 1038 | .569 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.24 | [-0.17, 0.64] | 1.14 | 1038 | .253 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.23 | [-0.05, 0.50] | 1.63 | 1038 | .102 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | 0.02 | [-0.20, 0.24] | 0.18 | 1038 | .856 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.16 | [-0.37, 0.05] | -1.48 | 1038 | .138 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.06 | [-0.22, 0.11] | -0.67 | 1038 | .502 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | 0.00 | [-0.15, 0.15] | 0.00 | 1038 | .999 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.08 | [-0.20, 0.03] | -1.47 | 1038 | .142 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.09 | [-0.25, 0.43] | 0.55 | 1038 | .584 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.09 | [-0.18, 0.36] | 0.67 | 1038 | .504 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.04 | [-0.21, 0.13] | -0.50 | 1038 | .617 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.18 | [0.03, 0.33] | 2.34 | 1038 | .019 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.06 | [-0.06, 0.19] | 0.97 | 1038 | .331 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.03 | [-0.08, 0.14] | 0.51 | 1038 | .609 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.05 | [-0.16, 0.05] | -0.98 | 1038 | .327 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.03 | [-0.12, 0.05] | -0.82 | 1038 | .411 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | -0.06 | [-0.49, 0.38] | -0.26 | 1038 | .792 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.19 | [-0.56, 0.18] | -1.03 | 1038 | .305 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.10 | [-0.33, 0.13] | -0.88 | 1038 | .376 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | -0.02 | [-0.22, 0.18] | -0.21 | 1038 | .837 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.11 | [-0.28, 0.07] | -1.20 | 1038 | .231 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | -0.01 | [-0.15, 0.13] | -0.13 | 1038 | .893 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | -0.01 | [-0.13, 0.11] | -0.16 | 1038 | .874 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.03 | [-0.07, 0.13] | 0.59 | 1038 | .556 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.21 | [-0.04, 0.46] | 1.67 | 1038 | .095 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.04 | [-0.18, 0.26] | 0.35 | 1038 | .723 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.12 | [-0.03, 0.27] | 1.58 | 1038 | .114 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.09] | -0.53 | 1038 | .596 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.04 | [-0.06, 0.15] | 0.82 | 1038 | .413 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.69 | 1038 | .489 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.17, -0.01] | -2.34 | 1038 | .020 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.19 | 1038 | .233 |

*Note.* DV = Consumer Intentions

#### ANOVA summary

anova(mod\_mice\_imp1) %>%  
 knitr::kable(digits = 3)

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.691 | 2.346 | 2.062 | 0.128 |
| norm\_condition | 4 | 8.168 | 2.042 | 1.796 | 0.127 |
| biospheric\_center | 1 | 142.746 | 142.746 | 125.509 | 0.000 |
| altruistic\_center | 1 | 0.351 | 0.351 | 0.309 | 0.578 |
| egoistic\_center | 1 | 122.369 | 122.369 | 107.593 | 0.000 |
| hedonic\_center | 1 | 4.201 | 4.201 | 3.694 | 0.055 |
| ingroup\_center | 1 | 4.171 | 4.171 | 3.667 | 0.056 |
| self\_dec\_center | 1 | 14.754 | 14.754 | 12.972 | 0.000 |
| impress\_manag\_center | 1 | 0.109 | 0.109 | 0.096 | 0.757 |
| clothing\_center | 1 | 0.755 | 0.755 | 0.664 | 0.415 |
| Gender | 1 | 5.603 | 5.603 | 4.926 | 0.027 |
| Age\_center | 1 | 11.674 | 11.674 | 10.264 | 0.001 |
| framing\_condition:norm\_condition | 8 | 5.530 | 0.691 | 0.608 | 0.772 |
| framing\_condition:biospheric\_center | 2 | 0.335 | 0.167 | 0.147 | 0.863 |
| norm\_condition:biospheric\_center | 4 | 14.275 | 3.569 | 3.138 | 0.014 |
| framing\_condition:altruistic\_center | 2 | 0.439 | 0.220 | 0.193 | 0.824 |
| norm\_condition:altruistic\_center | 4 | 3.007 | 0.752 | 0.661 | 0.619 |
| framing\_condition:egoistic\_center | 2 | 0.851 | 0.426 | 0.374 | 0.688 |
| norm\_condition:egoistic\_center | 4 | 2.434 | 0.608 | 0.535 | 0.710 |
| framing\_condition:hedonic\_center | 2 | 2.712 | 1.356 | 1.192 | 0.304 |
| norm\_condition:hedonic\_center | 4 | 8.593 | 2.148 | 1.889 | 0.110 |
| framing\_condition:ingroup\_center | 2 | 1.215 | 0.608 | 0.534 | 0.586 |
| norm\_condition:ingroup\_center | 4 | 0.392 | 0.098 | 0.086 | 0.987 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 16.828 | 2.103 | 1.849 | 0.065 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 12.032 | 1.504 | 1.322 | 0.228 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 10.415 | 1.302 | 1.145 | 0.330 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 4.068 | 0.508 | 0.447 | 0.893 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 14.930 | 1.866 | 1.641 | 0.109 |
| Residuals | 1038 | 1180.553 | 1.137 | NA | NA |

### Imputed Data 2

data\_imp2 <- impobject$imputations[[2]]  
  
mod\_mice\_imp2 <-lm(consumer\_intentions ~ framing\_condition\*norm\_condition\*biospheric\_center + framing\_condition\*norm\_condition\*altruistic\_center + framing\_condition\*norm\_condition\*egoistic\_center + framing\_condition\*norm\_condition\*hedonic\_center + framing\_condition\*norm\_condition\*ingroup\_center + self\_dec\_center + impress\_manag\_center + clothing\_center + Gender + Age\_center, data = data\_imp2)

#### Regression summary

summary\_imp2 <- summary(mod\_mice\_imp2)  
summary\_imp2

##   
## Call:  
## lm(formula = consumer\_intentions ~ framing\_condition \* norm\_condition \*   
## biospheric\_center + framing\_condition \* norm\_condition \*   
## altruistic\_center + framing\_condition \* norm\_condition \*   
## egoistic\_center + framing\_condition \* norm\_condition \* hedonic\_center +   
## framing\_condition \* norm\_condition \* ingroup\_center + self\_dec\_center +   
## impress\_manag\_center + clothing\_center + Gender + Age\_center,   
## data = data\_imp2)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -3.15557 -0.70559 0.04996 0.70836 2.73887   
##   
## Coefficients:  
## Estimate  
## (Intercept) 4.3271519  
## framing\_conditionFrameCode1 0.0319786  
## framing\_conditionFrameCode2 0.1378600  
## norm\_condition1 -0.0140257  
## norm\_condition2 0.0281665  
## norm\_condition3 -0.0440971  
## norm\_condition4 -0.0155952  
## biospheric\_center 0.3547317  
## altruistic\_center 0.1009297  
## egoistic\_center -0.2916375  
## hedonic\_center -0.1139462  
## ingroup\_center 0.0269355  
## self\_dec\_center -0.1179546  
## impress\_manag\_center -0.0136191  
## clothing\_center 0.0020804  
## Gender1 0.1284275  
## Age\_center -0.0459978  
## framing\_conditionFrameCode1:norm\_condition1 0.1898720  
## framing\_conditionFrameCode2:norm\_condition1 -0.1043778  
## framing\_conditionFrameCode1:norm\_condition2 -0.0047489  
## framing\_conditionFrameCode2:norm\_condition2 -0.0391643  
## framing\_conditionFrameCode1:norm\_condition3 0.0244443  
## framing\_conditionFrameCode2:norm\_condition3 0.0256701  
## framing\_conditionFrameCode1:norm\_condition4 0.0253641  
## framing\_conditionFrameCode2:norm\_condition4 -0.0126352  
## framing\_conditionFrameCode1:biospheric\_center -0.0612167  
## framing\_conditionFrameCode2:biospheric\_center 0.0731872  
## norm\_condition1:biospheric\_center -0.0491034  
## norm\_condition2:biospheric\_center 0.0857815  
## norm\_condition3:biospheric\_center -0.0489525  
## norm\_condition4:biospheric\_center -0.0387066  
## framing\_conditionFrameCode1:altruistic\_center 0.0673809  
## framing\_conditionFrameCode2:altruistic\_center -0.1643691  
## norm\_condition1:altruistic\_center -0.1708461  
## norm\_condition2:altruistic\_center -0.0293506  
## norm\_condition3:altruistic\_center 0.0237921  
## norm\_condition4:altruistic\_center 0.0597143  
## framing\_conditionFrameCode1:egoistic\_center -0.0127523  
## framing\_conditionFrameCode2:egoistic\_center 0.0358572  
## norm\_condition1:egoistic\_center 0.0822207  
## norm\_condition2:egoistic\_center -0.0202950  
## norm\_condition3:egoistic\_center 0.0132461  
## norm\_condition4:egoistic\_center 0.0146958  
## framing\_conditionFrameCode1:hedonic\_center -0.0590711  
## framing\_conditionFrameCode2:hedonic\_center 0.1925272  
## norm\_condition1:hedonic\_center 0.0154933  
## norm\_condition2:hedonic\_center 0.0792436  
## norm\_condition3:hedonic\_center -0.0306841  
## norm\_condition4:hedonic\_center -0.0424515  
## framing\_conditionFrameCode1:ingroup\_center 0.0245484  
## framing\_conditionFrameCode2:ingroup\_center -0.0589377  
## norm\_condition1:ingroup\_center 0.0060532  
## norm\_condition2:ingroup\_center -0.0102762  
## norm\_condition3:ingroup\_center 0.0036647  
## norm\_condition4:ingroup\_center -0.0148859  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.0028540  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.0006181  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -0.1071862  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.1030104  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.1609069  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.0623754  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.0657747  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.1099105  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center -0.2237315  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.2713576  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.2028368  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.0242704  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -0.1978668  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.0582204  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center -0.0193286  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -0.0756755  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.1291871  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.0861397  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.0314041  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.1688096  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.0759420  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.0313382  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -0.0618876  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.0376927  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.0080734  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -0.2131642  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.0921506  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.0236961  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -0.0935117  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.0186757  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.0016102  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.0291590  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.1983426  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.0330063  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.1262698  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.0375291  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.0396899  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.0293503  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -0.0901870  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.0394269  
## Std. Error  
## (Intercept) 0.0575085  
## framing\_conditionFrameCode1 0.0819952  
## framing\_conditionFrameCode2 0.0696559  
## norm\_condition1 0.0515575  
## norm\_condition2 0.0300823  
## norm\_condition3 0.0213912  
## norm\_condition4 0.0167841  
## biospheric\_center 0.0463207  
## altruistic\_center 0.0633011  
## egoistic\_center 0.0427049  
## hedonic\_center 0.0540878  
## ingroup\_center 0.0338281  
## self\_dec\_center 0.0427119  
## impress\_manag\_center 0.0419784  
## clothing\_center 0.0450279  
## Gender1 0.0762515  
## Age\_center 0.0178874  
## framing\_conditionFrameCode1:norm\_condition1 0.1263282  
## framing\_conditionFrameCode2:norm\_condition1 0.1101212  
## framing\_conditionFrameCode1:norm\_condition2 0.0755410  
## framing\_conditionFrameCode2:norm\_condition2 0.0623299  
## framing\_conditionFrameCode1:norm\_condition3 0.0518092  
## framing\_conditionFrameCode2:norm\_condition3 0.0459574  
## framing\_conditionFrameCode1:norm\_condition4 0.0423487  
## framing\_conditionFrameCode2:norm\_condition4 0.0344901  
## framing\_conditionFrameCode1:biospheric\_center 0.1200400  
## framing\_conditionFrameCode2:biospheric\_center 0.0915981  
## norm\_condition1:biospheric\_center 0.0702255  
## norm\_condition2:biospheric\_center 0.0414090  
## norm\_condition3:biospheric\_center 0.0290204  
## norm\_condition4:biospheric\_center 0.0250015  
## framing\_conditionFrameCode1:altruistic\_center 0.1559160  
## framing\_conditionFrameCode2:altruistic\_center 0.1256892  
## norm\_condition1:altruistic\_center 0.0991696  
## norm\_condition2:altruistic\_center 0.0549238  
## norm\_condition3:altruistic\_center 0.0415827  
## norm\_condition4:altruistic\_center 0.0293930  
## framing\_conditionFrameCode1:egoistic\_center 0.1028486  
## framing\_conditionFrameCode2:egoistic\_center 0.0855863  
## norm\_condition1:egoistic\_center 0.0678772  
## norm\_condition2:egoistic\_center 0.0361723  
## norm\_condition3:egoistic\_center 0.0261390  
## norm\_condition4:egoistic\_center 0.0208235  
## framing\_conditionFrameCode1:hedonic\_center 0.1325609  
## framing\_conditionFrameCode2:hedonic\_center 0.1122457  
## norm\_condition1:hedonic\_center 0.0892833  
## norm\_condition2:hedonic\_center 0.0480697  
## norm\_condition3:hedonic\_center 0.0351746  
## norm\_condition4:hedonic\_center 0.0250693  
## framing\_conditionFrameCode1:ingroup\_center 0.0819080  
## framing\_conditionFrameCode2:ingroup\_center 0.0710259  
## norm\_condition1:ingroup\_center 0.0525910  
## norm\_condition2:ingroup\_center 0.0311702  
## norm\_condition3:ingroup\_center 0.0216775  
## norm\_condition4:ingroup\_center 0.0165283  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.1779808  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.1432524  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.1050509  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.0846246  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.0756072  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.0570666  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.0671038  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.0473608  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.2454047  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.2067205  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.1384382  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.1132620  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.1058543  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.0845919  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.0763132  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.0581192  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.1737658  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.1371845  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.0878587  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.0776122  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.0639219  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.0553059  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.0528569  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.0425384  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.2200425  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.1886702  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.1165346  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.1028539  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.0883649  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.0724119  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.0622229  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.0523144  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.1277520  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.1122901  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.0776493  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.0647193  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.0530397  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.0462523  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.0399348  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.0352887  
## t value  
## (Intercept) 75.244  
## framing\_conditionFrameCode1 0.390  
## framing\_conditionFrameCode2 1.979  
## norm\_condition1 -0.272  
## norm\_condition2 0.936  
## norm\_condition3 -2.061  
## norm\_condition4 -0.929  
## biospheric\_center 7.658  
## altruistic\_center 1.594  
## egoistic\_center -6.829  
## hedonic\_center -2.107  
## ingroup\_center 0.796  
## self\_dec\_center -2.762  
## impress\_manag\_center -0.324  
## clothing\_center 0.046  
## Gender1 1.684  
## Age\_center -2.572  
## framing\_conditionFrameCode1:norm\_condition1 1.503  
## framing\_conditionFrameCode2:norm\_condition1 -0.948  
## framing\_conditionFrameCode1:norm\_condition2 -0.063  
## framing\_conditionFrameCode2:norm\_condition2 -0.628  
## framing\_conditionFrameCode1:norm\_condition3 0.472  
## framing\_conditionFrameCode2:norm\_condition3 0.559  
## framing\_conditionFrameCode1:norm\_condition4 0.599  
## framing\_conditionFrameCode2:norm\_condition4 -0.366  
## framing\_conditionFrameCode1:biospheric\_center -0.510  
## framing\_conditionFrameCode2:biospheric\_center 0.799  
## norm\_condition1:biospheric\_center -0.699  
## norm\_condition2:biospheric\_center 2.072  
## norm\_condition3:biospheric\_center -1.687  
## norm\_condition4:biospheric\_center -1.548  
## framing\_conditionFrameCode1:altruistic\_center 0.432  
## framing\_conditionFrameCode2:altruistic\_center -1.308  
## norm\_condition1:altruistic\_center -1.723  
## norm\_condition2:altruistic\_center -0.534  
## norm\_condition3:altruistic\_center 0.572  
## norm\_condition4:altruistic\_center 2.032  
## framing\_conditionFrameCode1:egoistic\_center -0.124  
## framing\_conditionFrameCode2:egoistic\_center 0.419  
## norm\_condition1:egoistic\_center 1.211  
## norm\_condition2:egoistic\_center -0.561  
## norm\_condition3:egoistic\_center 0.507  
## norm\_condition4:egoistic\_center 0.706  
## framing\_conditionFrameCode1:hedonic\_center -0.446  
## framing\_conditionFrameCode2:hedonic\_center 1.715  
## norm\_condition1:hedonic\_center 0.174  
## norm\_condition2:hedonic\_center 1.649  
## norm\_condition3:hedonic\_center -0.872  
## norm\_condition4:hedonic\_center -1.693  
## framing\_conditionFrameCode1:ingroup\_center 0.300  
## framing\_conditionFrameCode2:ingroup\_center -0.830  
## norm\_condition1:ingroup\_center 0.115  
## norm\_condition2:ingroup\_center -0.330  
## norm\_condition3:ingroup\_center 0.169  
## norm\_condition4:ingroup\_center -0.901  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.016  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.004  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -1.020  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 1.217  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 2.128  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 1.093  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.980  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 2.321  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center -0.912  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 1.313  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 1.465  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.214  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -1.869  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.688  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center -0.253  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -1.302  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.743  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.628  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.357  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 2.175  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 1.188  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.567  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -1.171  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.886  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.037  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -1.130  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.791  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.230  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -1.058  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.258  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.026  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.557  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 1.553  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.294  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 1.626  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.580  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.748  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.635  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -2.258  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 1.117  
## Pr(>|t|)  
## (Intercept) < 0.0000000000000002  
## framing\_conditionFrameCode1 0.69661  
## framing\_conditionFrameCode2 0.04806  
## norm\_condition1 0.78565  
## norm\_condition2 0.34933  
## norm\_condition3 0.03951  
## norm\_condition4 0.35302  
## biospheric\_center 0.0000000000000431  
## altruistic\_center 0.11114  
## egoistic\_center 0.0000000000145195  
## hedonic\_center 0.03538  
## ingroup\_center 0.42607  
## self\_dec\_center 0.00585  
## impress\_manag\_center 0.74568  
## clothing\_center 0.96316  
## Gender1 0.09243  
## Age\_center 0.01026  
## framing\_conditionFrameCode1:norm\_condition1 0.13314  
## framing\_conditionFrameCode2:norm\_condition1 0.34343  
## framing\_conditionFrameCode1:norm\_condition2 0.94989  
## framing\_conditionFrameCode2:norm\_condition2 0.52992  
## framing\_conditionFrameCode1:norm\_condition3 0.63716  
## framing\_conditionFrameCode2:norm\_condition3 0.57658  
## framing\_conditionFrameCode1:norm\_condition4 0.54935  
## framing\_conditionFrameCode2:norm\_condition4 0.71418  
## framing\_conditionFrameCode1:biospheric\_center 0.61018  
## framing\_conditionFrameCode2:biospheric\_center 0.42447  
## norm\_condition1:biospheric\_center 0.48457  
## norm\_condition2:biospheric\_center 0.03855  
## norm\_condition3:biospheric\_center 0.09194  
## norm\_condition4:biospheric\_center 0.12189  
## framing\_conditionFrameCode1:altruistic\_center 0.66571  
## framing\_conditionFrameCode2:altruistic\_center 0.19125  
## norm\_condition1:altruistic\_center 0.08523  
## norm\_condition2:altruistic\_center 0.59319  
## norm\_condition3:altruistic\_center 0.56733  
## norm\_condition4:altruistic\_center 0.04245  
## framing\_conditionFrameCode1:egoistic\_center 0.90135  
## framing\_conditionFrameCode2:egoistic\_center 0.67533  
## norm\_condition1:egoistic\_center 0.22605  
## norm\_condition2:egoistic\_center 0.57488  
## norm\_condition3:egoistic\_center 0.61243  
## norm\_condition4:egoistic\_center 0.48051  
## framing\_conditionFrameCode1:hedonic\_center 0.65597  
## framing\_conditionFrameCode2:hedonic\_center 0.08660  
## norm\_condition1:hedonic\_center 0.86227  
## norm\_condition2:hedonic\_center 0.09955  
## norm\_condition3:hedonic\_center 0.38323  
## norm\_condition4:hedonic\_center 0.09069  
## framing\_conditionFrameCode1:ingroup\_center 0.76446  
## framing\_conditionFrameCode2:ingroup\_center 0.40684  
## norm\_condition1:ingroup\_center 0.90839  
## norm\_condition2:ingroup\_center 0.74171  
## norm\_condition3:ingroup\_center 0.86578  
## norm\_condition4:ingroup\_center 0.36799  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.98721  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.99656  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.30781  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.22378  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.03356  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.27463  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.32722  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.02050  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.36215  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.18958  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.14317  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.83037  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.06187  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.49145  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.80010  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.19318  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.45737  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.53020  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.72084  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.02985  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.23509  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.57109  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.24193  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.37578  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.97074  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.25881  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.42927  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.81784  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.29019  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.79653  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.97936  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.57739  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.12083  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.76886  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.10422  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.56212  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.45445  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.52585  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.02413  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.26414  
##   
## (Intercept) \*\*\*  
## framing\_conditionFrameCode1   
## framing\_conditionFrameCode2 \*   
## norm\_condition1   
## norm\_condition2   
## norm\_condition3 \*   
## norm\_condition4   
## biospheric\_center \*\*\*  
## altruistic\_center   
## egoistic\_center \*\*\*  
## hedonic\_center \*   
## ingroup\_center   
## self\_dec\_center \*\*   
## impress\_manag\_center   
## clothing\_center   
## Gender1 .   
## Age\_center \*   
## framing\_conditionFrameCode1:norm\_condition1   
## framing\_conditionFrameCode2:norm\_condition1   
## framing\_conditionFrameCode1:norm\_condition2   
## framing\_conditionFrameCode2:norm\_condition2   
## framing\_conditionFrameCode1:norm\_condition3   
## framing\_conditionFrameCode2:norm\_condition3   
## framing\_conditionFrameCode1:norm\_condition4   
## framing\_conditionFrameCode2:norm\_condition4   
## framing\_conditionFrameCode1:biospheric\_center   
## framing\_conditionFrameCode2:biospheric\_center   
## norm\_condition1:biospheric\_center   
## norm\_condition2:biospheric\_center \*   
## norm\_condition3:biospheric\_center .   
## norm\_condition4:biospheric\_center   
## framing\_conditionFrameCode1:altruistic\_center   
## framing\_conditionFrameCode2:altruistic\_center   
## norm\_condition1:altruistic\_center .   
## norm\_condition2:altruistic\_center   
## norm\_condition3:altruistic\_center   
## norm\_condition4:altruistic\_center \*   
## framing\_conditionFrameCode1:egoistic\_center   
## framing\_conditionFrameCode2:egoistic\_center   
## norm\_condition1:egoistic\_center   
## norm\_condition2:egoistic\_center   
## norm\_condition3:egoistic\_center   
## norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:hedonic\_center   
## framing\_conditionFrameCode2:hedonic\_center .   
## norm\_condition1:hedonic\_center   
## norm\_condition2:hedonic\_center .   
## norm\_condition3:hedonic\_center   
## norm\_condition4:hedonic\_center .   
## framing\_conditionFrameCode1:ingroup\_center   
## framing\_conditionFrameCode2:ingroup\_center   
## norm\_condition1:ingroup\_center   
## norm\_condition2:ingroup\_center   
## norm\_condition3:ingroup\_center   
## norm\_condition4:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center \*   
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center \*   
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center .   
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center \*   
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center \*   
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 1.068 on 1038 degrees of freedom  
## Multiple R-squared: 0.2593, Adjusted R-squared: 0.1922   
## F-statistic: 3.865 on 94 and 1038 DF, p-value: < 0.00000000000000022

Succinct summary

summary\_imp2$coefficients %>%  
 knitr::kable(digits = 3)

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.327 | 0.058 | 75.244 | 0.000 |
| framing\_conditionFrameCode1 | 0.032 | 0.082 | 0.390 | 0.697 |
| framing\_conditionFrameCode2 | 0.138 | 0.070 | 1.979 | 0.048 |
| norm\_condition1 | -0.014 | 0.052 | -0.272 | 0.786 |
| norm\_condition2 | 0.028 | 0.030 | 0.936 | 0.349 |
| norm\_condition3 | -0.044 | 0.021 | -2.061 | 0.040 |
| norm\_condition4 | -0.016 | 0.017 | -0.929 | 0.353 |
| biospheric\_center | 0.355 | 0.046 | 7.658 | 0.000 |
| altruistic\_center | 0.101 | 0.063 | 1.594 | 0.111 |
| egoistic\_center | -0.292 | 0.043 | -6.829 | 0.000 |
| hedonic\_center | -0.114 | 0.054 | -2.107 | 0.035 |
| ingroup\_center | 0.027 | 0.034 | 0.796 | 0.426 |
| self\_dec\_center | -0.118 | 0.043 | -2.762 | 0.006 |
| impress\_manag\_center | -0.014 | 0.042 | -0.324 | 0.746 |
| clothing\_center | 0.002 | 0.045 | 0.046 | 0.963 |
| Gender1 | 0.128 | 0.076 | 1.684 | 0.092 |
| Age\_center | -0.046 | 0.018 | -2.572 | 0.010 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.190 | 0.126 | 1.503 | 0.133 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.104 | 0.110 | -0.948 | 0.343 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.005 | 0.076 | -0.063 | 0.950 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.039 | 0.062 | -0.628 | 0.530 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.024 | 0.052 | 0.472 | 0.637 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.026 | 0.046 | 0.559 | 0.577 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.025 | 0.042 | 0.599 | 0.549 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.013 | 0.034 | -0.366 | 0.714 |
| framing\_conditionFrameCode1:biospheric\_center | -0.061 | 0.120 | -0.510 | 0.610 |
| framing\_conditionFrameCode2:biospheric\_center | 0.073 | 0.092 | 0.799 | 0.424 |
| norm\_condition1:biospheric\_center | -0.049 | 0.070 | -0.699 | 0.485 |
| norm\_condition2:biospheric\_center | 0.086 | 0.041 | 2.072 | 0.039 |
| norm\_condition3:biospheric\_center | -0.049 | 0.029 | -1.687 | 0.092 |
| norm\_condition4:biospheric\_center | -0.039 | 0.025 | -1.548 | 0.122 |
| framing\_conditionFrameCode1:altruistic\_center | 0.067 | 0.156 | 0.432 | 0.666 |
| framing\_conditionFrameCode2:altruistic\_center | -0.164 | 0.126 | -1.308 | 0.191 |
| norm\_condition1:altruistic\_center | -0.171 | 0.099 | -1.723 | 0.085 |
| norm\_condition2:altruistic\_center | -0.029 | 0.055 | -0.534 | 0.593 |
| norm\_condition3:altruistic\_center | 0.024 | 0.042 | 0.572 | 0.567 |
| norm\_condition4:altruistic\_center | 0.060 | 0.029 | 2.032 | 0.042 |
| framing\_conditionFrameCode1:egoistic\_center | -0.013 | 0.103 | -0.124 | 0.901 |
| framing\_conditionFrameCode2:egoistic\_center | 0.036 | 0.086 | 0.419 | 0.675 |
| norm\_condition1:egoistic\_center | 0.082 | 0.068 | 1.211 | 0.226 |
| norm\_condition2:egoistic\_center | -0.020 | 0.036 | -0.561 | 0.575 |
| norm\_condition3:egoistic\_center | 0.013 | 0.026 | 0.507 | 0.612 |
| norm\_condition4:egoistic\_center | 0.015 | 0.021 | 0.706 | 0.481 |
| framing\_conditionFrameCode1:hedonic\_center | -0.059 | 0.133 | -0.446 | 0.656 |
| framing\_conditionFrameCode2:hedonic\_center | 0.193 | 0.112 | 1.715 | 0.087 |
| norm\_condition1:hedonic\_center | 0.015 | 0.089 | 0.174 | 0.862 |
| norm\_condition2:hedonic\_center | 0.079 | 0.048 | 1.649 | 0.100 |
| norm\_condition3:hedonic\_center | -0.031 | 0.035 | -0.872 | 0.383 |
| norm\_condition4:hedonic\_center | -0.042 | 0.025 | -1.693 | 0.091 |
| framing\_conditionFrameCode1:ingroup\_center | 0.025 | 0.082 | 0.300 | 0.764 |
| framing\_conditionFrameCode2:ingroup\_center | -0.059 | 0.071 | -0.830 | 0.407 |
| norm\_condition1:ingroup\_center | 0.006 | 0.053 | 0.115 | 0.908 |
| norm\_condition2:ingroup\_center | -0.010 | 0.031 | -0.330 | 0.742 |
| norm\_condition3:ingroup\_center | 0.004 | 0.022 | 0.169 | 0.866 |
| norm\_condition4:ingroup\_center | -0.015 | 0.017 | -0.901 | 0.368 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | 0.003 | 0.178 | 0.016 | 0.987 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.001 | 0.143 | 0.004 | 0.997 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.107 | 0.105 | -1.020 | 0.308 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.103 | 0.085 | 1.217 | 0.224 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.161 | 0.076 | 2.128 | 0.034 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.062 | 0.057 | 1.093 | 0.275 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.066 | 0.067 | 0.980 | 0.327 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.110 | 0.047 | 2.321 | 0.020 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.224 | 0.245 | -0.912 | 0.362 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.271 | 0.207 | 1.313 | 0.190 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.203 | 0.138 | 1.465 | 0.143 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.024 | 0.113 | 0.214 | 0.830 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.198 | 0.106 | -1.869 | 0.062 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.058 | 0.085 | -0.688 | 0.491 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | -0.019 | 0.076 | -0.253 | 0.800 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.076 | 0.058 | -1.302 | 0.193 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.129 | 0.174 | 0.743 | 0.457 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.086 | 0.137 | 0.628 | 0.530 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.031 | 0.088 | -0.357 | 0.721 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.169 | 0.078 | 2.175 | 0.030 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.076 | 0.064 | 1.188 | 0.235 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.031 | 0.055 | 0.567 | 0.571 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.062 | 0.053 | -1.171 | 0.242 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.038 | 0.043 | -0.886 | 0.376 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | 0.008 | 0.220 | 0.037 | 0.971 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.213 | 0.189 | -1.130 | 0.259 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.092 | 0.117 | -0.791 | 0.429 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.024 | 0.103 | -0.230 | 0.818 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.094 | 0.088 | -1.058 | 0.290 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.019 | 0.072 | -0.258 | 0.797 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | 0.002 | 0.062 | 0.026 | 0.979 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.029 | 0.052 | 0.557 | 0.577 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.198 | 0.128 | 1.553 | 0.121 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.033 | 0.112 | 0.294 | 0.769 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.126 | 0.078 | 1.626 | 0.104 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.038 | 0.065 | -0.580 | 0.562 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.040 | 0.053 | 0.748 | 0.454 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.029 | 0.046 | -0.635 | 0.526 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.090 | 0.040 | -2.258 | 0.024 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.039 | 0.035 | 1.117 | 0.264 |

APA style table for regression summary

apa\_summ\_imp2 <- apa\_print(summary\_imp2)  
  
apa\_summ\_imp2$table %>%  
apa\_table(caption = "Table 3 Regression Results Using Imputed Data 2",  
 note = "DV = Consumer Intentions")

(#tab:unnamed-chunk-35)

