Analysis using Multiple Imputation (scmfcs)

2023-03-29

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# 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

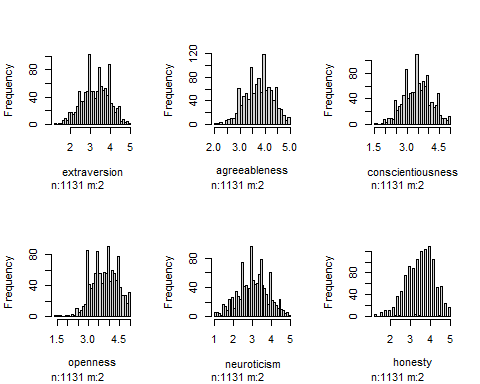
data\_R <- data %>%  
 mutate(across(c(big\_2\_11,  
 big\_2\_16,  
 big\_2\_26,  
 big\_2\_31,  
 big\_2\_36,  
 big\_2\_51,  
 big\_2\_12,  
 big\_2\_17,  
 big\_2\_22,  
 big\_2\_37,  
 big\_2\_42,  
 big\_2\_47,  
 big\_2\_3,  
 big\_2\_8,  
 big\_2\_23,  
 big\_2\_28,  
 big\_2\_48,  
 big\_2\_58,  
 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

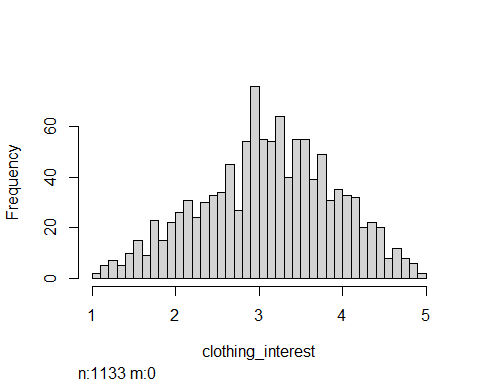
data\_R <- data\_R %>%  
 mutate(across(c(clothing\_interest\_3,  
 clothing\_interest\_5,  
 clothing\_interest\_7,  
 clothing\_interest\_9,  
 clothing\_interest\_12,  
 clothing\_interest\_14,  
 clothing\_interest\_15,  
 clothing\_interest\_16,  
 clothing\_interest\_18,  
 clothing\_interest\_20), ~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

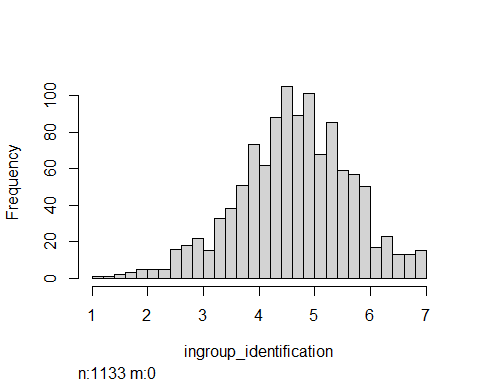
No items need to be reverse-coded.

### 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$values\_1\_rec <- dplyr::recode(data\_R$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$values\_2\_rec <- dplyr::recode(data\_R$values\_2, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_3\_rec <- dplyr::recode(data\_R$values\_3, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_4\_rec <- dplyr::recode(data\_R$values\_4, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_5\_rec <- dplyr::recode(data\_R$values\_5, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_6\_rec <- dplyr::recode(data\_R$values\_6, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_7\_rec <- dplyr::recode(data\_R$values\_7, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_8\_rec <- dplyr::recode(data\_R$values\_8, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_9\_rec <- dplyr::recode(data\_R$values\_9, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_10\_rec <- dplyr::recode(data\_R$values\_10, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_11\_rec <- dplyr::recode(data\_R$values\_11, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_12\_rec <- dplyr::recode(data\_R$values\_12, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_13\_rec <- dplyr::recode(data\_R$values\_13, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_14\_rec <- dplyr::recode(data\_R$values\_14, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_15\_rec <- dplyr::recode(data\_R$values\_15, `-3` = 1, `-2` = 2, `-1` = 3, `0` = 4, `1` = 5, `2` = 6, `3` = 7)  
data\_R$values\_16\_rec <- dplyr::recode(data\_R$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)

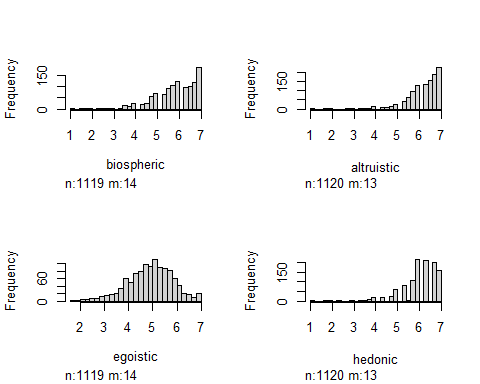
##   
## 1 2 3 4 5 6 7   
## 4 11 29 116 250 394 312

### 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)

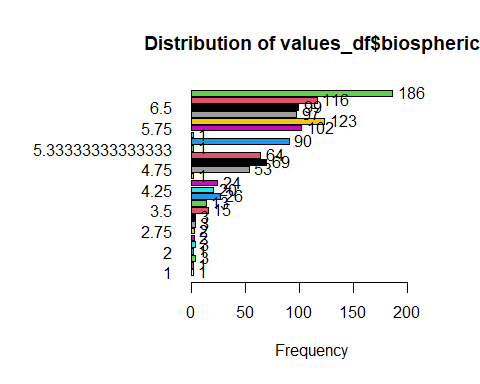
### Visually inspect

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



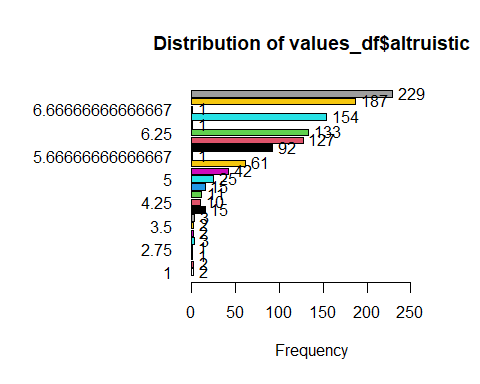
### Frequency tables

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



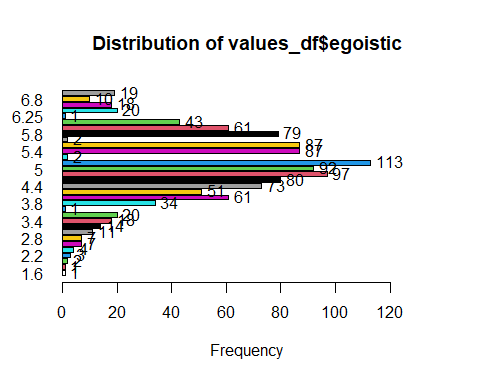
## values\_df$biospheric :   
## Frequency %(NA+) cum.%(NA+) %(NA-) cum.%(NA-)  
## 1 1 0.1 0.1 0.1 0.1  
## 1.5 1 0.1 0.2 0.1 0.2  
## 1.75 3 0.3 0.4 0.3 0.4  
## 2 1 0.1 0.5 0.1 0.5  
## 2.25 3 0.3 0.8 0.3 0.8  
## 2.5 2 0.2 1.0 0.2 1.0  
## 2.75 2 0.2 1.1 0.2 1.2  
## 3 3 0.3 1.4 0.3 1.4  
## 3.25 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)



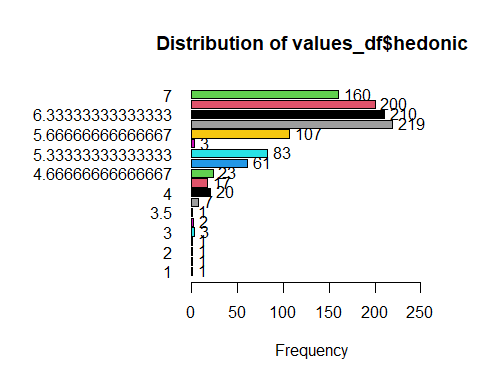
## values\_df$altruistic :   
## Frequency %(NA+) cum.%(NA+) %(NA-) cum.%(NA-)  
## 1 2 0.2 0.2 0.2 0.2  
## 1.75 2 0.2 0.4 0.2 0.4  
## 2 1 0.1 0.4 0.1 0.4  
## 2.75 1 0.1 0.5 0.1 0.5  
## 3 3 0.3 0.8 0.3 0.8  
## 3.25 2 0.2 1.0 0.2 1.0  
## 3.5 2 0.2 1.1 0.2 1.2  
## 3.75 3 0.3 1.4 0.3 1.4  
## 4 15 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

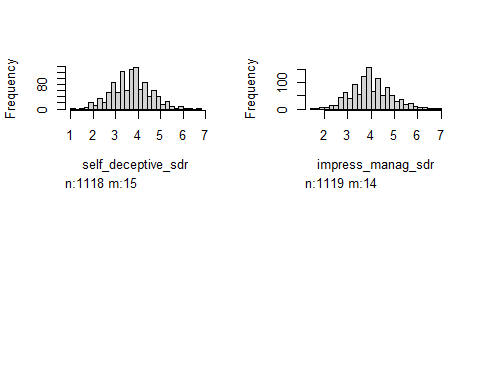
data\_R <- data\_R %>%  
 mutate(across(c(socially\_desirable\_1,  
 socially\_desirable\_3,  
 socially\_desirable\_5,  
 socially\_desirable\_8,  
 socially\_desirable\_9,  
 socially\_desirable\_11,  
 socially\_desirable\_12,  
 socially\_desirable\_13), ~8 - .)) # replace '#' with the max possible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

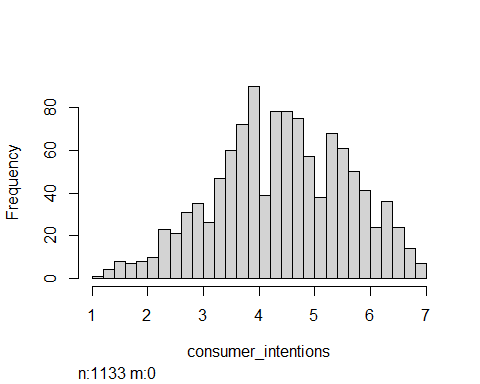
data\_R <- data\_R %>%  
 mutate(across(c(consumer\_intentions\_2,  
 consumer\_intentions\_4,  
 consumer\_intentions\_7,  
 consumer\_intentions\_9), ~8 - .)) # replace '#' with the max possible value plus 1 for any particular scale

### 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

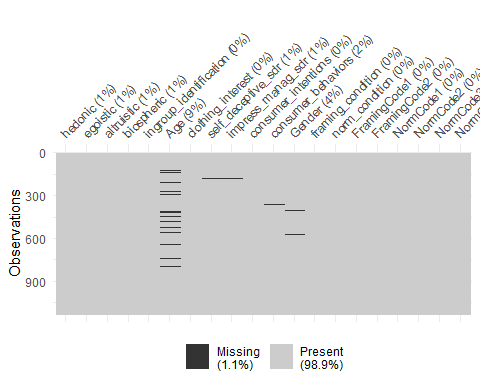
# Gender  
levels(data\_R\_alt$Gender) <- c("Woman", "Man", "Non-binary", "I prefer not to identify", "Other")  
  
data\_R\_alt$Gender[data\_R\_alt$Gender == "Non-binary"] <- NA  
data\_R\_alt$Gender[data\_R\_alt$Gender == "I prefer not to identify"] <- NA  
data\_R\_alt$Gender[data\_R\_alt$Gender ==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

## Centering continuous predictors

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

## Class: mipo m = 5   
## term m  
## 1 (Intercept) 5  
## 2 framing\_conditionFrameCode1 5  
## 3 framing\_conditionFrameCode2 5  
## 4 norm\_condition1 5  
## 5 norm\_condition2 5  
## 6 norm\_condition3 5  
## 7 norm\_condition4 5  
## 8 biospheric\_center 5  
## 9 altruistic\_center 5  
## 10 egoistic\_center 5  
## 11 hedonic\_center 5  
## 12 ingroup\_center 5  
## 13 self\_dec\_center 5  
## 14 impress\_manag\_center 5  
## 15 clothing\_center 5  
## 16 Gender1 5  
## 17 Age\_center 5  
## 18 framing\_conditionFrameCode1:norm\_condition1 5  
## 19 framing\_conditionFrameCode2:norm\_condition1 5  
## 20 framing\_conditionFrameCode1:norm\_condition2 5  
## 21 framing\_conditionFrameCode2:norm\_condition2 5  
## 22 framing\_conditionFrameCode1:norm\_condition3 5  
## 23 framing\_conditionFrameCode2:norm\_condition3 5  
## 24 framing\_conditionFrameCode1:norm\_condition4 5  
## 25 framing\_conditionFrameCode2:norm\_condition4 5  
## 26 framing\_conditionFrameCode1:biospheric\_center 5  
## 27 framing\_conditionFrameCode2:biospheric\_center 5  
## 28 norm\_condition1:biospheric\_center 5  
## 29 norm\_condition2:biospheric\_center 5  
## 30 norm\_condition3:biospheric\_center 5  
## 31 norm\_condition4:biospheric\_center 5  
## 32 framing\_conditionFrameCode1:altruistic\_center 5  
## 33 framing\_conditionFrameCode2:altruistic\_center 5  
## 34 norm\_condition1:altruistic\_center 5  
## 35 norm\_condition2:altruistic\_center 5  
## 36 norm\_condition3:altruistic\_center 5  
## 37 norm\_condition4:altruistic\_center 5  
## 38 framing\_conditionFrameCode1:egoistic\_center 5  
## 39 framing\_conditionFrameCode2:egoistic\_center 5  
## 40 norm\_condition1:egoistic\_center 5  
## 41 norm\_condition2:egoistic\_center 5  
## 42 norm\_condition3:egoistic\_center 5  
## 43 norm\_condition4:egoistic\_center 5  
## 44 framing\_conditionFrameCode1:hedonic\_center 5  
## 45 framing\_conditionFrameCode2:hedonic\_center 5  
## 46 norm\_condition1:hedonic\_center 5  
## 47 norm\_condition2:hedonic\_center 5  
## 48 norm\_condition3:hedonic\_center 5  
## 49 norm\_condition4:hedonic\_center 5  
## 50 framing\_conditionFrameCode1:ingroup\_center 5  
## 51 framing\_conditionFrameCode2:ingroup\_center 5  
## 52 norm\_condition1:ingroup\_center 5  
## 53 norm\_condition2:ingroup\_center 5  
## 54 norm\_condition3:ingroup\_center 5  
## 55 norm\_condition4:ingroup\_center 5  
## 56 framing\_conditionFrameCode1:norm\_condition1:biospheric\_center 5  
## 57 framing\_conditionFrameCode2:norm\_condition1:biospheric\_center 5  
## 58 framing\_conditionFrameCode1:norm\_condition2:biospheric\_center 5  
## 59 framing\_conditionFrameCode2:norm\_condition2:biospheric\_center 5  
## 60 framing\_conditionFrameCode1:norm\_condition3:biospheric\_center 5  
## 61 framing\_conditionFrameCode2:norm\_condition3:biospheric\_center 5  
## 62 framing\_conditionFrameCode1:norm\_condition4:biospheric\_center 5  
## 63 framing\_conditionFrameCode2:norm\_condition4:biospheric\_center 5  
## 64 framing\_conditionFrameCode1:norm\_condition1:altruistic\_center 5  
## 65 framing\_conditionFrameCode2:norm\_condition1:altruistic\_center 5  
## 66 framing\_conditionFrameCode1:norm\_condition2:altruistic\_center 5  
## 67 framing\_conditionFrameCode2:norm\_condition2:altruistic\_center 5  
## 68 framing\_conditionFrameCode1:norm\_condition3:altruistic\_center 5  
## 69 framing\_conditionFrameCode2:norm\_condition3:altruistic\_center 5  
## 70 framing\_conditionFrameCode1:norm\_condition4:altruistic\_center 5  
## 71 framing\_conditionFrameCode2:norm\_condition4:altruistic\_center 5  
## 72 framing\_conditionFrameCode1:norm\_condition1:egoistic\_center 5  
## 73 framing\_conditionFrameCode2:norm\_condition1:egoistic\_center 5  
## 74 framing\_conditionFrameCode1:norm\_condition2:egoistic\_center 5  
## 75 framing\_conditionFrameCode2:norm\_condition2:egoistic\_center 5  
## 76 framing\_conditionFrameCode1:norm\_condition3:egoistic\_center 5  
## 77 framing\_conditionFrameCode2:norm\_condition3:egoistic\_center 5  
## 78 framing\_conditionFrameCode1:norm\_condition4:egoistic\_center 5  
## 79 framing\_conditionFrameCode2:norm\_condition4:egoistic\_center 5  
## 80 framing\_conditionFrameCode1:norm\_condition1:hedonic\_center 5  
## 81 framing\_conditionFrameCode2:norm\_condition1:hedonic\_center 5  
## 82 framing\_conditionFrameCode1:norm\_condition2:hedonic\_center 5  
## 83 framing\_conditionFrameCode2:norm\_condition2:hedonic\_center 5  
## 84 framing\_conditionFrameCode1:norm\_condition3:hedonic\_center 5  
## 85 framing\_conditionFrameCode2:norm\_condition3:hedonic\_center 5  
## 86 framing\_conditionFrameCode1:norm\_condition4:hedonic\_center 5  
## 87 framing\_conditionFrameCode2:norm\_condition4:hedonic\_center 5  
## 88 framing\_conditionFrameCode1:norm\_condition1:ingroup\_center 5  
## 89 framing\_conditionFrameCode2:norm\_condition1:ingroup\_center 5  
## 90 framing\_conditionFrameCode1:norm\_condition2:ingroup\_center 5  
## 91 framing\_conditionFrameCode2:norm\_condition2:ingroup\_center 5  
## 92 framing\_conditionFrameCode1:norm\_condition3:ingroup\_center 5  
## 93 framing\_conditionFrameCode2:norm\_condition3:ingroup\_center 5  
## 94 framing\_conditionFrameCode1:norm\_condition4:ingroup\_center 5  
## 95 framing\_conditionFrameCode2:norm\_condition4:ingroup\_center 5  
## estimate ubar b t dfcom df  
## 1 4.3882832064 0.0011681294 0.0000060553075 0.0011753958 1038 1019.57129  
## 2 0.0334577158 0.0067128673 0.0000094990243 0.0067242661 1038 1033.48166  
## 3 0.1357712161 0.0048631431 0.0000147639939 0.0048808599 1038 1028.74730  
## 4 -0.0149520890 0.0026557625 0.0000060606385 0.0026630353 1038 1031.18988  
## 5 0.0280793928 0.0009043684 0.0000009852237 0.0009055507 1038 1034.19720  
## 6 -0.0423673976 0.0004569999 0.0000022432956 0.0004596918 1038 1020.92430  
## 7 -0.0151741185 0.0002819209 0.0000010314996 0.0002831587 1038 1026.41913  
## 8 0.3627015888 0.0021412549 0.0000078505877 0.0021506756 1038 1026.38932  
## 9 0.0773297593 0.0039910590 0.0000813024848 0.0040886220 1038 884.02401  
## 10 -0.2966165119 0.0018189641 0.0000067358134 0.0018270471 1038 1026.24312  
## 11 -0.0929073382 0.0029029298 0.0000678207251 0.0029843147 1038 848.72942  
## 12 0.0276316941 0.0011437088 0.0000163752229 0.0011633591 1038 949.52703  
## 13 -0.1090110036 0.0018339362 0.0000318176158 0.0018721173 1038 917.99842  
## 14 -0.0147035547 0.0017635696 0.0000140797575 0.0017804653 1038 1003.00335  
## 15 0.0035678876 0.0020298827 0.0000023245762 0.0020326722 1038 1034.08032  
## 16 0.1457676637 0.0057464766 0.0001985445255 0.0059847300 1038 713.53198  
## 17 -0.0427592289 0.0003297816 0.0000796223166 0.0004253284 1038 72.14511  
## 18 0.1965241038 0.0159085288 0.0000230936684 0.0159362412 1038 1033.39624  
## 19 -0.1039788804 0.0121459479 0.0000143396888 0.0121631555 1038 1034.00484  
## 20 -0.0059427565 0.0057048101 0.0000245599907 0.0057342821 1038 1023.71317  
## 21 -0.0370919465 0.0038850282 0.0000039083565 0.0038897183 1038 1034.36758  
## 22 0.0264886008 0.0026860347 0.0000100500274 0.0026980947 1038 1026.08903  
## 23 0.0237267417 0.0021102491 0.0000058178617 0.0021172305 1038 1029.69938  
## 24 0.0279839118 0.0017957198 0.0000194310821 0.0018190371 1038 981.49140  
## 25 -0.0151741942 0.0011919244 0.0000043120985 0.0011970989 1038 1026.58113  
## 26 -0.0488231105 0.0143292912 0.0005705039616 0.0150138959 1038 653.10052  
## 27 0.0612880822 0.0083778531 0.0000517491910 0.0084399521 1038 1014.26629  
## 28 -0.0697117506 0.0049238041 0.0001058578458 0.0050508335 1038 870.86698  
## 29 0.0775608914 0.0017182120 0.0000060448932 0.0017254659 1038 1026.96919  
## 30 -0.0488798963 0.0008369332 0.0000188969636 0.0008596095 1038 858.09479  
## 31 -0.0430613875 0.0006216588 0.0000075150012 0.0006306768 1038 970.53211  
## 32 0.0192465577 0.0241111935 0.0008768949824 0.0251634675 1038 692.25818  
## 33 -0.1302201337 0.0157574853 0.0001824985442 0.0159764836 1038 975.00595  
## 34 -0.1274075455 0.0097190243 0.0004103930640 0.0102114960 1038 626.71535  
## 35 -0.0154798436 0.0030071737 0.0001066092293 0.0031351047 1038 702.94254  
## 36 0.0300800370 0.0017340365 0.0000420169194 0.0017844568 1038 838.29189  
## 37 0.0666363958 0.0008534360 0.0000111427292 0.0008668073 1038 961.66959  
## 38 -0.0325216020 0.0104575967 0.0000705218207 0.0105422229 1038 1010.95237  
## 39 0.0466865410 0.0073002739 0.0000349367389 0.0073421980 1038 1021.51317  
## 40 0.0497158522 0.0045647189 0.0002075671411 0.0048137994 1038 592.68007  
## 41 -0.0163551940 0.0012996553 0.0000142494572 0.0013167546 1038 980.29212  
## 42 0.0170479571 0.0006794657 0.0000030742473 0.0006831548 1038 1022.72856  
## 43 0.0153843389 0.0004309370 0.0000009245651 0.0004320464 1038 1031.58795  
## 44 0.0070837447 0.0173730681 0.0005809557915 0.0180702151 1038 726.70140  
## 45 0.1536129044 0.0125770825 0.0001710784588 0.0127823767 1038 956.49127  
## 46 0.0188896298 0.0078763471 0.0002229021289 0.0081438297 1038 788.81711  
## 47 0.0630064144 0.0023108895 0.0000453225733 0.0023652766 1038 892.74285  
## 48 -0.0440260755 0.0012361545 0.0000193523998 0.0012593774 1038 935.99026  
## 49 -0.0460898413 0.0006222353 0.0000057502154 0.0006291355 1038 994.01302  
## 50 0.0229637826 0.0067054511 0.0000151197273 0.0067235947 1038 1031.27033  
## 51 -0.0589411072 0.0050387883 0.0000120153985 0.0050532068 1038 1030.88212  
## 52 0.0073571447 0.0027585266 0.0000168417984 0.0027787367 1038 1014.67003  
## 53 -0.0117172294 0.0009716381 0.0000017266869 0.0009737101 1038 1032.59270  
## 54 0.0038522974 0.0004705365 0.0000002909292 0.0004708856 1038 1035.09041  
## 55 -0.0143472332 0.0002725935 0.0000007782756 0.0002735274 1038 1029.37090  
## 56 -0.0599126119 0.0315707128 0.0018434584184 0.0337828629 1038 475.09676  
## 57 0.0336809631 0.0205137698 0.0002544413697 0.0208190995 1038 967.69432  
## 58 -0.1302043908 0.0110709894 0.0000359059929 0.0111140766 1038 1028.00316  
## 59 0.1137594949 0.0071621132 0.0000262415162 0.0071936030 1038 1026.39889  
## 60 0.1455229074 0.0056726244 0.0000704291968 0.0057571394 1038 967.58358  
## 61 0.0655072410 0.0032534470 0.0000368550078 0.0032976731 1038 977.19965  
## 62 0.0603785146 0.0044885071 0.0000626043573 0.0045636323 1038 953.15420  
## 63 0.1141279551 0.0022394020 0.0000143772846 0.0022566547 1038 1012.86894  
## 64 -0.0920084370 0.0593276447 0.0065832581871 0.0672275545 1038 219.97723  
## 65 0.2141104932 0.0424381619 0.0007493671208 0.0433374024 1038 914.63133  
## 66 0.2509724960 0.0190771191 0.0003364431629 0.0194808509 1038 914.87129  
## 67 -0.0004125401 0.0127950369 0.0002565779618 0.0131029304 1038 887.69535  
## 68 -0.1575017850 0.0112260486 0.0000656962611 0.0113048841 1038 1016.07245  
## 69 -0.0649551021 0.0071694118 0.0001400493400 0.0073374710 1038 893.63658  
## 70 -0.0067356713 0.0057517206 0.0001040698286 0.0058766044 1038 909.83134  
## 71 -0.0838896679 0.0033563242 0.0000172705367 0.0033770489 1038 1019.76175  
## 72 0.0479152910 0.0297374845 0.0020035760196 0.0321417757 1038 409.47580  
## 73 0.1294453452 0.0187205538 0.0003910166182 0.0191897737 1038 878.03355  
## 74 -0.0181512121 0.0076324080 0.0000299211836 0.0076683135 1038 1025.35977  
## 75 0.1620209529 0.0060046153 0.0000113363372 0.0060182189 1038 1032.30097  
## 76 0.0806472358 0.0040451002 0.0000162834271 0.0040646403 1038 1024.92000  
## 77 0.0253989974 0.0030508308 0.0000136595204 0.0030672222 1038 1022.94319  
## 78 -0.0587552086 0.0027723203 0.0000279257384 0.0028058312 1038 987.58236  
## 79 -0.0388868664 0.0018046267 0.0000008726854 0.0018056739 1038 1035.31478  
## 80 -0.0076665901 0.0476982022 0.0030368442452 0.0513424153 1038 435.06967  
## 81 -0.2264160730 0.0353339971 0.0007342583905 0.0362151072 1038 879.27424  
## 82 -0.1343450768 0.0135557271 0.0003125209433 0.0139307522 1038 852.42037  
## 83 -0.0013505332 0.0105671212 0.0001225897244 0.0107142289 1038 974.83740  
## 84 -0.1171795503 0.0077972744 0.0000917077256 0.0079073237 1038 973.43279  
## 85 -0.0032217551 0.0052270918 0.0000603485858 0.0052995101 1038 975.32220  
## 86 -0.0074912407 0.0038204443 0.0000625149970 0.0038954623 1038 928.57863  
## 87 0.0349662955 0.0027179999 0.0000192471070 0.0027410965 1038 1008.88085  
## 88 0.1869362900 0.0162665610 0.0001346036756 0.0164280855 1038 1001.00258  
## 89 0.0359388561 0.0126166405 0.0000317784382 0.0126547746 1038 1030.46758  
## 90 0.1193152572 0.0060218510 0.0000300477445 0.0060579083 1038 1020.53092  
## 91 -0.0319159427 0.0041932667 0.0000011952942 0.0041947011 1038 1035.62016  
## 92 0.0373737693 0.0028190970 0.0000190948693 0.0028420108 1038 1010.77246  
## 93 -0.0300534314 0.0021402919 0.0000019915555 0.0021426818 1038 1034.51729  
## 94 -0.0886941843 0.0015894615 0.0000067190817 0.0015975244 1038 1024.05466  
## 95 0.0396917493 0.0012435414 0.0000003739646 0.0012439902 1038 1035.59714  
## riv lambda fmi  
## 1 0.0062205171 0.0061820615 0.008125824  
## 2 0.0016980567 0.0016951782 0.003621512  
## 3 0.0036430745 0.0036298507 0.005561274  
## 4 0.0027384851 0.0027310063 0.004659606  
## 5 0.0013072863 0.0013055796 0.003231336  
## 6 0.0058904937 0.0058559990 0.007797830  
## 7 0.0043905917 0.0043713987 0.006305749  
## 8 0.0043996188 0.0043803469 0.006314736  
## 9 0.0244453872 0.0238620697 0.026062998  
## 10 0.0044437248 0.0044240654 0.006358644  
## 11 0.0280354249 0.0272708743 0.029555001  
## 12 0.0171811808 0.0168909739 0.018955186  
## 13 0.0208192296 0.0203946292 0.022521897  
## 14 0.0095804036 0.0094894905 0.011458690  
## 15 0.0013742132 0.0013723273 0.003298172  
## 16 0.0414607853 0.0398102222 0.042490325  
## 17 0.2897274365 0.2246423766 0.245278652  
## 18 0.0017419840 0.0017389547 0.003665363  
## 19 0.0014167381 0.0014147337 0.003340637  
## 20 0.0051661647 0.0051396126 0.007077565  
## 21 0.0012072056 0.0012057500 0.003131382  
## 22 0.0044899022 0.0044698330 0.006404613  
## 23 0.0033083459 0.0032974369 0.005227723  
## 24 0.0129849312 0.0128184840 0.014823949  
## 25 0.0043413141 0.0043225485 0.006256689  
## 26 0.0477765959 0.0455980751 0.048507391  
## 27 0.0074122843 0.0073577466 0.009309334  
## 28 0.0257990390 0.0251501883 0.027381306  
## 29 0.0042217561 0.0042040078 0.006137650  
## 30 0.0270945838 0.0263798332 0.028641187  
## 31 0.0145063515 0.0142989263 0.016323926  
## 32 0.0436425505 0.0418175269 0.044573863  
## 33 0.0138980458 0.0137075378 0.015724484  
## 34 0.0506708966 0.0482271821 0.051250049  
## 35 0.0425419645 0.0408059972 0.043523482  
## 36 0.0290768404 0.0282552665 0.030565392  
## 37 0.0156675782 0.0154258918 0.017467159  
## 38 0.0080923167 0.0080273568 0.009984002  
## 39 0.0057428101 0.0057100186 0.007651018  
## 40 0.0545664645 0.0517430303 0.054926810  
## 41 0.0131568340 0.0129859796 0.014993550  
## 42 0.0054294081 0.0054000888 0.007339393  
## 43 0.0025745718 0.0025679604 0.004496133  
## 44 0.0401280272 0.0385798922 0.041214998  
## 45 0.0163228754 0.0160607183 0.018111679  
## 46 0.0339602292 0.0328448119 0.035287687  
## 47 0.0235351316 0.0229939656 0.025175409  
## 48 0.0187863892 0.0184399687 0.020530640  
## 49 0.0110894687 0.0109678411 0.012951832  
## 50 0.0027058094 0.0026985078 0.004627020  
## 51 0.0028614971 0.0028533323 0.004782269  
## 52 0.0073264322 0.0072731460 0.009224126  
## 53 0.0021325062 0.0021279683 0.004055120  
## 54 0.0007419511 0.0007414010 0.002666587  
## 55 0.0034260933 0.0034143952 0.005345069  
## 56 0.0700696913 0.0654814279 0.069390756  
## 57 0.0148841313 0.0146658430 0.016696007  
## 58 0.0038919007 0.0038768125 0.005809150  
## 59 0.0043967218 0.0043774753 0.006311852  
## 60 0.0148987542 0.0146800399 0.016710406  
## 61 0.0135935851 0.0134112778 0.015424314  
## 62 0.0167372418 0.0164617180 0.018518998  
## 63 0.0077041736 0.0076452731 0.009598979  
## 64 0.1331573143 0.1175099985 0.125425515  
## 65 0.0211894320 0.0207497564 0.022884056  
## 66 0.0211631428 0.0207245463 0.022858343  
## 67 0.0240635144 0.0234980683 0.025690742  
## 68 0.0070225523 0.0069735800 0.008922463  
## 69 0.0234411432 0.0229042416 0.025083710  
## 70 0.0217124237 0.0212510127 0.023395437  
## 71 0.0061748040 0.0061369098 0.008080399  
## 72 0.0808505247 0.0748026881 0.079288756  
## 73 0.0250644264 0.0244515620 0.026666117  
## 74 0.0047043371 0.0046823099 0.006618048  
## 75 0.0022655247 0.0022604037 0.004187842  
## 76 0.0048305633 0.0048073411 0.006743664  
## 77 0.0053727741 0.0053440616 0.007283069  
## 78 0.0120876676 0.0119433010 0.013938202  
## 79 0.0005802987 0.0005799621 0.002505043  
## 80 0.0764014768 0.0709786065 0.075220039  
## 81 0.0249366090 0.0243299037 0.026541620  
## 82 0.0276654383 0.0269206663 0.029195757  
## 83 0.0139212626 0.0137301220 0.015747369  
## 84 0.0141138127 0.0139173854 0.015937151  
## 85 0.0138544156 0.0136650938 0.015681474  
## 86 0.0196359353 0.0192577906 0.021363340  
## 87 0.0084976192 0.0084260181 0.010385881  
## 88 0.0099298438 0.0098322115 0.011804652  
## 89 0.0030225261 0.0030134180 0.004942819  
## 90 0.0059877426 0.0059521029 0.007894492  
## 91 0.0003420610 0.0003419440 0.002266917  
## 92 0.0081280791 0.0080625461 0.010019469  
## 93 0.0011166078 0.0011153623 0.003040891  
## 94 0.0050727232 0.0050471205 0.006984608  
## 95 0.0003608706 0.0003607404 0.002285720