Table 3 Regression Results Using Imputed Data 2

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.33 | [4.21, 4.44] | 75.24 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.03 | [-0.13, 0.19] | 0.39 | 1038 | .697 |
| Framing conditionFrameCode2 | 0.14 | [0.00, 0.27] | 1.98 | 1038 | .048 |
| Norm condition1 | -0.01 | [-0.12, 0.09] | -0.27 | 1038 | .786 |
| Norm condition2 | 0.03 | [-0.03, 0.09] | 0.94 | 1038 | .349 |
| Norm condition3 | -0.04 | [-0.09, 0.00] | -2.06 | 1038 | .040 |
| Norm condition4 | -0.02 | [-0.05, 0.02] | -0.93 | 1038 | .353 |
| Biospheric center | 0.35 | [0.26, 0.45] | 7.66 | 1038 | < .001 |
| Altruistic center | 0.10 | [-0.02, 0.23] | 1.59 | 1038 | .111 |
| Egoistic center | -0.29 | [-0.38, -0.21] | -6.83 | 1038 | < .001 |
| Hedonic center | -0.11 | [-0.22, -0.01] | -2.11 | 1038 | .035 |
| Ingroup center | 0.03 | [-0.04, 0.09] | 0.80 | 1038 | .426 |
| Self dec center | -0.12 | [-0.20, -0.03] | -2.76 | 1038 | .006 |
| Impress manag center | -0.01 | [-0.10, 0.07] | -0.32 | 1038 | .746 |
| Clothing center | 0.00 | [-0.09, 0.09] | 0.05 | 1038 | .963 |
| Gender1 | 0.13 | [-0.02, 0.28] | 1.68 | 1038 | .092 |
| Age center | -0.05 | [-0.08, -0.01] | -2.57 | 1038 | .010 |
| Framing conditionFrameCode1 Norm condition1 | 0.19 | [-0.06, 0.44] | 1.50 | 1038 | .133 |
| Framing conditionFrameCode2 Norm condition1 | -0.10 | [-0.32, 0.11] | -0.95 | 1038 | .343 |
| Framing conditionFrameCode1 Norm condition2 | 0.00 | [-0.15, 0.14] | -0.06 | 1038 | .950 |
| Framing conditionFrameCode2 Norm condition2 | -0.04 | [-0.16, 0.08] | -0.63 | 1038 | .530 |
| Framing conditionFrameCode1 Norm condition3 | 0.02 | [-0.08, 0.13] | 0.47 | 1038 | .637 |
| Framing conditionFrameCode2 Norm condition3 | 0.03 | [-0.06, 0.12] | 0.56 | 1038 | .577 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.06, 0.11] | 0.60 | 1038 | .549 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.08, 0.06] | -0.37 | 1038 | .714 |
| Framing conditionFrameCode1 Biospheric center | -0.06 | [-0.30, 0.17] | -0.51 | 1038 | .610 |
| Framing conditionFrameCode2 Biospheric center | 0.07 | [-0.11, 0.25] | 0.80 | 1038 | .424 |
| Norm condition1 Biospheric center | -0.05 | [-0.19, 0.09] | -0.70 | 1038 | .485 |
| Norm condition2 Biospheric center | 0.09 | [0.00, 0.17] | 2.07 | 1038 | .039 |
| Norm condition3 Biospheric center | -0.05 | [-0.11, 0.01] | -1.69 | 1038 | .092 |
| Norm condition4 Biospheric center | -0.04 | [-0.09, 0.01] | -1.55 | 1038 | .122 |
| Framing conditionFrameCode1 Altruistic center | 0.07 | [-0.24, 0.37] | 0.43 | 1038 | .666 |
| Framing conditionFrameCode2 Altruistic center | -0.16 | [-0.41, 0.08] | -1.31 | 1038 | .191 |
| Norm condition1 Altruistic center | -0.17 | [-0.37, 0.02] | -1.72 | 1038 | .085 |
| Norm condition2 Altruistic center | -0.03 | [-0.14, 0.08] | -0.53 | 1038 | .593 |
| Norm condition3 Altruistic center | 0.02 | [-0.06, 0.11] | 0.57 | 1038 | .567 |
| Norm condition4 Altruistic center | 0.06 | [0.00, 0.12] | 2.03 | 1038 | .042 |
| Framing conditionFrameCode1 Egoistic center | -0.01 | [-0.21, 0.19] | -0.12 | 1038 | .901 |
| Framing conditionFrameCode2 Egoistic center | 0.04 | [-0.13, 0.20] | 0.42 | 1038 | .675 |
| Norm condition1 Egoistic center | 0.08 | [-0.05, 0.22] | 1.21 | 1038 | .226 |
| Norm condition2 Egoistic center | -0.02 | [-0.09, 0.05] | -0.56 | 1038 | .575 |
| Norm condition3 Egoistic center | 0.01 | [-0.04, 0.06] | 0.51 | 1038 | .612 |
| Norm condition4 Egoistic center | 0.01 | [-0.03, 0.06] | 0.71 | 1038 | .481 |
| Framing conditionFrameCode1 Hedonic center | -0.06 | [-0.32, 0.20] | -0.45 | 1038 | .656 |
| Framing conditionFrameCode2 Hedonic center | 0.19 | [-0.03, 0.41] | 1.72 | 1038 | .087 |
| Norm condition1 Hedonic center | 0.02 | [-0.16, 0.19] | 0.17 | 1038 | .862 |
| Norm condition2 Hedonic center | 0.08 | [-0.02, 0.17] | 1.65 | 1038 | .100 |
| Norm condition3 Hedonic center | -0.03 | [-0.10, 0.04] | -0.87 | 1038 | .383 |
| Norm condition4 Hedonic center | -0.04 | [-0.09, 0.01] | -1.69 | 1038 | .091 |
| Framing conditionFrameCode1 Ingroup center | 0.02 | [-0.14, 0.19] | 0.30 | 1038 | .764 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.20, 0.08] | -0.83 | 1038 | .407 |
| Norm condition1 Ingroup center | 0.01 | [-0.10, 0.11] | 0.12 | 1038 | .908 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.33 | 1038 | .742 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.05] | 0.17 | 1038 | .866 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.90 | 1038 | .368 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | 0.00 | [-0.35, 0.35] | 0.02 | 1038 | .987 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.00 | [-0.28, 0.28] | 0.00 | 1038 | .997 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.11 | [-0.31, 0.10] | -1.02 | 1038 | .308 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.10 | [-0.06, 0.27] | 1.22 | 1038 | .224 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.16 | [0.01, 0.31] | 2.13 | 1038 | .034 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.06 | [-0.05, 0.17] | 1.09 | 1038 | .275 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.07 | [-0.07, 0.20] | 0.98 | 1038 | .327 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.11 | [0.02, 0.20] | 2.32 | 1038 | .020 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.22 | [-0.71, 0.26] | -0.91 | 1038 | .362 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.27 | [-0.13, 0.68] | 1.31 | 1038 | .190 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.20 | [-0.07, 0.47] | 1.47 | 1038 | .143 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | 0.02 | [-0.20, 0.25] | 0.21 | 1038 | .830 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.20 | [-0.41, 0.01] | -1.87 | 1038 | .062 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.06 | [-0.22, 0.11] | -0.69 | 1038 | .491 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | -0.02 | [-0.17, 0.13] | -0.25 | 1038 | .800 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.08 | [-0.19, 0.04] | -1.30 | 1038 | .193 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.13 | [-0.21, 0.47] | 0.74 | 1038 | .457 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.09 | [-0.18, 0.36] | 0.63 | 1038 | .530 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.03 | [-0.20, 0.14] | -0.36 | 1038 | .721 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.17 | [0.02, 0.32] | 2.18 | 1038 | .030 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.08 | [-0.05, 0.20] | 1.19 | 1038 | .235 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.03 | [-0.08, 0.14] | 0.57 | 1038 | .571 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.06 | [-0.17, 0.04] | -1.17 | 1038 | .242 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.04 | [-0.12, 0.05] | -0.89 | 1038 | .376 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | 0.01 | [-0.42, 0.44] | 0.04 | 1038 | .971 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.21 | [-0.58, 0.16] | -1.13 | 1038 | .259 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.09 | [-0.32, 0.14] | -0.79 | 1038 | .429 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | -0.02 | [-0.23, 0.18] | -0.23 | 1038 | .818 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.09 | [-0.27, 0.08] | -1.06 | 1038 | .290 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | -0.02 | [-0.16, 0.12] | -0.26 | 1038 | .797 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | 0.00 | [-0.12, 0.12] | 0.03 | 1038 | .979 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.03 | [-0.07, 0.13] | 0.56 | 1038 | .577 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.20 | [-0.05, 0.45] | 1.55 | 1038 | .121 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.03 | [-0.19, 0.25] | 0.29 | 1038 | .769 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.13 | [-0.03, 0.28] | 1.63 | 1038 | .104 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.04 | [-0.16, 0.09] | -0.58 | 1038 | .562 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.04 | [-0.06, 0.14] | 0.75 | 1038 | .454 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.63 | 1038 | .526 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.17, -0.01] | -2.26 | 1038 | .024 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.12 | 1038 | .264 |

*Note.* DV = Consumer Intentions

#### ANOVA summary

anova(mod\_mice\_imp2) %>%  
 knitr::kable(digits = 3) # df\_residual = 1039 = 1133-94

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.691 | 2.346 | 2.057 | 0.128 |
| norm\_condition | 4 | 8.168 | 2.042 | 1.791 | 0.128 |
| biospheric\_center | 1 | 140.745 | 140.745 | 123.408 | 0.000 |
| altruistic\_center | 1 | 0.054 | 0.054 | 0.048 | 0.827 |
| egoistic\_center | 1 | 125.540 | 125.540 | 110.076 | 0.000 |
| hedonic\_center | 1 | 4.508 | 4.508 | 3.953 | 0.047 |
| ingroup\_center | 1 | 4.385 | 4.385 | 3.845 | 0.050 |
| self\_dec\_center | 1 | 14.178 | 14.178 | 12.432 | 0.000 |
| impress\_manag\_center | 1 | 0.018 | 0.018 | 0.016 | 0.899 |
| clothing\_center | 1 | 0.690 | 0.690 | 0.605 | 0.437 |
| Gender | 1 | 5.841 | 5.841 | 5.122 | 0.024 |
| Age\_center | 1 | 8.444 | 8.444 | 7.404 | 0.007 |
| framing\_condition:norm\_condition | 8 | 5.636 | 0.705 | 0.618 | 0.763 |
| framing\_condition:biospheric\_center | 2 | 0.774 | 0.387 | 0.339 | 0.712 |
| norm\_condition:biospheric\_center | 4 | 14.600 | 3.650 | 3.200 | 0.013 |
| framing\_condition:altruistic\_center | 2 | 0.632 | 0.316 | 0.277 | 0.758 |
| norm\_condition:altruistic\_center | 4 | 2.846 | 0.711 | 0.624 | 0.646 |
| framing\_condition:egoistic\_center | 2 | 0.914 | 0.457 | 0.401 | 0.670 |
| norm\_condition:egoistic\_center | 4 | 2.596 | 0.649 | 0.569 | 0.685 |
| framing\_condition:hedonic\_center | 2 | 2.913 | 1.456 | 1.277 | 0.279 |
| norm\_condition:hedonic\_center | 4 | 8.558 | 2.140 | 1.876 | 0.112 |
| framing\_condition:ingroup\_center | 2 | 1.243 | 0.621 | 0.545 | 0.580 |
| norm\_condition:ingroup\_center | 4 | 0.366 | 0.091 | 0.080 | 0.988 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 13.588 | 1.698 | 1.489 | 0.157 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 13.883 | 1.735 | 1.522 | 0.145 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 10.823 | 1.353 | 1.186 | 0.304 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 3.784 | 0.473 | 0.415 | 0.913 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 13.959 | 1.745 | 1.530 | 0.142 |
| Residuals | 1038 | 1183.822 | 1.140 | NA | NA |

### Imputed Data 3

data\_imp3 <- impobject$imputations[[3]]  
  
mod\_mice\_imp3 <-lm(consumer\_intentions ~ framing\_condition\*norm\_condition\*biospheric\_center + framing\_condition\*norm\_condition\*altruistic\_center + framing\_condition\*norm\_condition\*egoistic\_center + framing\_condition\*norm\_condition\*hedonic\_center + framing\_condition\*norm\_condition\*ingroup\_center + self\_dec\_center + impress\_manag\_center + clothing\_center + Gender + Age\_center, data = data\_imp3)

#### Regression summary

summary\_imp3 <- summary(mod\_mice\_imp3)  
summary\_imp3

##   
## Call:  
## lm(formula = consumer\_intentions ~ framing\_condition \* norm\_condition \*   
## biospheric\_center + framing\_condition \* norm\_condition \*   
## altruistic\_center + framing\_condition \* norm\_condition \*   
## egoistic\_center + framing\_condition \* norm\_condition \* hedonic\_center +   
## framing\_condition \* norm\_condition \* ingroup\_center + self\_dec\_center +   
## impress\_manag\_center + clothing\_center + Gender + Age\_center,   
## data = data\_imp3)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -3.1740 -0.7001 0.0663 0.7058 2.8060   
##   
## Coefficients:  
## Estimate  
## (Intercept) 4.31653911  
## framing\_conditionFrameCode1 0.03421291  
## framing\_conditionFrameCode2 0.13607796  
## norm\_condition1 -0.01441892  
## norm\_condition2 0.02595973  
## norm\_condition3 -0.04272283  
## norm\_condition4 -0.01399991  
## biospheric\_center 0.37332095  
## altruistic\_center 0.05804295  
## egoistic\_center -0.29258615  
## hedonic\_center -0.09810574  
## ingroup\_center 0.02697215  
## self\_dec\_center -0.10740845  
## impress\_manag\_center -0.01042352  
## clothing\_center 0.00334542  
## Gender1 0.14575754  
## Age\_center -0.05606709  
## framing\_conditionFrameCode1:norm\_condition1 0.19330165  
## framing\_conditionFrameCode2:norm\_condition1 -0.09689865  
## framing\_conditionFrameCode1:norm\_condition2 -0.00887010  
## framing\_conditionFrameCode2:norm\_condition2 -0.04121066  
## framing\_conditionFrameCode1:norm\_condition3 0.02676106  
## framing\_conditionFrameCode2:norm\_condition3 0.02282856  
## framing\_conditionFrameCode1:norm\_condition4 0.02890524  
## framing\_conditionFrameCode2:norm\_condition4 -0.01590373  
## framing\_conditionFrameCode1:biospheric\_center -0.04982144  
## framing\_conditionFrameCode2:biospheric\_center 0.04879232  
## norm\_condition1:biospheric\_center -0.09442578  
## norm\_condition2:biospheric\_center 0.07377683  
## norm\_condition3:biospheric\_center -0.04462733  
## norm\_condition4:biospheric\_center -0.04435900  
## framing\_conditionFrameCode1:altruistic\_center 0.00616971  
## framing\_conditionFrameCode2:altruistic\_center -0.11281131  
## norm\_condition1:altruistic\_center -0.08072032  
## norm\_condition2:altruistic\_center -0.00936606  
## norm\_condition3:altruistic\_center 0.02903338  
## norm\_condition4:altruistic\_center 0.06997773  
## framing\_conditionFrameCode1:egoistic\_center -0.02685539  
## framing\_conditionFrameCode2:egoistic\_center 0.04221382  
## norm\_condition1:egoistic\_center 0.05556071  
## norm\_condition2:egoistic\_center -0.01929450  
## norm\_condition3:egoistic\_center 0.01627043  
## norm\_condition4:egoistic\_center 0.01392253  
## framing\_conditionFrameCode1:hedonic\_center -0.00940696  
## framing\_conditionFrameCode2:hedonic\_center 0.16681890  
## norm\_condition1:hedonic\_center -0.00740373  
## norm\_condition2:hedonic\_center 0.06800171  
## norm\_condition3:hedonic\_center -0.04058292  
## norm\_condition4:hedonic\_center -0.04763145  
## framing\_conditionFrameCode1:ingroup\_center 0.02717694  
## framing\_conditionFrameCode2:ingroup\_center -0.06644751  
## norm\_condition1:ingroup\_center 0.00007535  
## norm\_condition2:ingroup\_center -0.00925173  
## norm\_condition3:ingroup\_center 0.00238805  
## norm\_condition4:ingroup\_center -0.01394841  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center -0.14686334  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.07103384  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -0.13723458  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.12190268  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.12827832  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.05844679  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.05465226  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.11603299  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.05569412  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.14698460  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.26711960  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center -0.01090007  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -0.14575743  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.06546089  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.00913906  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -0.08860407  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.05313887  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.12607910  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.02822318  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.16659839  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.07774293  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.02592576  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -0.05583723  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.03385878  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center -0.05324919  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -0.20201691  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.12240953  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.00486756  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -0.11084973  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.00639236  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center -0.01512197  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.03764495  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.18097254  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.03557242  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.11405883  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.02843921  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.03528043  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.03108921  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -0.08872478  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.03977554  
## Std. Error  
## (Intercept) 0.05712120  
## framing\_conditionFrameCode1 0.08183069  
## framing\_conditionFrameCode2 0.06960334  
## norm\_condition1 0.05148146  
## norm\_condition2 0.03005459  
## norm\_condition3 0.02135120  
## norm\_condition4 0.01674882  
## biospheric\_center 0.04608448  
## altruistic\_center 0.06307204  
## egoistic\_center 0.04254918  
## hedonic\_center 0.05414102  
## ingroup\_center 0.03371658  
## self\_dec\_center 0.04272879  
## impress\_manag\_center 0.04178554  
## clothing\_center 0.04490677  
## Gender1 0.07538719  
## Age\_center 0.01848959  
## framing\_conditionFrameCode1:norm\_condition1 0.12609485  
## framing\_conditionFrameCode2:norm\_condition1 0.11013864  
## framing\_conditionFrameCode1:norm\_condition2 0.07539199  
## framing\_conditionFrameCode2:norm\_condition2 0.06227587  
## framing\_conditionFrameCode1:norm\_condition3 0.05176814  
## framing\_conditionFrameCode2:norm\_condition3 0.04587531  
## framing\_conditionFrameCode1:norm\_condition4 0.04225492  
## framing\_conditionFrameCode2:norm\_condition4 0.03441667  
## framing\_conditionFrameCode1:biospheric\_center 0.11892939  
## framing\_conditionFrameCode2:biospheric\_center 0.09121547  
## norm\_condition1:biospheric\_center 0.06927778  
## norm\_condition2:biospheric\_center 0.04124175  
## norm\_condition3:biospheric\_center 0.02873873  
## norm\_condition4:biospheric\_center 0.02500545  
## framing\_conditionFrameCode1:altruistic\_center 0.15348882  
## framing\_conditionFrameCode2:altruistic\_center 0.12497857  
## norm\_condition1:altruistic\_center 0.09630098  
## norm\_condition2:altruistic\_center 0.05436378  
## norm\_condition3:altruistic\_center 0.04147701  
## norm\_condition4:altruistic\_center 0.02916232  
## framing\_conditionFrameCode1:egoistic\_center 0.10252949  
## framing\_conditionFrameCode2:egoistic\_center 0.08533069  
## norm\_condition1:egoistic\_center 0.06770953  
## norm\_condition2:egoistic\_center 0.03602420  
## norm\_condition3:egoistic\_center 0.02604491  
## norm\_condition4:egoistic\_center 0.02076501  
## framing\_conditionFrameCode1:hedonic\_center 0.13281914  
## framing\_conditionFrameCode2:hedonic\_center 0.11220686  
## norm\_condition1:hedonic\_center 0.08959646  
## norm\_condition2:hedonic\_center 0.04818631  
## norm\_condition3:hedonic\_center 0.03516773  
## norm\_condition4:hedonic\_center 0.02502109  
## framing\_conditionFrameCode1:ingroup\_center 0.08170534  
## framing\_conditionFrameCode2:ingroup\_center 0.07087664  
## norm\_condition1:ingroup\_center 0.05245501  
## norm\_condition2:ingroup\_center 0.03112226  
## norm\_condition3:ingroup\_center 0.02166406  
## norm\_condition4:ingroup\_center 0.01645725  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.17474081  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.14212172  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.10452593  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.08432384  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.07468742  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.05673431  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.06745074  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.04736900  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.23600686  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.20337312  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.13649274  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.11244223  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.10545138  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.08441524  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.07603752  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.05782975  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.17289443  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.13688109  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.08747453  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.07734969  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.06358894  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.05514062  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.05269735  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.04248988  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.22196124  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.18884565  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.11698122  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.10281172  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.08850390  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.07231194  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.06214667  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.05216795  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.12739095  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.11212773  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.07734311  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.06460088  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.05299804  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.04617977  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.03970546  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.03515956  
## t value  
## (Intercept) 75.568  
## framing\_conditionFrameCode1 0.418  
## framing\_conditionFrameCode2 1.955  
## norm\_condition1 -0.280  
## norm\_condition2 0.864  
## norm\_condition3 -2.001  
## norm\_condition4 -0.836  
## biospheric\_center 8.101  
## altruistic\_center 0.920  
## egoistic\_center -6.876  
## hedonic\_center -1.812  
## ingroup\_center 0.800  
## self\_dec\_center -2.514  
## impress\_manag\_center -0.249  
## clothing\_center 0.074  
## Gender1 1.933  
## Age\_center -3.032  
## framing\_conditionFrameCode1:norm\_condition1 1.533  
## framing\_conditionFrameCode2:norm\_condition1 -0.880  
## framing\_conditionFrameCode1:norm\_condition2 -0.118  
## framing\_conditionFrameCode2:norm\_condition2 -0.662  
## framing\_conditionFrameCode1:norm\_condition3 0.517  
## framing\_conditionFrameCode2:norm\_condition3 0.498  
## framing\_conditionFrameCode1:norm\_condition4 0.684  
## framing\_conditionFrameCode2:norm\_condition4 -0.462  
## framing\_conditionFrameCode1:biospheric\_center -0.419  
## framing\_conditionFrameCode2:biospheric\_center 0.535  
## norm\_condition1:biospheric\_center -1.363  
## norm\_condition2:biospheric\_center 1.789  
## norm\_condition3:biospheric\_center -1.553  
## norm\_condition4:biospheric\_center -1.774  
## framing\_conditionFrameCode1:altruistic\_center 0.040  
## framing\_conditionFrameCode2:altruistic\_center -0.903  
## norm\_condition1:altruistic\_center -0.838  
## norm\_condition2:altruistic\_center -0.172  
## norm\_condition3:altruistic\_center 0.700  
## norm\_condition4:altruistic\_center 2.400  
## framing\_conditionFrameCode1:egoistic\_center -0.262  
## framing\_conditionFrameCode2:egoistic\_center 0.495  
## norm\_condition1:egoistic\_center 0.821  
## norm\_condition2:egoistic\_center -0.536  
## norm\_condition3:egoistic\_center 0.625  
## norm\_condition4:egoistic\_center 0.670  
## framing\_conditionFrameCode1:hedonic\_center -0.071  
## framing\_conditionFrameCode2:hedonic\_center 1.487  
## norm\_condition1:hedonic\_center -0.083  
## norm\_condition2:hedonic\_center 1.411  
## norm\_condition3:hedonic\_center -1.154  
## norm\_condition4:hedonic\_center -1.904  
## framing\_conditionFrameCode1:ingroup\_center 0.333  
## framing\_conditionFrameCode2:ingroup\_center -0.938  
## norm\_condition1:ingroup\_center 0.001  
## norm\_condition2:ingroup\_center -0.297  
## norm\_condition3:ingroup\_center 0.110  
## norm\_condition4:ingroup\_center -0.848  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center -0.840  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.500  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -1.313  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 1.446  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 1.718  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 1.030  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.810  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 2.450  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.236  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.723  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 1.957  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center -0.097  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -1.382  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.775  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.120  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -1.532  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.307  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.921  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.323  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 2.154  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 1.223  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.470  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -1.060  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.797  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center -0.240  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -1.070  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -1.046  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.047  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -1.252  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.088  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center -0.243  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.722  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 1.421  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.317  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 1.475  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.440  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.666  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.673  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -2.235  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 1.131  
## Pr(>|t|)  
## (Intercept) < 0.0000000000000002  
## framing\_conditionFrameCode1 0.67596  
## framing\_conditionFrameCode2 0.05085  
## norm\_condition1 0.77947  
## norm\_condition2 0.38792  
## norm\_condition3 0.04566  
## norm\_condition4 0.40342  
## biospheric\_center 0.00000000000000152  
## altruistic\_center 0.35765  
## egoistic\_center 0.00000000001058211  
## hedonic\_center 0.07027  
## ingroup\_center 0.42391  
## self\_dec\_center 0.01210  
## impress\_manag\_center 0.80306  
## clothing\_center 0.94063  
## Gender1 0.05345  
## Age\_center 0.00249  
## framing\_conditionFrameCode1:norm\_condition1 0.12558  
## framing\_conditionFrameCode2:norm\_condition1 0.37918  
## framing\_conditionFrameCode1:norm\_condition2 0.90637  
## framing\_conditionFrameCode2:norm\_condition2 0.50828  
## framing\_conditionFrameCode1:norm\_condition3 0.60531  
## framing\_conditionFrameCode2:norm\_condition3 0.61886  
## framing\_conditionFrameCode1:norm\_condition4 0.49408  
## framing\_conditionFrameCode2:norm\_condition4 0.64411  
## framing\_conditionFrameCode1:biospheric\_center 0.67536  
## framing\_conditionFrameCode2:biospheric\_center 0.59282  
## norm\_condition1:biospheric\_center 0.17318  
## norm\_condition2:biospheric\_center 0.07392  
## norm\_condition3:biospheric\_center 0.12076  
## norm\_condition4:biospheric\_center 0.07636  
## framing\_conditionFrameCode1:altruistic\_center 0.96794  
## framing\_conditionFrameCode2:altruistic\_center 0.36692  
## norm\_condition1:altruistic\_center 0.40211  
## norm\_condition2:altruistic\_center 0.86325  
## norm\_condition3:altruistic\_center 0.48409  
## norm\_condition4:altruistic\_center 0.01659  
## framing\_conditionFrameCode1:egoistic\_center 0.79343  
## framing\_conditionFrameCode2:egoistic\_center 0.62091  
## norm\_condition1:egoistic\_center 0.41208  
## norm\_condition2:egoistic\_center 0.59235  
## norm\_condition3:egoistic\_center 0.53230  
## norm\_condition4:egoistic\_center 0.50270  
## framing\_conditionFrameCode1:hedonic\_center 0.94355  
## framing\_conditionFrameCode2:hedonic\_center 0.13740  
## norm\_condition1:hedonic\_center 0.93416  
## norm\_condition2:hedonic\_center 0.15848  
## norm\_condition3:hedonic\_center 0.24877  
## norm\_condition4:hedonic\_center 0.05723  
## framing\_conditionFrameCode1:ingroup\_center 0.73949  
## framing\_conditionFrameCode2:ingroup\_center 0.34871  
## norm\_condition1:ingroup\_center 0.99885  
## norm\_condition2:ingroup\_center 0.76632  
## norm\_condition3:ingroup\_center 0.91225  
## norm\_condition4:ingroup\_center 0.39688  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.40084  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.61731  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.18950  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.14858  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.08618  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.30316  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.41798  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.01447  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.81349  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.47001  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.05061  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.92279  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.16720  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.43824  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.90435  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.12579  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.75864  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.35722  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.74703  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.03148  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.22176  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.63833  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.28958  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.42571  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.81045  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.28498  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.29562  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.96225  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.21068  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.92958  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.80780  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.47070  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.15573  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.75112  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.14059  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.65986  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.50576  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.50096  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.02566  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.25820  
##   
## (Intercept) \*\*\*  
## framing\_conditionFrameCode1   
## framing\_conditionFrameCode2 .   
## norm\_condition1   
## norm\_condition2   
## norm\_condition3 \*   
## norm\_condition4   
## biospheric\_center \*\*\*  
## altruistic\_center   
## egoistic\_center \*\*\*  
## hedonic\_center .   
## ingroup\_center   
## self\_dec\_center \*   
## impress\_manag\_center   
## clothing\_center   
## Gender1 .   
## Age\_center \*\*   
## framing\_conditionFrameCode1:norm\_condition1   
## framing\_conditionFrameCode2:norm\_condition1   
## framing\_conditionFrameCode1:norm\_condition2   
## framing\_conditionFrameCode2:norm\_condition2   
## framing\_conditionFrameCode1:norm\_condition3   
## framing\_conditionFrameCode2:norm\_condition3   
## framing\_conditionFrameCode1:norm\_condition4   
## framing\_conditionFrameCode2:norm\_condition4   
## framing\_conditionFrameCode1:biospheric\_center   
## framing\_conditionFrameCode2:biospheric\_center   
## norm\_condition1:biospheric\_center   
## norm\_condition2:biospheric\_center .   
## norm\_condition3:biospheric\_center   
## norm\_condition4:biospheric\_center .   
## framing\_conditionFrameCode1:altruistic\_center   
## framing\_conditionFrameCode2:altruistic\_center   
## norm\_condition1:altruistic\_center   
## norm\_condition2:altruistic\_center   
## norm\_condition3:altruistic\_center   
## norm\_condition4:altruistic\_center \*   
## framing\_conditionFrameCode1:egoistic\_center   
## framing\_conditionFrameCode2:egoistic\_center   
## norm\_condition1:egoistic\_center   
## norm\_condition2:egoistic\_center   
## norm\_condition3:egoistic\_center   
## norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:hedonic\_center   
## framing\_conditionFrameCode2:hedonic\_center   
## norm\_condition1:hedonic\_center   
## norm\_condition2:hedonic\_center   
## norm\_condition3:hedonic\_center   
## norm\_condition4:hedonic\_center .   
## framing\_conditionFrameCode1:ingroup\_center   
## framing\_conditionFrameCode2:ingroup\_center   
## norm\_condition1:ingroup\_center   
## norm\_condition2:ingroup\_center   
## norm\_condition3:ingroup\_center   
## norm\_condition4:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center .   
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center \*   
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center .   
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center \*   
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center \*   
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 1.066 on 1038 degrees of freedom  
## Multiple R-squared: 0.2625, Adjusted R-squared: 0.1957   
## F-statistic: 3.93 on 94 and 1038 DF, p-value: < 0.00000000000000022

Succinct summary

summary\_imp3$coefficients %>%  
 knitr::kable(digits = 3)

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.317 | 0.057 | 75.568 | 0.000 |
| framing\_conditionFrameCode1 | 0.034 | 0.082 | 0.418 | 0.676 |
| framing\_conditionFrameCode2 | 0.136 | 0.070 | 1.955 | 0.051 |
| norm\_condition1 | -0.014 | 0.051 | -0.280 | 0.779 |
| norm\_condition2 | 0.026 | 0.030 | 0.864 | 0.388 |
| norm\_condition3 | -0.043 | 0.021 | -2.001 | 0.046 |
| norm\_condition4 | -0.014 | 0.017 | -0.836 | 0.403 |
| biospheric\_center | 0.373 | 0.046 | 8.101 | 0.000 |
| altruistic\_center | 0.058 | 0.063 | 0.920 | 0.358 |
| egoistic\_center | -0.293 | 0.043 | -6.876 | 0.000 |
| hedonic\_center | -0.098 | 0.054 | -1.812 | 0.070 |
| ingroup\_center | 0.027 | 0.034 | 0.800 | 0.424 |
| self\_dec\_center | -0.107 | 0.043 | -2.514 | 0.012 |
| impress\_manag\_center | -0.010 | 0.042 | -0.249 | 0.803 |
| clothing\_center | 0.003 | 0.045 | 0.074 | 0.941 |
| Gender1 | 0.146 | 0.075 | 1.933 | 0.053 |
| Age\_center | -0.056 | 0.018 | -3.032 | 0.002 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.193 | 0.126 | 1.533 | 0.126 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.097 | 0.110 | -0.880 | 0.379 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.009 | 0.075 | -0.118 | 0.906 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.041 | 0.062 | -0.662 | 0.508 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.027 | 0.052 | 0.517 | 0.605 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.023 | 0.046 | 0.498 | 0.619 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.029 | 0.042 | 0.684 | 0.494 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.016 | 0.034 | -0.462 | 0.644 |
| framing\_conditionFrameCode1:biospheric\_center | -0.050 | 0.119 | -0.419 | 0.675 |
| framing\_conditionFrameCode2:biospheric\_center | 0.049 | 0.091 | 0.535 | 0.593 |
| norm\_condition1:biospheric\_center | -0.094 | 0.069 | -1.363 | 0.173 |
| norm\_condition2:biospheric\_center | 0.074 | 0.041 | 1.789 | 0.074 |
| norm\_condition3:biospheric\_center | -0.045 | 0.029 | -1.553 | 0.121 |
| norm\_condition4:biospheric\_center | -0.044 | 0.025 | -1.774 | 0.076 |
| framing\_conditionFrameCode1:altruistic\_center | 0.006 | 0.153 | 0.040 | 0.968 |
| framing\_conditionFrameCode2:altruistic\_center | -0.113 | 0.125 | -0.903 | 0.367 |
| norm\_condition1:altruistic\_center | -0.081 | 0.096 | -0.838 | 0.402 |
| norm\_condition2:altruistic\_center | -0.009 | 0.054 | -0.172 | 0.863 |
| norm\_condition3:altruistic\_center | 0.029 | 0.041 | 0.700 | 0.484 |
| norm\_condition4:altruistic\_center | 0.070 | 0.029 | 2.400 | 0.017 |
| framing\_conditionFrameCode1:egoistic\_center | -0.027 | 0.103 | -0.262 | 0.793 |
| framing\_conditionFrameCode2:egoistic\_center | 0.042 | 0.085 | 0.495 | 0.621 |
| norm\_condition1:egoistic\_center | 0.056 | 0.068 | 0.821 | 0.412 |
| norm\_condition2:egoistic\_center | -0.019 | 0.036 | -0.536 | 0.592 |
| norm\_condition3:egoistic\_center | 0.016 | 0.026 | 0.625 | 0.532 |
| norm\_condition4:egoistic\_center | 0.014 | 0.021 | 0.670 | 0.503 |
| framing\_conditionFrameCode1:hedonic\_center | -0.009 | 0.133 | -0.071 | 0.944 |
| framing\_conditionFrameCode2:hedonic\_center | 0.167 | 0.112 | 1.487 | 0.137 |
| norm\_condition1:hedonic\_center | -0.007 | 0.090 | -0.083 | 0.934 |
| norm\_condition2:hedonic\_center | 0.068 | 0.048 | 1.411 | 0.158 |
| norm\_condition3:hedonic\_center | -0.041 | 0.035 | -1.154 | 0.249 |
| norm\_condition4:hedonic\_center | -0.048 | 0.025 | -1.904 | 0.057 |
| framing\_conditionFrameCode1:ingroup\_center | 0.027 | 0.082 | 0.333 | 0.739 |
| framing\_conditionFrameCode2:ingroup\_center | -0.066 | 0.071 | -0.938 | 0.349 |
| norm\_condition1:ingroup\_center | 0.000 | 0.052 | 0.001 | 0.999 |
| norm\_condition2:ingroup\_center | -0.009 | 0.031 | -0.297 | 0.766 |
| norm\_condition3:ingroup\_center | 0.002 | 0.022 | 0.110 | 0.912 |
| norm\_condition4:ingroup\_center | -0.014 | 0.016 | -0.848 | 0.397 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.147 | 0.175 | -0.840 | 0.401 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.071 | 0.142 | 0.500 | 0.617 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.137 | 0.105 | -1.313 | 0.189 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.122 | 0.084 | 1.446 | 0.149 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.128 | 0.075 | 1.718 | 0.086 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.058 | 0.057 | 1.030 | 0.303 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.055 | 0.067 | 0.810 | 0.418 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.116 | 0.047 | 2.450 | 0.014 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | 0.056 | 0.236 | 0.236 | 0.813 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.147 | 0.203 | 0.723 | 0.470 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.267 | 0.136 | 1.957 | 0.051 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | -0.011 | 0.112 | -0.097 | 0.923 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.146 | 0.105 | -1.382 | 0.167 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.065 | 0.084 | -0.775 | 0.438 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | 0.009 | 0.076 | 0.120 | 0.904 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.089 | 0.058 | -1.532 | 0.126 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.053 | 0.173 | 0.307 | 0.759 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.126 | 0.137 | 0.921 | 0.357 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.028 | 0.087 | -0.323 | 0.747 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.167 | 0.077 | 2.154 | 0.031 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.078 | 0.064 | 1.223 | 0.222 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.026 | 0.055 | 0.470 | 0.638 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.056 | 0.053 | -1.060 | 0.290 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.034 | 0.042 | -0.797 | 0.426 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.053 | 0.222 | -0.240 | 0.810 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.202 | 0.189 | -1.070 | 0.285 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.122 | 0.117 | -1.046 | 0.296 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.005 | 0.103 | -0.047 | 0.962 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.111 | 0.089 | -1.252 | 0.211 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.006 | 0.072 | -0.088 | 0.930 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.015 | 0.062 | -0.243 | 0.808 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.038 | 0.052 | 0.722 | 0.471 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.181 | 0.127 | 1.421 | 0.156 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.036 | 0.112 | 0.317 | 0.751 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.114 | 0.077 | 1.475 | 0.141 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.028 | 0.065 | -0.440 | 0.660 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.035 | 0.053 | 0.666 | 0.506 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.031 | 0.046 | -0.673 | 0.501 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.089 | 0.040 | -2.235 | 0.026 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.040 | 0.035 | 1.131 | 0.258 |