## Pooled Regression Results

Using mice package:

| term | estimate | std.error | statistic | df | p.value |
| --- | --- | --- | --- | --- | --- |
| (Intercept) | 4.38828 | 0.03428 | 127.99782 | 1019.57129 | 0.00000 |
| framing\_conditionFrameCode1 | 0.03346 | 0.08200 | 0.40801 | 1033.48166 | 0.68335 |
| framing\_conditionFrameCode2 | 0.13577 | 0.06986 | 1.94339 | 1028.74730 | 0.05224 |
| norm\_condition1 | -0.01495 | 0.05160 | -0.28974 | 1031.18988 | 0.77207 |
| norm\_condition2 | 0.02808 | 0.03009 | 0.93311 | 1034.19720 | 0.35098 |
| norm\_condition3 | -0.04237 | 0.02144 | -1.97605 | 1020.92430 | 0.04842 |
| norm\_condition4 | -0.01517 | 0.01683 | -0.90175 | 1026.41913 | 0.36740 |
| biospheric\_center | 0.36270 | 0.04638 | 7.82099 | 1026.38932 | 0.00000 |
| altruistic\_center | 0.07733 | 0.06394 | 1.20937 | 884.02401 | 0.22685 |
| egoistic\_center | -0.29662 | 0.04274 | -6.93938 | 1026.24312 | 0.00000 |
| hedonic\_center | -0.09291 | 0.05463 | -1.70070 | 848.72942 | 0.08937 |
| ingroup\_center | 0.02763 | 0.03411 | 0.81012 | 949.52703 | 0.41807 |
| self\_dec\_center | -0.10901 | 0.04327 | -2.51944 | 917.99842 | 0.01192 |
| impress\_manag\_center | -0.01470 | 0.04220 | -0.34846 | 1003.00335 | 0.72757 |
| clothing\_center | 0.00357 | 0.04509 | 0.07914 | 1034.08032 | 0.93694 |
| Gender1 | 0.14577 | 0.07736 | 1.88425 | 713.53198 | 0.05994 |
| Age\_center | -0.04276 | 0.02062 | -2.07333 | 72.14511 | 0.04171 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.19652 | 0.12624 | 1.55676 | 1033.39624 | 0.11983 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.10398 | 0.11029 | -0.94281 | 1034.00484 | 0.34600 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.00594 | 0.07573 | -0.07848 | 1023.71317 | 0.93746 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.03709 | 0.06237 | -0.59473 | 1034.36758 | 0.55215 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.02649 | 0.05194 | 0.50995 | 1026.08903 | 0.61019 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02373 | 0.04601 | 0.51565 | 1029.69938 | 0.60621 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.02798 | 0.04265 | 0.65613 | 981.49140 | 0.51190 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.01517 | 0.03460 | -0.43857 | 1026.58113 | 0.66106 |
| framing\_conditionFrameCode1:biospheric\_center | -0.04882 | 0.12253 | -0.39845 | 653.10052 | 0.69043 |
| framing\_conditionFrameCode2:biospheric\_center | 0.06129 | 0.09187 | 0.66712 | 1014.26629 | 0.50485 |
| norm\_condition1:biospheric\_center | -0.06971 | 0.07107 | -0.98090 | 870.86698 | 0.32691 |
| norm\_condition2:biospheric\_center | 0.07756 | 0.04154 | 1.86719 | 1026.96919 | 0.06216 |
| norm\_condition3:biospheric\_center | -0.04888 | 0.02932 | -1.66717 | 858.09479 | 0.09585 |
| norm\_condition4:biospheric\_center | -0.04306 | 0.02511 | -1.71469 | 970.53211 | 0.08672 |
| framing\_conditionFrameCode1:altruistic\_center | 0.01925 | 0.15863 | 0.12133 | 692.25818 | 0.90346 |
| framing\_conditionFrameCode2:altruistic\_center | -0.13022 | 0.12640 | -1.03024 | 975.00595 | 0.30315 |
| norm\_condition1:altruistic\_center | -0.12741 | 0.10105 | -1.26081 | 626.71535 | 0.20785 |
| norm\_condition2:altruistic\_center | -0.01548 | 0.05599 | -0.27647 | 702.94254 | 0.78227 |
| norm\_condition3:altruistic\_center | 0.03008 | 0.04224 | 0.71207 | 838.29189 | 0.47662 |
| norm\_condition4:altruistic\_center | 0.06664 | 0.02944 | 2.26334 | 961.66959 | 0.02384 |
| framing\_conditionFrameCode1:egoistic\_center | -0.03252 | 0.10268 | -0.31674 | 1010.95237 | 0.75150 |
| framing\_conditionFrameCode2:egoistic\_center | 0.04669 | 0.08569 | 0.54485 | 1021.51317 | 0.58597 |
| norm\_condition1:egoistic\_center | 0.04972 | 0.06938 | 0.71656 | 592.68007 | 0.47393 |
| norm\_condition2:egoistic\_center | -0.01636 | 0.03629 | -0.45072 | 980.29212 | 0.65229 |
| norm\_condition3:egoistic\_center | 0.01705 | 0.02614 | 0.65225 | 1022.72856 | 0.51439 |
| norm\_condition4:egoistic\_center | 0.01538 | 0.02079 | 0.74014 | 1031.58795 | 0.45938 |
| framing\_conditionFrameCode1:hedonic\_center | 0.00708 | 0.13443 | 0.05270 | 726.70140 | 0.95799 |
| framing\_conditionFrameCode2:hedonic\_center | 0.15361 | 0.11306 | 1.35869 | 956.49127 | 0.17456 |
| norm\_condition1:hedonic\_center | 0.01889 | 0.09024 | 0.20932 | 788.81711 | 0.83425 |
| norm\_condition2:hedonic\_center | 0.06301 | 0.04863 | 1.29552 | 892.74285 | 0.19548 |
| norm\_condition3:hedonic\_center | -0.04403 | 0.03549 | -1.24060 | 935.99026 | 0.21506 |
| norm\_condition4:hedonic\_center | -0.04609 | 0.02508 | -1.83752 | 994.01302 | 0.06643 |
| framing\_conditionFrameCode1:ingroup\_center | 0.02296 | 0.08200 | 0.28005 | 1031.27033 | 0.77949 |
| framing\_conditionFrameCode2:ingroup\_center | -0.05894 | 0.07109 | -0.82915 | 1030.88212 | 0.40721 |
| norm\_condition1:ingroup\_center | 0.00736 | 0.05271 | 0.13957 | 1014.67003 | 0.88903 |
| norm\_condition2:ingroup\_center | -0.01172 | 0.03120 | -0.37550 | 1032.59270 | 0.70737 |
| norm\_condition3:ingroup\_center | 0.00385 | 0.02170 | 0.17753 | 1035.09041 | 0.85913 |
| norm\_condition4:ingroup\_center | -0.01435 | 0.01654 | -0.86750 | 1029.37090 | 0.38587 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.05991 | 0.18380 | -0.32596 | 475.09676 | 0.74459 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.03368 | 0.14429 | 0.23343 | 967.69432 | 0.81548 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.13020 | 0.10542 | -1.23506 | 1028.00316 | 0.21709 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.11376 | 0.08482 | 1.34126 | 1026.39889 | 0.18013 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.14552 | 0.07588 | 1.91791 | 967.58358 | 0.05542 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.06551 | 0.05743 | 1.14074 | 977.19965 | 0.25426 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.06038 | 0.06755 | 0.89377 | 953.15420 | 0.37167 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.11413 | 0.04750 | 2.40248 | 1012.86894 | 0.01646 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.09201 | 0.25928 | -0.35486 | 219.97723 | 0.72304 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.21411 | 0.20818 | 1.02851 | 914.63133 | 0.30398 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.25097 | 0.13957 | 1.79813 | 914.87129 | 0.07249 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | -0.00041 | 0.11447 | -0.00360 | 887.69535 | 0.99713 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.15750 | 0.10632 | -1.48133 | 1016.07245 | 0.13883 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.06496 | 0.08566 | -0.75830 | 893.63658 | 0.44847 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | -0.00674 | 0.07666 | -0.08787 | 909.83134 | 0.93000 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.08389 | 0.05811 | -1.44358 | 1019.76175 | 0.14917 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.04792 | 0.17928 | 0.26726 | 409.47580 | 0.78940 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.12945 | 0.13853 | 0.93444 | 878.03355 | 0.35033 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.01815 | 0.08757 | -0.20728 | 1025.35977 | 0.83583 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.16202 | 0.07758 | 2.08851 | 1032.30097 | 0.03700 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.08065 | 0.06375 | 1.26496 | 1024.92000 | 0.20617 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.02540 | 0.05538 | 0.45861 | 1022.94319 | 0.64661 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.05876 | 0.05297 | -1.10921 | 987.58236 | 0.26761 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.03889 | 0.04249 | -0.91513 | 1035.31478 | 0.36034 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.00767 | 0.22659 | -0.03383 | 435.06967 | 0.97302 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.22642 | 0.19030 | -1.18977 | 879.27424 | 0.23446 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.13435 | 0.11803 | -1.13824 | 852.42037 | 0.25534 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.00135 | 0.10351 | -0.01305 | 974.83740 | 0.98959 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.11718 | 0.08892 | -1.31776 | 973.43279 | 0.18789 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.00322 | 0.07280 | -0.04426 | 975.32220 | 0.96471 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.00749 | 0.06241 | -0.12003 | 928.57863 | 0.90449 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.03497 | 0.05236 | 0.66786 | 1008.88085 | 0.50437 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.18694 | 0.12817 | 1.45848 | 1001.00258 | 0.14502 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.03594 | 0.11249 | 0.31948 | 1030.46758 | 0.74943 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.11932 | 0.07783 | 1.53297 | 1020.53092 | 0.12559 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03192 | 0.06477 | -0.49278 | 1035.62016 | 0.62227 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.03737 | 0.05331 | 0.70106 | 1010.77246 | 0.48343 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03005 | 0.04629 | -0.64925 | 1034.51729 | 0.51632 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.08869 | 0.03997 | -2.21907 | 1024.05466 | 0.02670 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.03969 | 0.03527 | 1.12536 | 1035.59714 | 0.26070 |

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) | 4.39 | 0.03 | 128.00 | 1,019.57 | 0.00 |
| framing\_conditionFrameCode1 | 0.03 | 0.08 | 0.41 | 1,033.48 | 0.68 |
| framing\_conditionFrameCode2 | 0.14 | 0.07 | 1.94 | 1,028.75 | 0.05 |
| norm\_condition1 | -0.01 | 0.05 | -0.29 | 1,031.19 | 0.77 |
| norm\_condition2 | 0.03 | 0.03 | 0.93 | 1,034.20 | 0.35 |
| norm\_condition3 | -0.04 | 0.02 | -1.98 | 1,020.92 | 0.05 |
| norm\_condition4 | -0.02 | 0.02 | -0.90 | 1,026.42 | 0.37 |
| biospheric\_center | 0.36 | 0.05 | 7.82 | 1,026.39 | 0.00 |
| altruistic\_center | 0.08 | 0.06 | 1.21 | 884.02 | 0.23 |
| egoistic\_center | -0.30 | 0.04 | -6.94 | 1,026.24 | 0.00 |
| hedonic\_center | -0.09 | 0.05 | -1.70 | 848.73 | 0.09 |
| ingroup\_center | 0.03 | 0.03 | 0.81 | 949.53 | 0.42 |
| self\_dec\_center | -0.11 | 0.04 | -2.52 | 918.00 | 0.01 |
| impress\_manag\_center | -0.01 | 0.04 | -0.35 | 1,003.00 | 0.73 |
| clothing\_center | 0.00 | 0.05 | 0.08 | 1,034.08 | 0.94 |
| Gender1 | 0.15 | 0.08 | 1.88 | 713.53 | 0.06 |
| Age\_center | -0.04 | 0.02 | -2.07 | 72.15 | 0.04 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.20 | 0.13 | 1.56 | 1,033.40 | 0.12 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.10 | 0.11 | -0.94 | 1,034.00 | 0.35 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.01 | 0.08 | -0.08 | 1,023.71 | 0.94 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.04 | 0.06 | -0.59 | 1,034.37 | 0.55 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.03 | 0.05 | 0.51 | 1,026.09 | 0.61 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02 | 0.05 | 0.52 | 1,029.70 | 0.61 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.03 | 0.04 | 0.66 | 981.49 | 0.51 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.02 | 0.03 | -0.44 | 1,026.58 | 0.66 |
| framing\_conditionFrameCode1:biospheric\_center | -0.05 | 0.12 | -0.40 | 653.10 | 0.69 |
| framing\_conditionFrameCode2:biospheric\_center | 0.06 | 0.09 | 0.67 | 1,014.27 | 0.50 |
| norm\_condition1:biospheric\_center | -0.07 | 0.07 | -0.98 | 870.87 | 0.33 |
| norm\_condition2:biospheric\_center | 0.08 | 0.04 | 1.87 | 1,026.97 | 0.06 |
| norm\_condition3:biospheric\_center | -0.05 | 0.03 | -1.67 | 858.09 | 0.10 |
| norm\_condition4:biospheric\_center | -0.04 | 0.03 | -1.71 | 970.53 | 0.09 |
| framing\_conditionFrameCode1:altruistic\_center | 0.02 | 0.16 | 0.12 | 692.26 | 0.90 |
| framing\_conditionFrameCode2:altruistic\_center | -0.13 | 0.13 | -1.03 | 975.01 | 0.30 |
| norm\_condition1:altruistic\_center | -0.13 | 0.10 | -1.26 | 626.72 | 0.21 |
| norm\_condition2:altruistic\_center | -0.02 | 0.06 | -0.28 | 702.94 | 0.78 |
| norm\_condition3:altruistic\_center | 0.03 | 0.04 | 0.71 | 838.29 | 0.48 |
| norm\_condition4:altruistic\_center | 0.07 | 0.03 | 2.26 | 961.67 | 0.02 |
| framing\_conditionFrameCode1:egoistic\_center | -0.03 | 0.10 | -0.32 | 1,010.95 | 0.75 |
| framing\_conditionFrameCode2:egoistic\_center | 0.05 | 0.09 | 0.54 | 1,021.51 | 0.59 |
| norm\_condition1:egoistic\_center | 0.05 | 0.07 | 0.72 | 592.68 | 0.47 |
| norm\_condition2:egoistic\_center | -0.02 | 0.04 | -0.45 | 980.29 | 0.65 |
| norm\_condition3:egoistic\_center | 0.02 | 0.03 | 0.65 | 1,022.73 | 0.51 |
| norm\_condition4:egoistic\_center | 0.02 | 0.02 | 0.74 | 1,031.59 | 0.46 |
| framing\_conditionFrameCode1:hedonic\_center | 0.01 | 0.13 | 0.05 | 726.70 | 0.96 |
| framing\_conditionFrameCode2:hedonic\_center | 0.15 | 0.11 | 1.36 | 956.49 | 0.17 |
| norm\_condition1:hedonic\_center | 0.02 | 0.09 | 0.21 | 788.82 | 0.83 |
| norm\_condition2:hedonic\_center | 0.06 | 0.05 | 1.30 | 892.74 | 0.20 |
| norm\_condition3:hedonic\_center | -0.04 | 0.04 | -1.24 | 935.99 | 0.22 |
| norm\_condition4:hedonic\_center | -0.05 | 0.03 | -1.84 | 994.01 | 0.07 |
| framing\_conditionFrameCode1:ingroup\_center | 0.02 | 0.08 | 0.28 | 1,031.27 | 0.78 |
| framing\_conditionFrameCode2:ingroup\_center | -0.06 | 0.07 | -0.83 | 1,030.88 | 0.41 |
| norm\_condition1:ingroup\_center | 0.01 | 0.05 | 0.14 | 1,014.67 | 0.89 |
| norm\_condition2:ingroup\_center | -0.01 | 0.03 | -0.38 | 1,032.59 | 0.71 |
| norm\_condition3:ingroup\_center | 0.00 | 0.02 | 0.18 | 1,035.09 | 0.86 |
| norm\_condition4:ingroup\_center | -0.01 | 0.02 | -0.87 | 1,029.37 | 0.39 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.06 | 0.18 | -0.33 | 475.10 | 0.74 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.03 | 0.14 | 0.23 | 967.69 | 0.82 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.13 | 0.11 | -1.24 | 1,028.00 | 0.22 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.11 | 0.08 | 1.34 | 1,026.40 | 0.18 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.15 | 0.08 | 1.92 | 967.58 | 0.06 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.07 | 0.06 | 1.14 | 977.20 | 0.25 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.06 | 0.07 | 0.89 | 953.15 | 0.37 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.11 | 0.05 | 2.40 | 1,012.87 | 0.02 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.09 | 0.26 | -0.35 | 219.98 | 0.72 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.21 | 0.21 | 1.03 | 914.63 | 0.30 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.25 | 0.14 | 1.80 | 914.87 | 0.07 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.00 | 0.11 | 0.00 | 887.70 | 1.00 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.16 | 0.11 | -1.48 | 1,016.07 | 0.14 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.06 | 0.09 | -0.76 | 893.64 | 0.45 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | -0.01 | 0.08 | -0.09 | 909.83 | 0.93 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.08 | 0.06 | -1.44 | 1,019.76 | 0.15 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.05 | 0.18 | 0.27 | 409.48 | 0.79 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.13 | 0.14 | 0.93 | 878.03 | 0.35 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.02 | 0.09 | -0.21 | 1,025.36 | 0.84 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.16 | 0.08 | 2.09 | 1,032.30 | 0.04 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.08 | 0.06 | 1.26 | 1,024.92 | 0.21 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.03 | 0.06 | 0.46 | 1,022.94 | 0.65 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.06 | 0.05 | -1.11 | 987.58 | 0.27 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.04 | 0.04 | -0.92 | 1,035.31 | 0.36 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.01 | 0.23 | -0.03 | 435.07 | 0.97 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.23 | 0.19 | -1.19 | 879.27 | 0.23 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.13 | 0.12 | -1.14 | 852.42 | 0.26 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | 0.00 | 0.10 | -0.01 | 974.84 | 0.99 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.12 | 0.09 | -1.32 | 973.43 | 0.19 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | 0.00 | 0.07 | -0.04 | 975.32 | 0.96 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.01 | 0.06 | -0.12 | 928.58 | 0.90 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.03 | 0.05 | 0.67 | 1,008.88 | 0.50 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.19 | 0.13 | 1.46 | 1,001.00 | 0.15 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.04 | 0.11 | 0.32 | 1,030.47 | 0.75 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.12 | 0.08 | 1.53 | 1,020.53 | 0.13 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03 | 0.06 | -0.49 | 1,035.62 | 0.62 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.04 | 0.05 | 0.70 | 1,010.77 | 0.48 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03 | 0.05 | -0.65 | 1,034.52 | 0.52 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.09 | 0.04 | -2.22 | 1,024.05 | 0.03 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.04 | 0.04 | 1.13 | 1,035.60 | 0.26 |

*Note.* DV = Consumer Intentions

## Standardized Regression Coefficients

Using scale()