APA style table for regression summary

apa\_summ\_imp3 <- apa\_print(summary\_imp3)  
  
apa\_summ\_imp3$table %>%  
apa\_table(caption = "Table 4 Regression Results Using Imputed Data 3",  
 note = "DV = Consumer Intentions")

(#tab:unnamed-chunk-40)

Table 4 Regression Results Using Imputed Data 3

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.32 | [4.20, 4.43] | 75.57 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.03 | [-0.13, 0.19] | 0.42 | 1038 | .676 |
| Framing conditionFrameCode2 | 0.14 | [0.00, 0.27] | 1.96 | 1038 | .051 |
| Norm condition1 | -0.01 | [-0.12, 0.09] | -0.28 | 1038 | .779 |
| Norm condition2 | 0.03 | [-0.03, 0.08] | 0.86 | 1038 | .388 |
| Norm condition3 | -0.04 | [-0.08, 0.00] | -2.00 | 1038 | .046 |
| Norm condition4 | -0.01 | [-0.05, 0.02] | -0.84 | 1038 | .403 |
| Biospheric center | 0.37 | [0.28, 0.46] | 8.10 | 1038 | < .001 |
| Altruistic center | 0.06 | [-0.07, 0.18] | 0.92 | 1038 | .358 |
| Egoistic center | -0.29 | [-0.38, -0.21] | -6.88 | 1038 | < .001 |
| Hedonic center | -0.10 | [-0.20, 0.01] | -1.81 | 1038 | .070 |
| Ingroup center | 0.03 | [-0.04, 0.09] | 0.80 | 1038 | .424 |
| Self dec center | -0.11 | [-0.19, -0.02] | -2.51 | 1038 | .012 |
| Impress manag center | -0.01 | [-0.09, 0.07] | -0.25 | 1038 | .803 |
| Clothing center | 0.00 | [-0.08, 0.09] | 0.07 | 1038 | .941 |
| Gender1 | 0.15 | [0.00, 0.29] | 1.93 | 1038 | .053 |
| Age center | -0.06 | [-0.09, -0.02] | -3.03 | 1038 | .002 |
| Framing conditionFrameCode1 Norm condition1 | 0.19 | [-0.05, 0.44] | 1.53 | 1038 | .126 |
| Framing conditionFrameCode2 Norm condition1 | -0.10 | [-0.31, 0.12] | -0.88 | 1038 | .379 |
| Framing conditionFrameCode1 Norm condition2 | -0.01 | [-0.16, 0.14] | -0.12 | 1038 | .906 |
| Framing conditionFrameCode2 Norm condition2 | -0.04 | [-0.16, 0.08] | -0.66 | 1038 | .508 |
| Framing conditionFrameCode1 Norm condition3 | 0.03 | [-0.07, 0.13] | 0.52 | 1038 | .605 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.07, 0.11] | 0.50 | 1038 | .619 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.05, 0.11] | 0.68 | 1038 | .494 |
| Framing conditionFrameCode2 Norm condition4 | -0.02 | [-0.08, 0.05] | -0.46 | 1038 | .644 |
| Framing conditionFrameCode1 Biospheric center | -0.05 | [-0.28, 0.18] | -0.42 | 1038 | .675 |
| Framing conditionFrameCode2 Biospheric center | 0.05 | [-0.13, 0.23] | 0.53 | 1038 | .593 |
| Norm condition1 Biospheric center | -0.09 | [-0.23, 0.04] | -1.36 | 1038 | .173 |
| Norm condition2 Biospheric center | 0.07 | [-0.01, 0.15] | 1.79 | 1038 | .074 |
| Norm condition3 Biospheric center | -0.04 | [-0.10, 0.01] | -1.55 | 1038 | .121 |
| Norm condition4 Biospheric center | -0.04 | [-0.09, 0.00] | -1.77 | 1038 | .076 |
| Framing conditionFrameCode1 Altruistic center | 0.01 | [-0.30, 0.31] | 0.04 | 1038 | .968 |
| Framing conditionFrameCode2 Altruistic center | -0.11 | [-0.36, 0.13] | -0.90 | 1038 | .367 |
| Norm condition1 Altruistic center | -0.08 | [-0.27, 0.11] | -0.84 | 1038 | .402 |
| Norm condition2 Altruistic center | -0.01 | [-0.12, 0.10] | -0.17 | 1038 | .863 |
| Norm condition3 Altruistic center | 0.03 | [-0.05, 0.11] | 0.70 | 1038 | .484 |
| Norm condition4 Altruistic center | 0.07 | [0.01, 0.13] | 2.40 | 1038 | .017 |
| Framing conditionFrameCode1 Egoistic center | -0.03 | [-0.23, 0.17] | -0.26 | 1038 | .793 |
| Framing conditionFrameCode2 Egoistic center | 0.04 | [-0.13, 0.21] | 0.49 | 1038 | .621 |
| Norm condition1 Egoistic center | 0.06 | [-0.08, 0.19] | 0.82 | 1038 | .412 |
| Norm condition2 Egoistic center | -0.02 | [-0.09, 0.05] | -0.54 | 1038 | .592 |
| Norm condition3 Egoistic center | 0.02 | [-0.03, 0.07] | 0.62 | 1038 | .532 |
| Norm condition4 Egoistic center | 0.01 | [-0.03, 0.05] | 0.67 | 1038 | .503 |
| Framing conditionFrameCode1 Hedonic center | -0.01 | [-0.27, 0.25] | -0.07 | 1038 | .944 |
| Framing conditionFrameCode2 Hedonic center | 0.17 | [-0.05, 0.39] | 1.49 | 1038 | .137 |
| Norm condition1 Hedonic center | -0.01 | [-0.18, 0.17] | -0.08 | 1038 | .934 |
| Norm condition2 Hedonic center | 0.07 | [-0.03, 0.16] | 1.41 | 1038 | .158 |
| Norm condition3 Hedonic center | -0.04 | [-0.11, 0.03] | -1.15 | 1038 | .249 |
| Norm condition4 Hedonic center | -0.05 | [-0.10, 0.00] | -1.90 | 1038 | .057 |
| Framing conditionFrameCode1 Ingroup center | 0.03 | [-0.13, 0.19] | 0.33 | 1038 | .739 |
| Framing conditionFrameCode2 Ingroup center | -0.07 | [-0.21, 0.07] | -0.94 | 1038 | .349 |
| Norm condition1 Ingroup center | 0.00 | [-0.10, 0.10] | 0.00 | 1038 | .999 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.30 | 1038 | .766 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.04] | 0.11 | 1038 | .912 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.85 | 1038 | .397 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.15 | [-0.49, 0.20] | -0.84 | 1038 | .401 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.07 | [-0.21, 0.35] | 0.50 | 1038 | .617 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.14 | [-0.34, 0.07] | -1.31 | 1038 | .189 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.12 | [-0.04, 0.29] | 1.45 | 1038 | .149 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.13 | [-0.02, 0.27] | 1.72 | 1038 | .086 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.06 | [-0.05, 0.17] | 1.03 | 1038 | .303 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.05 | [-0.08, 0.19] | 0.81 | 1038 | .418 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.12 | [0.02, 0.21] | 2.45 | 1038 | .014 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | 0.06 | [-0.41, 0.52] | 0.24 | 1038 | .813 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.15 | [-0.25, 0.55] | 0.72 | 1038 | .470 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.27 | [0.00, 0.53] | 1.96 | 1038 | .051 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | -0.01 | [-0.23, 0.21] | -0.10 | 1038 | .923 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.15 | [-0.35, 0.06] | -1.38 | 1038 | .167 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.07 | [-0.23, 0.10] | -0.78 | 1038 | .438 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | 0.01 | [-0.14, 0.16] | 0.12 | 1038 | .904 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.09 | [-0.20, 0.02] | -1.53 | 1038 | .126 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.05 | [-0.29, 0.39] | 0.31 | 1038 | .759 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.13 | [-0.14, 0.39] | 0.92 | 1038 | .357 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.03 | [-0.20, 0.14] | -0.32 | 1038 | .747 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.17 | [0.01, 0.32] | 2.15 | 1038 | .031 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.08 | [-0.05, 0.20] | 1.22 | 1038 | .222 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.03 | [-0.08, 0.13] | 0.47 | 1038 | .638 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.06 | [-0.16, 0.05] | -1.06 | 1038 | .290 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.03 | [-0.12, 0.05] | -0.80 | 1038 | .426 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | -0.05 | [-0.49, 0.38] | -0.24 | 1038 | .810 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.20 | [-0.57, 0.17] | -1.07 | 1038 | .285 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.12 | [-0.35, 0.11] | -1.05 | 1038 | .296 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | 0.00 | [-0.21, 0.20] | -0.05 | 1038 | .962 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.11 | [-0.28, 0.06] | -1.25 | 1038 | .211 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | -0.01 | [-0.15, 0.14] | -0.09 | 1038 | .930 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | -0.02 | [-0.14, 0.11] | -0.24 | 1038 | .808 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.04 | [-0.06, 0.14] | 0.72 | 1038 | .471 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.18 | [-0.07, 0.43] | 1.42 | 1038 | .156 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.04 | [-0.18, 0.26] | 0.32 | 1038 | .751 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.11 | [-0.04, 0.27] | 1.47 | 1038 | .141 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.10] | -0.44 | 1038 | .660 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.04 | [-0.07, 0.14] | 0.67 | 1038 | .506 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.67 | 1038 | .501 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.17, -0.01] | -2.23 | 1038 | .026 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.13 | 1038 | .258 |

*Note.* DV = Consumer Intentions

#### ANOVA summary

anova(mod\_mice\_imp3) %>%  
 knitr::kable(digits = 3) # df\_residual = 1039 = 1133-94

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.691 | 2.346 | 2.066 | 0.127 |
| norm\_condition | 4 | 8.168 | 2.042 | 1.798 | 0.127 |
| biospheric\_center | 1 | 146.500 | 146.500 | 129.010 | 0.000 |
| altruistic\_center | 1 | 0.262 | 0.262 | 0.230 | 0.631 |
| egoistic\_center | 1 | 127.196 | 127.196 | 112.010 | 0.000 |
| hedonic\_center | 1 | 3.745 | 3.745 | 3.298 | 0.070 |
| ingroup\_center | 1 | 4.613 | 4.613 | 4.062 | 0.044 |
| self\_dec\_center | 1 | 12.712 | 12.712 | 11.195 | 0.001 |
| impress\_manag\_center | 1 | 0.004 | 0.004 | 0.004 | 0.952 |
| clothing\_center | 1 | 0.777 | 0.777 | 0.684 | 0.408 |
| Gender | 1 | 6.242 | 6.242 | 5.496 | 0.019 |
| Age\_center | 1 | 10.758 | 10.758 | 9.473 | 0.002 |
| framing\_condition:norm\_condition | 8 | 5.783 | 0.723 | 0.637 | 0.747 |
| framing\_condition:biospheric\_center | 2 | 0.413 | 0.206 | 0.182 | 0.834 |
| norm\_condition:biospheric\_center | 4 | 14.393 | 3.598 | 3.169 | 0.013 |
| framing\_condition:altruistic\_center | 2 | 0.243 | 0.121 | 0.107 | 0.899 |
| norm\_condition:altruistic\_center | 4 | 2.442 | 0.611 | 0.538 | 0.708 |
| framing\_condition:egoistic\_center | 2 | 1.163 | 0.582 | 0.512 | 0.599 |
| norm\_condition:egoistic\_center | 4 | 1.893 | 0.473 | 0.417 | 0.797 |
| framing\_condition:hedonic\_center | 2 | 2.354 | 1.177 | 1.036 | 0.355 |
| norm\_condition:hedonic\_center | 4 | 9.205 | 2.301 | 2.027 | 0.089 |
| framing\_condition:ingroup\_center | 2 | 1.434 | 0.717 | 0.631 | 0.532 |
| norm\_condition:ingroup\_center | 4 | 0.273 | 0.068 | 0.060 | 0.993 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 14.961 | 1.870 | 1.647 | 0.107 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 11.517 | 1.440 | 1.268 | 0.257 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 10.300 | 1.287 | 1.134 | 0.338 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 4.803 | 0.600 | 0.529 | 0.835 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 12.636 | 1.579 | 1.391 | 0.196 |
| Residuals | 1038 | 1178.722 | 1.136 | NA | NA |

### Imputed Data 4

data\_imp4 <- impobject$imputations[[4]]  
  
mod\_mice\_imp4 <-lm(consumer\_intentions ~ framing\_condition\*norm\_condition\*biospheric\_center + framing\_condition\*norm\_condition\*altruistic\_center + framing\_condition\*norm\_condition\*egoistic\_center + framing\_condition\*norm\_condition\*hedonic\_center + framing\_condition\*norm\_condition\*ingroup\_center + self\_dec\_center + impress\_manag\_center + clothing\_center + Gender + Age\_center, data = data\_imp4)

#### Regression summary

summary\_imp4 <- summary(mod\_mice\_imp4)  
summary\_imp4

##   
## Call:  
## lm(formula = consumer\_intentions ~ framing\_condition \* norm\_condition \*   
## biospheric\_center + framing\_condition \* norm\_condition \*   
## altruistic\_center + framing\_condition \* norm\_condition \*   
## egoistic\_center + framing\_condition \* norm\_condition \* hedonic\_center +   
## framing\_condition \* norm\_condition \* ingroup\_center + self\_dec\_center +   
## impress\_manag\_center + clothing\_center + Gender + Age\_center,   
## data = data\_imp4)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -3.1799 -0.7056 0.0532 0.7242 2.7820   
##   
## Coefficients:  
## Estimate  
## (Intercept) 4.3337950  
## framing\_conditionFrameCode1 0.0333414  
## framing\_conditionFrameCode2 0.1411642  
## norm\_condition1 -0.0133501  
## norm\_condition2 0.0287706  
## norm\_condition3 -0.0436540  
## norm\_condition4 -0.0159764  
## biospheric\_center 0.3626960  
## altruistic\_center 0.0892285  
## egoistic\_center -0.2959999  
## hedonic\_center -0.1007641  
## ingroup\_center 0.0259936  
## self\_dec\_center -0.1107340  
## impress\_manag\_center -0.0162499  
## clothing\_center 0.0091277  
## Gender1 0.1156655  
## Age\_center -0.0486323  
## framing\_conditionFrameCode1:norm\_condition1 0.1936772  
## framing\_conditionFrameCode2:norm\_condition1 -0.1090178  
## framing\_conditionFrameCode1:norm\_condition2 -0.0059674  
## framing\_conditionFrameCode2:norm\_condition2 -0.0340309  
## framing\_conditionFrameCode1:norm\_condition3 0.0257506  
## framing\_conditionFrameCode2:norm\_condition3 0.0241582  
## framing\_conditionFrameCode1:norm\_condition4 0.0269986  
## framing\_conditionFrameCode2:norm\_condition4 -0.0151831  
## framing\_conditionFrameCode1:biospheric\_center -0.0499261  
## framing\_conditionFrameCode2:biospheric\_center 0.0614454  
## norm\_condition1:biospheric\_center -0.0600874  
## norm\_condition2:biospheric\_center 0.0781392  
## norm\_condition3:biospheric\_center -0.0487405  
## norm\_condition4:biospheric\_center -0.0415125  
## framing\_conditionFrameCode1:altruistic\_center 0.0475424  
## framing\_conditionFrameCode2:altruistic\_center -0.1426877  
## norm\_condition1:altruistic\_center -0.1480793  
## norm\_condition2:altruistic\_center -0.0233209  
## norm\_condition3:altruistic\_center 0.0236399  
## norm\_condition4:altruistic\_center 0.0640717  
## framing\_conditionFrameCode1:egoistic\_center -0.0190151  
## framing\_conditionFrameCode2:egoistic\_center 0.0389758  
## norm\_condition1:egoistic\_center 0.0872417  
## norm\_condition2:egoistic\_center -0.0228756  
## norm\_condition3:egoistic\_center 0.0146452  
## norm\_condition4:egoistic\_center 0.0161235  
## framing\_conditionFrameCode1:hedonic\_center -0.0249393  
## framing\_conditionFrameCode2:hedonic\_center 0.1663757  
## norm\_condition1:hedonic\_center -0.0004562  
## norm\_condition2:hedonic\_center 0.0723119  
## norm\_condition3:hedonic\_center -0.0354984  
## norm\_condition4:hedonic\_center -0.0457154  
## framing\_conditionFrameCode1:ingroup\_center 0.0255447  
## framing\_conditionFrameCode2:ingroup\_center -0.0596003  
## norm\_condition1:ingroup\_center 0.0032577  
## norm\_condition2:ingroup\_center -0.0126252  
## norm\_condition3:ingroup\_center 0.0031810  
## norm\_condition4:ingroup\_center -0.0155764  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center -0.0342930  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.0201450  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -0.1277378  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.1075541  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.1555113  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.0662126  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.0596940  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.1140420  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center -0.1532936  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.2469185  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.2249047  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.0181166  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -0.1776595  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.0592633  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center -0.0088646  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -0.0826682  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.1165700  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.0741623  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.0204539  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.1680410  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.0792372  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.0307595  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -0.0552161  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.0381181  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center -0.0299327  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -0.1967693  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.1143550  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.0137095  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -0.1146365  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.0144275  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center -0.0054063  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.0338785  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.1848002  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.0411035  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.1163014  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.0335682  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.0377971  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.0305629  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -0.0925165  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.0393572  
## Std. Error  
## (Intercept) 0.0574595  
## framing\_conditionFrameCode1 0.0820360  
## framing\_conditionFrameCode2 0.0697476  
## norm\_condition1 0.0515879  
## norm\_condition2 0.0300655  
## norm\_condition3 0.0214132  
## norm\_condition4 0.0167843  
## biospheric\_center 0.0463271  
## altruistic\_center 0.0631996  
## egoistic\_center 0.0423527  
## hedonic\_center 0.0540491  
## ingroup\_center 0.0337627  
## self\_dec\_center 0.0428019  
## impress\_manag\_center 0.0419704  
## clothing\_center 0.0450912  
## Gender1 0.0763981  
## Age\_center 0.0179526  
## framing\_conditionFrameCode1:norm\_condition1 0.1264346  
## framing\_conditionFrameCode2:norm\_condition1 0.1102313  
## framing\_conditionFrameCode1:norm\_condition2 0.0755140  
## framing\_conditionFrameCode2:norm\_condition2 0.0623458  
## framing\_conditionFrameCode1:norm\_condition3 0.0519221  
## framing\_conditionFrameCode2:norm\_condition3 0.0459934  
## framing\_conditionFrameCode1:norm\_condition4 0.0423597  
## framing\_conditionFrameCode2:norm\_condition4 0.0345554  
## framing\_conditionFrameCode1:biospheric\_center 0.1197212  
## framing\_conditionFrameCode2:biospheric\_center 0.0915303  
## norm\_condition1:biospheric\_center 0.0701074  
## norm\_condition2:biospheric\_center 0.0410759  
## norm\_condition3:biospheric\_center 0.0289465  
## norm\_condition4:biospheric\_center 0.0250887  
## framing\_conditionFrameCode1:altruistic\_center 0.1555550  
## framing\_conditionFrameCode2:altruistic\_center 0.1256066  
## norm\_condition1:altruistic\_center 0.0985662  
## norm\_condition2:altruistic\_center 0.0547234  
## norm\_condition3:altruistic\_center 0.0416862  
## norm\_condition4:altruistic\_center 0.0293756  
## framing\_conditionFrameCode1:egoistic\_center 0.1012471  
## framing\_conditionFrameCode2:egoistic\_center 0.0851561  
## norm\_condition1:egoistic\_center 0.0666773  
## norm\_condition2:egoistic\_center 0.0358865  
## norm\_condition3:egoistic\_center 0.0260283  
## norm\_condition4:egoistic\_center 0.0206929  
## framing\_conditionFrameCode1:hedonic\_center 0.1324070  
## framing\_conditionFrameCode2:hedonic\_center 0.1122754  
## norm\_condition1:hedonic\_center 0.0896119  
## norm\_condition2:hedonic\_center 0.0482117  
## norm\_condition3:hedonic\_center 0.0349690  
## norm\_condition4:hedonic\_center 0.0250385  
## framing\_conditionFrameCode1:ingroup\_center 0.0817019  
## framing\_conditionFrameCode2:ingroup\_center 0.0709588  
## norm\_condition1:ingroup\_center 0.0526171  
## norm\_condition2:ingroup\_center 0.0310270  
## norm\_condition3:ingroup\_center 0.0216895  
## norm\_condition4:ingroup\_center 0.0165031  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.1773662  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.1431179  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.1040018  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.0842253  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.0754690  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.0570013  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.0674982  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.0474612  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.2432093  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.2060169  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.1377060  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.1130178  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.1062003  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.0846981  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.0763285  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.0580803  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.1695342  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.1357583  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.0869053  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.0773645  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.0634809  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.0551697  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.0525299  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.0423806  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.2217270  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.1887112  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.1169191  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.1029253  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.0877449  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.0721860  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.0621359  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.0522232  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.1278945  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.1123328  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.0770826  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.0645630  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.0530382  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.0462684  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.0398682  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.0352448  
## t value  
## (Intercept) 75.423  
## framing\_conditionFrameCode1 0.406  
## framing\_conditionFrameCode2 2.024  
## norm\_condition1 -0.259  
## norm\_condition2 0.957  
## norm\_condition3 -2.039  
## norm\_condition4 -0.952  
## biospheric\_center 7.829  
## altruistic\_center 1.412  
## egoistic\_center -6.989  
## hedonic\_center -1.864  
## ingroup\_center 0.770  
## self\_dec\_center -2.587  
## impress\_manag\_center -0.387  
## clothing\_center 0.202  
## Gender1 1.514  
## Age\_center -2.709  
## framing\_conditionFrameCode1:norm\_condition1 1.532  
## framing\_conditionFrameCode2:norm\_condition1 -0.989  
## framing\_conditionFrameCode1:norm\_condition2 -0.079  
## framing\_conditionFrameCode2:norm\_condition2 -0.546  
## framing\_conditionFrameCode1:norm\_condition3 0.496  
## framing\_conditionFrameCode2:norm\_condition3 0.525  
## framing\_conditionFrameCode1:norm\_condition4 0.637  
## framing\_conditionFrameCode2:norm\_condition4 -0.439  
## framing\_conditionFrameCode1:biospheric\_center -0.417  
## framing\_conditionFrameCode2:biospheric\_center 0.671  
## norm\_condition1:biospheric\_center -0.857  
## norm\_condition2:biospheric\_center 1.902  
## norm\_condition3:biospheric\_center -1.684  
## norm\_condition4:biospheric\_center -1.655  
## framing\_conditionFrameCode1:altruistic\_center 0.306  
## framing\_conditionFrameCode2:altruistic\_center -1.136  
## norm\_condition1:altruistic\_center -1.502  
## norm\_condition2:altruistic\_center -0.426  
## norm\_condition3:altruistic\_center 0.567  
## norm\_condition4:altruistic\_center 2.181  
## framing\_conditionFrameCode1:egoistic\_center -0.188  
## framing\_conditionFrameCode2:egoistic\_center 0.458  
## norm\_condition1:egoistic\_center 1.308  
## norm\_condition2:egoistic\_center -0.637  
## norm\_condition3:egoistic\_center 0.563  
## norm\_condition4:egoistic\_center 0.779  
## framing\_conditionFrameCode1:hedonic\_center -0.188  
## framing\_conditionFrameCode2:hedonic\_center 1.482  
## norm\_condition1:hedonic\_center -0.005  
## norm\_condition2:hedonic\_center 1.500  
## norm\_condition3:hedonic\_center -1.015  
## norm\_condition4:hedonic\_center -1.826  
## framing\_conditionFrameCode1:ingroup\_center 0.313  
## framing\_conditionFrameCode2:ingroup\_center -0.840  
## norm\_condition1:ingroup\_center 0.062  
## norm\_condition2:ingroup\_center -0.407  
## norm\_condition3:ingroup\_center 0.147  
## norm\_condition4:ingroup\_center -0.944  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center -0.193  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.141  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -1.228  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 1.277  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 2.061  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 1.162  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.884  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 2.403  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center -0.630  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 1.199  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 1.633  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.160  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -1.673  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.700  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center -0.116  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -1.423  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.688  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.546  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.235  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 2.172  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 1.248  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.558  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -1.051  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.899  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center -0.135  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -1.043  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.978  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.133  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -1.306  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.200  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center -0.087  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.649  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 1.445  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.366  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 1.509  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.520  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.713  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.661  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -2.321  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 1.117  
## Pr(>|t|)  
## (Intercept) < 0.0000000000000002  
## framing\_conditionFrameCode1 0.68451  
## framing\_conditionFrameCode2 0.04323  
## norm\_condition1 0.79585  
## norm\_condition2 0.33883  
## norm\_condition3 0.04174  
## norm\_condition4 0.34138  
## biospheric\_center 0.0000000000000121  
## altruistic\_center 0.15829  
## egoistic\_center 0.0000000000049471  
## hedonic\_center 0.06256  
## ingroup\_center 0.44154  
## self\_dec\_center 0.00981  
## impress\_manag\_center 0.69871  
## clothing\_center 0.83962  
## Gender1 0.13033  
## Age\_center 0.00686  
## framing\_conditionFrameCode1:norm\_condition1 0.12587  
## framing\_conditionFrameCode2:norm\_condition1 0.32290  
## framing\_conditionFrameCode1:norm\_condition2 0.93703  
## framing\_conditionFrameCode2:norm\_condition2 0.58529  
## framing\_conditionFrameCode1:norm\_condition3 0.62004  
## framing\_conditionFrameCode2:norm\_condition3 0.59952  
## framing\_conditionFrameCode1:norm\_condition4 0.52403  
## framing\_conditionFrameCode2:norm\_condition4 0.66048  
## framing\_conditionFrameCode1:biospheric\_center 0.67675  
## framing\_conditionFrameCode2:biospheric\_center 0.50217  
## norm\_condition1:biospheric\_center 0.39160  
## norm\_condition2:biospheric\_center 0.05741  
## norm\_condition3:biospheric\_center 0.09252  
## norm\_condition4:biospheric\_center 0.09830  
## framing\_conditionFrameCode1:altruistic\_center 0.75995  
## framing\_conditionFrameCode2:altruistic\_center 0.25622  
## norm\_condition1:altruistic\_center 0.13332  
## norm\_condition2:altruistic\_center 0.67008  
## norm\_condition3:altruistic\_center 0.57077  
## norm\_condition4:altruistic\_center 0.02940  
## framing\_conditionFrameCode1:egoistic\_center 0.85106  
## framing\_conditionFrameCode2:egoistic\_center 0.64727  
## norm\_condition1:egoistic\_center 0.19102  
## norm\_condition2:egoistic\_center 0.52398  
## norm\_condition3:egoistic\_center 0.57378  
## norm\_condition4:egoistic\_center 0.43605  
## framing\_conditionFrameCode1:hedonic\_center 0.85064  
## framing\_conditionFrameCode2:hedonic\_center 0.13868  
## norm\_condition1:hedonic\_center 0.99594  
## norm\_condition2:hedonic\_center 0.13395  
## norm\_condition3:hedonic\_center 0.31028  
## norm\_condition4:hedonic\_center 0.06817  
## framing\_conditionFrameCode1:ingroup\_center 0.75460  
## framing\_conditionFrameCode2:ingroup\_center 0.40114  
## norm\_condition1:ingroup\_center 0.95064  
## norm\_condition2:ingroup\_center 0.68416  
## norm\_condition3:ingroup\_center 0.88343  
## norm\_condition4:ingroup\_center 0.34547  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.84673  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.88809  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.21964  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.20189  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.03959  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.24567  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.37670  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.01644  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.52864  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.23098  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.10273  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.87268  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.09465  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.48427  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.90757  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.15494  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.49186  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.58499  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.81398  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.03008  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.21224  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.57728  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.29344  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.36864  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.89264  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.29733  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.32827  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.89406  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.19168  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.84162  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.93068  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.51666  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.14878  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.71451  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.13166  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.60322  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.47623  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.50904  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.02050  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.26439  
##   
## (Intercept) \*\*\*  
## framing\_conditionFrameCode1   
## framing\_conditionFrameCode2 \*   
## norm\_condition1   
## norm\_condition2   
## norm\_condition3 \*   
## norm\_condition4   
## biospheric\_center \*\*\*  
## altruistic\_center   
## egoistic\_center \*\*\*  
## hedonic\_center .   
## ingroup\_center   
## self\_dec\_center \*\*   
## impress\_manag\_center   
## clothing\_center   
## Gender1   
## Age\_center \*\*   
## framing\_conditionFrameCode1:norm\_condition1   
## framing\_conditionFrameCode2:norm\_condition1   
## framing\_conditionFrameCode1:norm\_condition2   
## framing\_conditionFrameCode2:norm\_condition2   
## framing\_conditionFrameCode1:norm\_condition3   
## framing\_conditionFrameCode2:norm\_condition3   
## framing\_conditionFrameCode1:norm\_condition4   
## framing\_conditionFrameCode2:norm\_condition4   
## framing\_conditionFrameCode1:biospheric\_center   
## framing\_conditionFrameCode2:biospheric\_center   
## norm\_condition1:biospheric\_center   
## norm\_condition2:biospheric\_center .   
## norm\_condition3:biospheric\_center .   
## norm\_condition4:biospheric\_center .   
## framing\_conditionFrameCode1:altruistic\_center   
## framing\_conditionFrameCode2:altruistic\_center   
## norm\_condition1:altruistic\_center   
## norm\_condition2:altruistic\_center   
## norm\_condition3:altruistic\_center   
## norm\_condition4:altruistic\_center \*   
## framing\_conditionFrameCode1:egoistic\_center   
## framing\_conditionFrameCode2:egoistic\_center   
## norm\_condition1:egoistic\_center   
## norm\_condition2:egoistic\_center   
## norm\_condition3:egoistic\_center   
## norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:hedonic\_center   
## framing\_conditionFrameCode2:hedonic\_center   
## norm\_condition1:hedonic\_center   
## norm\_condition2:hedonic\_center   
## norm\_condition3:hedonic\_center   
## norm\_condition4:hedonic\_center .   
## framing\_conditionFrameCode1:ingroup\_center   
## framing\_conditionFrameCode2:ingroup\_center   
## norm\_condition1:ingroup\_center   
## norm\_condition2:ingroup\_center   
## norm\_condition3:ingroup\_center   
## norm\_condition4:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center \*   
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center \*   
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center .   
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center \*   
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center \*   
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 1.068 on 1038 degrees of freedom  
## Multiple R-squared: 0.2596, Adjusted R-squared: 0.1925   
## F-statistic: 3.871 on 94 and 1038 DF, p-value: < 0.00000000000000022

Succinct summary

summary\_imp4$coefficients %>%  
 knitr::kable(digits = 3)