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

| term | estimate | std.error | statistic | df | p.value |
| --- | --- | --- | --- | --- | --- |
| (Intercept) | -0.02078 | 0.02885 | -0.72011 | 1019.57129 | 0.47162 |
| framing\_conditionFrameCode1 | 0.02816 | 0.06901 | 0.40801 | 1033.48166 | 0.68335 |
| framing\_conditionFrameCode2 | 0.11427 | 0.05880 | 1.94339 | 1028.74730 | 0.05224 |
| norm\_condition1 | -0.01258 | 0.04343 | -0.28974 | 1031.18988 | 0.77207 |
| norm\_condition2 | 0.02363 | 0.02533 | 0.93311 | 1034.19720 | 0.35098 |
| norm\_condition3 | -0.03566 | 0.01804 | -1.97605 | 1020.92430 | 0.04842 |
| norm\_condition4 | -0.01277 | 0.01416 | -0.90175 | 1026.41913 | 0.36740 |
| scale(biospheric) | 0.30426 | 0.03893 | 7.81497 | 1020.66424 | 0.00000 |
| scale(altruistic) | 0.05249 | 0.04340 | 1.20958 | 890.73447 | 0.22676 |
| scale(egoistic) | -0.22969 | 0.03310 | -6.93930 | 1026.11050 | 0.00000 |
| scale(hedonic) | -0.06213 | 0.03653 | -1.70090 | 851.55191 | 0.08933 |
| scale(ingroup\_identification) | 0.02354 | 0.02906 | 0.81012 | 949.52703 | 0.41807 |
| scale(self\_deceptive\_sdr) | -0.07845 | 0.03113 | -2.51979 | 920.94712 | 0.01191 |
| scale(impress\_manag\_sdr) | -0.01050 | 0.03014 | -0.34841 | 1003.35144 | 0.72761 |
| scale(clothing\_interest) | 0.00241 | 0.03044 | 0.07914 | 1034.08032 | 0.93694 |
| Gender1 | 0.12268 | 0.06511 | 1.88425 | 713.53198 | 0.05994 |
| scale(Age) | -0.07034 | 0.03391 | -2.07449 | 72.73329 | 0.04157 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.16540 | 0.10624 | 1.55676 | 1033.39624 | 0.11983 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.08751 | 0.09282 | -0.94281 | 1034.00484 | 0.34600 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.00500 | 0.06373 | -0.07848 | 1023.71317 | 0.93746 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.03122 | 0.05249 | -0.59473 | 1034.36758 | 0.55215 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.02229 | 0.04372 | 0.50995 | 1026.08903 | 0.61019 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.01997 | 0.03873 | 0.51565 | 1029.69938 | 0.60621 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.02355 | 0.03589 | 0.65613 | 981.49140 | 0.51190 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.01277 | 0.02912 | -0.43857 | 1026.58113 | 0.66106 |
| framing\_conditionFrameCode1:scale(biospheric) | -0.04093 | 0.10277 | -0.39823 | 656.18638 | 0.69059 |
| framing\_conditionFrameCode2:scale(biospheric) | 0.05141 | 0.07706 | 0.66710 | 1014.86612 | 0.50486 |
| norm\_condition1:scale(biospheric) | -0.05848 | 0.05962 | -0.98087 | 871.57020 | 0.32693 |
| norm\_condition2:scale(biospheric) | 0.06506 | 0.03485 | 1.86713 | 1026.78969 | 0.06217 |
| norm\_condition3:scale(biospheric) | -0.04101 | 0.02460 | -1.66695 | 854.18601 | 0.09589 |
| norm\_condition4:scale(biospheric) | -0.03612 | 0.02106 | -1.71526 | 976.90891 | 0.08661 |
| framing\_conditionFrameCode1:scale(altruistic) | 0.01304 | 0.10769 | 0.12108 | 693.43075 | 0.90366 |
| framing\_conditionFrameCode2:scale(altruistic) | -0.08840 | 0.08580 | -1.03031 | 977.87658 | 0.30312 |
| norm\_condition1:scale(altruistic) | -0.08648 | 0.06857 | -1.26124 | 637.49350 | 0.20768 |
| norm\_condition2:scale(altruistic) | -0.01050 | 0.03801 | -0.27625 | 705.22777 | 0.78244 |
| norm\_condition3:scale(altruistic) | 0.02043 | 0.02869 | 0.71212 | 832.78770 | 0.47659 |
| norm\_condition4:scale(altruistic) | 0.04524 | 0.02000 | 2.26192 | 950.17543 | 0.02393 |
| framing\_conditionFrameCode1:scale(egoistic) | -0.02518 | 0.07950 | -0.31673 | 1011.08829 | 0.75151 |
| framing\_conditionFrameCode2:scale(egoistic) | 0.03615 | 0.06635 | 0.54482 | 1021.84544 | 0.58600 |
| norm\_condition1:scale(egoistic) | 0.03850 | 0.05373 | 0.71656 | 591.00011 | 0.47393 |
| norm\_condition2:scale(egoistic) | -0.01266 | 0.02810 | -0.45058 | 981.90807 | 0.65239 |
| norm\_condition3:scale(egoistic) | 0.01320 | 0.02024 | 0.65227 | 1022.33713 | 0.51438 |
| norm\_condition4:scale(egoistic) | 0.01191 | 0.01610 | 0.74016 | 1031.12598 | 0.45937 |
| framing\_conditionFrameCode1:scale(hedonic) | 0.00474 | 0.08990 | 0.05274 | 726.67084 | 0.95795 |
| framing\_conditionFrameCode2:scale(hedonic) | 0.10273 | 0.07560 | 1.35882 | 958.87942 | 0.17452 |
| norm\_condition1:scale(hedonic) | 0.01264 | 0.06035 | 0.20952 | 788.51444 | 0.83409 |
| norm\_condition2:scale(hedonic) | 0.04213 | 0.03252 | 1.29563 | 895.60201 | 0.19544 |
| norm\_condition3:scale(hedonic) | -0.02944 | 0.02373 | -1.24057 | 935.31363 | 0.21508 |
| norm\_condition4:scale(hedonic) | -0.03082 | 0.01678 | -1.83734 | 992.27683 | 0.06646 |
| framing\_conditionFrameCode1:scale(ingroup\_identification) | 0.01956 | 0.06985 | 0.28005 | 1031.27033 | 0.77949 |
| framing\_conditionFrameCode2:scale(ingroup\_identification) | -0.05021 | 0.06056 | -0.82915 | 1030.88212 | 0.40721 |
| norm\_condition1:scale(ingroup\_identification) | 0.00627 | 0.04490 | 0.13957 | 1014.67003 | 0.88903 |
| norm\_condition2:scale(ingroup\_identification) | -0.00998 | 0.02658 | -0.37550 | 1032.59270 | 0.70737 |
| norm\_condition3:scale(ingroup\_identification) | 0.00328 | 0.01849 | 0.17753 | 1035.09041 | 0.85913 |
| norm\_condition4:scale(ingroup\_identification) | -0.01222 | 0.01409 | -0.86750 | 1029.37090 | 0.38587 |
| framing\_conditionFrameCode1:norm\_condition1:scale(biospheric) | -0.05024 | 0.15419 | -0.32584 | 474.58582 | 0.74469 |
| framing\_conditionFrameCode2:norm\_condition1:scale(biospheric) | 0.02825 | 0.12104 | 0.23337 | 967.69251 | 0.81553 |
| framing\_conditionFrameCode1:norm\_condition2:scale(biospheric) | -0.10923 | 0.08845 | -1.23494 | 1027.11011 | 0.21713 |
| framing\_conditionFrameCode2:norm\_condition2:scale(biospheric) | 0.09543 | 0.07116 | 1.34118 | 1025.85916 | 0.18016 |
| framing\_conditionFrameCode1:norm\_condition3:scale(biospheric) | 0.12208 | 0.06366 | 1.91773 | 965.58096 | 0.05544 |
| framing\_conditionFrameCode2:norm\_condition3:scale(biospheric) | 0.05496 | 0.04818 | 1.14068 | 975.51268 | 0.25428 |
| framing\_conditionFrameCode1:norm\_condition4:scale(biospheric) | 0.05066 | 0.05668 | 0.89373 | 948.88453 | 0.37169 |
| framing\_conditionFrameCode2:norm\_condition4:scale(biospheric) | 0.09573 | 0.03983 | 2.40349 | 1017.33708 | 0.01642 |
| framing\_conditionFrameCode1:norm\_condition1:scale(altruistic) | -0.06239 | 0.17598 | -0.35451 | 221.40585 | 0.72330 |
| framing\_conditionFrameCode2:norm\_condition1:scale(altruistic) | 0.14534 | 0.14129 | 1.02863 | 920.28369 | 0.30393 |
| framing\_conditionFrameCode1:norm\_condition2:scale(altruistic) | 0.17041 | 0.09481 | 1.79735 | 904.55377 | 0.07261 |
| framing\_conditionFrameCode2:norm\_condition2:scale(altruistic) | -0.00030 | 0.07771 | -0.00381 | 887.71230 | 0.99696 |
| framing\_conditionFrameCode1:norm\_condition3:scale(altruistic) | -0.10693 | 0.07218 | -1.48141 | 1016.74173 | 0.13881 |
| framing\_conditionFrameCode2:norm\_condition3:scale(altruistic) | -0.04411 | 0.05817 | -0.75832 | 889.34503 | 0.44846 |
| framing\_conditionFrameCode1:norm\_condition4:scale(altruistic) | -0.00456 | 0.05205 | -0.08761 | 910.29193 | 0.93021 |
| framing\_conditionFrameCode2:norm\_condition4:scale(altruistic) | -0.05696 | 0.03946 | -1.44331 | 1017.55543 | 0.14924 |
| framing\_conditionFrameCode1:norm\_condition1:scale(egoistic) | 0.03710 | 0.13883 | 0.26726 | 408.90144 | 0.78940 |
| framing\_conditionFrameCode2:norm\_condition1:scale(egoistic) | 0.10024 | 0.10728 | 0.93443 | 876.38615 | 0.35034 |
| framing\_conditionFrameCode1:norm\_condition2:scale(egoistic) | -0.01405 | 0.06781 | -0.20719 | 1025.52965 | 0.83590 |
| framing\_conditionFrameCode2:norm\_condition2:scale(egoistic) | 0.12546 | 0.06006 | 2.08882 | 1033.00475 | 0.03697 |
| framing\_conditionFrameCode1:norm\_condition3:scale(egoistic) | 0.06245 | 0.04937 | 1.26497 | 1024.91287 | 0.20617 |
| framing\_conditionFrameCode2:norm\_condition3:scale(egoistic) | 0.01967 | 0.04288 | 0.45857 | 1023.21842 | 0.64664 |
| framing\_conditionFrameCode1:norm\_condition4:scale(egoistic) | -0.04549 | 0.04101 | -1.10935 | 991.27805 | 0.26755 |
| framing\_conditionFrameCode2:norm\_condition4:scale(egoistic) | -0.03011 | 0.03291 | -0.91513 | 1035.19885 | 0.36034 |
| framing\_conditionFrameCode1:norm\_condition1:scale(hedonic) | -0.00510 | 0.15151 | -0.03364 | 436.50953 | 0.97318 |
| framing\_conditionFrameCode2:norm\_condition1:scale(hedonic) | -0.15144 | 0.12730 | -1.18965 | 874.49015 | 0.23451 |
| framing\_conditionFrameCode1:norm\_condition2:scale(hedonic) | -0.08985 | 0.07894 | -1.13824 | 851.50214 | 0.25534 |
| framing\_conditionFrameCode2:norm\_condition2:scale(hedonic) | -0.00090 | 0.06923 | -0.01298 | 974.70292 | 0.98965 |
| framing\_conditionFrameCode1:norm\_condition3:scale(hedonic) | -0.07838 | 0.05949 | -1.31749 | 968.33912 | 0.18799 |
| framing\_conditionFrameCode2:norm\_condition3:scale(hedonic) | -0.00215 | 0.04869 | -0.04426 | 975.25518 | 0.96471 |
| framing\_conditionFrameCode1:norm\_condition4:scale(hedonic) | -0.00501 | 0.04174 | -0.12006 | 928.69796 | 0.90446 |
| framing\_conditionFrameCode2:norm\_condition4:scale(hedonic) | 0.02339 | 0.03502 | 0.66788 | 1008.57089 | 0.50437 |
| framing\_conditionFrameCode1:norm\_condition1:scale(ingroup\_identification) | 0.15924 | 0.10918 | 1.45848 | 1001.00258 | 0.14502 |
| framing\_conditionFrameCode2:norm\_condition1:scale(ingroup\_identification) | 0.03061 | 0.09583 | 0.31948 | 1030.46758 | 0.74943 |
| framing\_conditionFrameCode1:norm\_condition2:scale(ingroup\_identification) | 0.10164 | 0.06630 | 1.53297 | 1020.53092 | 0.12559 |
| framing\_conditionFrameCode2:norm\_condition2:scale(ingroup\_identification) | -0.02719 | 0.05517 | -0.49278 | 1035.62016 | 0.62227 |
| framing\_conditionFrameCode1:norm\_condition3:scale(ingroup\_identification) | 0.03184 | 0.04541 | 0.70106 | 1010.77246 | 0.48343 |
| framing\_conditionFrameCode2:norm\_condition3:scale(ingroup\_identification) | -0.02560 | 0.03943 | -0.64925 | 1034.51729 | 0.51632 |
| framing\_conditionFrameCode1:norm\_condition4:scale(ingroup\_identification) | -0.07556 | 0.03405 | -2.21907 | 1024.05466 | 0.02670 |
| framing\_conditionFrameCode2:norm\_condition4:scale(ingroup\_identification) | 0.03381 | 0.03005 | 1.12536 | 1035.59714 | 0.26070 |

APA style table for regression summary

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

(#tab:unnamed-chunk-27)

Table 1b Pooled Standardized Regression Results

| term | estimate | std.error | statistic | df | p.value |
| --- | --- | --- | --- | --- | --- |
| (Intercept) | -0.02 | 0.03 | -0.72 | 1,019.57 | 0.47 |
| framing\_conditionFrameCode1 | 0.03 | 0.07 | 0.41 | 1,033.48 | 0.68 |
| framing\_conditionFrameCode2 | 0.11 | 0.06 | 1.94 | 1,028.75 | 0.05 |
| norm\_condition1 | -0.01 | 0.04 | -0.29 | 1,031.19 | 0.77 |
| norm\_condition2 | 0.02 | 0.03 | 0.93 | 1,034.20 | 0.35 |
| norm\_condition3 | -0.04 | 0.02 | -1.98 | 1,020.92 | 0.05 |
| norm\_condition4 | -0.01 | 0.01 | -0.90 | 1,026.42 | 0.37 |
| scale(biospheric) | 0.30 | 0.04 | 7.81 | 1,020.66 | 0.00 |
| scale(altruistic) | 0.05 | 0.04 | 1.21 | 890.73 | 0.23 |
| scale(egoistic) | -0.23 | 0.03 | -6.94 | 1,026.11 | 0.00 |
| scale(hedonic) | -0.06 | 0.04 | -1.70 | 851.55 | 0.09 |
| scale(ingroup\_identification) | 0.02 | 0.03 | 0.81 | 949.53 | 0.42 |
| scale(self\_deceptive\_sdr) | -0.08 | 0.03 | -2.52 | 920.95 | 0.01 |
| scale(impress\_manag\_sdr) | -0.01 | 0.03 | -0.35 | 1,003.35 | 0.73 |
| scale(clothing\_interest) | 0.00 | 0.03 | 0.08 | 1,034.08 | 0.94 |
| Gender1 | 0.12 | 0.07 | 1.88 | 713.53 | 0.06 |
| scale(Age) | -0.07 | 0.03 | -2.07 | 72.73 | 0.04 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.17 | 0.11 | 1.56 | 1,033.40 | 0.12 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.09 | 0.09 | -0.94 | 1,034.00 | 0.35 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.01 | 0.06 | -0.08 | 1,023.71 | 0.94 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.03 | 0.05 | -0.59 | 1,034.37 | 0.55 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.02 | 0.04 | 0.51 | 1,026.09 | 0.61 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02 | 0.04 | 0.52 | 1,029.70 | 0.61 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.02 | 0.04 | 0.66 | 981.49 | 0.51 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.01 | 0.03 | -0.44 | 1,026.58 | 0.66 |
| framing\_conditionFrameCode1:scale(biospheric) | -0.04 | 0.10 | -0.40 | 656.19 | 0.69 |
| framing\_conditionFrameCode2:scale(biospheric) | 0.05 | 0.08 | 0.67 | 1,014.87 | 0.50 |
| norm\_condition1:scale(biospheric) | -0.06 | 0.06 | -0.98 | 871.57 | 0.33 |
| norm\_condition2:scale(biospheric) | 0.07 | 0.03 | 1.87 | 1,026.79 | 0.06 |
| norm\_condition3:scale(biospheric) | -0.04 | 0.02 | -1.67 | 854.19 | 0.10 |
| norm\_condition4:scale(biospheric) | -0.04 | 0.02 | -1.72 | 976.91 | 0.09 |
| framing\_conditionFrameCode1:scale(altruistic) | 0.01 | 0.11 | 0.12 | 693.43 | 0.90 |
| framing\_conditionFrameCode2:scale(altruistic) | -0.09 | 0.09 | -1.03 | 977.88 | 0.30 |
| norm\_condition1:scale(altruistic) | -0.09 | 0.07 | -1.26 | 637.49 | 0.21 |
| norm\_condition2:scale(altruistic) | -0.01 | 0.04 | -0.28 | 705.23 | 0.78 |
| norm\_condition3:scale(altruistic) | 0.02 | 0.03 | 0.71 | 832.79 | 0.48 |
| norm\_condition4:scale(altruistic) | 0.05 | 0.02 | 2.26 | 950.18 | 0.02 |
| framing\_conditionFrameCode1:scale(egoistic) | -0.03 | 0.08 | -0.32 | 1,011.09 | 0.75 |
| framing\_conditionFrameCode2:scale(egoistic) | 0.04 | 0.07 | 0.54 | 1,021.85 | 0.59 |
| norm\_condition1:scale(egoistic) | 0.04 | 0.05 | 0.72 | 591.00 | 0.47 |
| norm\_condition2:scale(egoistic) | -0.01 | 0.03 | -0.45 | 981.91 | 0.65 |
| norm\_condition3:scale(egoistic) | 0.01 | 0.02 | 0.65 | 1,022.34 | 0.51 |
| norm\_condition4:scale(egoistic) | 0.01 | 0.02 | 0.74 | 1,031.13 | 0.46 |
| framing\_conditionFrameCode1:scale(hedonic) | 0.00 | 0.09 | 0.05 | 726.67 | 0.96 |
| framing\_conditionFrameCode2:scale(hedonic) | 0.10 | 0.08 | 1.36 | 958.88 | 0.17 |
| norm\_condition1:scale(hedonic) | 0.01 | 0.06 | 0.21 | 788.51 | 0.83 |
| norm\_condition2:scale(hedonic) | 0.04 | 0.03 | 1.30 | 895.60 | 0.20 |
| norm\_condition3:scale(hedonic) | -0.03 | 0.02 | -1.24 | 935.31 | 0.22 |
| norm\_condition4:scale(hedonic) | -0.03 | 0.02 | -1.84 | 992.28 | 0.07 |
| framing\_conditionFrameCode1:scale(ingroup\_identification) | 0.02 | 0.07 | 0.28 | 1,031.27 | 0.78 |
| framing\_conditionFrameCode2:scale(ingroup\_identification) | -0.05 | 0.06 | -0.83 | 1,030.88 | 0.41 |
| norm\_condition1:scale(ingroup\_identification) | 0.01 | 0.04 | 0.14 | 1,014.67 | 0.89 |
| norm\_condition2:scale(ingroup\_identification) | -0.01 | 0.03 | -0.38 | 1,032.59 | 0.71 |
| norm\_condition3:scale(ingroup\_identification) | 0.00 | 0.02 | 0.18 | 1,035.09 | 0.86 |
| norm\_condition4:scale(ingroup\_identification) | -0.01 | 0.01 | -0.87 | 1,029.37 | 0.39 |
| framing\_conditionFrameCode1:norm\_condition1:scale(biospheric) | -0.05 | 0.15 | -0.33 | 474.59 | 0.74 |
| framing\_conditionFrameCode2:norm\_condition1:scale(biospheric) | 0.03 | 0.12 | 0.23 | 967.69 | 0.82 |
| framing\_conditionFrameCode1:norm\_condition2:scale(biospheric) | -0.11 | 0.09 | -1.23 | 1,027.11 | 0.22 |
| framing\_conditionFrameCode2:norm\_condition2:scale(biospheric) | 0.10 | 0.07 | 1.34 | 1,025.86 | 0.18 |
| framing\_conditionFrameCode1:norm\_condition3:scale(biospheric) | 0.12 | 0.06 | 1.92 | 965.58 | 0.06 |
| framing\_conditionFrameCode2:norm\_condition3:scale(biospheric) | 0.05 | 0.05 | 1.14 | 975.51 | 0.25 |
| framing\_conditionFrameCode1:norm\_condition4:scale(biospheric) | 0.05 | 0.06 | 0.89 | 948.88 | 0.37 |
| framing\_conditionFrameCode2:norm\_condition4:scale(biospheric) | 0.10 | 0.04 | 2.40 | 1,017.34 | 0.02 |
| framing\_conditionFrameCode1:norm\_condition1:scale(altruistic) | -0.06 | 0.18 | -0.35 | 221.41 | 0.72 |
| framing\_conditionFrameCode2:norm\_condition1:scale(altruistic) | 0.15 | 0.14 | 1.03 | 920.28 | 0.30 |
| framing\_conditionFrameCode1:norm\_condition2:scale(altruistic) | 0.17 | 0.09 | 1.80 | 904.55 | 0.07 |
| framing\_conditionFrameCode2:norm\_condition2:scale(altruistic) | 0.00 | 0.08 | 0.00 | 887.71 | 1.00 |
| framing\_conditionFrameCode1:norm\_condition3:scale(altruistic) | -0.11 | 0.07 | -1.48 | 1,016.74 | 0.14 |
| framing\_conditionFrameCode2:norm\_condition3:scale(altruistic) | -0.04 | 0.06 | -0.76 | 889.35 | 0.45 |
| framing\_conditionFrameCode1:norm\_condition4:scale(altruistic) | 0.00 | 0.05 | -0.09 | 910.29 | 0.93 |
| framing\_conditionFrameCode2:norm\_condition4:scale(altruistic) | -0.06 | 0.04 | -1.44 | 1,017.56 | 0.15 |
| framing\_conditionFrameCode1:norm\_condition1:scale(egoistic) | 0.04 | 0.14 | 0.27 | 408.90 | 0.79 |
| framing\_conditionFrameCode2:norm\_condition1:scale(egoistic) | 0.10 | 0.11 | 0.93 | 876.39 | 0.35 |
| framing\_conditionFrameCode1:norm\_condition2:scale(egoistic) | -0.01 | 0.07 | -0.21 | 1,025.53 | 0.84 |
| framing\_conditionFrameCode2:norm\_condition2:scale(egoistic) | 0.13 | 0.06 | 2.09 | 1,033.00 | 0.04 |
| framing\_conditionFrameCode1:norm\_condition3:scale(egoistic) | 0.06 | 0.05 | 1.26 | 1,024.91 | 0.21 |
| framing\_conditionFrameCode2:norm\_condition3:scale(egoistic) | 0.02 | 0.04 | 0.46 | 1,023.22 | 0.65 |
| framing\_conditionFrameCode1:norm\_condition4:scale(egoistic) | -0.05 | 0.04 | -1.11 | 991.28 | 0.27 |
| framing\_conditionFrameCode2:norm\_condition4:scale(egoistic) | -0.03 | 0.03 | -0.92 | 1,035.20 | 0.36 |
| framing\_conditionFrameCode1:norm\_condition1:scale(hedonic) | -0.01 | 0.15 | -0.03 | 436.51 | 0.97 |
| framing\_conditionFrameCode2:norm\_condition1:scale(hedonic) | -0.15 | 0.13 | -1.19 | 874.49 | 0.23 |
| framing\_conditionFrameCode1:norm\_condition2:scale(hedonic) | -0.09 | 0.08 | -1.14 | 851.50 | 0.26 |
| framing\_conditionFrameCode2:norm\_condition2:scale(hedonic) | 0.00 | 0.07 | -0.01 | 974.70 | 0.99 |
| framing\_conditionFrameCode1:norm\_condition3:scale(hedonic) | -0.08 | 0.06 | -1.32 | 968.34 | 0.19 |
| framing\_conditionFrameCode2:norm\_condition3:scale(hedonic) | 0.00 | 0.05 | -0.04 | 975.26 | 0.96 |
| framing\_conditionFrameCode1:norm\_condition4:scale(hedonic) | -0.01 | 0.04 | -0.12 | 928.70 | 0.90 |
| framing\_conditionFrameCode2:norm\_condition4:scale(hedonic) | 0.02 | 0.04 | 0.67 | 1,008.57 | 0.50 |
| framing\_conditionFrameCode1:norm\_condition1:scale(ingroup\_identification) | 0.16 | 0.11 | 1.46 | 1,001.00 | 0.15 |
| framing\_conditionFrameCode2:norm\_condition1:scale(ingroup\_identification) | 0.03 | 0.10 | 0.32 | 1,030.47 | 0.75 |
| framing\_conditionFrameCode1:norm\_condition2:scale(ingroup\_identification) | 0.10 | 0.07 | 1.53 | 1,020.53 | 0.13 |
| framing\_conditionFrameCode2:norm\_condition2:scale(ingroup\_identification) | -0.03 | 0.06 | -0.49 | 1,035.62 | 0.62 |
| framing\_conditionFrameCode1:norm\_condition3:scale(ingroup\_identification) | 0.03 | 0.05 | 0.70 | 1,010.77 | 0.48 |
| framing\_conditionFrameCode2:norm\_condition3:scale(ingroup\_identification) | -0.03 | 0.04 | -0.65 | 1,034.52 | 0.52 |
| framing\_conditionFrameCode1:norm\_condition4:scale(ingroup\_identification) | -0.08 | 0.03 | -2.22 | 1,024.05 | 0.03 |
| framing\_conditionFrameCode2:norm\_condition4:scale(ingroup\_identification) | 0.03 | 0.03 | 1.13 | 1,035.60 | 0.26 |

*Note.* DV = Consumer Intentions

## Pooled Anova Results

Using Anova()