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.334 | 0.057 | 75.423 | 0.000 |
| framing\_conditionFrameCode1 | 0.033 | 0.082 | 0.406 | 0.685 |
| framing\_conditionFrameCode2 | 0.141 | 0.070 | 2.024 | 0.043 |
| norm\_condition1 | -0.013 | 0.052 | -0.259 | 0.796 |
| norm\_condition2 | 0.029 | 0.030 | 0.957 | 0.339 |
| norm\_condition3 | -0.044 | 0.021 | -2.039 | 0.042 |
| norm\_condition4 | -0.016 | 0.017 | -0.952 | 0.341 |
| biospheric\_center | 0.363 | 0.046 | 7.829 | 0.000 |
| altruistic\_center | 0.089 | 0.063 | 1.412 | 0.158 |
| egoistic\_center | -0.296 | 0.042 | -6.989 | 0.000 |
| hedonic\_center | -0.101 | 0.054 | -1.864 | 0.063 |
| ingroup\_center | 0.026 | 0.034 | 0.770 | 0.442 |
| self\_dec\_center | -0.111 | 0.043 | -2.587 | 0.010 |
| impress\_manag\_center | -0.016 | 0.042 | -0.387 | 0.699 |
| clothing\_center | 0.009 | 0.045 | 0.202 | 0.840 |
| Gender1 | 0.116 | 0.076 | 1.514 | 0.130 |
| Age\_center | -0.049 | 0.018 | -2.709 | 0.007 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.194 | 0.126 | 1.532 | 0.126 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.109 | 0.110 | -0.989 | 0.323 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.006 | 0.076 | -0.079 | 0.937 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.034 | 0.062 | -0.546 | 0.585 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.026 | 0.052 | 0.496 | 0.620 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.024 | 0.046 | 0.525 | 0.600 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.027 | 0.042 | 0.637 | 0.524 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.015 | 0.035 | -0.439 | 0.660 |
| framing\_conditionFrameCode1:biospheric\_center | -0.050 | 0.120 | -0.417 | 0.677 |
| framing\_conditionFrameCode2:biospheric\_center | 0.061 | 0.092 | 0.671 | 0.502 |
| norm\_condition1:biospheric\_center | -0.060 | 0.070 | -0.857 | 0.392 |
| norm\_condition2:biospheric\_center | 0.078 | 0.041 | 1.902 | 0.057 |
| norm\_condition3:biospheric\_center | -0.049 | 0.029 | -1.684 | 0.093 |
| norm\_condition4:biospheric\_center | -0.042 | 0.025 | -1.655 | 0.098 |
| framing\_conditionFrameCode1:altruistic\_center | 0.048 | 0.156 | 0.306 | 0.760 |
| framing\_conditionFrameCode2:altruistic\_center | -0.143 | 0.126 | -1.136 | 0.256 |
| norm\_condition1:altruistic\_center | -0.148 | 0.099 | -1.502 | 0.133 |
| norm\_condition2:altruistic\_center | -0.023 | 0.055 | -0.426 | 0.670 |
| norm\_condition3:altruistic\_center | 0.024 | 0.042 | 0.567 | 0.571 |
| norm\_condition4:altruistic\_center | 0.064 | 0.029 | 2.181 | 0.029 |
| framing\_conditionFrameCode1:egoistic\_center | -0.019 | 0.101 | -0.188 | 0.851 |
| framing\_conditionFrameCode2:egoistic\_center | 0.039 | 0.085 | 0.458 | 0.647 |
| norm\_condition1:egoistic\_center | 0.087 | 0.067 | 1.308 | 0.191 |
| norm\_condition2:egoistic\_center | -0.023 | 0.036 | -0.637 | 0.524 |
| norm\_condition3:egoistic\_center | 0.015 | 0.026 | 0.563 | 0.574 |
| norm\_condition4:egoistic\_center | 0.016 | 0.021 | 0.779 | 0.436 |
| framing\_conditionFrameCode1:hedonic\_center | -0.025 | 0.132 | -0.188 | 0.851 |
| framing\_conditionFrameCode2:hedonic\_center | 0.166 | 0.112 | 1.482 | 0.139 |
| norm\_condition1:hedonic\_center | 0.000 | 0.090 | -0.005 | 0.996 |
| norm\_condition2:hedonic\_center | 0.072 | 0.048 | 1.500 | 0.134 |
| norm\_condition3:hedonic\_center | -0.035 | 0.035 | -1.015 | 0.310 |
| norm\_condition4:hedonic\_center | -0.046 | 0.025 | -1.826 | 0.068 |
| framing\_conditionFrameCode1:ingroup\_center | 0.026 | 0.082 | 0.313 | 0.755 |
| framing\_conditionFrameCode2:ingroup\_center | -0.060 | 0.071 | -0.840 | 0.401 |
| norm\_condition1:ingroup\_center | 0.003 | 0.053 | 0.062 | 0.951 |
| norm\_condition2:ingroup\_center | -0.013 | 0.031 | -0.407 | 0.684 |
| norm\_condition3:ingroup\_center | 0.003 | 0.022 | 0.147 | 0.883 |
| norm\_condition4:ingroup\_center | -0.016 | 0.017 | -0.944 | 0.345 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.034 | 0.177 | -0.193 | 0.847 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.020 | 0.143 | 0.141 | 0.888 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.128 | 0.104 | -1.228 | 0.220 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.108 | 0.084 | 1.277 | 0.202 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.156 | 0.075 | 2.061 | 0.040 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.066 | 0.057 | 1.162 | 0.246 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.060 | 0.067 | 0.884 | 0.377 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.114 | 0.047 | 2.403 | 0.016 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.153 | 0.243 | -0.630 | 0.529 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.247 | 0.206 | 1.199 | 0.231 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.225 | 0.138 | 1.633 | 0.103 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.018 | 0.113 | 0.160 | 0.873 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.178 | 0.106 | -1.673 | 0.095 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.059 | 0.085 | -0.700 | 0.484 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | -0.009 | 0.076 | -0.116 | 0.908 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.083 | 0.058 | -1.423 | 0.155 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.117 | 0.170 | 0.688 | 0.492 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.074 | 0.136 | 0.546 | 0.585 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.020 | 0.087 | -0.235 | 0.814 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.168 | 0.077 | 2.172 | 0.030 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.079 | 0.063 | 1.248 | 0.212 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.031 | 0.055 | 0.558 | 0.577 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.055 | 0.053 | -1.051 | 0.293 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.038 | 0.042 | -0.899 | 0.369 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.030 | 0.222 | -0.135 | 0.893 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.197 | 0.189 | -1.043 | 0.297 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.114 | 0.117 | -0.978 | 0.328 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.014 | 0.103 | -0.133 | 0.894 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.115 | 0.088 | -1.306 | 0.192 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.014 | 0.072 | -0.200 | 0.842 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.005 | 0.062 | -0.087 | 0.931 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.034 | 0.052 | 0.649 | 0.517 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.185 | 0.128 | 1.445 | 0.149 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.041 | 0.112 | 0.366 | 0.715 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.116 | 0.077 | 1.509 | 0.132 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.034 | 0.065 | -0.520 | 0.603 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.038 | 0.053 | 0.713 | 0.476 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.031 | 0.046 | -0.661 | 0.509 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.093 | 0.040 | -2.321 | 0.021 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.039 | 0.035 | 1.117 | 0.264 |

APA style table for regression summary

apa\_summ\_imp4 <- apa\_print(summary\_imp4)  
  
apa\_summ\_imp4$table %>%  
apa\_table(caption = "Table 5 Regression Results Using Imputed Data 4",  
 note = "DV = Consumer Intentions")

(#tab:unnamed-chunk-45)

Table 5 Regression Results Using Imputed Data 4

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.33 | [4.22, 4.45] | 75.42 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.03 | [-0.13, 0.19] | 0.41 | 1038 | .685 |
| Framing conditionFrameCode2 | 0.14 | [0.00, 0.28] | 2.02 | 1038 | .043 |
| Norm condition1 | -0.01 | [-0.11, 0.09] | -0.26 | 1038 | .796 |
| Norm condition2 | 0.03 | [-0.03, 0.09] | 0.96 | 1038 | .339 |
| Norm condition3 | -0.04 | [-0.09, 0.00] | -2.04 | 1038 | .042 |
| Norm condition4 | -0.02 | [-0.05, 0.02] | -0.95 | 1038 | .341 |
| Biospheric center | 0.36 | [0.27, 0.45] | 7.83 | 1038 | < .001 |
| Altruistic center | 0.09 | [-0.03, 0.21] | 1.41 | 1038 | .158 |
| Egoistic center | -0.30 | [-0.38, -0.21] | -6.99 | 1038 | < .001 |
| Hedonic center | -0.10 | [-0.21, 0.01] | -1.86 | 1038 | .063 |
| Ingroup center | 0.03 | [-0.04, 0.09] | 0.77 | 1038 | .442 |
| Self dec center | -0.11 | [-0.19, -0.03] | -2.59 | 1038 | .010 |
| Impress manag center | -0.02 | [-0.10, 0.07] | -0.39 | 1038 | .699 |
| Clothing center | 0.01 | [-0.08, 0.10] | 0.20 | 1038 | .840 |
| Gender1 | 0.12 | [-0.03, 0.27] | 1.51 | 1038 | .130 |
| Age center | -0.05 | [-0.08, -0.01] | -2.71 | 1038 | .007 |
| Framing conditionFrameCode1 Norm condition1 | 0.19 | [-0.05, 0.44] | 1.53 | 1038 | .126 |
| Framing conditionFrameCode2 Norm condition1 | -0.11 | [-0.33, 0.11] | -0.99 | 1038 | .323 |
| Framing conditionFrameCode1 Norm condition2 | -0.01 | [-0.15, 0.14] | -0.08 | 1038 | .937 |
| Framing conditionFrameCode2 Norm condition2 | -0.03 | [-0.16, 0.09] | -0.55 | 1038 | .585 |
| Framing conditionFrameCode1 Norm condition3 | 0.03 | [-0.08, 0.13] | 0.50 | 1038 | .620 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.07, 0.11] | 0.53 | 1038 | .600 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.06, 0.11] | 0.64 | 1038 | .524 |
| Framing conditionFrameCode2 Norm condition4 | -0.02 | [-0.08, 0.05] | -0.44 | 1038 | .660 |
| Framing conditionFrameCode1 Biospheric center | -0.05 | [-0.28, 0.18] | -0.42 | 1038 | .677 |
| Framing conditionFrameCode2 Biospheric center | 0.06 | [-0.12, 0.24] | 0.67 | 1038 | .502 |
| Norm condition1 Biospheric center | -0.06 | [-0.20, 0.08] | -0.86 | 1038 | .392 |
| Norm condition2 Biospheric center | 0.08 | [0.00, 0.16] | 1.90 | 1038 | .057 |
| Norm condition3 Biospheric center | -0.05 | [-0.11, 0.01] | -1.68 | 1038 | .093 |
| Norm condition4 Biospheric center | -0.04 | [-0.09, 0.01] | -1.65 | 1038 | .098 |
| Framing conditionFrameCode1 Altruistic center | 0.05 | [-0.26, 0.35] | 0.31 | 1038 | .760 |
| Framing conditionFrameCode2 Altruistic center | -0.14 | [-0.39, 0.10] | -1.14 | 1038 | .256 |
| Norm condition1 Altruistic center | -0.15 | [-0.34, 0.05] | -1.50 | 1038 | .133 |
| Norm condition2 Altruistic center | -0.02 | [-0.13, 0.08] | -0.43 | 1038 | .670 |
| Norm condition3 Altruistic center | 0.02 | [-0.06, 0.11] | 0.57 | 1038 | .571 |
| Norm condition4 Altruistic center | 0.06 | [0.01, 0.12] | 2.18 | 1038 | .029 |
| Framing conditionFrameCode1 Egoistic center | -0.02 | [-0.22, 0.18] | -0.19 | 1038 | .851 |
| Framing conditionFrameCode2 Egoistic center | 0.04 | [-0.13, 0.21] | 0.46 | 1038 | .647 |
| Norm condition1 Egoistic center | 0.09 | [-0.04, 0.22] | 1.31 | 1038 | .191 |
| Norm condition2 Egoistic center | -0.02 | [-0.09, 0.05] | -0.64 | 1038 | .524 |
| Norm condition3 Egoistic center | 0.01 | [-0.04, 0.07] | 0.56 | 1038 | .574 |
| Norm condition4 Egoistic center | 0.02 | [-0.02, 0.06] | 0.78 | 1038 | .436 |
| Framing conditionFrameCode1 Hedonic center | -0.02 | [-0.28, 0.23] | -0.19 | 1038 | .851 |
| Framing conditionFrameCode2 Hedonic center | 0.17 | [-0.05, 0.39] | 1.48 | 1038 | .139 |
| Norm condition1 Hedonic center | 0.00 | [-0.18, 0.18] | -0.01 | 1038 | .996 |
| Norm condition2 Hedonic center | 0.07 | [-0.02, 0.17] | 1.50 | 1038 | .134 |
| Norm condition3 Hedonic center | -0.04 | [-0.10, 0.03] | -1.02 | 1038 | .310 |
| Norm condition4 Hedonic center | -0.05 | [-0.09, 0.00] | -1.83 | 1038 | .068 |
| Framing conditionFrameCode1 Ingroup center | 0.03 | [-0.13, 0.19] | 0.31 | 1038 | .755 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.20, 0.08] | -0.84 | 1038 | .401 |
| Norm condition1 Ingroup center | 0.00 | [-0.10, 0.11] | 0.06 | 1038 | .951 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.41 | 1038 | .684 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.05] | 0.15 | 1038 | .883 |
| Norm condition4 Ingroup center | -0.02 | [-0.05, 0.02] | -0.94 | 1038 | .345 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.03 | [-0.38, 0.31] | -0.19 | 1038 | .847 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.02 | [-0.26, 0.30] | 0.14 | 1038 | .888 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.13 | [-0.33, 0.08] | -1.23 | 1038 | .220 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.11 | [-0.06, 0.27] | 1.28 | 1038 | .202 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.16 | [0.01, 0.30] | 2.06 | 1038 | .040 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.07 | [-0.05, 0.18] | 1.16 | 1038 | .246 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.06 | [-0.07, 0.19] | 0.88 | 1038 | .377 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.11 | [0.02, 0.21] | 2.40 | 1038 | .016 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.15 | [-0.63, 0.32] | -0.63 | 1038 | .529 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.25 | [-0.16, 0.65] | 1.20 | 1038 | .231 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.22 | [-0.05, 0.50] | 1.63 | 1038 | .103 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | 0.02 | [-0.20, 0.24] | 0.16 | 1038 | .873 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.18 | [-0.39, 0.03] | -1.67 | 1038 | .095 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.06 | [-0.23, 0.11] | -0.70 | 1038 | .484 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | -0.01 | [-0.16, 0.14] | -0.12 | 1038 | .908 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.08 | [-0.20, 0.03] | -1.42 | 1038 | .155 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.12 | [-0.22, 0.45] | 0.69 | 1038 | .492 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.07 | [-0.19, 0.34] | 0.55 | 1038 | .585 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.02 | [-0.19, 0.15] | -0.24 | 1038 | .814 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.17 | [0.02, 0.32] | 2.17 | 1038 | .030 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.08 | [-0.05, 0.20] | 1.25 | 1038 | .212 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.03 | [-0.08, 0.14] | 0.56 | 1038 | .577 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.06 | [-0.16, 0.05] | -1.05 | 1038 | .293 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.04 | [-0.12, 0.05] | -0.90 | 1038 | .369 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | -0.03 | [-0.47, 0.41] | -0.13 | 1038 | .893 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.20 | [-0.57, 0.17] | -1.04 | 1038 | .297 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.11 | [-0.34, 0.12] | -0.98 | 1038 | .328 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | -0.01 | [-0.22, 0.19] | -0.13 | 1038 | .894 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.11 | [-0.29, 0.06] | -1.31 | 1038 | .192 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | -0.01 | [-0.16, 0.13] | -0.20 | 1038 | .842 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | -0.01 | [-0.13, 0.12] | -0.09 | 1038 | .931 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.03 | [-0.07, 0.14] | 0.65 | 1038 | .517 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.18 | [-0.07, 0.44] | 1.44 | 1038 | .149 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.04 | [-0.18, 0.26] | 0.37 | 1038 | .715 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.12 | [-0.03, 0.27] | 1.51 | 1038 | .132 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.09] | -0.52 | 1038 | .603 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.04 | [-0.07, 0.14] | 0.71 | 1038 | .476 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.66 | 1038 | .509 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.17, -0.01] | -2.32 | 1038 | .021 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.12 | 1038 | .264 |

*Note.* DV = Consumer Intentions

#### ANOVA summary

anova(mod\_mice\_imp4) %>%  
 knitr::kable(digits = 3)

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.691 | 2.346 | 2.057 | 0.128 |
| norm\_condition | 4 | 8.168 | 2.042 | 1.791 | 0.128 |
| biospheric\_center | 1 | 146.288 | 146.288 | 128.316 | 0.000 |
| altruistic\_center | 1 | 0.126 | 0.126 | 0.110 | 0.740 |
| egoistic\_center | 1 | 122.715 | 122.715 | 107.639 | 0.000 |
| hedonic\_center | 1 | 3.746 | 3.746 | 3.286 | 0.070 |
| ingroup\_center | 1 | 4.313 | 4.313 | 3.783 | 0.052 |
| self\_dec\_center | 1 | 13.329 | 13.329 | 11.692 | 0.001 |
| impress\_manag\_center | 1 | 0.033 | 0.033 | 0.029 | 0.864 |
| clothing\_center | 1 | 0.740 | 0.740 | 0.649 | 0.421 |
| Gender | 1 | 4.403 | 4.403 | 3.862 | 0.050 |
| Age\_center | 1 | 10.256 | 10.256 | 8.996 | 0.003 |
| framing\_condition:norm\_condition | 8 | 5.846 | 0.731 | 0.641 | 0.744 |
| framing\_condition:biospheric\_center | 2 | 0.342 | 0.171 | 0.150 | 0.861 |
| norm\_condition:biospheric\_center | 4 | 14.016 | 3.504 | 3.073 | 0.016 |
| framing\_condition:altruistic\_center | 2 | 0.495 | 0.248 | 0.217 | 0.805 |
| norm\_condition:altruistic\_center | 4 | 2.701 | 0.675 | 0.592 | 0.668 |
| framing\_condition:egoistic\_center | 2 | 0.836 | 0.418 | 0.367 | 0.693 |
| norm\_condition:egoistic\_center | 4 | 3.037 | 0.759 | 0.666 | 0.616 |
| framing\_condition:hedonic\_center | 2 | 2.186 | 1.093 | 0.959 | 0.384 |
| norm\_condition:hedonic\_center | 4 | 8.606 | 2.151 | 1.887 | 0.110 |
| framing\_condition:ingroup\_center | 2 | 1.290 | 0.645 | 0.566 | 0.568 |
| norm\_condition:ingroup\_center | 4 | 0.419 | 0.105 | 0.092 | 0.985 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 14.557 | 1.820 | 1.596 | 0.122 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 13.151 | 1.644 | 1.442 | 0.175 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 10.338 | 1.292 | 1.134 | 0.338 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 4.726 | 0.591 | 0.518 | 0.843 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 13.461 | 1.683 | 1.476 | 0.162 |
| Residuals | 1038 | 1183.385 | 1.140 | NA | NA |

### Imputed Data 5

data\_imp5 <- impobject$imputations[[5]]  
  
mod\_mice\_imp5 <-lm(consumer\_intentions ~ framing\_condition\*norm\_condition\*biospheric\_center + framing\_condition\*norm\_condition\*altruistic\_center + framing\_condition\*norm\_condition\*egoistic\_center + framing\_condition\*norm\_condition\*hedonic\_center + framing\_condition\*norm\_condition\*ingroup\_center + self\_dec\_center + impress\_manag\_center + clothing\_center + Gender + Age\_center, data = data\_imp5)

#### Regression summary

summary\_imp5 <- summary(mod\_mice\_imp5)  
summary\_imp5

##   
## Call:  
## lm(formula = consumer\_intentions ~ framing\_condition \* norm\_condition \*   
## biospheric\_center + framing\_condition \* norm\_condition \*   
## altruistic\_center + framing\_condition \* norm\_condition \*   
## egoistic\_center + framing\_condition \* norm\_condition \* hedonic\_center +   
## framing\_condition \* norm\_condition \* ingroup\_center + self\_dec\_center +   
## impress\_manag\_center + clothing\_center + Gender + Age\_center,   
## data = data\_imp5)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -3.2027 -0.7149 0.0465 0.7119 2.7817   
##   
## Coefficients:  
## Estimate  
## (Intercept) 4.33630706  
## framing\_conditionFrameCode1 0.04151732  
## framing\_conditionFrameCode2 0.12980827  
## norm\_condition1 -0.02364647  
## norm\_condition2 0.02417985  
## norm\_condition3 -0.04239515  
## norm\_condition4 -0.01391596  
## biospheric\_center 0.37065967  
## altruistic\_center 0.07998582  
## egoistic\_center -0.29829880  
## hedonic\_center -0.11598397  
## ingroup\_center 0.02659784  
## self\_dec\_center -0.09468390  
## impress\_manag\_center -0.01824338  
## clothing\_center 0.00467969  
## Gender1 0.11727652  
## Age\_center -0.05532572  
## framing\_conditionFrameCode1:norm\_condition1 0.16492955  
## framing\_conditionFrameCode2:norm\_condition1 -0.09602085  
## framing\_conditionFrameCode1:norm\_condition2 -0.01005830  
## framing\_conditionFrameCode2:norm\_condition2 -0.03386067  
## framing\_conditionFrameCode1:norm\_condition3 0.02641579  
## framing\_conditionFrameCode2:norm\_condition3 0.02566887  
## framing\_conditionFrameCode1:norm\_condition4 0.02858994  
## framing\_conditionFrameCode2:norm\_condition4 -0.01399163  
## framing\_conditionFrameCode1:biospheric\_center -0.02362357  
## framing\_conditionFrameCode2:biospheric\_center 0.05154807  
## norm\_condition1:biospheric\_center -0.06041230  
## norm\_condition2:biospheric\_center 0.06725907  
## norm\_condition3:biospheric\_center -0.05451849  
## norm\_condition4:biospheric\_center -0.04515387  
## framing\_conditionFrameCode1:altruistic\_center 0.01531951  
## framing\_conditionFrameCode2:altruistic\_center -0.12435184  
## norm\_condition1:altruistic\_center -0.12247789  
## norm\_condition2:altruistic\_center -0.01254486  
## norm\_condition3:altruistic\_center 0.03015222  
## norm\_condition4:altruistic\_center 0.06763184  
## framing\_conditionFrameCode1:egoistic\_center -0.01831446  
## framing\_conditionFrameCode2:egoistic\_center 0.04051197  
## norm\_condition1:egoistic\_center 0.06138939  
## norm\_condition2:egoistic\_center -0.01893650  
## norm\_condition3:egoistic\_center 0.01401846  
## norm\_condition4:egoistic\_center 0.01563881  
## framing\_conditionFrameCode1:hedonic\_center -0.08101913  
## framing\_conditionFrameCode2:hedonic\_center 0.18226233  
## norm\_condition1:hedonic\_center 0.01524599  
## norm\_condition2:hedonic\_center 0.08149505  
## norm\_condition3:hedonic\_center -0.02761757  
## norm\_condition4:hedonic\_center -0.04204858  
## framing\_conditionFrameCode1:ingroup\_center 0.02930116  
## framing\_conditionFrameCode2:ingroup\_center -0.05941671  
## norm\_condition1:ingroup\_center 0.00797702  
## norm\_condition2:ingroup\_center -0.01309526  
## norm\_condition3:ingroup\_center 0.00241864  
## norm\_condition4:ingroup\_center -0.01377042  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center -0.03691645  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.02323432  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -0.15971473  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.12434672  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.15311534  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.07109032  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.04427857  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.11648658  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center -0.07040921  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.20687382  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.26349240  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center -0.00009351  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -0.17373695  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.06461233  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.00697382  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -0.08720946  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.06737477  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.12068006  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.02235473  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.16498032  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.07372009  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.02867245  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -0.05092350  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.03922590  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.00395183  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -0.23297465  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.07364714  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.03221634  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -0.10505036  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.03171059  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.00173808  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.03117643  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.20342345  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.03550839  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.10705995  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.02841215  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.04236410  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.02849812  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -0.08673839  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.03918979  
## Std. Error  
## (Intercept) 0.05665279  
## framing\_conditionFrameCode1 0.08170105  
## framing\_conditionFrameCode2 0.06943815  
## norm\_condition1 0.05139599  
## norm\_condition2 0.03003981  
## norm\_condition3 0.02135021  
## norm\_condition4 0.01672257  
## biospheric\_center 0.04601578  
## altruistic\_center 0.06311774  
## egoistic\_center 0.04250195  
## hedonic\_center 0.05387286  
## ingroup\_center 0.03369275  
## self\_dec\_center 0.04273746  
## impress\_manag\_center 0.04206188  
## clothing\_center 0.04510675  
## Gender1 0.07529853  
## Age\_center 0.01833492  
## framing\_conditionFrameCode1:norm\_condition1 0.12578104  
## framing\_conditionFrameCode2:norm\_condition1 0.10997306  
## framing\_conditionFrameCode1:norm\_condition2 0.07540780  
## framing\_conditionFrameCode2:norm\_condition2 0.06228536  
## framing\_conditionFrameCode1:norm\_condition3 0.05176004  
## framing\_conditionFrameCode2:norm\_condition3 0.04588814  
## framing\_conditionFrameCode1:norm\_condition4 0.04215088  
## framing\_conditionFrameCode2:norm\_condition4 0.03438445  
## framing\_conditionFrameCode1:biospheric\_center 0.11875964  
## framing\_conditionFrameCode2:biospheric\_center 0.09113780  
## norm\_condition1:biospheric\_center 0.06928028  
## norm\_condition2:biospheric\_center 0.04104254  
## norm\_condition3:biospheric\_center 0.02881214  
## norm\_condition4:biospheric\_center 0.02492557  
## framing\_conditionFrameCode1:altruistic\_center 0.15506329  
## framing\_conditionFrameCode2:altruistic\_center 0.12544592  
## norm\_condition1:altruistic\_center 0.09820764  
## norm\_condition2:altruistic\_center 0.05471709  
## norm\_condition3:altruistic\_center 0.04157605  
## norm\_condition4:altruistic\_center 0.02921108  
## framing\_conditionFrameCode1:egoistic\_center 0.10250940  
## framing\_conditionFrameCode2:egoistic\_center 0.08539993  
## norm\_condition1:egoistic\_center 0.06775265  
## norm\_condition2:egoistic\_center 0.03610039  
## norm\_condition3:egoistic\_center 0.02612876  
## norm\_condition4:egoistic\_center 0.02065898  
## framing\_conditionFrameCode1:hedonic\_center 0.13213428  
## framing\_conditionFrameCode2:hedonic\_center 0.11210044  
## norm\_condition1:hedonic\_center 0.08896826  
## norm\_condition2:hedonic\_center 0.04803773  
## norm\_condition3:hedonic\_center 0.03510766  
## norm\_condition4:hedonic\_center 0.02498612  
## framing\_conditionFrameCode1:ingroup\_center 0.08173157  
## framing\_conditionFrameCode2:ingroup\_center 0.07088543  
## norm\_condition1:ingroup\_center 0.05254150  
## norm\_condition2:ingroup\_center 0.03110230  
## norm\_condition3:ingroup\_center 0.02167515  
## norm\_condition4:ingroup\_center 0.01646135  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.17438927  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.14227824  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.10385936  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.08409860  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.07499303  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.05681514  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.06713098  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.04729487  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.24213408  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.20532147  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.13781843  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.11288460  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.10588696  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.08450941  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.07599999  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.05789070  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.17316521  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.13703626  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.08763408  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.07747091  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.06387428  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.05525279  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.05242512  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.04233206  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.21919285  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.18840782  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.11655868  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.10270461  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.08813976  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.07224233  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.06190945  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.05215350  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.12766093  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.11216214  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.07735789  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.06463508  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.05311556  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.04621390  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.03970031  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.03518137  
## t value  
## (Intercept) 76.542  
## framing\_conditionFrameCode1 0.508  
## framing\_conditionFrameCode2 1.869  
## norm\_condition1 -0.460  
## norm\_condition2 0.805  
## norm\_condition3 -1.986  
## norm\_condition4 -0.832  
## biospheric\_center 8.055  
## altruistic\_center 1.267  
## egoistic\_center -7.018  
## hedonic\_center -2.153  
## ingroup\_center 0.789  
## self\_dec\_center -2.215  
## impress\_manag\_center -0.434  
## clothing\_center 0.104  
## Gender1 1.557  
## Age\_center -3.018  
## framing\_conditionFrameCode1:norm\_condition1 1.311  
## framing\_conditionFrameCode2:norm\_condition1 -0.873  
## framing\_conditionFrameCode1:norm\_condition2 -0.133  
## framing\_conditionFrameCode2:norm\_condition2 -0.544  
## framing\_conditionFrameCode1:norm\_condition3 0.510  
## framing\_conditionFrameCode2:norm\_condition3 0.559  
## framing\_conditionFrameCode1:norm\_condition4 0.678  
## framing\_conditionFrameCode2:norm\_condition4 -0.407  
## framing\_conditionFrameCode1:biospheric\_center -0.199  
## framing\_conditionFrameCode2:biospheric\_center 0.566  
## norm\_condition1:biospheric\_center -0.872  
## norm\_condition2:biospheric\_center 1.639  
## norm\_condition3:biospheric\_center -1.892  
## norm\_condition4:biospheric\_center -1.812  
## framing\_conditionFrameCode1:altruistic\_center 0.099  
## framing\_conditionFrameCode2:altruistic\_center -0.991  
## norm\_condition1:altruistic\_center -1.247  
## norm\_condition2:altruistic\_center -0.229  
## norm\_condition3:altruistic\_center 0.725  
## norm\_condition4:altruistic\_center 2.315  
## framing\_conditionFrameCode1:egoistic\_center -0.179  
## framing\_conditionFrameCode2:egoistic\_center 0.474  
## norm\_condition1:egoistic\_center 0.906  
## norm\_condition2:egoistic\_center -0.525  
## norm\_condition3:egoistic\_center 0.537  
## norm\_condition4:egoistic\_center 0.757  
## framing\_conditionFrameCode1:hedonic\_center -0.613  
## framing\_conditionFrameCode2:hedonic\_center 1.626  
## norm\_condition1:hedonic\_center 0.171  
## norm\_condition2:hedonic\_center 1.696  
## norm\_condition3:hedonic\_center -0.787  
## norm\_condition4:hedonic\_center -1.683  
## framing\_conditionFrameCode1:ingroup\_center 0.359  
## framing\_conditionFrameCode2:ingroup\_center -0.838  
## norm\_condition1:ingroup\_center 0.152  
## norm\_condition2:ingroup\_center -0.421  
## norm\_condition3:ingroup\_center 0.112  
## norm\_condition4:ingroup\_center -0.837  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center -0.212  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.163  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center -1.538  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 1.479  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 2.042  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 1.251  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.660  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 2.463  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center -0.291  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 1.008  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 1.912  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center -0.001  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center -1.641  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center -0.765  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.092  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center -1.506  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.389  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.881  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center -0.255  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 2.130  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 1.154  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.519  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center -0.971  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center -0.927  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.018  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center -1.237  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center -0.632  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center -0.314  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center -1.192  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center -0.439  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.028  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.598  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 1.593  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.317  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 1.384  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center -0.440  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.798  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center -0.617  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center -2.185  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 1.114  
## Pr(>|t|)  
## (Intercept) < 0.0000000000000002  
## framing\_conditionFrameCode1 0.61145  
## framing\_conditionFrameCode2 0.06185  
## norm\_condition1 0.64555  
## norm\_condition2 0.42105  
## norm\_condition3 0.04733  
## norm\_condition4 0.40551  
## biospheric\_center 0.00000000000000217  
## altruistic\_center 0.20535  
## egoistic\_center 0.00000000000404454  
## hedonic\_center 0.03155  
## ingroup\_center 0.43004  
## self\_dec\_center 0.02694  
## impress\_manag\_center 0.66458  
## clothing\_center 0.91739  
## Gender1 0.11966  
## Age\_center 0.00261  
## framing\_conditionFrameCode1:norm\_condition1 0.19007  
## framing\_conditionFrameCode2:norm\_condition1 0.38279  
## framing\_conditionFrameCode1:norm\_condition2 0.89391  
## framing\_conditionFrameCode2:norm\_condition2 0.58681  
## framing\_conditionFrameCode1:norm\_condition3 0.60991  
## framing\_conditionFrameCode2:norm\_condition3 0.57602  
## framing\_conditionFrameCode1:norm\_condition4 0.49775  
## framing\_conditionFrameCode2:norm\_condition4 0.68415  
## framing\_conditionFrameCode1:biospheric\_center 0.84236  
## framing\_conditionFrameCode2:biospheric\_center 0.57178  
## norm\_condition1:biospheric\_center 0.38341  
## norm\_condition2:biospheric\_center 0.10157  
## norm\_condition3:biospheric\_center 0.05874  
## norm\_condition4:biospheric\_center 0.07034  
## framing\_conditionFrameCode1:altruistic\_center 0.92132  
## framing\_conditionFrameCode2:altruistic\_center 0.32178  
## norm\_condition1:altruistic\_center 0.21263  
## norm\_condition2:altruistic\_center 0.81871  
## norm\_condition3:altruistic\_center 0.46847  
## norm\_condition4:altruistic\_center 0.02079  
## framing\_conditionFrameCode1:egoistic\_center 0.85824  
## framing\_conditionFrameCode2:egoistic\_center 0.63533  
## norm\_condition1:egoistic\_center 0.36510  
## norm\_condition2:egoistic\_center 0.60001  
## norm\_condition3:egoistic\_center 0.59172  
## norm\_condition4:egoistic\_center 0.44922  
## framing\_conditionFrameCode1:hedonic\_center 0.53991  
## framing\_conditionFrameCode2:hedonic\_center 0.10428  
## norm\_condition1:hedonic\_center 0.86397  
## norm\_condition2:hedonic\_center 0.09009  
## norm\_condition3:hedonic\_center 0.43166  
## norm\_condition4:hedonic\_center 0.09270  
## framing\_conditionFrameCode1:ingroup\_center 0.72004  
## framing\_conditionFrameCode2:ingroup\_center 0.40211  
## norm\_condition1:ingroup\_center 0.87936  
## norm\_condition2:ingroup\_center 0.67381  
## norm\_condition3:ingroup\_center 0.91117  
## norm\_condition4:ingroup\_center 0.40305  
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 0.83239  
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 0.87031  
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 0.12440  
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 0.13956  
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 0.04143  
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 0.21112  
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 0.50967  
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 0.01394  
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 0.77127  
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 0.31390  
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 0.05617  
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 0.99934  
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 0.10115  
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 0.44471  
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 0.92691  
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 0.13226  
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 0.69730  
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 0.37871  
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 0.79870  
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 0.03344  
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 0.24871  
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 0.60392  
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 0.33160  
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 0.35434  
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 0.98562  
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 0.21654  
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 0.52763  
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 0.75383  
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 0.23359  
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 0.66079  
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 0.97761  
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 0.55012  
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 0.11136  
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 0.75163  
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 0.16667  
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 0.66033  
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 0.42529  
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 0.53760  
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 0.02912  
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 0.26556  
##   
## (Intercept) \*\*\*  
## framing\_conditionFrameCode1   
## framing\_conditionFrameCode2 .   
## norm\_condition1   
## norm\_condition2   
## norm\_condition3 \*   
## norm\_condition4   
## biospheric\_center \*\*\*  
## altruistic\_center   
## egoistic\_center \*\*\*  
## hedonic\_center \*   
## ingroup\_center   
## self\_dec\_center \*   
## impress\_manag\_center   
## clothing\_center   
## Gender1   
## Age\_center \*\*   
## framing\_conditionFrameCode1:norm\_condition1   
## framing\_conditionFrameCode2:norm\_condition1   
## framing\_conditionFrameCode1:norm\_condition2   
## framing\_conditionFrameCode2:norm\_condition2   
## framing\_conditionFrameCode1:norm\_condition3   
## framing\_conditionFrameCode2:norm\_condition3   
## framing\_conditionFrameCode1:norm\_condition4   
## framing\_conditionFrameCode2:norm\_condition4   
## framing\_conditionFrameCode1:biospheric\_center   
## framing\_conditionFrameCode2:biospheric\_center   
## norm\_condition1:biospheric\_center   
## norm\_condition2:biospheric\_center   
## norm\_condition3:biospheric\_center .   
## norm\_condition4:biospheric\_center .   
## framing\_conditionFrameCode1:altruistic\_center   
## framing\_conditionFrameCode2:altruistic\_center   
## norm\_condition1:altruistic\_center   
## norm\_condition2:altruistic\_center   
## norm\_condition3:altruistic\_center   
## norm\_condition4:altruistic\_center \*   
## framing\_conditionFrameCode1:egoistic\_center   
## framing\_conditionFrameCode2:egoistic\_center   
## norm\_condition1:egoistic\_center   
## norm\_condition2:egoistic\_center   
## norm\_condition3:egoistic\_center   
## norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:hedonic\_center   
## framing\_conditionFrameCode2:hedonic\_center   
## norm\_condition1:hedonic\_center   
## norm\_condition2:hedonic\_center .   
## norm\_condition3:hedonic\_center   
## norm\_condition4:hedonic\_center .   
## framing\_conditionFrameCode1:ingroup\_center   
## framing\_conditionFrameCode2:ingroup\_center   
## norm\_condition1:ingroup\_center   
## norm\_condition2:ingroup\_center   
## norm\_condition3:ingroup\_center   
## norm\_condition4:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition1:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition2:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition3:biospheric\_center \*   
## framing\_conditionFrameCode2:norm\_condition3:biospheric\_center   
## framing\_conditionFrameCode1:norm\_condition4:biospheric\_center   
## framing\_conditionFrameCode2:norm\_condition4:biospheric\_center \*   
## framing\_conditionFrameCode1:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:altruistic\_center .   
## framing\_conditionFrameCode2:norm\_condition2:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition3:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition3:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:altruistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition1:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition2:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition2:egoistic\_center \*   
## framing\_conditionFrameCode1:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition3:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode2:norm\_condition4:egoistic\_center   
## framing\_conditionFrameCode1:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition1:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition2:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition3:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode2:norm\_condition4:hedonic\_center   
## framing\_conditionFrameCode1:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition1:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition2:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode2:norm\_condition3:ingroup\_center   
## framing\_conditionFrameCode1:norm\_condition4:ingroup\_center \*   
## framing\_conditionFrameCode2:norm\_condition4:ingroup\_center   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 1.067 on 1038 degrees of freedom  
## Multiple R-squared: 0.2612, Adjusted R-squared: 0.1943   
## F-statistic: 3.904 on 94 and 1038 DF, p-value: < 0.00000000000000022

Succinct summary

summary\_imp5$coefficients %>%  
 knitr::kable(digits = 3)

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.336 | 0.057 | 76.542 | 0.000 |
| framing\_conditionFrameCode1 | 0.042 | 0.082 | 0.508 | 0.611 |
| framing\_conditionFrameCode2 | 0.130 | 0.069 | 1.869 | 0.062 |
| norm\_condition1 | -0.024 | 0.051 | -0.460 | 0.646 |
| norm\_condition2 | 0.024 | 0.030 | 0.805 | 0.421 |
| norm\_condition3 | -0.042 | 0.021 | -1.986 | 0.047 |
| norm\_condition4 | -0.014 | 0.017 | -0.832 | 0.406 |
| biospheric\_center | 0.371 | 0.046 | 8.055 | 0.000 |
| altruistic\_center | 0.080 | 0.063 | 1.267 | 0.205 |
| egoistic\_center | -0.298 | 0.043 | -7.018 | 0.000 |
| hedonic\_center | -0.116 | 0.054 | -2.153 | 0.032 |
| ingroup\_center | 0.027 | 0.034 | 0.789 | 0.430 |
| self\_dec\_center | -0.095 | 0.043 | -2.215 | 0.027 |
| impress\_manag\_center | -0.018 | 0.042 | -0.434 | 0.665 |
| clothing\_center | 0.005 | 0.045 | 0.104 | 0.917 |
| Gender1 | 0.117 | 0.075 | 1.557 | 0.120 |
| Age\_center | -0.055 | 0.018 | -3.018 | 0.003 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.165 | 0.126 | 1.311 | 0.190 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.096 | 0.110 | -0.873 | 0.383 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.010 | 0.075 | -0.133 | 0.894 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.034 | 0.062 | -0.544 | 0.587 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.026 | 0.052 | 0.510 | 0.610 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.026 | 0.046 | 0.559 | 0.576 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.029 | 0.042 | 0.678 | 0.498 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.014 | 0.034 | -0.407 | 0.684 |
| framing\_conditionFrameCode1:biospheric\_center | -0.024 | 0.119 | -0.199 | 0.842 |
| framing\_conditionFrameCode2:biospheric\_center | 0.052 | 0.091 | 0.566 | 0.572 |
| norm\_condition1:biospheric\_center | -0.060 | 0.069 | -0.872 | 0.383 |
| norm\_condition2:biospheric\_center | 0.067 | 0.041 | 1.639 | 0.102 |
| norm\_condition3:biospheric\_center | -0.055 | 0.029 | -1.892 | 0.059 |
| norm\_condition4:biospheric\_center | -0.045 | 0.025 | -1.812 | 0.070 |
| framing\_conditionFrameCode1:altruistic\_center | 0.015 | 0.155 | 0.099 | 0.921 |
| framing\_conditionFrameCode2:altruistic\_center | -0.124 | 0.125 | -0.991 | 0.322 |
| norm\_condition1:altruistic\_center | -0.122 | 0.098 | -1.247 | 0.213 |
| norm\_condition2:altruistic\_center | -0.013 | 0.055 | -0.229 | 0.819 |
| norm\_condition3:altruistic\_center | 0.030 | 0.042 | 0.725 | 0.468 |
| norm\_condition4:altruistic\_center | 0.068 | 0.029 | 2.315 | 0.021 |
| framing\_conditionFrameCode1:egoistic\_center | -0.018 | 0.103 | -0.179 | 0.858 |
| framing\_conditionFrameCode2:egoistic\_center | 0.041 | 0.085 | 0.474 | 0.635 |
| norm\_condition1:egoistic\_center | 0.061 | 0.068 | 0.906 | 0.365 |
| norm\_condition2:egoistic\_center | -0.019 | 0.036 | -0.525 | 0.600 |
| norm\_condition3:egoistic\_center | 0.014 | 0.026 | 0.537 | 0.592 |
| norm\_condition4:egoistic\_center | 0.016 | 0.021 | 0.757 | 0.449 |
| framing\_conditionFrameCode1:hedonic\_center | -0.081 | 0.132 | -0.613 | 0.540 |
| framing\_conditionFrameCode2:hedonic\_center | 0.182 | 0.112 | 1.626 | 0.104 |
| norm\_condition1:hedonic\_center | 0.015 | 0.089 | 0.171 | 0.864 |
| norm\_condition2:hedonic\_center | 0.081 | 0.048 | 1.696 | 0.090 |
| norm\_condition3:hedonic\_center | -0.028 | 0.035 | -0.787 | 0.432 |
| norm\_condition4:hedonic\_center | -0.042 | 0.025 | -1.683 | 0.093 |
| framing\_conditionFrameCode1:ingroup\_center | 0.029 | 0.082 | 0.359 | 0.720 |
| framing\_conditionFrameCode2:ingroup\_center | -0.059 | 0.071 | -0.838 | 0.402 |
| norm\_condition1:ingroup\_center | 0.008 | 0.053 | 0.152 | 0.879 |
| norm\_condition2:ingroup\_center | -0.013 | 0.031 | -0.421 | 0.674 |
| norm\_condition3:ingroup\_center | 0.002 | 0.022 | 0.112 | 0.911 |
| norm\_condition4:ingroup\_center | -0.014 | 0.016 | -0.837 | 0.403 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.037 | 0.174 | -0.212 | 0.832 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.023 | 0.142 | 0.163 | 0.870 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.160 | 0.104 | -1.538 | 0.124 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.124 | 0.084 | 1.479 | 0.140 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.153 | 0.075 | 2.042 | 0.041 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.071 | 0.057 | 1.251 | 0.211 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.044 | 0.067 | 0.660 | 0.510 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.116 | 0.047 | 2.463 | 0.014 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.070 | 0.242 | -0.291 | 0.771 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.207 | 0.205 | 1.008 | 0.314 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.263 | 0.138 | 1.912 | 0.056 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.000 | 0.113 | -0.001 | 0.999 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.174 | 0.106 | -1.641 | 0.101 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.065 | 0.085 | -0.765 | 0.445 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | 0.007 | 0.076 | 0.092 | 0.927 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.087 | 0.058 | -1.506 | 0.132 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.067 | 0.173 | 0.389 | 0.697 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.121 | 0.137 | 0.881 | 0.379 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.022 | 0.088 | -0.255 | 0.799 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.165 | 0.077 | 2.130 | 0.033 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.074 | 0.064 | 1.154 | 0.249 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.029 | 0.055 | 0.519 | 0.604 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.051 | 0.052 | -0.971 | 0.332 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.039 | 0.042 | -0.927 | 0.354 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | 0.004 | 0.219 | 0.018 | 0.986 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.233 | 0.188 | -1.237 | 0.217 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.074 | 0.117 | -0.632 | 0.528 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.032 | 0.103 | -0.314 | 0.754 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.105 | 0.088 | -1.192 | 0.234 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.032 | 0.072 | -0.439 | 0.661 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | 0.002 | 0.062 | 0.028 | 0.978 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.031 | 0.052 | 0.598 | 0.550 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.203 | 0.128 | 1.593 | 0.111 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.036 | 0.112 | 0.317 | 0.752 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.107 | 0.077 | 1.384 | 0.167 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.028 | 0.065 | -0.440 | 0.660 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.042 | 0.053 | 0.798 | 0.425 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.028 | 0.046 | -0.617 | 0.538 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.087 | 0.040 | -2.185 | 0.029 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.039 | 0.035 | 1.114 | 0.266 |

APA style table for regression summary

apa\_summ\_imp5 <- apa\_print(summary\_imp5)  
  
apa\_summ\_imp5$table %>%  
apa\_table(caption = "Table 6 Regression Results Using Imputed Data 5",  
 note = "DV = Consumer Intentions")

(#tab:unnamed-chunk-50)

Table 6 Regression Results Using Imputed Data 5

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.34 | [4.23, 4.45] | 76.54 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.04 | [-0.12, 0.20] | 0.51 | 1038 | .611 |
| Framing conditionFrameCode2 | 0.13 | [-0.01, 0.27] | 1.87 | 1038 | .062 |
| Norm condition1 | -0.02 | [-0.12, 0.08] | -0.46 | 1038 | .646 |
| Norm condition2 | 0.02 | [-0.03, 0.08] | 0.80 | 1038 | .421 |
| Norm condition3 | -0.04 | [-0.08, 0.00] | -1.99 | 1038 | .047 |
| Norm condition4 | -0.01 | [-0.05, 0.02] | -0.83 | 1038 | .406 |
| Biospheric center | 0.37 | [0.28, 0.46] | 8.06 | 1038 | < .001 |
| Altruistic center | 0.08 | [-0.04, 0.20] | 1.27 | 1038 | .205 |
| Egoistic center | -0.30 | [-0.38, -0.21] | -7.02 | 1038 | < .001 |
| Hedonic center | -0.12 | [-0.22, -0.01] | -2.15 | 1038 | .032 |
| Ingroup center | 0.03 | [-0.04, 0.09] | 0.79 | 1038 | .430 |
| Self dec center | -0.09 | [-0.18, -0.01] | -2.22 | 1038 | .027 |
| Impress manag center | -0.02 | [-0.10, 0.06] | -0.43 | 1038 | .665 |
| Clothing center | 0.00 | [-0.08, 0.09] | 0.10 | 1038 | .917 |
| Gender1 | 0.12 | [-0.03, 0.27] | 1.56 | 1038 | .120 |
| Age center | -0.06 | [-0.09, -0.02] | -3.02 | 1038 | .003 |
| Framing conditionFrameCode1 Norm condition1 | 0.16 | [-0.08, 0.41] | 1.31 | 1038 | .190 |
| Framing conditionFrameCode2 Norm condition1 | -0.10 | [-0.31, 0.12] | -0.87 | 1038 | .383 |
| Framing conditionFrameCode1 Norm condition2 | -0.01 | [-0.16, 0.14] | -0.13 | 1038 | .894 |
| Framing conditionFrameCode2 Norm condition2 | -0.03 | [-0.16, 0.09] | -0.54 | 1038 | .587 |
| Framing conditionFrameCode1 Norm condition3 | 0.03 | [-0.08, 0.13] | 0.51 | 1038 | .610 |
| Framing conditionFrameCode2 Norm condition3 | 0.03 | [-0.06, 0.12] | 0.56 | 1038 | .576 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.05, 0.11] | 0.68 | 1038 | .498 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.08, 0.05] | -0.41 | 1038 | .684 |
| Framing conditionFrameCode1 Biospheric center | -0.02 | [-0.26, 0.21] | -0.20 | 1038 | .842 |
| Framing conditionFrameCode2 Biospheric center | 0.05 | [-0.13, 0.23] | 0.57 | 1038 | .572 |
| Norm condition1 Biospheric center | -0.06 | [-0.20, 0.08] | -0.87 | 1038 | .383 |
| Norm condition2 Biospheric center | 0.07 | [-0.01, 0.15] | 1.64 | 1038 | .102 |
| Norm condition3 Biospheric center | -0.05 | [-0.11, 0.00] | -1.89 | 1038 | .059 |
| Norm condition4 Biospheric center | -0.05 | [-0.09, 0.00] | -1.81 | 1038 | .070 |
| Framing conditionFrameCode1 Altruistic center | 0.02 | [-0.29, 0.32] | 0.10 | 1038 | .921 |
| Framing conditionFrameCode2 Altruistic center | -0.12 | [-0.37, 0.12] | -0.99 | 1038 | .322 |
| Norm condition1 Altruistic center | -0.12 | [-0.32, 0.07] | -1.25 | 1038 | .213 |
| Norm condition2 Altruistic center | -0.01 | [-0.12, 0.09] | -0.23 | 1038 | .819 |
| Norm condition3 Altruistic center | 0.03 | [-0.05, 0.11] | 0.73 | 1038 | .468 |
| Norm condition4 Altruistic center | 0.07 | [0.01, 0.12] | 2.32 | 1038 | .021 |
| Framing conditionFrameCode1 Egoistic center | -0.02 | [-0.22, 0.18] | -0.18 | 1038 | .858 |
| Framing conditionFrameCode2 Egoistic center | 0.04 | [-0.13, 0.21] | 0.47 | 1038 | .635 |
| Norm condition1 Egoistic center | 0.06 | [-0.07, 0.19] | 0.91 | 1038 | .365 |
| Norm condition2 Egoistic center | -0.02 | [-0.09, 0.05] | -0.52 | 1038 | .600 |
| Norm condition3 Egoistic center | 0.01 | [-0.04, 0.07] | 0.54 | 1038 | .592 |
| Norm condition4 Egoistic center | 0.02 | [-0.02, 0.06] | 0.76 | 1038 | .449 |
| Framing conditionFrameCode1 Hedonic center | -0.08 | [-0.34, 0.18] | -0.61 | 1038 | .540 |
| Framing conditionFrameCode2 Hedonic center | 0.18 | [-0.04, 0.40] | 1.63 | 1038 | .104 |
| Norm condition1 Hedonic center | 0.02 | [-0.16, 0.19] | 0.17 | 1038 | .864 |
| Norm condition2 Hedonic center | 0.08 | [-0.01, 0.18] | 1.70 | 1038 | .090 |
| Norm condition3 Hedonic center | -0.03 | [-0.10, 0.04] | -0.79 | 1038 | .432 |
| Norm condition4 Hedonic center | -0.04 | [-0.09, 0.01] | -1.68 | 1038 | .093 |
| Framing conditionFrameCode1 Ingroup center | 0.03 | [-0.13, 0.19] | 0.36 | 1038 | .720 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.20, 0.08] | -0.84 | 1038 | .402 |
| Norm condition1 Ingroup center | 0.01 | [-0.10, 0.11] | 0.15 | 1038 | .879 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.42 | 1038 | .674 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.04] | 0.11 | 1038 | .911 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.84 | 1038 | .403 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.04 | [-0.38, 0.31] | -0.21 | 1038 | .832 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.02 | [-0.26, 0.30] | 0.16 | 1038 | .870 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.16 | [-0.36, 0.04] | -1.54 | 1038 | .124 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.12 | [-0.04, 0.29] | 1.48 | 1038 | .140 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.15 | [0.01, 0.30] | 2.04 | 1038 | .041 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.07 | [-0.04, 0.18] | 1.25 | 1038 | .211 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.04 | [-0.09, 0.18] | 0.66 | 1038 | .510 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.12 | [0.02, 0.21] | 2.46 | 1038 | .014 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.07 | [-0.55, 0.40] | -0.29 | 1038 | .771 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.21 | [-0.20, 0.61] | 1.01 | 1038 | .314 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.26 | [-0.01, 0.53] | 1.91 | 1038 | .056 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | 0.00 | [-0.22, 0.22] | 0.00 | 1038 | .999 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.17 | [-0.38, 0.03] | -1.64 | 1038 | .101 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.06 | [-0.23, 0.10] | -0.76 | 1038 | .445 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | 0.01 | [-0.14, 0.16] | 0.09 | 1038 | .927 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.09 | [-0.20, 0.03] | -1.51 | 1038 | .132 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.07 | [-0.27, 0.41] | 0.39 | 1038 | .697 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.12 | [-0.15, 0.39] | 0.88 | 1038 | .379 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.02 | [-0.19, 0.15] | -0.26 | 1038 | .799 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.16 | [0.01, 0.32] | 2.13 | 1038 | .033 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.07 | [-0.05, 0.20] | 1.15 | 1038 | .249 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.03 | [-0.08, 0.14] | 0.52 | 1038 | .604 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.05 | [-0.15, 0.05] | -0.97 | 1038 | .332 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.04 | [-0.12, 0.04] | -0.93 | 1038 | .354 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | 0.00 | [-0.43, 0.43] | 0.02 | 1038 | .986 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.23 | [-0.60, 0.14] | -1.24 | 1038 | .217 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.07 | [-0.30, 0.16] | -0.63 | 1038 | .528 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | -0.03 | [-0.23, 0.17] | -0.31 | 1038 | .754 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.11 | [-0.28, 0.07] | -1.19 | 1038 | .234 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | -0.03 | [-0.17, 0.11] | -0.44 | 1038 | .661 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | 0.00 | [-0.12, 0.12] | 0.03 | 1038 | .978 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.03 | [-0.07, 0.13] | 0.60 | 1038 | .550 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.20 | [-0.05, 0.45] | 1.59 | 1038 | .111 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.04 | [-0.18, 0.26] | 0.32 | 1038 | .752 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.11 | [-0.04, 0.26] | 1.38 | 1038 | .167 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.10] | -0.44 | 1038 | .660 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.04 | [-0.06, 0.15] | 0.80 | 1038 | .425 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.62 | 1038 | .538 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.16, -0.01] | -2.18 | 1038 | .029 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.11 | 1038 | .266 |

*Note.* DV = Consumer Intentions

#### ANOVA summary

anova(mod\_mice\_imp5) %>%  
 knitr::kable(digits = 3)

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.691 | 2.346 | 2.062 | 0.128 |
| norm\_condition | 4 | 8.168 | 2.042 | 1.795 | 0.128 |
| biospheric\_center | 1 | 147.370 | 147.370 | 129.556 | 0.000 |
| altruistic\_center | 1 | 0.339 | 0.339 | 0.298 | 0.585 |
| egoistic\_center | 1 | 125.686 | 125.686 | 110.494 | 0.000 |
| hedonic\_center | 1 | 3.766 | 3.766 | 3.311 | 0.069 |
| ingroup\_center | 1 | 4.459 | 4.459 | 3.920 | 0.048 |
| self\_dec\_center | 1 | 11.821 | 11.821 | 10.392 | 0.001 |
| impress\_manag\_center | 1 | 0.005 | 0.005 | 0.005 | 0.946 |
| clothing\_center | 1 | 0.799 | 0.799 | 0.702 | 0.402 |
| Gender | 1 | 4.579 | 4.579 | 4.026 | 0.045 |
| Age\_center | 1 | 12.375 | 12.375 | 10.879 | 0.001 |
| framing\_condition:norm\_condition | 8 | 5.594 | 0.699 | 0.615 | 0.766 |
| framing\_condition:biospheric\_center | 2 | 0.282 | 0.141 | 0.124 | 0.884 |
| norm\_condition:biospheric\_center | 4 | 13.482 | 3.371 | 2.963 | 0.019 |
| framing\_condition:altruistic\_center | 2 | 0.210 | 0.105 | 0.092 | 0.912 |
| norm\_condition:altruistic\_center | 4 | 3.334 | 0.833 | 0.733 | 0.570 |
| framing\_condition:egoistic\_center | 2 | 1.020 | 0.510 | 0.448 | 0.639 |
| norm\_condition:egoistic\_center | 4 | 2.170 | 0.543 | 0.477 | 0.753 |
| framing\_condition:hedonic\_center | 2 | 2.679 | 1.340 | 1.178 | 0.308 |
| norm\_condition:hedonic\_center | 4 | 8.464 | 2.116 | 1.860 | 0.115 |
| framing\_condition:ingroup\_center | 2 | 1.345 | 0.672 | 0.591 | 0.554 |
| norm\_condition:ingroup\_center | 4 | 0.389 | 0.097 | 0.085 | 0.987 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 14.333 | 1.792 | 1.575 | 0.128 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 13.764 | 1.720 | 1.513 | 0.148 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 8.916 | 1.114 | 0.980 | 0.450 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 4.574 | 0.572 | 0.503 | 0.855 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 12.867 | 1.608 | 1.414 | 0.186 |
| Residuals | 1038 | 1180.719 | 1.137 | NA | NA |

## Simple Effects

Averaging scores across imputations

complete\_data\_subset <- complete\_data %>%  
 dplyr::select(.imp, .id, consumer\_intentions, consumer\_behaviors, Gender, framing\_condition, norm\_condition, biospheric\_center, altruistic\_center, egoistic\_center, hedonic\_center, ingroup\_center, Age\_center, clothing\_center, self\_dec\_center, impress\_manag\_center)  
  
average\_df <- complete\_data\_subset %>%   
 group\_by(.id) %>%  
 transmute(.imp = .imp,   
 consumer\_behaviors = consumer\_behaviors,   
 Gender = Gender,  
 framing\_condition = framing\_condition,  
 norm\_condition = norm\_condition,  
 biospheric\_center = mean(biospheric\_center),  
 altruistic\_center = mean(altruistic\_center),  
 egoistic\_center = mean(egoistic\_center),  
 hedonic\_center = mean(hedonic\_center),  
 ingroup\_center = mean(ingroup\_center),  
 Age\_center = mean(Age\_center),  
 clothing\_center = mean(clothing\_center),  
 self\_dec\_center = mean(self\_dec\_center),  
 impress\_manag\_center = mean(impress\_manag\_center),  
 consumer\_intentions = mean(consumer\_intentions))  
  
  
average\_df <- average\_df %>%  
 filter(.imp == 1)

Labels to use with facet\_wrap

norm\_labs <- c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")  
names(norm\_labs) <- c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm")  
  
frame\_labs <- c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")  
names(frame\_labs) <- c("control\_framing","pro\_env\_framing","self\_enh\_framing")

### Framing Condition

H1: Consumer intentions/behaviors will be lower in the self-enhancing framing than in the pro-environmental or control framing conditions.

Comparing each level of framing condition

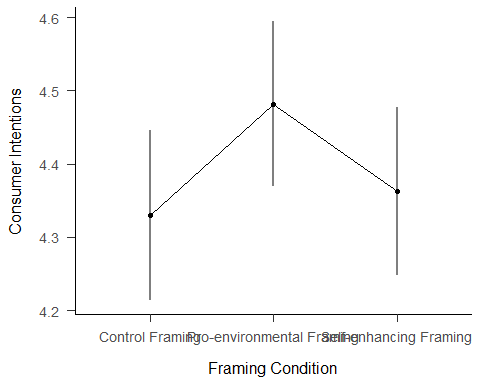
frame\_means <- emmeans(mod\_mice, pairwise ~ framing\_condition, adjust = "none")  
  
frame\_means

## $emmeans  
## framing\_condition emmean SE df lower.CL upper.CL  
## control\_framing 4.33 0.0589 1038 4.21 4.45  
## pro\_env\_framing 4.48 0.0572 1038 4.37 4.59  
## self\_enh\_framing 4.36 0.0583 1038 4.25 4.48  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_framing - pro\_env\_framing -0.152 0.0811 1038 -1.879 0.0605  
## control\_framing - self\_enh\_framing -0.033 0.0822 1038 -0.401 0.6883  
## pro\_env\_framing - self\_enh\_framing 0.119 0.0809 1038 1.477 0.1400  
##   
## Results are averaged over the levels of: norm\_condition, Gender

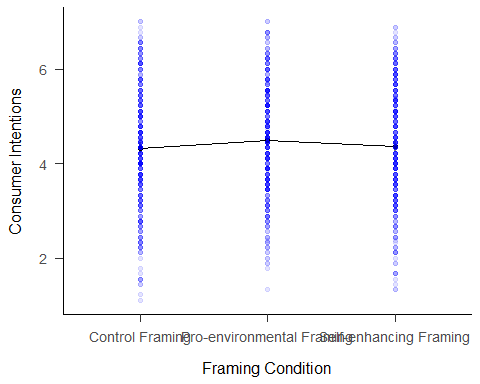
confint(frame\_means)

## $emmeans  
## framing\_condition emmean SE df lower.CL upper.CL  
## control\_framing 4.33 0.0589 1038 4.21 4.45  
## pro\_env\_framing 4.48 0.0572 1038 4.37 4.59  
## self\_enh\_framing 4.36 0.0583 1038 4.25 4.48  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df lower.CL upper.CL  
## control\_framing - pro\_env\_framing -0.152 0.0811 1038 -0.3116 0.00675  
## control\_framing - self\_enh\_framing -0.033 0.0822 1038 -0.1943 0.12831  
## pro\_env\_framing - self\_enh\_framing 0.119 0.0809 1038 -0.0392 0.27807  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, ~ framing\_condition, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.5), xlab = "Framing Condition", ylab = "Consumer Intentions") + scale\_x\_discrete(breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"),  
 labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



# with data overlaid (scores averaged across imputations)  
emmip(mod\_mice, ~ framing\_condition, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.5), xlab = "Framing Condition", ylab = "Consumer Intentions") + geom\_point(data = average\_df, aes(x = framing\_condition, y = consumer\_intentions), alpha = 0.1, color = "blue") + scale\_x\_discrete(breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"),  
 labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



* Intentions are highest in the pro-environmental condition
* No significant difference in consumer intentions between the pro-environmental and self-enhancing framing conditions, t(1039) = 1.33, p = .184
* No significant difference in consumer intentions between the pro-environmental and control framing conditions, t(1039) = -1.85, p = .064
* No significant difference in consumer intentions between the self-enhancing and control framing conditions, t(1039) = -0.54, p = .592

Effect Sizes (Cohen’s D)

sigma\_pool <- mean(pool\_obj$glanced$sigma)  
df\_resid\_pool <- mean(pool\_obj$glanced$df.residual)  
  
eff\_size(frame\_means, sigma = sigma\_pool, edf = df\_resid\_pool)

## contrast effect.size SE df lower.CL upper.CL  
## (control\_framing - pro\_env\_framing) -0.1429 0.0761 1038 -0.2922 0.00645  
## (control\_framing - self\_enh\_framing) -0.0309 0.0771 1038 -0.1821 0.12028  
## (pro\_env\_framing - self\_enh\_framing) 0.1119 0.0758 1038 -0.0369 0.26072  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## sigma used for effect sizes: 1.067   
## Confidence level used: 0.95

### Norm Condition

H2: Consumer intentions/behaviors will be lower in each norm condition compared to the control norm condition.