anova\_mod2

## call :  
## with.mids(data = mids\_obj, expr = Anova(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), type = "III"))  
##   
## call1 :  
## datlist2mids(dat.list = impobject)  
##   
## nmis :  
## hedonic egoistic altruistic   
## 13 14 13   
## biospheric ingroup\_identification Age   
## 14 0 103   
## clothing\_interest self\_deceptive\_sdr impress\_manag\_sdr   
## 0 15 14   
## consumer\_intentions consumer\_behaviors Gender   
## 0 11 26   
## framing\_condition norm\_condition FramingCode1   
## 0 0 0   
## FramingCode2 NormCode1 NormCode2   
## 0 0 0   
## NormCode3 NormCode4 framing1Xbiospheric   
## 0 0 14   
## framing2Xbiospheric norm1Xbiospheric norm2Xbiospheric   
## 14 14 11   
## norm3Xbiospheric norm4Xbiospheric framing1Xnorm1Xbiospheric   
## 8 7 14   
## framing1Xnorm2Xbiospheric framing1Xnorm3Xbiospheric framing1Xnorm4Xbiospheric   
## 11 8 7   
## framing2Xnorm1Xbiospheric framing2Xnorm2Xbiospheric framing2Xnorm3Xbiospheric   
## 14 11 8   
## framing2Xnorm4Xbiospheric framing1Xaltruistic framing2Xaltruistic   
## 7 13 13   
## norm1Xaltruistic norm2Xaltruistic norm3Xaltruistic   
## 13 10 8   
## norm4Xaltruistic framing1Xnorm1Xaltruistic framing1Xnorm2Xaltruistic   
## 7 13 10   
## framing1Xnorm3Xaltruistic framing1Xnorm4Xaltruistic framing2Xnorm1Xaltruistic   
## 8 7 13   
## framing2Xnorm2Xaltruistic framing2Xnorm3Xaltruistic framing2Xnorm4Xaltruistic   
## 10 8 7   
## framing1Xegoistic framing2Xegoistic norm1Xegoistic   
## 14 14 14   
## norm2Xegoistic norm3Xegoistic norm4Xegoistic   
## 12 9 8   
## framing1Xnorm1Xegoistic framing1Xnorm2Xegoistic framing1Xnorm3Xegoistic   
## 14 12 9   
## framing1Xnorm4Xegoistic framing2Xnorm1Xegoistic framing2Xnorm2Xegoistic   
## 8 14 12   
## framing2Xnorm3Xegoistic framing2Xnorm4Xegoistic framing1Xhedonic   
## 9 8 13   
## framing2Xhedonic norm1Xhedonic norm2Xhedonic   
## 13 13 11   
## norm3Xhedonic norm4Xhedonic framing1Xnorm1Xhedonic   
## 8 7 13   
## framing1Xnorm2Xhedonic framing1Xnorm3Xhedonic framing1Xnorm4Xhedonic   
## 11 8 7   
## framing2Xnorm1Xhedonic framing2Xnorm2Xhedonic framing2Xnorm3Xhedonic   
## 13 11 8   
## framing2Xnorm4Xhedonic framing1Xingroup framing2Xingroup   
## 7 0 0   
## norm1Xingroup norm2Xingroup norm3Xingroup   
## 0 0 0   
## norm4Xingroup framing1Xnorm1Xingroup framing1Xnorm2Xingroup   
## 0 0 0   
## framing1Xnorm3Xingroup framing1Xnorm4Xingroup framing2Xnorm1Xingroup   
## 0 0 0   
## framing2Xnorm2Xingroup framing2Xnorm3Xingroup framing2Xnorm4Xingroup   
## 0 0 0   
## biospheric\_center altruistic\_center egoistic\_center   
## 1133 1133 1133   
## hedonic\_center ingroup\_center Age\_center   
## 1133 0 1133   
## clothing\_center self\_dec\_center impress\_manag\_center   
## 0 1133 1133   
##   
## analyses :  
## [[1]]  
## Anova Table (Type III tests)  
##   
## Response: consumer\_intentions  
## Sum Sq Df F value  
## (Intercept) 18679.2 1 16403.0218  
## framing\_condition 4.5 2 1.9597  
## norm\_condition 7.1 4 1.5618  
## biospheric\_center 67.7 1 59.4589  
## altruistic\_center 1.7 1 1.5292  
## egoistic\_center 53.4 1 46.9265  
## hedonic\_center 2.7 1 2.3547  
## ingroup\_center 0.6 1 0.5663  
## self\_dec\_center 8.4 1 7.4017  
## impress\_manag\_center 0.1 1 0.0703  
## clothing\_center 0.0 1 0.0146  
## Gender 4.1 1 3.5697  
## Age\_center 7.1 1 6.2278  
## framing\_condition:norm\_condition 5.7 8 0.6271  
## framing\_condition:biospheric\_center 1.0 2 0.4281  
## norm\_condition:biospheric\_center 11.7 4 2.5738  
## framing\_condition:altruistic\_center 1.3 2 0.5522  
## norm\_condition:altruistic\_center 8.4 4 1.8469  
## framing\_condition:egoistic\_center 0.3 2 0.1322  
## norm\_condition:egoistic\_center 2.4 4 0.5328  
## framing\_condition:hedonic\_center 1.9 2 0.8156  
## norm\_condition:hedonic\_center 7.4 4 1.6354  
## framing\_condition:ingroup\_center 0.8 2 0.3418  
## norm\_condition:ingroup\_center 1.1 4 0.2369  
## framing\_condition:norm\_condition:biospheric\_center 17.3 8 1.8963  
## framing\_condition:norm\_condition:altruistic\_center 11.8 8 1.2916  
## framing\_condition:norm\_condition:egoistic\_center 11.7 8 1.2867  
## framing\_condition:norm\_condition:hedonic\_center 6.3 8 0.6916  
## framing\_condition:norm\_condition:ingroup\_center 13.8 8 1.5174  
## Residuals 1182.0 1038   
## Pr(>F)   
## (Intercept) < 0.00000000000000022 \*\*\*  
## framing\_condition 0.141425   
## norm\_condition 0.182314   
## biospheric\_center 0.00000000000002916 \*\*\*  
## altruistic\_center 0.216514   
## egoistic\_center 0.00000000001260679 \*\*\*  
## hedonic\_center 0.125212   
## ingroup\_center 0.451905   
## self\_dec\_center 0.006625 \*\*   
## impress\_manag\_center 0.790924   
## clothing\_center 0.903840   
## Gender 0.059121 .   
## Age\_center 0.012731 \*   
## framing\_condition:norm\_condition 0.755544   
## framing\_condition:biospheric\_center 0.651830   
## norm\_condition:biospheric\_center 0.036352 \*   
## framing\_condition:altruistic\_center 0.575869   
## norm\_condition:altruistic\_center 0.117642   
## framing\_condition:egoistic\_center 0.876206   
## norm\_condition:egoistic\_center 0.711680   
## framing\_condition:hedonic\_center 0.442650   
## norm\_condition:hedonic\_center 0.163079   
## framing\_condition:ingroup\_center 0.710566   
## norm\_condition:ingroup\_center 0.917571   
## framing\_condition:norm\_condition:biospheric\_center 0.057160 .   
## framing\_condition:norm\_condition:altruistic\_center 0.243869   
## framing\_condition:norm\_condition:egoistic\_center 0.246438   
## framing\_condition:norm\_condition:hedonic\_center 0.699225   
## framing\_condition:norm\_condition:ingroup\_center 0.146639   
## Residuals   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## [[2]]  
## Anova Table (Type III tests)  
##   
## Response: consumer\_intentions  
## Sum Sq Df F value  
## (Intercept) 18853.6 1 16512.3628  
## framing\_condition 4.2 2 1.8503  
## norm\_condition 6.5 4 1.4214  
## biospheric\_center 70.3 1 61.5752  
## altruistic\_center 1.5 1 1.2735  
## egoistic\_center 56.1 1 49.1593  
## hedonic\_center 3.0 1 2.6454  
## ingroup\_center 1.0 1 0.8514  
## self\_dec\_center 6.9 1 6.0288  
## impress\_manag\_center 0.2 1 0.2041  
## clothing\_center 0.0 1 0.0010  
## Gender 5.1 1 4.4592  
## Age\_center 4.6 1 4.0306  
## framing\_condition:norm\_condition 5.6 8 0.6077  
## framing\_condition:biospheric\_center 0.5 2 0.2273  
## norm\_condition:biospheric\_center 11.7 4 2.5650  
## framing\_condition:altruistic\_center 1.1 2 0.4794  
## norm\_condition:altruistic\_center 9.6 4 2.0954  
## framing\_condition:egoistic\_center 0.6 2 0.2662  
## norm\_condition:egoistic\_center 2.0 4 0.4458  
## framing\_condition:hedonic\_center 1.9 2 0.8123  
## norm\_condition:hedonic\_center 8.1 4 1.7748  
## framing\_condition:ingroup\_center 1.0 2 0.4423  
## norm\_condition:ingroup\_center 1.1 4 0.2449  
## framing\_condition:norm\_condition:biospheric\_center 17.9 8 1.9589  
## framing\_condition:norm\_condition:altruistic\_center 12.0 8 1.3121  
## framing\_condition:norm\_condition:egoistic\_center 11.1 8 1.2175  
## framing\_condition:norm\_condition:hedonic\_center 6.6 8 0.7279  
## framing\_condition:norm\_condition:ingroup\_center 12.3 8 1.3512  
## Residuals 1185.2 1038   
## Pr(>F)   
## (Intercept) < 0.00000000000000022 \*\*\*  
## framing\_condition 0.15770   
## norm\_condition 0.22472   
## biospheric\_center 0.00000000000001056 \*\*\*  
## altruistic\_center 0.25937   
## egoistic\_center 0.00000000000424549 \*\*\*  
## hedonic\_center 0.10415   
## ingroup\_center 0.35638   
## self\_dec\_center 0.01424 \*   
## impress\_manag\_center 0.65154   
## clothing\_center 0.97464   
## Gender 0.03495 \*   
## Age\_center 0.04494 \*   
## framing\_condition:norm\_condition 0.77201   
## framing\_condition:biospheric\_center 0.79672   
## norm\_condition:biospheric\_center 0.03689 \*   
## framing\_condition:altruistic\_center 0.61928   
## norm\_condition:altruistic\_center 0.07938 .   
## framing\_condition:egoistic\_center 0.76635   
## norm\_condition:egoistic\_center 0.77549   
## framing\_condition:hedonic\_center 0.44411   
## norm\_condition:hedonic\_center 0.13163   
## framing\_condition:ingroup\_center 0.64269   
## norm\_condition:ingroup\_center 0.91278   
## framing\_condition:norm\_condition:biospheric\_center 0.04849 \*   
## framing\_condition:norm\_condition:altruistic\_center 0.23329   
## framing\_condition:norm\_condition:egoistic\_center 0.28507   
## framing\_condition:norm\_condition:hedonic\_center 0.66701   
## framing\_condition:norm\_condition:ingroup\_center 0.21418   
## Residuals   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## [[3]]  
## Anova Table (Type III tests)  
##   
## Response: consumer\_intentions  
## Sum Sq Df F value  
## (Intercept) 18788.9 1 16500.1822  
## framing\_condition 4.6 2 2.0336  
## norm\_condition 6.5 4 1.4175  
## biospheric\_center 70.4 1 61.7886  
## altruistic\_center 1.4 1 1.2411  
## egoistic\_center 56.3 1 49.4136  
## hedonic\_center 3.4 1 2.9948  
## ingroup\_center 0.7 1 0.5767  
## self\_dec\_center 6.7 1 5.9042  
## impress\_manag\_center 0.1 1 0.0649  
## clothing\_center 0.0 1 0.0077  
## Gender 4.3 1 3.7543  
## Age\_center 6.6 1 5.7698  
## framing\_condition:norm\_condition 5.5 8 0.5987  
## framing\_condition:biospheric\_center 0.5 2 0.2369  
## norm\_condition:biospheric\_center 12.1 4 2.6639  
## framing\_condition:altruistic\_center 1.1 2 0.4711  
## norm\_condition:altruistic\_center 9.2 4 2.0125  
## framing\_condition:egoistic\_center 0.6 2 0.2506  
## norm\_condition:egoistic\_center 1.6 4 0.3610  
## framing\_condition:hedonic\_center 2.2 2 0.9784  
## norm\_condition:hedonic\_center 8.9 4 1.9543  
## framing\_condition:ingroup\_center 0.8 2 0.3439  
## norm\_condition:ingroup\_center 1.1 4 0.2343  
## framing\_condition:norm\_condition:biospheric\_center 17.8 8 1.9554  
## framing\_condition:norm\_condition:altruistic\_center 12.2 8 1.3378  
## framing\_condition:norm\_condition:egoistic\_center 11.7 8 1.2887  
## framing\_condition:norm\_condition:hedonic\_center 6.4 8 0.7033  
## framing\_condition:norm\_condition:ingroup\_center 13.7 8 1.4986  
## Residuals 1182.0 1038   
## Pr(>F)   
## (Intercept) < 0.00000000000000022 \*\*\*  
## framing\_condition 0.13139   
## norm\_condition 0.22602   
## biospheric\_center 0.000000000000009531 \*\*\*  
## altruistic\_center 0.26552   
## egoistic\_center 0.000000000003751339 \*\*\*  
## hedonic\_center 0.08383 .   
## ingroup\_center 0.44779   
## self\_dec\_center 0.01527 \*   
## impress\_manag\_center 0.79897   
## clothing\_center 0.93030   
## Gender 0.05294 .   
## Age\_center 0.01648 \*   
## framing\_condition:norm\_condition 0.77952   
## framing\_condition:biospheric\_center 0.78913   
## norm\_condition:biospheric\_center 0.03130 \*   
## framing\_condition:altruistic\_center 0.62446   
## norm\_condition:altruistic\_center 0.09061 .   
## framing\_condition:egoistic\_center 0.77840   
## norm\_condition:egoistic\_center 0.83641   
## framing\_condition:hedonic\_center 0.37625   
## norm\_condition:hedonic\_center 0.09937 .   
## framing\_condition:ingroup\_center 0.70907   
## norm\_condition:ingroup\_center 0.91907   
## framing\_condition:norm\_condition:biospheric\_center 0.04894 \*   
## framing\_condition:norm\_condition:altruistic\_center 0.22061   
## framing\_condition:norm\_condition:egoistic\_center 0.24539   
## framing\_condition:norm\_condition:hedonic\_center 0.68891   
## framing\_condition:norm\_condition:ingroup\_center 0.15326   
## Residuals   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## [[4]]  
## Anova Table (Type III tests)  
##   
## Response: consumer\_intentions  
## Sum Sq Df F value  
## (Intercept) 18796.1 1 16526.5694  
## framing\_condition 4.8 2 2.1175  
## norm\_condition 6.1 4 1.3463  
## biospheric\_center 70.7 1 62.1474  
## altruistic\_center 2.5 1 2.1860  
## egoistic\_center 54.9 1 48.2984  
## hedonic\_center 4.2 1 3.7110  
## ingroup\_center 0.5 1 0.4743  
## self\_dec\_center 7.0 1 6.1192  
## impress\_manag\_center 0.1 1 0.1292  
## clothing\_center 0.0 1 0.0037  
## Gender 3.0 1 2.6557  
## Age\_center 10.8 1 9.4866  
## framing\_condition:norm\_condition 6.1 8 0.6749  
## framing\_condition:biospheric\_center 1.2 2 0.5261  
## norm\_condition:biospheric\_center 11.6 4 2.5552  
## framing\_condition:altruistic\_center 1.9 2 0.8262  
## norm\_condition:altruistic\_center 10.0 4 2.2075  
## framing\_condition:egoistic\_center 0.4 2 0.1543  
## norm\_condition:egoistic\_center 2.5 4 0.5514  
## framing\_condition:hedonic\_center 2.7 2 1.1912  
## norm\_condition:hedonic\_center 8.0 4 1.7508  
## framing\_condition:ingroup\_center 0.8 2 0.3516  
## norm\_condition:ingroup\_center 0.9 4 0.2037  
## framing\_condition:norm\_condition:biospheric\_center 16.2 8 1.7764  
## framing\_condition:norm\_condition:altruistic\_center 11.8 8 1.3020  
## framing\_condition:norm\_condition:egoistic\_center 10.5 8 1.1556  
## framing\_condition:norm\_condition:hedonic\_center 5.6 8 0.6194  
## framing\_condition:norm\_condition:ingroup\_center 12.8 8 1.4110  
## Residuals 1180.5 1038   
## Pr(>F)   
## (Intercept) < 0.00000000000000022 \*\*\*  
## framing\_condition 0.120851   
## norm\_condition 0.250821   
## biospheric\_center 0.000000000000008025 \*\*\*  
## altruistic\_center 0.139578   
## egoistic\_center 0.000000000006456806 \*\*\*  
## hedonic\_center 0.054328 .   
## ingroup\_center 0.491162   
## self\_dec\_center 0.013531 \*   
## impress\_manag\_center 0.719294   
## clothing\_center 0.951227   
## Gender 0.103482   
## Age\_center 0.002124 \*\*   
## framing\_condition:norm\_condition 0.713986   
## framing\_condition:biospheric\_center 0.591077   
## norm\_condition:biospheric\_center 0.037494 \*   
## framing\_condition:altruistic\_center 0.437990   
## norm\_condition:altruistic\_center 0.066271 .   
## framing\_condition:egoistic\_center 0.857065   
## norm\_condition:egoistic\_center 0.698076   
## framing\_condition:hedonic\_center 0.304266   
## norm\_condition:hedonic\_center 0.136610   
## framing\_condition:ingroup\_center 0.703627   
## norm\_condition:ingroup\_center 0.936414   
## framing\_condition:norm\_condition:biospheric\_center 0.077806 .   
## framing\_condition:norm\_condition:altruistic\_center 0.238440   
## framing\_condition:norm\_condition:egoistic\_center 0.323199   
## framing\_condition:norm\_condition:hedonic\_center 0.762071   
## framing\_condition:norm\_condition:ingroup\_center 0.187443   
## Residuals   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## [[5]]  
## Anova Table (Type III tests)  
##   
## Response: consumer\_intentions  
## Sum Sq Df F value  
## (Intercept) 18901.5 1 16485.1216  
## framing\_condition 4.4 2 1.9142  
## norm\_condition 6.3 4 1.3796  
## biospheric\_center 71.4 1 62.2579  
## altruistic\_center 1.6 1 1.3587  
## egoistic\_center 55.1 1 48.0782  
## hedonic\_center 3.7 1 3.2540  
## ingroup\_center 1.1 1 0.9238  
## self\_dec\_center 8.0 1 7.0111  
## impress\_manag\_center 0.2 1 0.1753  
## clothing\_center 0.0 1 0.0090  
## Gender 4.8 1 4.1883  
## Age\_center 3.7 1 3.2128  
## framing\_condition:norm\_condition 5.3 8 0.5811  
## framing\_condition:biospheric\_center 0.5 2 0.2147  
## norm\_condition:biospheric\_center 11.1 4 2.4235  
## framing\_condition:altruistic\_center 1.1 2 0.4687  
## norm\_condition:altruistic\_center 8.5 4 1.8588  
## framing\_condition:egoistic\_center 0.5 2 0.2181  
## norm\_condition:egoistic\_center 2.1 4 0.4653  
## framing\_condition:hedonic\_center 2.3 2 1.0052  
## norm\_condition:hedonic\_center 8.4 4 1.8264  
## framing\_condition:ingroup\_center 1.0 2 0.4182  
## norm\_condition:ingroup\_center 1.2 4 0.2696  
## framing\_condition:norm\_condition:biospheric\_center 17.5 8 1.9046  
## framing\_condition:norm\_condition:altruistic\_center 11.0 8 1.2011  
## framing\_condition:norm\_condition:egoistic\_center 11.3 8 1.2372  
## framing\_condition:norm\_condition:hedonic\_center 5.1 8 0.5562  
## framing\_condition:norm\_condition:ingroup\_center 12.8 8 1.3902  
## Residuals 1190.1 1038   
## Pr(>F)   
## (Intercept) < 0.00000000000000022 \*\*\*  
## framing\_condition 0.147978   
## norm\_condition 0.238941   
## biospheric\_center 0.000000000000007611 \*\*\*  
## altruistic\_center 0.244024   
## egoistic\_center 0.000000000007188035 \*\*\*  
## hedonic\_center 0.071537 .   
## ingroup\_center 0.336701   
## self\_dec\_center 0.008224 \*\*   
## impress\_manag\_center 0.675491   
## clothing\_center 0.924373   
## Gender 0.040955 \*   
## Age\_center 0.073357 .   
## framing\_condition:norm\_condition 0.794056   
## framing\_condition:biospheric\_center 0.806853   
## norm\_condition:biospheric\_center 0.046595 \*   
## framing\_condition:altruistic\_center 0.625945   
## norm\_condition:altruistic\_center 0.115487   
## framing\_condition:egoistic\_center 0.804063   
## norm\_condition:egoistic\_center 0.761264   
## framing\_condition:hedonic\_center 0.366336   
## norm\_condition:hedonic\_center 0.121475   
## framing\_condition:ingroup\_center 0.658327   
## norm\_condition:ingroup\_center 0.897630   
## framing\_condition:norm\_condition:biospheric\_center 0.055922 .   
## framing\_condition:norm\_condition:altruistic\_center 0.294803   
## framing\_condition:norm\_condition:egoistic\_center 0.273587   
## framing\_condition:norm\_condition:hedonic\_center 0.814113   
## framing\_condition:norm\_condition:ingroup\_center 0.196431   
## Residuals   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Using mi.anova()

anova\_mod3 <- mi.anova(mi.res = mids\_obj, 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", type = 3)