Comparing each level of norm condition:

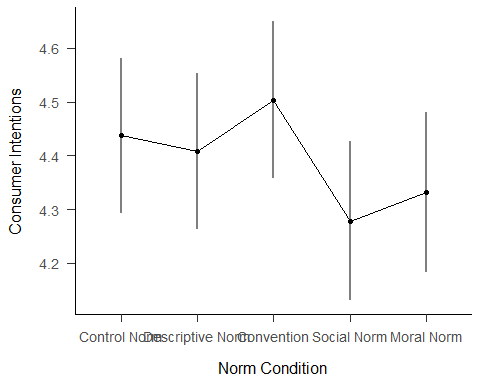
norm\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition, adjust = "none")  
  
norm\_means

## $emmeans  
## norm\_condition emmean SE df lower.CL upper.CL  
## control\_norm 4.44 0.0737 1038 4.29 4.58  
## descriptive\_norm 4.41 0.0739 1038 4.26 4.55  
## convention\_norm 4.50 0.0745 1038 4.36 4.65  
## social\_norm 4.28 0.0751 1038 4.13 4.43  
## moral\_norm 4.33 0.0760 1038 4.18 4.48  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.0293 0.104 1038 0.282 0.7779  
## control\_norm - convention\_norm -0.0659 0.104 1038 -0.632 0.5275  
## control\_norm - social\_norm 0.1586 0.104 1038 1.519 0.1290  
## control\_norm - moral\_norm 0.1053 0.105 1038 1.006 0.3148  
## descriptive\_norm - convention\_norm -0.0952 0.104 1038 -0.913 0.3614  
## descriptive\_norm - social\_norm 0.1293 0.104 1038 1.237 0.2164  
## descriptive\_norm - moral\_norm 0.0760 0.105 1038 0.722 0.4703  
## convention\_norm - social\_norm 0.2244 0.105 1038 2.134 0.0331  
## convention\_norm - moral\_norm 0.1712 0.106 1038 1.613 0.1070  
## social\_norm - moral\_norm -0.0532 0.106 1038 -0.502 0.6160  
##   
## Results are averaged over the levels of: framing\_condition, Gender

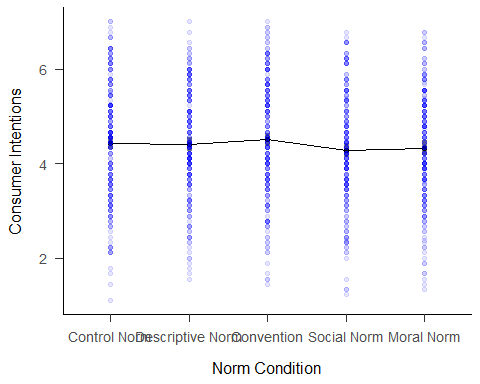
apa\_print(norm\_means$emmeans)

## $estimate  
## $estimate$Controlnorm  
## [1] "$M = 4.44$, 95\\% CI $[4.29, 4.58]$"  
##   
## $estimate$Descriptivenorm  
## [1] "$M = 4.41$, 95\\% CI $[4.26, 4.55]$"  
##   
## $estimate$Conventionnorm  
## [1] "$M = 4.50$, 95\\% CI $[4.36, 4.65]$"  
##   
## $estimate$Socialnorm  
## [1] "$M = 4.28$, 95\\% CI $[4.13, 4.43]$"  
##   
## $estimate$Moralnorm  
## [1] "$M = 4.33$, 95\\% CI $[4.18, 4.48]$"  
##   
##   
## $statistic  
## $statistic$Controlnorm  
## [1] "$t(1,038) = 60.21$, $p < .001$"  
##   
## $statistic$Descriptivenorm  
## [1] "$t(1,038) = 59.66$, $p < .001$"  
##   
## $statistic$Conventionnorm  
## [1] "$t(1,038) = 60.46$, $p < .001$"  
##   
## $statistic$Socialnorm  
## [1] "$t(1,038) = 56.99$, $p < .001$"  
##   
## $statistic$Moralnorm  
## [1] "$t(1,038) = 56.98$, $p < .001$"  
##   
##   
## $full\_result  
## $full\_result$Controlnorm  
## [1] "$M = 4.44$, 95\\% CI $[4.29, 4.58]$, $t(1,038) = 60.21$, $p < .001$"  
##   
## $full\_result$Descriptivenorm  
## [1] "$M = 4.41$, 95\\% CI $[4.26, 4.55]$, $t(1,038) = 59.66$, $p < .001$"  
##   
## $full\_result$Conventionnorm  
## [1] "$M = 4.50$, 95\\% CI $[4.36, 4.65]$, $t(1,038) = 60.46$, $p < .001$"  
##   
## $full\_result$Socialnorm  
## [1] "$M = 4.28$, 95\\% CI $[4.13, 4.43]$, $t(1,038) = 56.99$, $p < .001$"  
##   
## $full\_result$Moralnorm  
## [1] "$M = 4.33$, 95\\% CI $[4.18, 4.48]$, $t(1,038) = 56.98$, $p < .001$"  
##   
##   
## $table  
## A data.frame with 6 labelled columns:  
##   
## norm\_condition estimate conf.int statistic df p.value  
## Controlnorm Control norm 4.44 [4.29, 4.58] 60.21 1,038 < .001  
## Descriptivenorm Descriptive norm 4.41 [4.26, 4.55] 59.66 1,038 < .001  
## Conventionnorm Convention norm 4.50 [4.36, 4.65] 60.46 1,038 < .001  
## Socialnorm Social norm 4.28 [4.13, 4.43] 56.99 1,038 < .001  
## Moralnorm Moral norm 4.33 [4.18, 4.48] 56.98 1,038 < .001  
##   
## norm\_condition: norm\_condition   
## estimate : $M$   
## conf.int : 95\\% CI   
## statistic : $t$   
## df : $\\mathit{df}$   
## p.value : $p$   
## attr(,"class")  
## [1] "apa\_results" "list"

# without data overlaid  
emmip(mod\_mice, ~ norm\_condition, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.5), xlab = "Norm Condition", ylab = "Consumer Intentions") + scale\_x\_discrete(breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"),  
 labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ norm\_condition, CIs = TRUE, xlab = "Norm Condition", ylab = "Consumer Intentions") + geom\_point(data = average\_df, aes(x = norm\_condition, y = consumer\_intentions), alpha = 0.1, color = "blue") + scale\_x\_discrete(breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"),  
 labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + theme\_apa()



* There was no significant difference between any norm condition compared to the control condition (all ps > .129)

Effect Sizes (Cohen’s D):

eff\_size(norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool)

## contrast effect.size SE df lower.CL upper.CL  
## (control\_norm - descriptive\_norm) 0.0275 0.0973 1038 -0.1635 0.218  
## (control\_norm - convention\_norm) -0.0617 0.0977 1038 -0.2535 0.130  
## (control\_norm - social\_norm) 0.1486 0.0979 1038 -0.0435 0.341  
## (control\_norm - moral\_norm) 0.0987 0.0982 1038 -0.0939 0.291  
## (descriptive\_norm - convention\_norm) -0.0892 0.0977 1038 -0.2810 0.103  
## (descriptive\_norm - social\_norm) 0.1212 0.0980 1038 -0.0711 0.313  
## (descriptive\_norm - moral\_norm) 0.0713 0.0987 1038 -0.1224 0.265  
## (convention\_norm - social\_norm) 0.2104 0.0987 1038 0.0167 0.404  
## (convention\_norm - moral\_norm) 0.1605 0.0995 1038 -0.0348 0.356  
## (social\_norm - moral\_norm) -0.0499 0.0994 1038 -0.2450 0.145  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## sigma used for effect sizes: 1.067   
## Confidence level used: 0.95

Exploratory finding:

* Intentions were significantly higher in the convention versus the social norm condition, t(1039) = 2.20, p = .028.

### Framing X Norm

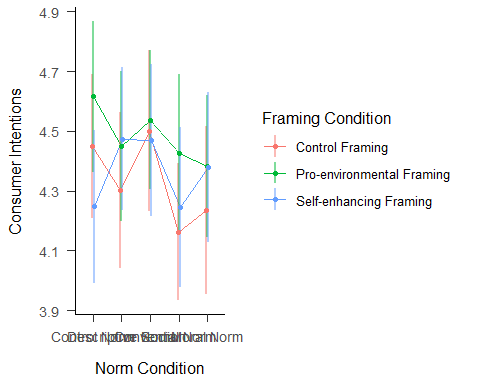
H3: There will be a two-way interaction between framing & norm condition such that the effect of each norm will be stronger in the self-enhancing framing than in the pro-environmental or control framing conditions.

Effect of norm condition at each level of framing condition:

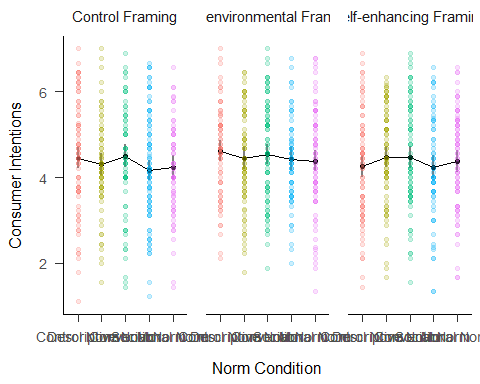
cell\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition | framing\_condition, adjust = "none")  
  
cell\_means

## $emmeans  
## framing\_condition = control\_framing:  
## norm\_condition emmean SE df lower.CL upper.CL  
## control\_norm 4.45 0.123 1038 4.21 4.69  
## descriptive\_norm 4.30 0.133 1038 4.04 4.56  
## convention\_norm 4.50 0.137 1038 4.23 4.77  
## social\_norm 4.16 0.116 1038 3.94 4.39  
## moral\_norm 4.23 0.143 1038 3.95 4.52  
##   
## framing\_condition = pro\_env\_framing:  
## norm\_condition emmean SE df lower.CL upper.CL  
## control\_norm 4.62 0.128 1038 4.36 4.87  
## descriptive\_norm 4.45 0.128 1038 4.20 4.70  
## convention\_norm 4.54 0.119 1038 4.30 4.77  
## social\_norm 4.43 0.134 1038 4.16 4.69  
## moral\_norm 4.38 0.121 1038 4.15 4.62  
##   
## framing\_condition = self\_enh\_framing:  
## norm\_condition emmean SE df lower.CL upper.CL  
## control\_norm 4.25 0.130 1038 3.99 4.50  
## descriptive\_norm 4.47 0.122 1038 4.23 4.71  
## convention\_norm 4.47 0.130 1038 4.22 4.72  
## social\_norm 4.25 0.137 1038 3.98 4.51  
## moral\_norm 4.38 0.128 1038 4.13 4.63  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## framing\_condition = control\_framing:  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.14755 0.181 1038 0.817 0.4143  
## control\_norm - convention\_norm -0.05192 0.184 1038 -0.282 0.7778  
## control\_norm - social\_norm 0.28582 0.169 1038 1.690 0.0913  
## control\_norm - moral\_norm 0.21486 0.189 1038 1.138 0.2554  
## descriptive\_norm - convention\_norm -0.19946 0.190 1038 -1.047 0.2953  
## descriptive\_norm - social\_norm 0.13827 0.175 1038 0.789 0.4306  
## descriptive\_norm - moral\_norm 0.06732 0.195 1038 0.345 0.7299  
## convention\_norm - social\_norm 0.33773 0.179 1038 1.882 0.0601  
## convention\_norm - moral\_norm 0.26678 0.198 1038 1.348 0.1780  
## social\_norm - moral\_norm -0.07095 0.184 1038 -0.385 0.7001  
##   
## framing\_condition = pro\_env\_framing:  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.16638 0.181 1038 0.919 0.3582  
## control\_norm - convention\_norm 0.07749 0.174 1038 0.445 0.6563  
## control\_norm - social\_norm 0.18804 0.185 1038 1.017 0.3094  
## control\_norm - moral\_norm 0.23216 0.176 1038 1.323 0.1862  
## descriptive\_norm - convention\_norm -0.08889 0.174 1038 -0.510 0.6103  
## descriptive\_norm - social\_norm 0.02166 0.185 1038 0.117 0.9068  
## descriptive\_norm - moral\_norm 0.06578 0.176 1038 0.374 0.7086  
## convention\_norm - social\_norm 0.11055 0.178 1038 0.622 0.5344  
## convention\_norm - moral\_norm 0.15467 0.168 1038 0.919 0.3582  
## social\_norm - moral\_norm 0.04412 0.179 1038 0.246 0.8056  
##   
## framing\_condition = self\_enh\_framing:  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm -0.22605 0.178 1038 -1.271 0.2039  
## control\_norm - convention\_norm -0.22321 0.184 1038 -1.215 0.2246  
## control\_norm - social\_norm 0.00180 0.188 1038 0.010 0.9923  
## control\_norm - moral\_norm -0.13100 0.180 1038 -0.726 0.4680  
## descriptive\_norm - convention\_norm 0.00284 0.177 1038 0.016 0.9872  
## descriptive\_norm - social\_norm 0.22785 0.183 1038 1.244 0.2137  
## descriptive\_norm - moral\_norm 0.09505 0.177 1038 0.538 0.5904  
## convention\_norm - social\_norm 0.22501 0.188 1038 1.197 0.2316  
## convention\_norm - moral\_norm 0.09221 0.182 1038 0.505 0.6134  
## social\_norm - moral\_norm -0.13280 0.187 1038 -0.710 0.4777  
##   
## Results are averaged over the levels of: Gender

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ norm\_condition, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.5), xlab = "Norm Condition", ylab = "Consumer Intentions") + scale\_x\_discrete(breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"),  
 labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ norm\_condition | framing\_condition, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.5), xlab = "Norm Condition", ylab = "Consumer Intentions") + geom\_point(data = average\_df, aes(x = norm\_condition, y = consumer\_intentions, color = norm\_condition), alpha = 0.2, show.legend = FALSE) + scale\_x\_discrete(breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"),  
 labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* Differences between the control norm condition & other norm conditions were not significant within any of the framing conditions.

Effect Sizes (Cohen’s D):

eff\_size(cell\_means, sigma = sigma\_pool, edf = df\_resid\_pool)

## framing\_condition = control\_framing:  
## contrast effect.size SE df lower.CL upper.CL  
## (control\_norm - descriptive\_norm) 0.13830 0.169 1038 -0.1940 0.471  
## (control\_norm - convention\_norm) -0.04866 0.172 1038 -0.3869 0.290  
## (control\_norm - social\_norm) 0.26791 0.159 1038 -0.0434 0.579  
## (control\_norm - moral\_norm) 0.20140 0.177 1038 -0.1460 0.549  
## (descriptive\_norm - convention\_norm) -0.18696 0.179 1038 -0.5374 0.163  
## (descriptive\_norm - social\_norm) 0.12961 0.164 1038 -0.1930 0.452  
## (descriptive\_norm - moral\_norm) 0.06310 0.183 1038 -0.2954 0.422  
## (convention\_norm - social\_norm) 0.31657 0.168 1038 -0.0138 0.647  
## (convention\_norm - moral\_norm) 0.25006 0.186 1038 -0.1141 0.614  
## (social\_norm - moral\_norm) -0.06651 0.173 1038 -0.4052 0.272  
##   
## framing\_condition = pro\_env\_framing:  
## contrast effect.size SE df lower.CL upper.CL  
## (control\_norm - descriptive\_norm) 0.15595 0.170 1038 -0.1770 0.489  
## (control\_norm - convention\_norm) 0.07263 0.163 1038 -0.2475 0.393  
## (control\_norm - social\_norm) 0.17625 0.173 1038 -0.1639 0.516  
## (control\_norm - moral\_norm) 0.21761 0.165 1038 -0.1053 0.541  
## (descriptive\_norm - convention\_norm) -0.08332 0.163 1038 -0.4040 0.237  
## (descriptive\_norm - social\_norm) 0.02030 0.173 1038 -0.3200 0.361  
## (descriptive\_norm - moral\_norm) 0.06166 0.165 1038 -0.2620 0.385  
## (convention\_norm - social\_norm) 0.10362 0.167 1038 -0.2236 0.431  
## (convention\_norm - moral\_norm) 0.14498 0.158 1038 -0.1646 0.455  
## (social\_norm - moral\_norm) 0.04136 0.168 1038 -0.2883 0.371  
##   
## framing\_condition = self\_enh\_framing:  
## contrast effect.size SE df lower.CL upper.CL  
## (control\_norm - descriptive\_norm) -0.21188 0.167 1038 -0.5391 0.115  
## (control\_norm - convention\_norm) -0.20922 0.172 1038 -0.5472 0.129  
## (control\_norm - social\_norm) 0.00169 0.176 1038 -0.3439 0.347  
## (control\_norm - moral\_norm) -0.12279 0.169 1038 -0.4547 0.209  
## (descriptive\_norm - convention\_norm) 0.00266 0.166 1038 -0.3227 0.328  
## (descriptive\_norm - social\_norm) 0.21357 0.172 1038 -0.1233 0.550  
## (descriptive\_norm - moral\_norm) 0.08909 0.165 1038 -0.2356 0.414  
## (convention\_norm - social\_norm) 0.21091 0.176 1038 -0.1350 0.557  
## (convention\_norm - moral\_norm) 0.08643 0.171 1038 -0.2491 0.422  
## (social\_norm - moral\_norm) -0.12448 0.175 1038 -0.4684 0.219  
##   
## Results are averaged over the levels of: Gender   
## sigma used for effect sizes: 1.067   
## Confidence level used: 0.95

Exploratory finding:

* In the control framing condition, consumer intentions were close to being significantly higher in the convention norm condition (M = 4.51) compared to the social norm condition (M = 4.17), Mdiff = 0.34, t(1039) = 1.91, p = .056

Comparing consumer intentions for each norm condition between each framing condition:

# Control norm  
chosen\_values <- list(norm\_condition = c("control\_norm"), framing\_condition = c("control\_framing", "pro\_env\_framing", "self\_enh\_framing"))  
  
control\_norm\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition\*framing\_condition, at = chosen\_values, adjust = "none")  
  
control\_norm\_means

## $emmeans  
## norm\_condition framing\_condition emmean SE df lower.CL upper.CL  
## control\_norm control\_framing 4.45 0.123 1038 4.21 4.69  
## control\_norm pro\_env\_framing 4.62 0.128 1038 4.36 4.87  
## control\_norm self\_enh\_framing 4.25 0.130 1038 3.99 4.50  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE  
## control\_norm control\_framing - control\_norm pro\_env\_framing -0.166 0.177  
## control\_norm control\_framing - control\_norm self\_enh\_framing 0.202 0.178  
## control\_norm pro\_env\_framing - control\_norm self\_enh\_framing 0.368 0.182  
## df t.ratio p.value  
## 1038 -0.935 0.3500  
## 1038 1.133 0.2576  
## 1038 2.026 0.0430  
##   
## Results are averaged over the levels of: Gender

eff\_size(control\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool)

## contrast effect.size  
## (control\_norm control\_framing - control\_norm pro\_env\_framing) -0.156  
## (control\_norm control\_framing - control\_norm self\_enh\_framing) 0.189  
## (control\_norm pro\_env\_framing - control\_norm self\_enh\_framing) 0.345  
## SE df lower.CL upper.CL  
## 0.166 1038 -0.4821 0.171  
## 0.167 1038 -0.1387 0.517  
## 0.170 1038 0.0105 0.679  
##   
## Results are averaged over the levels of: Gender   
## sigma used for effect sizes: 1.067   
## Confidence level used: 0.95

# Descriptive norm  
chosen\_values <- list(norm\_condition = c("descriptive\_norm"), framing\_condition = c("control\_framing", "pro\_env\_framing", "self\_enh\_framing"))  
  
descr\_norm\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition\*framing\_condition, at = chosen\_values, adjust = "none")  
descr\_norm\_means

## $emmeans  
## norm\_condition framing\_condition emmean SE df lower.CL upper.CL  
## descriptive\_norm control\_framing 4.30 0.133 1038 4.04 4.56  
## descriptive\_norm pro\_env\_framing 4.45 0.128 1038 4.20 4.70  
## descriptive\_norm self\_enh\_framing 4.47 0.122 1038 4.23 4.71  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate  
## descriptive\_norm control\_framing - descriptive\_norm pro\_env\_framing -0.1471  
## descriptive\_norm control\_framing - descriptive\_norm self\_enh\_framing -0.1716  
## descriptive\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing -0.0245  
## SE df t.ratio p.value  
## 0.185 1038 -0.797 0.4257  
## 0.180 1038 -0.955 0.3396  
## 0.177 1038 -0.139 0.8898  
##   
## Results are averaged over the levels of: Gender

eff\_size(descr\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool)

## contrast   
## (descriptive\_norm control\_framing - descriptive\_norm pro\_env\_framing)   
## (descriptive\_norm control\_framing - descriptive\_norm self\_enh\_framing)  
## (descriptive\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing)  
## effect.size SE df lower.CL upper.CL  
## -0.138 0.173 1038 -0.478 0.202  
## -0.161 0.168 1038 -0.491 0.170  
## -0.023 0.166 1038 -0.348 0.302  
##   
## Results are averaged over the levels of: Gender   
## sigma used for effect sizes: 1.067   
## Confidence level used: 0.95

# Convention norm  
chosen\_values <- list(norm\_condition = c("convention\_norm"), framing\_condition = c("control\_framing", "pro\_env\_framing", "self\_enh\_framing"))  
  
conv\_norm\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition\*framing\_condition, at = chosen\_values, adjust = "none")  
conv\_norm\_means

## $emmeans  
## norm\_condition framing\_condition emmean SE df lower.CL upper.CL  
## convention\_norm control\_framing 4.50 0.137 1038 4.23 4.77  
## convention\_norm pro\_env\_framing 4.54 0.119 1038 4.30 4.77  
## convention\_norm self\_enh\_framing 4.47 0.130 1038 4.22 4.72  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate  
## convention\_norm control\_framing - convention\_norm pro\_env\_framing -0.0365  
## convention\_norm control\_framing - convention\_norm self\_enh\_framing 0.0307  
## convention\_norm pro\_env\_framing - convention\_norm self\_enh\_framing 0.0672  
## SE df t.ratio p.value  
## 0.181 1038 -0.202 0.8398  
## 0.188 1038 0.163 0.8706  
## 0.175 1038 0.384 0.7010  
##   
## Results are averaged over the levels of: Gender

eff\_size(conv\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool)

## contrast   
## (convention\_norm control\_framing - convention\_norm pro\_env\_framing)   
## (convention\_norm control\_framing - convention\_norm self\_enh\_framing)  
## (convention\_norm pro\_env\_framing - convention\_norm self\_enh\_framing)  
## effect.size SE df lower.CL upper.CL  
## -0.0343 0.169 1038 -0.367 0.298  
## 0.0288 0.177 1038 -0.318 0.375  
## 0.0630 0.164 1038 -0.259 0.385  
##   
## Results are averaged over the levels of: Gender   
## sigma used for effect sizes: 1.067   
## Confidence level used: 0.95

# Social norm  
chosen\_values <- list(norm\_condition = c("social\_norm"), framing\_condition = c("control\_framing", "pro\_env\_framing", "self\_enh\_framing"))  
  
soc\_norm\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition\*framing\_condition, at = chosen\_values, adjust = "none")  
soc\_norm\_means

## $emmeans  
## norm\_condition framing\_condition emmean SE df lower.CL upper.CL  
## social\_norm control\_framing 4.16 0.116 1038 3.94 4.39  
## social\_norm pro\_env\_framing 4.43 0.134 1038 4.16 4.69  
## social\_norm self\_enh\_framing 4.25 0.137 1038 3.98 4.51  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df  
## social\_norm control\_framing - social\_norm pro\_env\_framing -0.264 0.177 1038  
## social\_norm control\_framing - social\_norm self\_enh\_framing -0.082 0.179 1038  
## social\_norm pro\_env\_framing - social\_norm self\_enh\_framing 0.182 0.191 1038  
## t.ratio p.value  
## -1.491 0.1363  
## -0.457 0.6475  
## 0.950 0.3425  
##   
## Results are averaged over the levels of: Gender

eff\_size(soc\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool)

## contrast effect.size SE  
## (social\_norm control\_framing - social\_norm pro\_env\_framing) -0.2472 0.166  
## (social\_norm control\_framing - social\_norm self\_enh\_framing) -0.0769 0.168  
## (social\_norm pro\_env\_framing - social\_norm self\_enh\_framing) 0.1703 0.179  
## df lower.CL upper.CL  
## 1038 -0.573 0.0783  
## 1038 -0.407 0.2531  
## 1038 -0.182 0.5222  
##   
## Results are averaged over the levels of: Gender   
## sigma used for effect sizes: 1.067   
## Confidence level used: 0.95

# Moral norm  
chosen\_values <- list(norm\_condition = c("moral\_norm"), framing\_condition = c("control\_framing", "pro\_env\_framing", "self\_enh\_framing"))  
  
moral\_norm\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition\*framing\_condition, at = chosen\_values, adjust = "none")  
moral\_norm\_means

## $emmeans  
## norm\_condition framing\_condition emmean SE df lower.CL upper.CL  
## moral\_norm control\_framing 4.23 0.143 1038 3.95 4.52  
## moral\_norm pro\_env\_framing 4.38 0.121 1038 4.15 4.62  
## moral\_norm self\_enh\_framing 4.38 0.128 1038 4.13 4.63  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df  
## moral\_norm control\_framing - moral\_norm pro\_env\_framing -0.14866 0.187 1038  
## moral\_norm control\_framing - moral\_norm self\_enh\_framing -0.14390 0.192 1038  
## moral\_norm pro\_env\_framing - moral\_norm self\_enh\_framing 0.00476 0.175 1038  
## t.ratio p.value  
## -0.796 0.4261  
## -0.750 0.4531  
## 0.027 0.9784  
##   
## Results are averaged over the levels of: Gender

eff\_size(moral\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool)

## contrast effect.size SE  
## (moral\_norm control\_framing - moral\_norm pro\_env\_framing) -0.13934 0.175  
## (moral\_norm control\_framing - moral\_norm self\_enh\_framing) -0.13488 0.180  
## (moral\_norm pro\_env\_framing - moral\_norm self\_enh\_framing) 0.00446 0.164  
## df lower.CL upper.CL  
## 1038 -0.483 0.204  
## 1038 -0.488 0.218  
## 1038 -0.318 0.327  
##   
## Results are averaged over the levels of: Gender   
## sigma used for effect sizes: 1.067   
## Confidence level used: 0.95

### Values Interactions

H4: There will be a three-way interaction between values (biospheric, egoistic, altruistic, hedonic), framing condition, & norm condition such that when a pro-environmental or control framing is used, values will moderate the effect of each norm condition, but not when a self-enhancing framing is used.

### Biospheric Values

First, relationship between biospheric values & consumer intentions for each norm condition:

bio\_norm\_means <- emtrends(mod\_mice, ~norm\_condition, var = "biospheric\_center", adjust = "none")  
  
bio\_norm\_means

## norm\_condition biospheric\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.449 0.101 1038 0.2511 0.647  
## descriptive\_norm 0.315 0.103 1038 0.1121 0.518  
## convention\_norm 0.609 0.102 1038 0.4081 0.809  
## social\_norm 0.261 0.102 1038 0.0612 0.460  
## moral\_norm 0.196 0.115 1038 -0.0292 0.421  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95

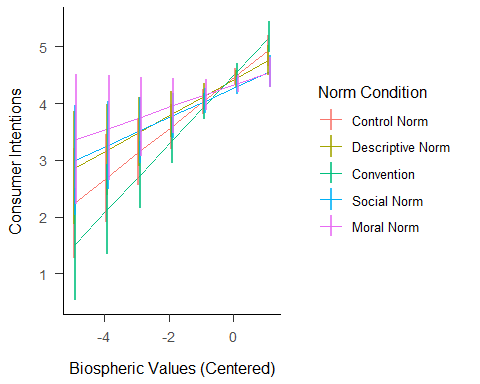
bio\_norm\_contr <- contrast(bio\_norm\_means, "pairwise")  
bio\_norm\_contr

## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.1340 0.144 1038 0.929 0.8858  
## control\_norm - convention\_norm -0.1598 0.144 1038 -1.108 0.8026  
## control\_norm - social\_norm 0.1883 0.140 1038 1.341 0.6658  
## control\_norm - moral\_norm 0.2532 0.153 1038 1.656 0.4616  
## descriptive\_norm - convention\_norm -0.2937 0.146 1038 -2.018 0.2581  
## descriptive\_norm - social\_norm 0.0543 0.146 1038 0.372 0.9959  
## descriptive\_norm - moral\_norm 0.1192 0.154 1038 0.772 0.9385  
## convention\_norm - social\_norm 0.3481 0.144 1038 2.419 0.1111  
## convention\_norm - moral\_norm 0.4130 0.154 1038 2.690 0.0562  
## social\_norm - moral\_norm 0.0649 0.153 1038 0.424 0.9933  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## P value adjustment: tukey method for comparing a family of 5 estimates

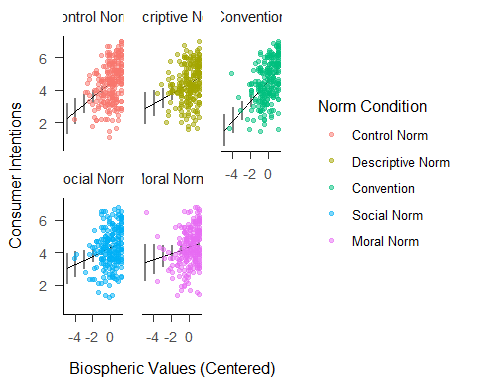
# On a single graph  
describe(average\_df$biospheric\_center)

## vars n mean sd median trimmed mad min max range skew kurtosis se  
## X1 1 1133 0 0.99 0.15 0.12 1.11 -4.85 1.15 6 -1.1 1.6 0.03

at\_list <- list(biospheric\_center = seq(-4.9, 1.2, by = 1)) # add .05 to the bounds set by min and max  
  
# without data overlaid  
emmip(mod\_mice, norm\_condition ~ biospheric\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Biospheric Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"),  
 labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ biospheric\_center | norm\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Biospheric Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + geom\_point(data = average\_df, aes(x = biospheric\_center, y = consumer\_intentions, color = norm\_condition), alpha = 0.5) + facet\_wrap(~norm\_condition, labeller = labeller(norm\_condition = norm\_labs)) + theme\_apa()



* Biospheric values was a significant, positive predictor of consumer intentions in all norm conditions except for the moral norm conditions in which it was a non-significant, positive predictor.

Is the slope of the relationship between biospheric values & consumer intentions stronger in any one of the norm conditions compared to the others?

bio\_norm\_slopes <- emtrends(mod\_mice, pairwise~norm\_condition, var = "biospheric\_center", adjust = "none")  
bio\_norm\_slopes

## $emtrends  
## norm\_condition biospheric\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.449 0.101 1038 0.2511 0.647  
## descriptive\_norm 0.315 0.103 1038 0.1121 0.518  
## convention\_norm 0.609 0.102 1038 0.4081 0.809  
## social\_norm 0.261 0.102 1038 0.0612 0.460  
## moral\_norm 0.196 0.115 1038 -0.0292 0.421  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.1340 0.144 1038 0.929 0.3533  
## control\_norm - convention\_norm -0.1598 0.144 1038 -1.108 0.2683  
## control\_norm - social\_norm 0.1883 0.140 1038 1.341 0.1803  
## control\_norm - moral\_norm 0.2532 0.153 1038 1.656 0.0979  
## descriptive\_norm - convention\_norm -0.2937 0.146 1038 -2.018 0.0439  
## descriptive\_norm - social\_norm 0.0543 0.146 1038 0.372 0.7097  
## descriptive\_norm - moral\_norm 0.1192 0.154 1038 0.772 0.4400  
## convention\_norm - social\_norm 0.3481 0.144 1038 2.419 0.0157  
## convention\_norm - moral\_norm 0.4130 0.154 1038 2.690 0.0073  
## social\_norm - moral\_norm 0.0649 0.153 1038 0.424 0.6719  
##   
## Results are averaged over the levels of: framing\_condition, Gender

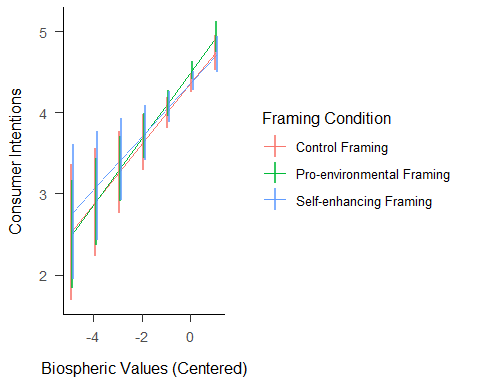
The relationship between biospheric values and consumer intentions was significantly stronger in the convention norm condition (b = 0.61) compared to the moral norm condition (b = 0.20), t(1039) = -2.69, p = .007, and in the convention norm condition compared to the social norm condition (b = 0.26), t(1039) = 2.49, p = .013, and in the convention norm condition compared to the descriptive norm condition (b = 0.32), t(1039) = -1.98, p = .048.

Second, relationship between biospheric values & consumer intentions for each framing condition:

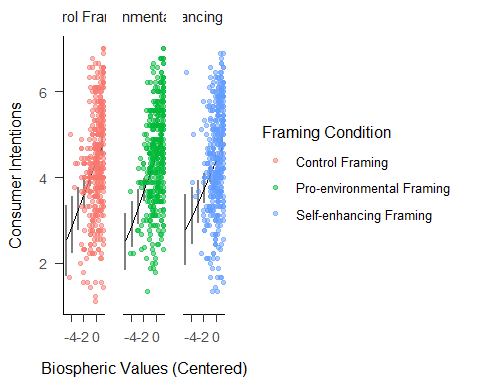
emtrends(mod\_mice, ~framing\_condition, var = "biospheric\_center", adjust = "none")

## framing\_condition biospheric\_center.trend SE df lower.CL upper.CL  
## control\_framing 0.369 0.0853 1038 0.201 0.536  
## pro\_env\_framing 0.405 0.0691 1038 0.269 0.540  
## self\_enh\_framing 0.324 0.0861 1038 0.155 0.493  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ biospheric\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Biospheric Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"),  
 labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ biospheric\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Biospheric Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + geom\_point(data = average\_df, aes(x = biospheric\_center, y = consumer\_intentions, color = framing\_condition), alpha = 0.5) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* Biospheric values were significantly, positively related to consumer intentions in all framing conditions.

Is the slope of the relationship between biospheric values & consumer intentions stronger in any one of the framing conditions compared to the others?

bio\_frame\_trends <- emtrends(mod\_mice, pairwise~framing\_condition, var = "biospheric\_center", adjust = "none")  
bio\_frame\_trends

## $emtrends  
## framing\_condition biospheric\_center.trend SE df lower.CL upper.CL  
## control\_framing 0.369 0.0853 1038 0.201 0.536  
## pro\_env\_framing 0.405 0.0691 1038 0.269 0.540  
## self\_enh\_framing 0.324 0.0861 1038 0.155 0.493  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_framing - pro\_env\_framing -0.0361 0.11 1038 -0.329 0.7419  
## control\_framing - self\_enh\_framing 0.0448 0.12 1038 0.372 0.7098  
## pro\_env\_framing - self\_enh\_framing 0.0809 0.11 1038 0.734 0.4631  
##   
## Results are averaged over the levels of: norm\_condition, Gender

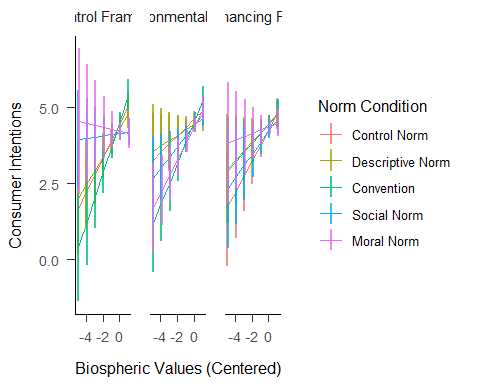
No, the relationship between biospheric values and consumer intentions was similarly strong across all framing conditions.

Third, interaction between biospheric values, framing, & norm condition:

bio\_frame\_norm\_trends <- emtrends(mod\_mice, pairwise~norm\_condition | framing\_condition, var = "biospheric\_center", adjust = "none")  
bio\_frame\_norm\_trends

## $emtrends  
## framing\_condition = control\_framing:  
## norm\_condition biospheric\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.5671 0.157 1038 0.2587 0.875  
## descriptive\_norm 0.4641 0.193 1038 0.0861 0.842  
## convention\_norm 0.8331 0.187 1038 0.4668 1.200  
## social\_norm 0.0423 0.169 1038 -0.2887 0.373  
## moral\_norm -0.0636 0.238 1038 -0.5302 0.403  
##   
## framing\_condition = pro\_env\_framing:  
## norm\_condition biospheric\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.2709 0.159 1038 -0.0408 0.583  
## descriptive\_norm 0.1779 0.159 1038 -0.1332 0.489  
## convention\_norm 0.6808 0.164 1038 0.3590 1.003  
## social\_norm 0.3537 0.143 1038 0.0726 0.635  
## moral\_norm 0.5402 0.147 1038 0.2509 0.829  
##   
## framing\_condition = self\_enh\_framing:  
## norm\_condition biospheric\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.5085 0.204 1038 0.1084 0.909  
## descriptive\_norm 0.3027 0.183 1038 -0.0563 0.662  
## convention\_norm 0.3119 0.180 1038 -0.0411 0.665  
## social\_norm 0.3857 0.208 1038 -0.0226 0.794  
## moral\_norm 0.1104 0.200 1038 -0.2824 0.503  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## framing\_condition = control\_framing:  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.10303 0.249 1038 0.415 0.6785  
## control\_norm - convention\_norm -0.26606 0.244 1038 -1.091 0.2757  
## control\_norm - social\_norm 0.52481 0.231 1038 2.274 0.0232  
## control\_norm - moral\_norm 0.63066 0.285 1038 2.212 0.0272  
## descriptive\_norm - convention\_norm -0.36908 0.268 1038 -1.377 0.1689  
## descriptive\_norm - social\_norm 0.42179 0.256 1038 1.651 0.0991  
## descriptive\_norm - moral\_norm 0.52763 0.306 1038 1.724 0.0850  
## convention\_norm - social\_norm 0.79087 0.252 1038 3.134 0.0018  
## convention\_norm - moral\_norm 0.89672 0.302 1038 2.969 0.0031  
## social\_norm - moral\_norm 0.10585 0.291 1038 0.363 0.7165  
##   
## framing\_condition = pro\_env\_framing:  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.09306 0.224 1038 0.415 0.6783  
## control\_norm - convention\_norm -0.40989 0.228 1038 -1.795 0.0730  
## control\_norm - social\_norm -0.08271 0.214 1038 -0.386 0.6992  
## control\_norm - moral\_norm -0.26922 0.217 1038 -1.243 0.2143  
## descriptive\_norm - convention\_norm -0.50295 0.228 1038 -2.202 0.0279  
## descriptive\_norm - social\_norm -0.17578 0.214 1038 -0.823 0.4109  
## descriptive\_norm - moral\_norm -0.36228 0.216 1038 -1.676 0.0940  
## convention\_norm - social\_norm 0.32718 0.218 1038 1.502 0.1334  
## convention\_norm - moral\_norm 0.14067 0.221 1038 0.637 0.5241  
## social\_norm - moral\_norm -0.18651 0.206 1038 -0.907 0.3646  
##   
## framing\_condition = self\_enh\_framing:  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.20585 0.276 1038 0.746 0.4561  
## control\_norm - convention\_norm 0.19664 0.275 1038 0.714 0.4751  
## control\_norm - social\_norm 0.12281 0.290 1038 0.424 0.6717  
## control\_norm - moral\_norm 0.39815 0.290 1038 1.374 0.1697  
## descriptive\_norm - convention\_norm -0.00921 0.259 1038 -0.036 0.9716  
## descriptive\_norm - social\_norm -0.08304 0.276 1038 -0.301 0.7635  
## descriptive\_norm - moral\_norm 0.19230 0.273 1038 0.705 0.4811  
## convention\_norm - social\_norm -0.07383 0.275 1038 -0.269 0.7882  
## convention\_norm - moral\_norm 0.20151 0.268 1038 0.751 0.4530  
## social\_norm - moral\_norm 0.27534 0.289 1038 0.952 0.3414  
##   
## Results are averaged over the levels of: Gender

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ biospheric\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Biospheric Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



# with data overlaid - doesn't work

* In the control framing condition, biospheric values were significantly, positively related to consumer intentions in the **control norm**, **descriptive norm**, and **convention** conditions but non-significantly, negatively related in the **social norm** and **moral norm** conditions.
* In the pro-environmental framing condition, biospheric values were significantly, positively related to consumer intentions in the **convention**, **social norm** and **moral norm** conditions, and non-significantly, positively related in the **control norm** and **descriptive norm** conditions.
* In the self-enhancing framing condition, biospheric values were significantly, positively related to consumer intentions in the **control norm** condition, but non-significantly, positively related in all other norm conditions.

### Altruistic Values

First, relationship between altruistic values & consumer intentions for each norm condition:

emtrends(mod\_mice, ~norm\_condition, var = "altruistic\_center", adjust = "none")

## norm\_condition altruistic\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.1426 0.163 1038 -0.1779 0.463  
## descriptive\_norm -0.1218 0.132 1038 -0.3803 0.137  
## convention\_norm -0.0499 0.133 1038 -0.3101 0.210  
## social\_norm 0.0918 0.149 1038 -0.2002 0.384  
## moral\_norm 0.3441 0.130 1038 0.0896 0.599  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95

Table

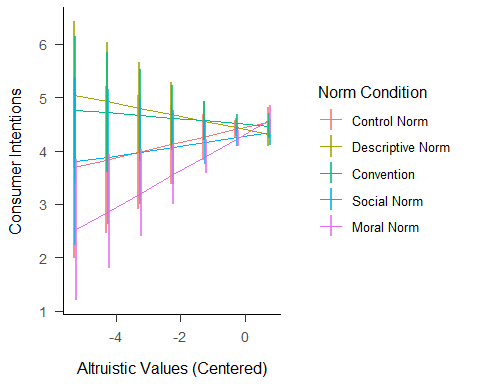
#

Graph

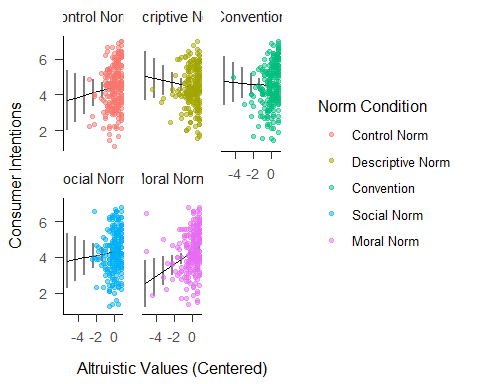
# On a single graph  
describe(average\_df$altruistic\_center)

## vars n mean sd median trimmed mad min max range skew kurtosis se  
## X1 1 1133 0 0.81 0.29 0.12 0.74 -5.21 0.79 6 -1.92 6.11 0.02

at\_list <- list(altruistic\_center = seq(-5.26, 0.84, by = 1))  
  
# without data overlaid  
emmip(mod\_mice, norm\_condition ~ altruistic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Altruistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ altruistic\_center | norm\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Altruistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + geom\_point(data = average\_df, aes(x = altruistic\_center, y = consumer\_intentions, color = norm\_condition), alpha = 0.5) + facet\_wrap(~norm\_condition, labeller = labeller(norm\_condition = norm\_labs)) + theme\_apa()



* Altruistic values was a non-significant predictor of consumer intentions in the **control norm**, **descriptive norm**, **convention**, and **social norm** conditions.
* Altruistic values was a significant, positive predictor of consumer intentions in the **moral norm** condition.

Is the slope of the relationship between altruistic values & consumer intentions stronger in any one of the norm conditions compared to the others?

emtrends(mod\_mice, pairwise~norm\_condition, var = "altruistic\_center", adjust = "none")

## $emtrends  
## norm\_condition altruistic\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.1426 0.163 1038 -0.1779 0.463  
## descriptive\_norm -0.1218 0.132 1038 -0.3803 0.137  
## convention\_norm -0.0499 0.133 1038 -0.3101 0.210  
## social\_norm 0.0918 0.149 1038 -0.2002 0.384  
## moral\_norm 0.3441 0.130 1038 0.0896 0.599  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm 0.2644 0.210 1038 1.258 0.2086  
## control\_norm - convention\_norm 0.1925 0.207 1038 0.931 0.3521  
## control\_norm - social\_norm 0.0508 0.215 1038 0.236 0.8135  
## control\_norm - moral\_norm -0.2015 0.206 1038 -0.976 0.3293  
## descriptive\_norm - convention\_norm -0.0719 0.187 1038 -0.385 0.7003  
## descriptive\_norm - social\_norm -0.2136 0.198 1038 -1.078 0.2815  
## descriptive\_norm - moral\_norm -0.4659 0.184 1038 -2.528 0.0116  
## convention\_norm - social\_norm -0.1417 0.198 1038 -0.717 0.4733  
## convention\_norm - moral\_norm -0.3940 0.184 1038 -2.136 0.0329  
## social\_norm - moral\_norm -0.2523 0.196 1038 -1.285 0.1991  
##   
## Results are averaged over the levels of: framing\_condition, Gender

The relationship between altruistic values and consumer intentions was significantly stronger in the moral norm condition (b = 0.36) compared to the descriptive norm condition (b = -0.10), t(1039) = -2.46, p = .014.

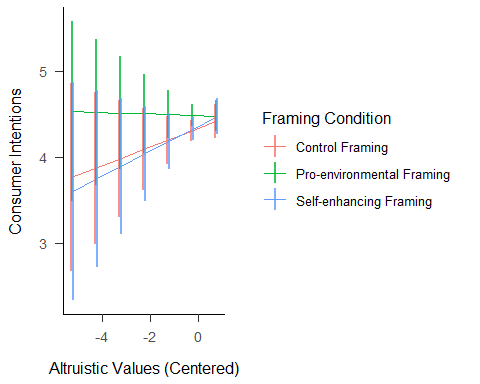
The relationship between altruistic values and consumer intentions was also significantly stronger in the moral norm condition (b = 0.36) compared to the convention norm condition (b = -0.05), t(1039) = -2.17, p = .031.

Second, relationship between altruistic values & consumer intentions for each framing condition:

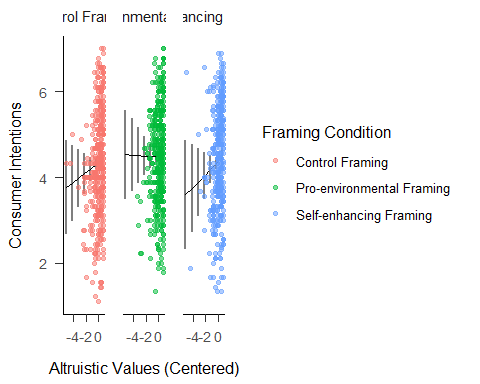
emtrends(mod\_mice, ~framing\_condition, var = "altruistic\_center", adjust = "none")

## framing\_condition altruistic\_center.trend SE df lower.CL upper.CL  
## control\_framing 0.10815 0.1061 1038 -0.1001 0.316  
## pro\_env\_framing -0.00896 0.0998 1038 -0.2049 0.187  
## self\_enh\_framing 0.14482 0.1220 1038 -0.0946 0.384  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ altruistic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Altruistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ altruistic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Altruistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + geom\_point(data = average\_df, aes(x = altruistic\_center, y = consumer\_intentions, color = framing\_condition), alpha = 0.5) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* Altruistic values are positively, but non-significantly, related to consumer intentions in each framing condition.

Is the slope of the relationship between altruistic values & consumer intentions stronger in any one of the framing conditions compared to the others?

emtrends(mod\_mice, pairwise~framing\_condition, var = "altruistic\_center", adjust = "none")

## $emtrends  
## framing\_condition altruistic\_center.trend SE df lower.CL upper.CL  
## control\_framing 0.10815 0.1061 1038 -0.1001 0.316  
## pro\_env\_framing -0.00896 0.0998 1038 -0.2049 0.187  
## self\_enh\_framing 0.14482 0.1220 1038 -0.0946 0.384  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_framing - pro\_env\_framing 0.1171 0.144 1038 0.813 0.4163  
## control\_framing - self\_enh\_framing -0.0367 0.158 1038 -0.233 0.8161  
## pro\_env\_framing - self\_enh\_framing -0.1538 0.155 1038 -0.991 0.3221  
##   
## Results are averaged over the levels of: norm\_condition, Gender

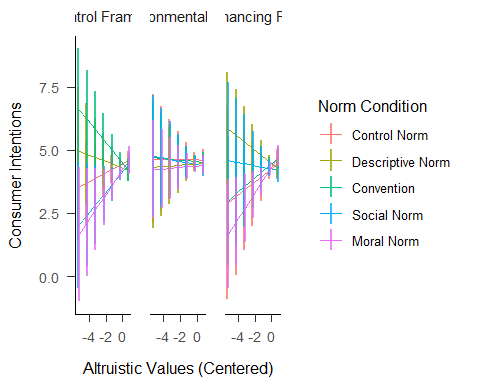
No, the difference between any two slopes was not significant.

Third, interaction between altruistic values, framing, & norm condition:

emtrends(mod\_mice, ~norm\_condition | framing\_condition, var = "altruistic\_center", adjust = "none")

## framing\_condition = control\_framing:  
## norm\_condition altruistic\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.17732 0.196 1038 -0.2069 0.5615  
## descriptive\_norm -0.12841 0.242 1038 -0.6033 0.3464  
## convention\_norm -0.40170 0.230 1038 -0.8539 0.0505  
## social\_norm 0.40611 0.238 1038 -0.0617 0.8739  
## moral\_norm 0.48743 0.265 1038 -0.0335 1.0084  
##   
## framing\_condition = pro\_env\_framing:  
## norm\_condition altruistic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.00605 0.245 1038 -0.4867 0.4746  
## descriptive\_norm 0.02530 0.226 1038 -0.4189 0.4695  
## convention\_norm -0.02990 0.212 1038 -0.4451 0.3853  
## social\_norm -0.06439 0.230 1038 -0.5148 0.3860  
## moral\_norm 0.03022 0.187 1038 -0.3376 0.3980  
##   
## framing\_condition = self\_enh\_framing:  
## norm\_condition altruistic\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.25643 0.368 1038 -0.4659 0.9788  
## descriptive\_norm -0.26233 0.216 1038 -0.6863 0.1616  
## convention\_norm 0.28184 0.244 1038 -0.1965 0.7602  
## social\_norm -0.06635 0.295 1038 -0.6459 0.5132  
## moral\_norm 0.51452 0.211 1038 0.1006 0.9284  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ altruistic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Altruistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* In the control framing condition, altruistic values were not significantly related to consumer intentions in any of the norm conditions.
* In the pro-environmental framing condition, altruistic values were not significantly related to consumer intentions in any of the norm conditions.
* In the self-enhancing framing condition, altruistic values were significantly, positively related to consumer intentions in the **moral norm** condition, but non-significantly related in all other norm conditions.

### Egoistic Values

First, relationship between egoistic values & consumer intentions for each norm condition:

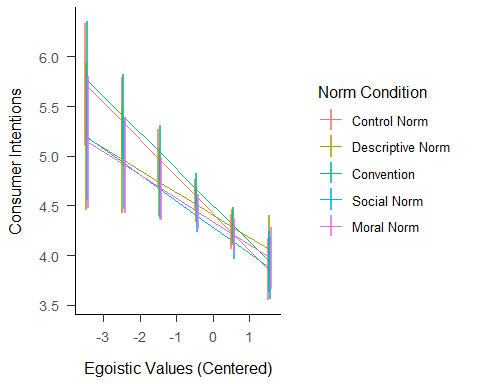
emtrends(mod\_mice, ~norm\_condition, var = "egoistic\_center", adjust = "none")

## norm\_condition egoistic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.372 0.0892 1038 -0.547 -0.1966  
## descriptive\_norm -0.227 0.1061 1038 -0.435 -0.0187  
## convention\_norm -0.366 0.0853 1038 -0.533 -0.1984  
## social\_norm -0.263 0.0906 1038 -0.441 -0.0857  
## moral\_norm -0.234 0.0942 1038 -0.419 -0.0491  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95

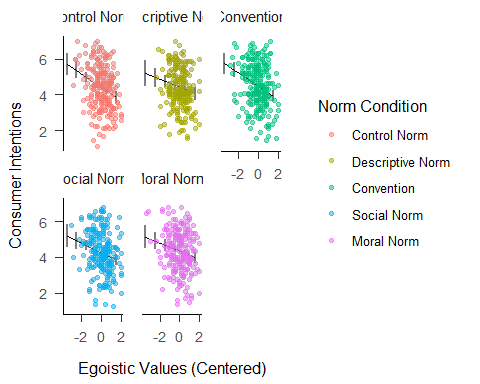
# On a single graph  
describe(average\_df$egoistic\_center)

## vars n mean sd median trimmed mad min max range skew kurtosis se  
## X1 1 1133 0 0.92 0 0.03 0.89 -3.4 2 5.4 -0.4 0.31 0.03

at\_list <- list(egoistic\_center = seq(-3.45, 2.05, by = 1))  
  
# without data overlaid  
emmip(mod\_mice, norm\_condition ~ egoistic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Egoistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ egoistic\_center | norm\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Egoistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + geom\_point(data = average\_df, aes(x = egoistic\_center, y = consumer\_intentions, color = norm\_condition), alpha = 0.5) + facet\_wrap(~norm\_condition, labeller = labeller(norm\_condition = norm\_labs)) + theme\_apa()



* Egoistic values were a significant, negative predictor of consumer intentions within each norm condition

Is the slope of the relationship between egoistic values & consumer intentions stronger in any one of the norm conditions compared to the others?

emtrends(mod\_mice, pairwise~norm\_condition, var = "egoistic\_center", adjust = "none")

## $emtrends  
## norm\_condition egoistic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.372 0.0892 1038 -0.547 -0.1966  
## descriptive\_norm -0.227 0.1061 1038 -0.435 -0.0187  
## convention\_norm -0.366 0.0853 1038 -0.533 -0.1984  
## social\_norm -0.263 0.0906 1038 -0.441 -0.0857  
## moral\_norm -0.234 0.0942 1038 -0.419 -0.0491  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm -0.14481 0.138 1038 -1.047 0.2953  
## control\_norm - convention\_norm -0.00586 0.122 1038 -0.048 0.9618  
## control\_norm - social\_norm -0.10824 0.126 1038 -0.861 0.3893  
## control\_norm - moral\_norm -0.13763 0.129 1038 -1.069 0.2855  
## descriptive\_norm - convention\_norm 0.13896 0.136 1038 1.024 0.3060  
## descriptive\_norm - social\_norm 0.03657 0.138 1038 0.264 0.7916  
## descriptive\_norm - moral\_norm 0.00718 0.140 1038 0.051 0.9592  
## convention\_norm - social\_norm -0.10239 0.124 1038 -0.828 0.4077  
## convention\_norm - moral\_norm -0.13178 0.126 1038 -1.046 0.2957  
## social\_norm - moral\_norm -0.02939 0.129 1038 -0.227 0.8205  
##   
## Results are averaged over the levels of: framing\_condition, Gender

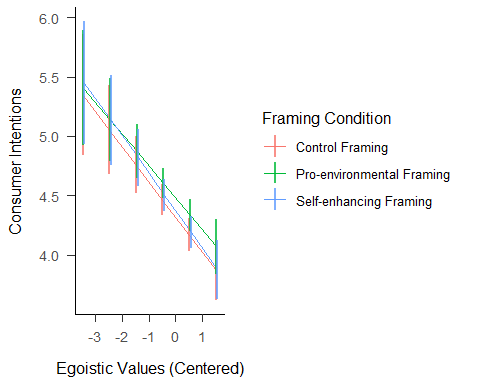
No, the difference between any two slopes was not significant.

Second, relationship between egoistic values & consumer intentions for each framing condition:

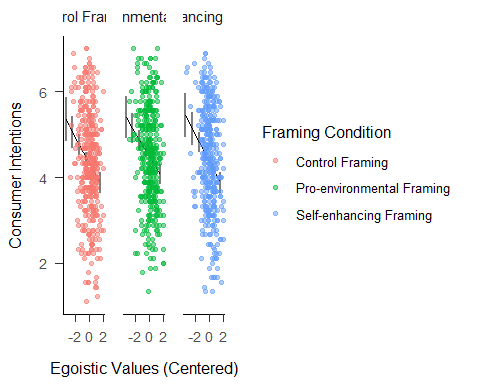
emtrends(mod\_mice, ~framing\_condition, var = "egoistic\_center", adjust = "none")

## framing\_condition egoistic\_center.trend SE df lower.CL upper.CL  
## control\_framing -0.295 0.0738 1038 -0.440 -0.150  
## pro\_env\_framing -0.268 0.0691 1038 -0.403 -0.132  
## self\_enh\_framing -0.314 0.0739 1038 -0.459 -0.169  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ egoistic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Egoistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ egoistic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Egoistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + geom\_point(data = average\_df, aes(x = egoistic\_center, y = consumer\_intentions, color = framing\_condition), alpha = 0.5) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* Egoistic values were a significant, negative predictor of consumer intentions within each framing condition

Is the slope of the relationship between egoistic values & consumer intentions stronger in any one of the framing conditions compared to the others?

emtrends(mod\_mice, pairwise~framing\_condition, var = "egoistic\_center", adjust = "none")

## $emtrends  
## framing\_condition egoistic\_center.trend SE df lower.CL upper.CL  
## control\_framing -0.295 0.0738 1038 -0.440 -0.150  
## pro\_env\_framing -0.268 0.0691 1038 -0.403 -0.132  
## self\_enh\_framing -0.314 0.0739 1038 -0.459 -0.169  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_framing - pro\_env\_framing -0.0277 0.0996 1038 -0.278 0.7812  
## control\_framing - self\_enh\_framing 0.0190 0.1024 1038 0.186 0.8527  
## pro\_env\_framing - self\_enh\_framing 0.0467 0.0998 1038 0.468 0.6400  
##   
## Results are averaged over the levels of: norm\_condition, Gender

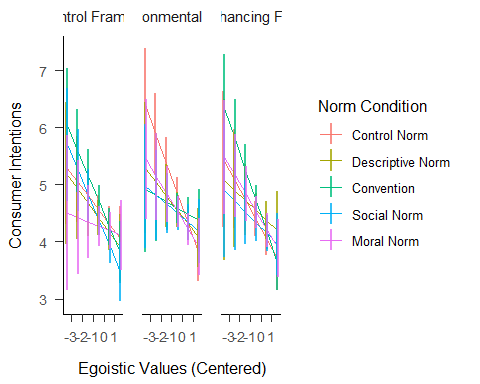
No, the difference between any two slopes was not significant.

Third, interaction between egoistic values, framing, & norm condition:

emtrends(mod\_mice, ~norm\_condition | framing\_condition, var = "egoistic\_center", adjust = "none")

## framing\_condition = control\_framing:  
## norm\_condition egoistic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.2464 0.148 1038 -0.538 0.0447  
## descriptive\_norm -0.2603 0.177 1038 -0.608 0.0873  
## convention\_norm -0.4460 0.146 1038 -0.733 -0.1594  
## social\_norm -0.4456 0.145 1038 -0.731 -0.1603  
## moral\_norm -0.0777 0.191 1038 -0.452 0.2963  
##   
## framing\_condition = pro\_env\_framing:  
## norm\_condition egoistic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.5214 0.140 1038 -0.795 -0.2475  
## descriptive\_norm -0.2436 0.160 1038 -0.557 0.0701  
## convention\_norm -0.1093 0.160 1038 -0.422 0.2037  
## social\_norm -0.1561 0.158 1038 -0.466 0.1536  
## moral\_norm -0.3072 0.149 1038 -0.599 -0.0157  
##   
## framing\_condition = self\_enh\_framing:  
## norm\_condition egoistic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.3471 0.170 1038 -0.680 -0.0142  
## descriptive\_norm -0.1765 0.207 1038 -0.582 0.2288  
## convention\_norm -0.5420 0.134 1038 -0.806 -0.2782  
## social\_norm -0.1884 0.164 1038 -0.510 0.1329  
## moral\_norm -0.3171 0.144 1038 -0.599 -0.0353  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ egoistic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Egoistic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* In the control framing condition, egoistic values were *not* significantly related to consumer intentions in the **control norm**, **descriptive norm**, or **moral norm** conditions (but were signifcantly, negatively related to consumer intentions in the **convention** and **social norm** conditions).
* In the pro-environmental framing condition, egoistic values were *not* significantly related to consumer intentions in the **descriptive norm**, **convention**, or **social norm** conditions (but were significantly, negatively related in the **control norm** and **moral norm** conditions).
* In the self-enhancing framing condition, egoistic values were *not* significantly related to consumer intentions in the **descriptive norm** and **social norm** conditions (but were significantly, negatively related in the **control norm**, **convention** & **moral norm** conditions).

### Hedonic Values

First, relationship between hedonic values & consumer intentions for each norm condition:

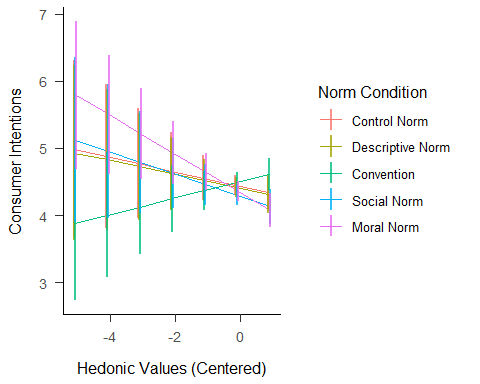
emtrends(mod\_mice, ~norm\_condition, var = "hedonic\_center", adjust = "none")

## norm\_condition hedonic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.108 0.129 1038 -0.361 0.1446  
## descriptive\_norm -0.103 0.130 1038 -0.358 0.1525  
## convention\_norm 0.121 0.113 1038 -0.101 0.3430  
## social\_norm -0.166 0.122 1038 -0.406 0.0737  
## moral\_norm -0.285 0.110 1038 -0.500 -0.0695  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95

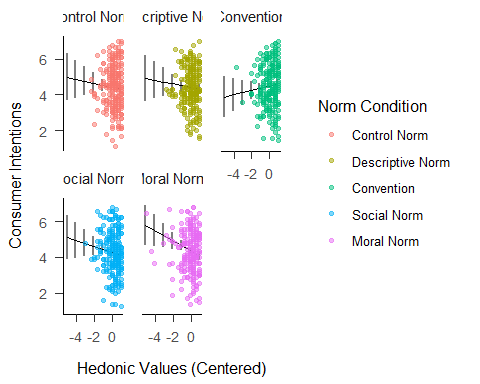
# On a single graph  
describe(average\_df$hedonic\_center)

## vars n mean sd median trimmed mad min max range skew kurtosis se  
## X1 1 1133 0 0.79 0.28 0.09 0.49 -5.05 0.95 6 -1.44 3.66 0.02

at\_list <- list(hedonic\_center = seq(-5.1, 1, by = 1))  
  
# without data overlaid  
emmip(mod\_mice, norm\_condition ~ hedonic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Hedonic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ hedonic\_center | norm\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Hedonic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + geom\_point(data = average\_df, aes(x = hedonic\_center, y = consumer\_intentions, color = norm\_condition), alpha = 0.5) + facet\_wrap(~norm\_condition, labeller = labeller(norm\_condition = norm\_labs)) + theme\_apa()



* Hedonic values were not significantly related to consumer intentions in any norm condition except for the **moral norm** condition in which they were significantly, negatively related to consumer intentions.

Is the slope of the relationship between hedonic values & consumer intentions stronger in any one of the norm conditions compared to the others?

emtrends(mod\_mice, pairwise~norm\_condition, var = "hedonic\_center", adjust = "none")

## $emtrends  
## norm\_condition hedonic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.108 0.129 1038 -0.361 0.1446  
## descriptive\_norm -0.103 0.130 1038 -0.358 0.1525  
## convention\_norm 0.121 0.113 1038 -0.101 0.3430  
## social\_norm -0.166 0.122 1038 -0.406 0.0737  
## moral\_norm -0.285 0.110 1038 -0.500 -0.0695  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm -0.00546 0.181 1038 -0.030 0.9759  
## control\_norm - convention\_norm -0.22914 0.171 1038 -1.344 0.1794  
## control\_norm - social\_norm 0.05797 0.178 1038 0.326 0.7447  
## control\_norm - moral\_norm 0.17682 0.169 1038 1.048 0.2947  
## descriptive\_norm - convention\_norm -0.22368 0.172 1038 -1.301 0.1937  
## descriptive\_norm - social\_norm 0.06343 0.178 1038 0.356 0.7218  
## descriptive\_norm - moral\_norm 0.18228 0.170 1038 1.073 0.2834  
## convention\_norm - social\_norm 0.28711 0.167 1038 1.723 0.0851  
## convention\_norm - moral\_norm 0.40596 0.158 1038 2.574 0.0102  
## social\_norm - moral\_norm 0.11886 0.164 1038 0.727 0.4676  
##   
## Results are averaged over the levels of: framing\_condition, Gender

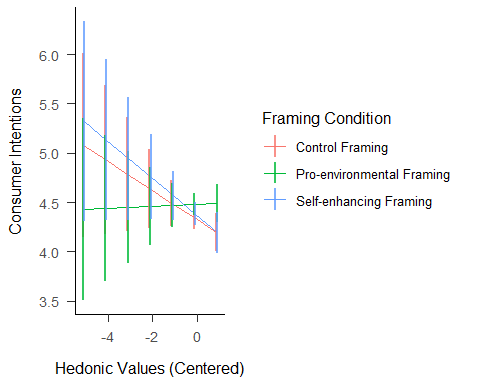
There was a significant difference in the relationship between hedonic values and consumer intentions between the convention norm condition (b = 0.12) and the moral norm condition (b = -0.30), t(1039) = 2.66, p = .008.

Second, relationship between hedonic values & consumer intentions for each framing condition:

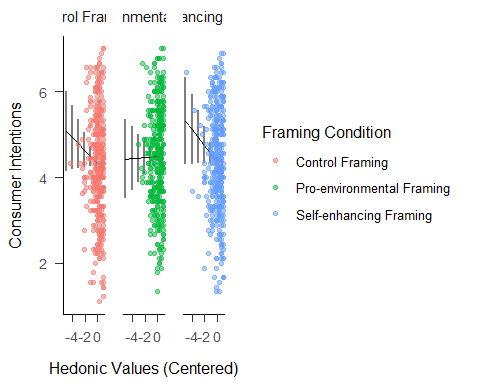
emtrends(mod\_mice, ~framing\_condition, var = "hedonic\_center", adjust = "none")

## framing\_condition hedonic\_center.trend SE df lower.CL upper.CL  
## control\_framing -0.1473 0.0916 1038 -0.327 0.03255  
## pro\_env\_framing 0.0102 0.0912 1038 -0.169 0.18917  
## self\_enh\_framing -0.1874 0.1003 1038 -0.384 0.00953  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ hedonic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Hedonic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ hedonic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Hedonic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + geom\_point(data = average\_df, aes(x = hedonic\_center, y = consumer\_intentions, color = framing\_condition), alpha = 0.5) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* Hedonic values were non-significantly, negatively related to consumer intentions in all framing conditions.

Is the slope of the relationship between hedonic values & consumer intentions stronger in any one of the framing conditions compared to the others?

emtrends(mod\_mice, pairwise~framing\_condition, var = "hedonic\_center", adjust = "none")

## $emtrends  
## framing\_condition hedonic\_center.trend SE df lower.CL upper.CL  
## control\_framing -0.1473 0.0916 1038 -0.327 0.03255  
## pro\_env\_framing 0.0102 0.0912 1038 -0.169 0.18917  
## self\_enh\_framing -0.1874 0.1003 1038 -0.384 0.00953  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_framing - pro\_env\_framing -0.1575 0.129 1038 -1.220 0.2229  
## control\_framing - self\_enh\_framing 0.0401 0.136 1038 0.294 0.7686  
## pro\_env\_framing - self\_enh\_framing 0.1976 0.134 1038 1.469 0.1421  
##   
## Results are averaged over the levels of: norm\_condition, Gender

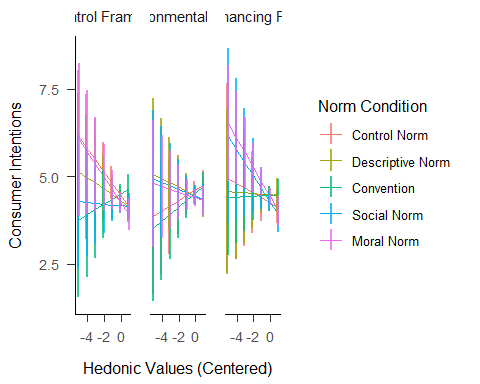
No, there was no significant difference between any two pairs of slopes.

Third, interaction between hedonic values, framing, & norm condition:

emtrends(mod\_mice, ~norm\_condition | framing\_condition, var = "hedonic\_center", adjust = "none")

## framing\_condition = control\_framing:  
## norm\_condition hedonic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.3366 0.183 1038 -0.695 0.0220  
## descriptive\_norm -0.1669 0.220 1038 -0.599 0.2649  
## convention\_norm 0.1456 0.214 1038 -0.274 0.5649  
## social\_norm -0.0218 0.188 1038 -0.390 0.3466  
## moral\_norm -0.3566 0.215 1038 -0.779 0.0657  
##   
## framing\_condition = pro\_env\_framing:  
## norm\_condition hedonic\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.1506 0.214 1038 -0.270 0.5710  
## descriptive\_norm -0.1208 0.218 1038 -0.549 0.3074  
## convention\_norm 0.2030 0.203 1038 -0.195 0.6014  
## social\_norm -0.1017 0.194 1038 -0.483 0.2792  
## moral\_norm -0.0798 0.182 1038 -0.438 0.2782  
##   
## framing\_condition = self\_enh\_framing:  
## norm\_condition hedonic\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.1382 0.263 1038 -0.653 0.3770  
## descriptive\_norm -0.0202 0.237 1038 -0.485 0.4442  
## convention\_norm 0.0145 0.168 1038 -0.316 0.3449  
## social\_norm -0.3746 0.247 1038 -0.860 0.1104  
## moral\_norm -0.4183 0.168 1038 -0.747 -0.0896  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ hedonic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Hedonic Values (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* In the control framing condition, hedonic values were not significantly related to consumer intentions in any norm condition.
* In the pro-environmental framing condition, hedonic values were not significantly related to consumer intentions in any norm condition.
* In the self-enhancing framing condition, hedonic values were not significantly related to consumer intentions in any norm condition except for the **moral norm** condition in which they were significantly, related.

### Ingroup Identification Interactions

H5: There will be a two-way interaction between ingroup identification and norm condition.

First, relationship between ingroup identification & consumer intentions for each norm condition:

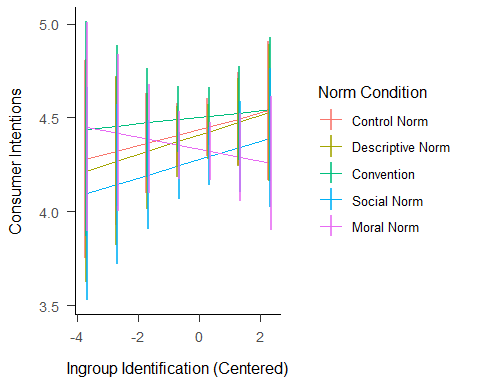
emtrends(mod\_mice, ~norm\_condition, var = "ingroup\_center", adjust = "none")

## norm\_condition ingroup\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.0431 0.0721 1038 -0.0984 0.185  
## descriptive\_norm 0.0518 0.0776 1038 -0.1004 0.204  
## convention\_norm 0.0173 0.0772 1038 -0.1342 0.169  
## social\_norm 0.0495 0.0754 1038 -0.0985 0.197  
## moral\_norm -0.0324 0.0732 1038 -0.1761 0.111  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95

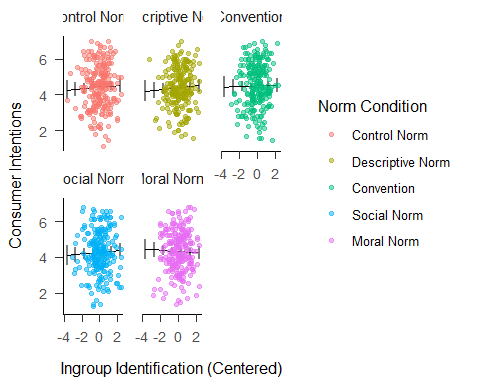
# On a single graph  
describe(average\_df$ingroup\_center)

## vars n mean sd median trimmed mad min max range skew kurtosis se  
## X1 1 1133 0 1.01 0.01 0.03 0.95 -3.64 2.36 6 -0.27 0.17 0.03

at\_list <- list(ingroup\_center = seq(-3.69, 2.41, by = 1))  
  
# without data overlaid  
emmip(mod\_mice, norm\_condition ~ ingroup\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Ingroup Identification (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ ingroup\_center | norm\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Ingroup Identification (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + geom\_point(data = average\_df, aes(x = ingroup\_center, y = consumer\_intentions, color = norm\_condition), alpha = 0.5) + facet\_wrap(~norm\_condition, labeller = labeller(norm\_condition = norm\_labs)) + theme\_apa()



* Ingroup identification was not significantly related to consumer intentions in any of the norm conditions.

Is the slope of the relationship between ingroup idenitification & consumer intentions stronger in any one of the norm conditions compared to the others?

emtrends(mod\_mice, pairwise~norm\_condition, var = "ingroup\_center", adjust = "none")

## $emtrends  
## norm\_condition ingroup\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.0431 0.0721 1038 -0.0984 0.185  
## descriptive\_norm 0.0518 0.0776 1038 -0.1004 0.204  
## convention\_norm 0.0173 0.0772 1038 -0.1342 0.169  
## social\_norm 0.0495 0.0754 1038 -0.0985 0.197  
## moral\_norm -0.0324 0.0732 1038 -0.1761 0.111  
##   
## Results are averaged over the levels of: framing\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_norm - descriptive\_norm -0.00863 0.105 1038 -0.082 0.9346  
## control\_norm - convention\_norm 0.02589 0.106 1038 0.245 0.8064  
## control\_norm - social\_norm -0.00637 0.104 1038 -0.061 0.9511  
## control\_norm - moral\_norm 0.07559 0.103 1038 0.734 0.4628  
## descriptive\_norm - convention\_norm 0.03452 0.110 1038 0.315 0.7530  
## descriptive\_norm - social\_norm 0.00227 0.108 1038 0.021 0.9832  
## descriptive\_norm - moral\_norm 0.08423 0.106 1038 0.791 0.4291  
## convention\_norm - social\_norm -0.03226 0.108 1038 -0.299 0.7651  
## convention\_norm - moral\_norm 0.04970 0.106 1038 0.467 0.6404  
## social\_norm - moral\_norm 0.08196 0.105 1038 0.780 0.4358  
##   
## Results are averaged over the levels of: framing\_condition, Gender

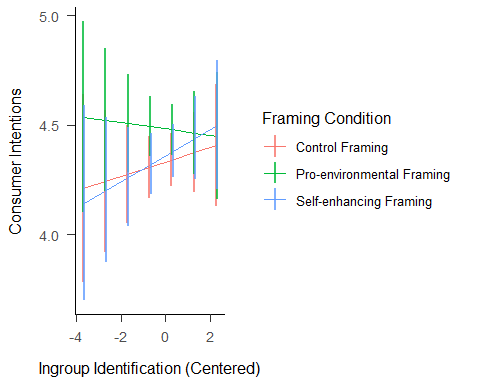
No, there was no significant difference between any two pairs of slopes.

Second, relationship between ingroup idenitification & consumer intentions for each framing condition:

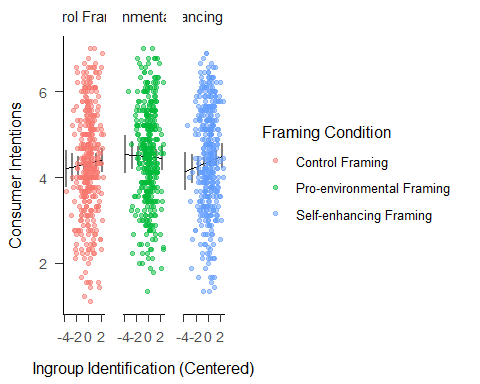
emtrends(mod\_mice, ~framing\_condition, var = "ingroup\_center", adjust = "none")

## framing\_condition ingroup\_center.trend SE df lower.CL upper.CL  
## control\_framing 0.0326 0.0566 1038 -0.0785 0.144  
## pro\_env\_framing -0.0144 0.0583 1038 -0.1289 0.100  
## self\_enh\_framing 0.0593 0.0593 1038 -0.0571 0.176  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ ingroup\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Ingroup Identification (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



# with data overlaid  
emmip(mod\_mice, ~ ingroup\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 0.8, alpha = 0.5), xlab = "Ingroup Identification (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + geom\_point(data = average\_df, aes(x = ingroup\_center, y = consumer\_intentions, color = framing\_condition), alpha = 0.5) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* Ingroup identification was non-significantly related to consumer intentions in all framing conditions.

Is the slope of the relationship between ingroup identification & consumer intentions stronger in any one of the framing conditions compared to the others?

emtrends(mod\_mice, pairwise~framing\_condition, var = "ingroup\_center", adjust = "none")

## $emtrends  
## framing\_condition ingroup\_center.trend SE df lower.CL upper.CL  
## control\_framing 0.0326 0.0566 1038 -0.0785 0.144  
## pro\_env\_framing -0.0144 0.0583 1038 -0.1289 0.100  
## self\_enh\_framing 0.0593 0.0593 1038 -0.0571 0.176  
##   
## Results are averaged over the levels of: norm\_condition, Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate SE df t.ratio p.value  
## control\_framing - pro\_env\_framing 0.0471 0.0810 1038 0.581 0.5611  
## control\_framing - self\_enh\_framing -0.0267 0.0818 1038 -0.327 0.7441  
## pro\_env\_framing - self\_enh\_framing -0.0738 0.0829 1038 -0.890 0.3736  
##   
## Results are averaged over the levels of: norm\_condition, Gender

No, there was no significant difference between any two pairs of slopes.

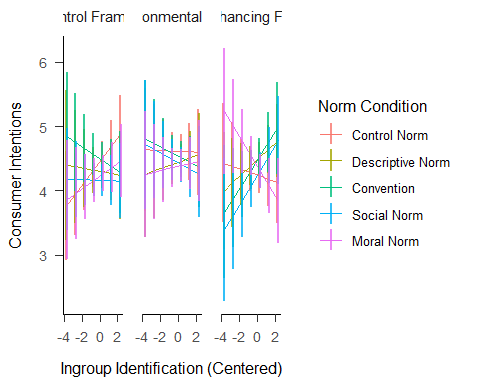
Exploratory RQ1: Is there a three-way interaction between ingroup identification, framing, and norm condition?

Third, interaction between ingroup identification, framing, & norm condition:

emtrends(mod\_mice, ~norm\_condition | framing\_condition, var = "ingroup\_center", adjust = "none")

## framing\_condition = control\_framing:  
## norm\_condition ingroup\_center.trend SE df lower.CL upper.CL  
## control\_norm 0.18603 0.117 1038 -0.0428 0.4149  
## descriptive\_norm -0.02599 0.151 1038 -0.3219 0.2699  
## convention\_norm -0.09353 0.132 1038 -0.3528 0.1657  
## social\_norm -0.00475 0.110 1038 -0.2213 0.2118  
## moral\_norm 0.10145 0.118 1038 -0.1294 0.3323  
##   
## framing\_condition = pro\_env\_framing:  
## norm\_condition ingroup\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.00662 0.131 1038 -0.2646 0.2514  
## descriptive\_norm 0.05133 0.130 1038 -0.2046 0.3072  
## convention\_norm -0.07273 0.125 1038 -0.3177 0.1723  
## social\_norm -0.07800 0.133 1038 -0.3392 0.1832  
## moral\_norm 0.03381 0.130 1038 -0.2219 0.2895  
##   
## framing\_condition = self\_enh\_framing:  
## norm\_condition ingroup\_center.trend SE df lower.CL upper.CL  
## control\_norm -0.04998 0.125 1038 -0.2950 0.1950  
## descriptive\_norm 0.12999 0.118 1038 -0.1020 0.3620  
## convention\_norm 0.21802 0.143 1038 -0.0625 0.4985  
## social\_norm 0.23128 0.146 1038 -0.0546 0.5171  
## moral\_norm -0.23260 0.132 1038 -0.4909 0.0257  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ ingroup\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Ingroup Identification (Centered)", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()



* In the control framing condition, ingroup identification was non-significantly related to consumer intentions in all norm conditions.
* In the pro-environmental framing condition, ingroup identification was non-significantly related to consumer intentions in all norm conditions.
* In the self-enhancing framing condition, ingroup identification was non-significantly related to consumer intentions in all norm conditions.

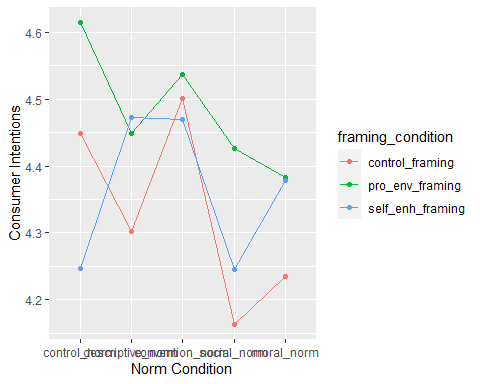
### All cells compared to control

Exploratory RQ2: Which combination of framing and norm condition produced the strongest reductions in consumer intentions compared to the control condition?

emmeans(mod\_mice, pairwise ~ norm\_condition\*framing\_condition, adjust = "none")

## $emmeans  
## norm\_condition framing\_condition emmean SE df lower.CL upper.CL  
## control\_norm control\_framing 4.45 0.123 1038 4.21 4.69  
## descriptive\_norm control\_framing 4.30 0.133 1038 4.04 4.56  
## convention\_norm control\_framing 4.50 0.137 1038 4.23 4.77  
## social\_norm control\_framing 4.16 0.116 1038 3.94 4.39  
## moral\_norm control\_framing 4.23 0.143 1038 3.95 4.52  
## control\_norm pro\_env\_framing 4.62 0.128 1038 4.36 4.87  
## descriptive\_norm pro\_env\_framing 4.45 0.128 1038 4.20 4.70  
## convention\_norm pro\_env\_framing 4.54 0.119 1038 4.30 4.77  
## social\_norm pro\_env\_framing 4.43 0.134 1038 4.16 4.69  
## moral\_norm pro\_env\_framing 4.38 0.121 1038 4.15 4.62  
## control\_norm self\_enh\_framing 4.25 0.130 1038 3.99 4.50  
## descriptive\_norm self\_enh\_framing 4.47 0.122 1038 4.23 4.71  
## convention\_norm self\_enh\_framing 4.47 0.130 1038 4.22 4.72  
## social\_norm self\_enh\_framing 4.25 0.137 1038 3.98 4.51  
## moral\_norm self\_enh\_framing 4.38 0.128 1038 4.13 4.63  
##   
## Results are averaged over the levels of: Gender   
## Confidence level used: 0.95   
##   
## $contrasts  
## contrast estimate  
## control\_norm control\_framing - descriptive\_norm control\_framing 0.147546  
## control\_norm control\_framing - convention\_norm control\_framing -0.051916  
## control\_norm control\_framing - social\_norm control\_framing 0.285818  
## control\_norm control\_framing - moral\_norm control\_framing 0.214865  
## control\_norm control\_framing - control\_norm pro\_env\_framing -0.165950  
## control\_norm control\_framing - descriptive\_norm pro\_env\_framing 0.000427  
## control\_norm control\_framing - convention\_norm pro\_env\_framing -0.088462  
## control\_norm control\_framing - social\_norm pro\_env\_framing 0.022085  
## control\_norm control\_framing - moral\_norm pro\_env\_framing 0.066208  
## control\_norm control\_framing - control\_norm self\_enh\_framing 0.201965  
## control\_norm control\_framing - descriptive\_norm self\_enh\_framing -0.024083  
## control\_norm control\_framing - convention\_norm self\_enh\_framing -0.021243  
## control\_norm control\_framing - social\_norm self\_enh\_framing 0.203768  
## control\_norm control\_framing - moral\_norm self\_enh\_framing 0.070965  
## descriptive\_norm control\_framing - convention\_norm control\_framing -0.199462  
## descriptive\_norm control\_framing - social\_norm control\_framing 0.138272  
## descriptive\_norm control\_framing - moral\_norm control\_framing 0.067319  
## descriptive\_norm control\_framing - control\_norm pro\_env\_framing -0.313497  
## descriptive\_norm control\_framing - descriptive\_norm pro\_env\_framing -0.147119  
## descriptive\_norm control\_framing - convention\_norm pro\_env\_framing -0.236008  
## descriptive\_norm control\_framing - social\_norm pro\_env\_framing -0.125461  
## descriptive\_norm control\_framing - moral\_norm pro\_env\_framing -0.081338  
## descriptive\_norm control\_framing - control\_norm self\_enh\_framing 0.054419  
## descriptive\_norm control\_framing - descriptive\_norm self\_enh\_framing -0.171629  
## descriptive\_norm control\_framing - convention\_norm self\_enh\_framing -0.168789  
## descriptive\_norm control\_framing - social\_norm self\_enh\_framing 0.056222  
## descriptive\_norm control\_framing - moral\_norm self\_enh\_framing -0.076581  
## convention\_norm control\_framing - social\_norm control\_framing 0.337734  
## convention\_norm control\_framing - moral\_norm control\_framing 0.266781  
## convention\_norm control\_framing - control\_norm pro\_env\_framing -0.114034  
## convention\_norm control\_framing - descriptive\_norm pro\_env\_framing 0.052343  
## convention\_norm control\_framing - convention\_norm pro\_env\_framing -0.036546  
## convention\_norm control\_framing - social\_norm pro\_env\_framing 0.074001  
## convention\_norm control\_framing - moral\_norm pro\_env\_framing 0.118124  
## convention\_norm control\_framing - control\_norm self\_enh\_framing 0.253881  
## convention\_norm control\_framing - descriptive\_norm self\_enh\_framing 0.027833  
## convention\_norm control\_framing - convention\_norm self\_enh\_framing 0.030673  
## convention\_norm control\_framing - social\_norm self\_enh\_framing 0.255684  
## convention\_norm control\_framing - moral\_norm self\_enh\_framing 0.122881  
## social\_norm control\_framing - moral\_norm control\_framing -0.070953  
## social\_norm control\_framing - control\_norm pro\_env\_framing -0.451768  
## social\_norm control\_framing - descriptive\_norm pro\_env\_framing -0.285391  
## social\_norm control\_framing - convention\_norm pro\_env\_framing -0.374279  
## social\_norm control\_framing - social\_norm pro\_env\_framing -0.263732  
## social\_norm control\_framing - moral\_norm pro\_env\_framing -0.219610  
## social\_norm control\_framing - control\_norm self\_enh\_framing -0.083852  
## social\_norm control\_framing - descriptive\_norm self\_enh\_framing -0.309900  
## social\_norm control\_framing - convention\_norm self\_enh\_framing -0.307061  
## social\_norm control\_framing - social\_norm self\_enh\_framing -0.082049  
## social\_norm control\_framing - moral\_norm self\_enh\_framing -0.214853  
## moral\_norm control\_framing - control\_norm pro\_env\_framing -0.380815  
## moral\_norm control\_framing - descriptive\_norm pro\_env\_framing -0.214438  
## moral\_norm control\_framing - convention\_norm pro\_env\_framing -0.303326  
## moral\_norm control\_framing - social\_norm pro\_env\_framing -0.192779  
## moral\_norm control\_framing - moral\_norm pro\_env\_framing -0.148657  
## moral\_norm control\_framing - control\_norm self\_enh\_framing -0.012899  
## moral\_norm control\_framing - descriptive\_norm self\_enh\_framing -0.238947  
## moral\_norm control\_framing - convention\_norm self\_enh\_framing -0.236107  
## moral\_norm control\_framing - social\_norm self\_enh\_framing -0.011096  
## moral\_norm control\_framing - moral\_norm self\_enh\_framing -0.143900  
## control\_norm pro\_env\_framing - descriptive\_norm pro\_env\_framing 0.166378  
## control\_norm pro\_env\_framing - convention\_norm pro\_env\_framing 0.077489  
## control\_norm pro\_env\_framing - social\_norm pro\_env\_framing 0.188036  
## control\_norm pro\_env\_framing - moral\_norm pro\_env\_framing 0.232158  
## control\_norm pro\_env\_framing - control\_norm self\_enh\_framing 0.367916  
## control\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing 0.141868  
## control\_norm pro\_env\_framing - convention\_norm self\_enh\_framing 0.144708  
## control\_norm pro\_env\_framing - social\_norm self\_enh\_framing 0.369719  
## control\_norm pro\_env\_framing - moral\_norm self\_enh\_framing 0.236915  
## descriptive\_norm pro\_env\_framing - convention\_norm pro\_env\_framing -0.088889  
## descriptive\_norm pro\_env\_framing - social\_norm pro\_env\_framing 0.021658  
## descriptive\_norm pro\_env\_framing - moral\_norm pro\_env\_framing 0.065781  
## descriptive\_norm pro\_env\_framing - control\_norm self\_enh\_framing 0.201538  
## descriptive\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing -0.024510  
## descriptive\_norm pro\_env\_framing - convention\_norm self\_enh\_framing -0.021670  
## descriptive\_norm pro\_env\_framing - social\_norm self\_enh\_framing 0.203341  
## descriptive\_norm pro\_env\_framing - moral\_norm self\_enh\_framing 0.070538  
## convention\_norm pro\_env\_framing - social\_norm pro\_env\_framing 0.110547  
## convention\_norm pro\_env\_framing - moral\_norm pro\_env\_framing 0.154670  
## convention\_norm pro\_env\_framing - control\_norm self\_enh\_framing 0.290427  
## convention\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing 0.064379  
## convention\_norm pro\_env\_framing - convention\_norm self\_enh\_framing 0.067219  
## convention\_norm pro\_env\_framing - social\_norm self\_enh\_framing 0.292230  
## convention\_norm pro\_env\_framing - moral\_norm self\_enh\_framing 0.159426  
## social\_norm pro\_env\_framing - moral\_norm pro\_env\_framing 0.044123  
## social\_norm pro\_env\_framing - control\_norm self\_enh\_framing 0.179880  
## social\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing -0.046168  
## social\_norm pro\_env\_framing - convention\_norm self\_enh\_framing -0.043328  
## social\_norm pro\_env\_framing - social\_norm self\_enh\_framing 0.181683  
## social\_norm pro\_env\_framing - moral\_norm self\_enh\_framing 0.048879  
## moral\_norm pro\_env\_framing - control\_norm self\_enh\_framing 0.135757  
## moral\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing -0.090291  
## moral\_norm pro\_env\_framing - convention\_norm self\_enh\_framing -0.087451  
## moral\_norm pro\_env\_framing - social\_norm self\_enh\_framing 0.137561  
## moral\_norm pro\_env\_framing - moral\_norm self\_enh\_framing 0.004757  
## control\_norm self\_enh\_framing - descriptive\_norm self\_enh\_framing -0.226048  
## control\_norm self\_enh\_framing - convention\_norm self\_enh\_framing -0.223208  
## control\_norm self\_enh\_framing - social\_norm self\_enh\_framing 0.001803  
## control\_norm self\_enh\_framing - moral\_norm self\_enh\_framing -0.131000  
## descriptive\_norm self\_enh\_framing - convention\_norm self\_enh\_framing 0.002840  
## descriptive\_norm self\_enh\_framing - social\_norm self\_enh\_framing 0.227851  
## descriptive\_norm self\_enh\_framing - moral\_norm self\_enh\_framing 0.095047  
## convention\_norm self\_enh\_framing - social\_norm self\_enh\_framing 0.225011  
## convention\_norm self\_enh\_framing - moral\_norm self\_enh\_framing 0.092207  
## social\_norm self\_enh\_framing - moral\_norm self\_enh\_framing -0.132804  
## SE df t.ratio p.value  
## 0.181 1038 0.817 0.4143  
## 0.184 1038 -0.282 0.7778  
## 0.169 1038 1.690 0.0913  
## 0.189 1038 1.138 0.2554  
## 0.177 1038 -0.935 0.3500  
## 0.178 1038 0.002 0.9981  
## 0.170 1038 -0.519 0.6039  
## 0.181 1038 0.122 0.9032  
## 0.172 1038 0.385 0.7000  
## 0.178 1038 1.133 0.2576  
## 0.173 1038 -0.140 0.8891  
## 0.178 1038 -0.119 0.9050  
## 0.184 1038 1.109 0.2676  
## 0.177 1038 0.400 0.6893  
## 0.190 1038 -1.047 0.2953  
## 0.175 1038 0.789 0.4306  
## 0.195 1038 0.345 0.7299  
## 0.184 1038 -1.703 0.0889  
## 0.185 1038 -0.797 0.4257  
## 0.177 1038 -1.330 0.1837  
## 0.188 1038 -0.669 0.5037  
## 0.179 1038 -0.455 0.6488  
## 0.185 1038 0.295 0.7682  
## 0.180 1038 -0.955 0.3396  
## 0.185 1038 -0.912 0.3621  
## 0.190 1038 0.295 0.7677  
## 0.184 1038 -0.417 0.6771  
## 0.179 1038 1.882 0.0601  
## 0.198 1038 1.348 0.1780  
## 0.187 1038 -0.610 0.5421  
## 0.187 1038 0.280 0.7798  
## 0.181 1038 -0.202 0.8398  
## 0.191 1038 0.387 0.6987  
## 0.182 1038 0.649 0.5165  
## 0.188 1038 1.350 0.1772  
## 0.183 1038 0.152 0.8791  
## 0.188 1038 0.163 0.8706  
## 0.193 1038 1.321 0.1866  
## 0.187 1038 0.656 0.5123  
## 0.184 1038 -0.385 0.7001  
## 0.173 1038 -2.616 0.0090  
## 0.173 1038 -1.649 0.0995  
## 0.166 1038 -2.256 0.0243  
## 0.177 1038 -1.491 0.1363  
## 0.167 1038 -1.313 0.1895  
## 0.174 1038 -0.481 0.6303  
## 0.168 1038 -1.842 0.0658  
## 0.174 1038 -1.766 0.0778  
## 0.179 1038 -0.457 0.6475  
## 0.173 1038 -1.243 0.2140  
## 0.192 1038 -1.985 0.0474  
## 0.192 1038 -1.118 0.2639  
## 0.186 1038 -1.635 0.1023  
## 0.195 1038 -0.986 0.3243  
## 0.187 1038 -0.796 0.4261  
## 0.192 1038 -0.067 0.9466  
## 0.188 1038 -1.273 0.2035  
## 0.193 1038 -1.221 0.2225  
## 0.198 1038 -0.056 0.9554  
## 0.192 1038 -0.750 0.4531  
## 0.181 1038 0.919 0.3582  
## 0.174 1038 0.445 0.6563  
## 0.185 1038 1.017 0.3094  
## 0.176 1038 1.323 0.1862  
## 0.182 1038 2.026 0.0430  
## 0.176 1038 0.804 0.4217  
## 0.182 1038 0.795 0.4270  
## 0.187 1038 1.973 0.0488  
## 0.181 1038 1.309 0.1909  
## 0.174 1038 -0.510 0.6103  
## 0.185 1038 0.117 0.9068  
## 0.176 1038 0.374 0.7086  
## 0.183 1038 1.104 0.2699  
## 0.177 1038 -0.139 0.8898  
## 0.183 1038 -0.119 0.9056  
## 0.188 1038 1.083 0.2791  
## 0.181 1038 0.389 0.6972  
## 0.178 1038 0.622 0.5344  
## 0.168 1038 0.919 0.3582  
## 0.175 1038 1.657 0.0979  
## 0.169 1038 0.381 0.7034  
## 0.175 1038 0.384 0.7010  
## 0.181 1038 1.614 0.1069  
## 0.175 1038 0.913 0.3614  
## 0.179 1038 0.246 0.8056  
## 0.185 1038 0.971 0.3319  
## 0.180 1038 -0.256 0.7981  
## 0.186 1038 -0.233 0.8159  
## 0.191 1038 0.950 0.3425  
## 0.185 1038 0.264 0.7916  
## 0.176 1038 0.774 0.4394  
## 0.171 1038 -0.529 0.5970  
## 0.177 1038 -0.495 0.6205  
## 0.182 1038 0.755 0.4504  
## 0.175 1038 0.027 0.9784  
## 0.178 1038 -1.271 0.2039  
## 0.184 1038 -1.215 0.2246  
## 0.188 1038 0.010 0.9923  
## 0.180 1038 -0.726 0.4680  
## 0.177 1038 0.016 0.9872  
## 0.183 1038 1.244 0.2137  
## 0.177 1038 0.538 0.5904  
## 0.188 1038 1.197 0.2316  
## 0.182 1038 0.505 0.6134  
## 0.187 1038 -0.710 0.4777  
##   
## Results are averaged over the levels of: Gender

emmip(mod\_mice, framing\_condition ~ norm\_condition, CIs = FALSE, xlab = "Norm Condition", ylab = "Consumer Intentions")



There are no significant differences between the control norm/control framing condition and any of the other combinations of framing/norm conditions.

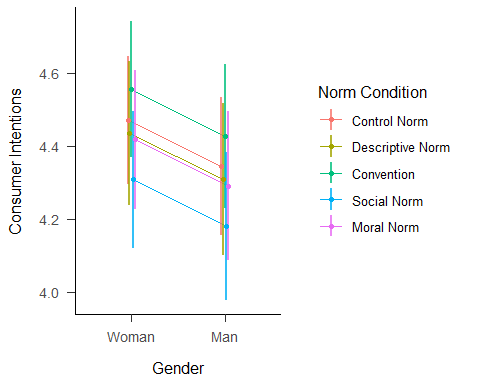
### Gender Interactions (exploratory)

Gender X Norm

emmeans(mod\_mice, ~ norm\_condition\*Gender\*framing\_condition, adjust = "none")

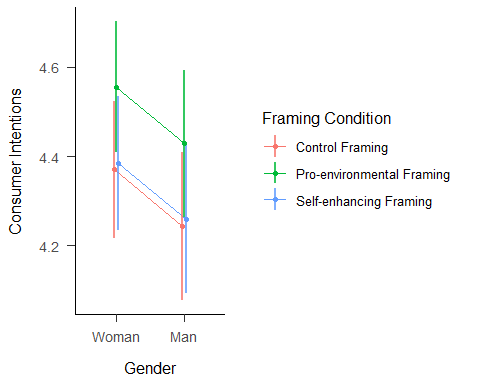
## norm\_condition Gender framing\_condition emmean SE df lower.CL upper.CL  
## control\_norm Woman control\_framing 4.51 0.127 1038 4.26 4.76  
## descriptive\_norm Woman control\_framing 4.37 0.134 1038 4.10 4.63  
## convention\_norm Woman control\_framing 4.56 0.141 1038 4.29 4.84  
## social\_norm Woman control\_framing 4.23 0.120 1038 3.99 4.46  
## moral\_norm Woman control\_framing 4.30 0.146 1038 4.01 4.59  
## control\_norm Man control\_framing 4.39 0.131 1038 4.13 4.64  
## descriptive\_norm Man control\_framing 4.24 0.142 1038 3.96 4.52  
## convention\_norm Man control\_framing 4.44 0.143 1038 4.16 4.72  
## social\_norm Man control\_framing 4.10 0.125 1038 3.85 4.34  
## moral\_norm Man control\_framing 4.17 0.150 1038 3.88 4.47  
## control\_norm Woman pro\_env\_framing 4.68 0.132 1038 4.42 4.94  
## descriptive\_norm Woman pro\_env\_framing 4.51 0.133 1038 4.25 4.77  
## convention\_norm Woman pro\_env\_framing 4.60 0.121 1038 4.36 4.84  
## social\_norm Woman pro\_env\_framing 4.49 0.135 1038 4.23 4.76  
## moral\_norm Woman pro\_env\_framing 4.45 0.122 1038 4.21 4.69  
## control\_norm Man pro\_env\_framing 4.55 0.135 1038 4.29 4.82  
## descriptive\_norm Man pro\_env\_framing 4.39 0.135 1038 4.12 4.65  
## convention\_norm Man pro\_env\_framing 4.47 0.128 1038 4.22 4.73  
## social\_norm Man pro\_env\_framing 4.36 0.144 1038 4.08 4.65  
## moral\_norm Man pro\_env\_framing 4.32 0.131 1038 4.06 4.58  
## control\_norm Woman self\_enh\_framing 4.31 0.131 1038 4.05 4.57  
## descriptive\_norm Woman self\_enh\_framing 4.54 0.125 1038 4.29 4.78  
## convention\_norm Woman self\_enh\_framing 4.53 0.133 1038 4.27 4.80  
## social\_norm Woman self\_enh\_framing 4.31 0.141 1038 4.03 4.59  
## moral\_norm Woman self\_enh\_framing 4.44 0.132 1038 4.18 4.70  
## control\_norm Man self\_enh\_framing 4.18 0.140 1038 3.91 4.46  
## descriptive\_norm Man self\_enh\_framing 4.41 0.130 1038 4.15 4.67  
## convention\_norm Man self\_enh\_framing 4.41 0.137 1038 4.14 4.68  
## social\_norm Man self\_enh\_framing 4.18 0.144 1038 3.90 4.46  
## moral\_norm Man self\_enh\_framing 4.31 0.135 1038 4.05 4.58  
##   
## Confidence level used: 0.95

emmip(mod\_mice, norm\_condition ~ Gender, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Gender", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + theme\_apa()



Gender X Framing

emmip(mod\_mice, framing\_condition ~ Gender, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Gender", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Framing Condition", breaks=c("control\_framing","pro\_env\_framing","self\_enh\_framing"), labels=c("Control Framing", "Pro-environmental Framing", "Self-enhancing Framing")) + theme\_apa()



Gender X Norm X Framing

emmip(mod\_mice, norm\_condition ~ Gender | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1, alpha = 0.8), xlab = "Gender", ylab = "Consumer Intentions") + scale\_colour\_discrete(name = "Norm Condition", breaks=c("control\_norm","descriptive\_norm", "convention\_norm", "social\_norm", "moral\_norm"), labels=c("Control Norm", "Descriptive Norm", "Convention", "Social Norm", "Moral Norm")) + facet\_wrap(~framing\_condition, labeller = labeller(framing\_condition = frame\_labs)) + theme\_apa()