## 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=0.182   
## ..........................................................................  
## ANOVA Table   
## SSQ df1 df2  
## framing\_condition 4.50523 2 248803.96693  
## norm\_condition 6.50281 4 56976.41717  
## biospheric\_center 70.08801 1 97128.62497  
## altruistic\_center 1.73055 1 5845.17205  
## egoistic\_center 55.17836 1 110627.91319  
## hedonic\_center 3.41275 1 5450.53422  
## ingroup\_center 0.77446 1 14711.24697  
## self\_dec\_center 7.40676 1 10068.84255  
## impress\_manag\_center 0.14701 1 45822.29747  
## clothing\_center 0.00822 1 2085416.59315  
## Gender 4.25083 1 2521.53284  
## Age\_center 6.54743 1 76.90636  
## framing\_condition:norm\_condition 5.63769 8 47883.75094  
## framing\_condition:biospheric\_center 0.74451 2 2343.75410  
## norm\_condition:biospheric\_center 11.66224 4 143123.55317  
## framing\_condition:altruistic\_center 1.27588 2 5678.47679  
## norm\_condition:altruistic\_center 9.14330 4 8815.72572  
## framing\_condition:egoistic\_center 0.46612 2 23314.49864  
## norm\_condition:egoistic\_center 2.14995 4 7712.17304  
## framing\_condition:hedonic\_center 2.19110 2 12001.17590  
## norm\_condition:hedonic\_center 8.15957 4 21750.57376  
## framing\_condition:ingroup\_center 0.86612 2 224763.46504  
## norm\_condition:ingroup\_center 1.08558 4 214061.49899  
## framing\_condition:norm\_condition:biospheric\_center 17.32289 8 23588.97564  
## framing\_condition:norm\_condition:altruistic\_center 11.76051 8 43981.12726  
## framing\_condition:norm\_condition:egoistic\_center 11.28902 8 32856.96926  
## framing\_condition:norm\_condition:hedonic\_center 6.01878 8 3409.78534  
## framing\_condition:norm\_condition:ingroup\_center 13.08139 8 16077.68828  
## Residual 1183.97669 NA NA  
## F value Pr(>F) eta2  
## framing\_condition 1.9637 0.14033 0.00311  
## norm\_condition 1.4091 0.22800 0.00449  
## biospheric\_center 61.0417 0.00000 0.04842  
## altruistic\_center 1.4388 0.23039 0.00120  
## egoistic\_center 48.0753 0.00000 0.03812  
## hedonic\_center 2.8703 0.09029 0.00236  
## ingroup\_center 0.6426 0.42279 0.00054  
## self\_dec\_center 6.3337 0.01186 0.00512  
## impress\_manag\_center 0.1136 0.73613 0.00010  
## clothing\_center 0.0051 0.94297 0.00001  
## Gender 3.5173 0.06085 0.00294  
## Age\_center 4.0931 0.04653 0.00452  
## framing\_condition:norm\_condition 0.6075 0.77240 0.00390  
## framing\_condition:biospheric\_center 0.2653 0.76698 0.00051  
## norm\_condition:biospheric\_center 2.5421 0.03769 0.00806  
## framing\_condition:altruistic\_center 0.5151 0.59746 0.00088  
## norm\_condition:altruistic\_center 1.9550 0.09851 0.00632  
## framing\_condition:egoistic\_center 0.1861 0.83017 0.00032  
## norm\_condition:egoistic\_center 0.4416 0.77859 0.00148  
## framing\_condition:hedonic\_center 0.9241 0.39693 0.00151  
## norm\_condition:hedonic\_center 1.7589 0.13406 0.00564  
## framing\_condition:ingroup\_center 0.3731 0.68858 0.00060  
## norm\_condition:ingroup\_center 0.2329 0.91997 0.00075  
## framing\_condition:norm\_condition:biospheric\_center 1.8746 0.05926 0.01197  
## framing\_condition:norm\_condition:altruistic\_center 1.2747 0.25148 0.00812  
## framing\_condition:norm\_condition:egoistic\_center 1.2210 0.28176 0.00780  
## framing\_condition:norm\_condition:hedonic\_center 0.6200 0.76172 0.00416  
## framing\_condition:norm\_condition:ingroup\_center 1.4089 0.18691 0.00904  
## Residual NA NA NA  
## partial.eta2  
## framing\_condition 0.00379  
## norm\_condition 0.00546  
## biospheric\_center 0.05589  
## altruistic\_center 0.00146  
## egoistic\_center 0.04453  
## hedonic\_center 0.00287  
## ingroup\_center 0.00065  
## self\_dec\_center 0.00622  
## impress\_manag\_center 0.00012  
## clothing\_center 0.00001  
## Gender 0.00358  
## Age\_center 0.00550  
## framing\_condition:norm\_condition 0.00474  
## framing\_condition:biospheric\_center 0.00063  
## norm\_condition:biospheric\_center 0.00975  
## framing\_condition:altruistic\_center 0.00108  
## norm\_condition:altruistic\_center 0.00766  
## framing\_condition:egoistic\_center 0.00039  
## norm\_condition:egoistic\_center 0.00181  
## framing\_condition:hedonic\_center 0.00185  
## norm\_condition:hedonic\_center 0.00684  
## framing\_condition:ingroup\_center 0.00073  
## norm\_condition:ingroup\_center 0.00092  
## framing\_condition:norm\_condition:biospheric\_center 0.01442  
## framing\_condition:norm\_condition:altruistic\_center 0.00984  
## framing\_condition:norm\_condition:egoistic\_center 0.00944  
## framing\_condition:norm\_condition:hedonic\_center 0.00506  
## framing\_condition:norm\_condition:ingroup\_center 0.01093  
## Residual NA

anova\_mod3 %>%  
 knitr::kable(digits = c(2, 2, 2, 2, 3, 3, 3))

| x |
| --- |
| 0.18 |

|  | SSQ | df1 | df2 | F value | Pr(>F) | eta2 | partial.eta2 |
| --- | --- | --- | --- | --- | --- | --- | --- |
| framing\_condition | 4.51 | 2 | 248803.97 | 1.96 | 0.140 | 0.003 | 0.004 |
| norm\_condition | 6.50 | 4 | 56976.42 | 1.41 | 0.228 | 0.004 | 0.005 |
| biospheric\_center | 70.09 | 1 | 97128.62 | 61.04 | 0.000 | 0.048 | 0.056 |
| altruistic\_center | 1.73 | 1 | 5845.17 | 1.44 | 0.230 | 0.001 | 0.001 |
| egoistic\_center | 55.18 | 1 | 110627.91 | 48.08 | 0.000 | 0.038 | 0.045 |
| hedonic\_center | 3.41 | 1 | 5450.53 | 2.87 | 0.090 | 0.002 | 0.003 |
| ingroup\_center | 0.77 | 1 | 14711.25 | 0.64 | 0.423 | 0.001 | 0.001 |
| self\_dec\_center | 7.41 | 1 | 10068.84 | 6.33 | 0.012 | 0.005 | 0.006 |
| impress\_manag\_center | 0.15 | 1 | 45822.30 | 0.11 | 0.736 | 0.000 | 0.000 |
| clothing\_center | 0.01 | 1 | 2085416.59 | 0.01 | 0.943 | 0.000 | 0.000 |
| Gender | 4.25 | 1 | 2521.53 | 3.52 | 0.061 | 0.003 | 0.004 |
| Age\_center | 6.55 | 1 | 76.91 | 4.09 | 0.047 | 0.005 | 0.005 |
| framing\_condition:norm\_condition | 5.64 | 8 | 47883.75 | 0.61 | 0.772 | 0.004 | 0.005 |
| framing\_condition:biospheric\_center | 0.74 | 2 | 2343.75 | 0.27 | 0.767 | 0.001 | 0.001 |
| norm\_condition:biospheric\_center | 11.66 | 4 | 143123.55 | 2.54 | 0.038 | 0.008 | 0.010 |
| framing\_condition:altruistic\_center | 1.28 | 2 | 5678.48 | 0.52 | 0.597 | 0.001 | 0.001 |
| norm\_condition:altruistic\_center | 9.14 | 4 | 8815.73 | 1.96 | 0.099 | 0.006 | 0.008 |
| framing\_condition:egoistic\_center | 0.47 | 2 | 23314.50 | 0.19 | 0.830 | 0.000 | 0.000 |
| norm\_condition:egoistic\_center | 2.15 | 4 | 7712.17 | 0.44 | 0.779 | 0.001 | 0.002 |
| framing\_condition:hedonic\_center | 2.19 | 2 | 12001.18 | 0.92 | 0.397 | 0.002 | 0.002 |
| norm\_condition:hedonic\_center | 8.16 | 4 | 21750.57 | 1.76 | 0.134 | 0.006 | 0.007 |
| framing\_condition:ingroup\_center | 0.87 | 2 | 224763.47 | 0.37 | 0.689 | 0.001 | 0.001 |
| norm\_condition:ingroup\_center | 1.09 | 4 | 214061.50 | 0.23 | 0.920 | 0.001 | 0.001 |
| framing\_condition:norm\_condition:biospheric\_center | 17.32 | 8 | 23588.98 | 1.87 | 0.059 | 0.012 | 0.014 |
| framing\_condition:norm\_condition:altruistic\_center | 11.76 | 8 | 43981.13 | 1.27 | 0.251 | 0.008 | 0.010 |
| framing\_condition:norm\_condition:egoistic\_center | 11.29 | 8 | 32856.97 | 1.22 | 0.282 | 0.008 | 0.009 |
| framing\_condition:norm\_condition:hedonic\_center | 6.02 | 8 | 3409.79 | 0.62 | 0.762 | 0.004 | 0.005 |
| framing\_condition:norm\_condition:ingroup\_center | 13.08 | 8 | 16077.69 | 1.41 | 0.187 | 0.009 | 0.011 |
| Residual | 1183.98 | NA | NA | NA | NA | NA | NA |

| x |
| --- |
| 3 |

MS\_btw <- (67.71/1)  
MS\_wth <- (1185.172/1038)  
F <- MS\_btw/MS\_wth  
F # 59.459

## [1] 59.30192

## Analysis in each imputed data set

### Imputed Data 1

#### Regression summary

Succinct summary

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.39 | 0.03 | 128.07 | 0.000 |
| framing\_conditionFrameCode1 | 0.03 | 0.08 | 0.37 | 0.712 |
| framing\_conditionFrameCode2 | 0.14 | 0.07 | 1.95 | 0.052 |
| norm\_condition1 | -0.01 | 0.05 | -0.24 | 0.810 |
| norm\_condition2 | 0.03 | 0.03 | 0.91 | 0.363 |
| norm\_condition3 | -0.04 | 0.02 | -2.09 | 0.037 |
| norm\_condition4 | -0.02 | 0.02 | -1.00 | 0.318 |
| biospheric\_center | 0.36 | 0.05 | 7.71 | 0.000 |
| altruistic\_center | 0.08 | 0.06 | 1.24 | 0.217 |
| egoistic\_center | -0.29 | 0.04 | -6.85 | 0.000 |
| hedonic\_center | -0.08 | 0.05 | -1.53 | 0.125 |
| ingroup\_center | 0.03 | 0.03 | 0.75 | 0.452 |
| self\_dec\_center | -0.12 | 0.04 | -2.72 | 0.007 |
| impress\_manag\_center | -0.01 | 0.04 | -0.27 | 0.791 |
| clothing\_center | 0.01 | 0.04 | 0.12 | 0.904 |
| Gender1 | 0.14 | 0.08 | 1.89 | 0.059 |
| Age\_center | -0.04 | 0.02 | -2.50 | 0.013 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.20 | 0.13 | 1.60 | 0.110 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.11 | 0.11 | -0.96 | 0.337 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.01 | 0.08 | -0.07 | 0.944 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.04 | 0.06 | -0.57 | 0.569 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.03 | 0.05 | 0.55 | 0.586 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.03 | 0.05 | 0.59 | 0.555 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.02 | 0.04 | 0.56 | 0.575 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.01 | 0.03 | -0.43 | 0.668 |
| framing\_conditionFrameCode1:biospheric\_center | -0.07 | 0.12 | -0.54 | 0.587 |
| framing\_conditionFrameCode2:biospheric\_center | 0.07 | 0.09 | 0.75 | 0.453 |
| norm\_condition1:biospheric\_center | -0.08 | 0.07 | -1.08 | 0.280 |
| norm\_condition2:biospheric\_center | 0.08 | 0.04 | 1.92 | 0.055 |
| norm\_condition3:biospheric\_center | -0.05 | 0.03 | -1.70 | 0.090 |
| norm\_condition4:biospheric\_center | -0.04 | 0.03 | -1.64 | 0.101 |
| framing\_conditionFrameCode1:altruistic\_center | 0.02 | 0.16 | 0.13 | 0.896 |
| framing\_conditionFrameCode2:altruistic\_center | -0.13 | 0.13 | -1.05 | 0.295 |
| norm\_condition1:altruistic\_center | -0.14 | 0.10 | -1.39 | 0.165 |
| norm\_condition2:altruistic\_center | -0.02 | 0.06 | -0.28 | 0.780 |
| norm\_condition3:altruistic\_center | 0.03 | 0.04 | 0.73 | 0.464 |
| norm\_condition4:altruistic\_center | 0.06 | 0.03 | 2.10 | 0.036 |
| framing\_conditionFrameCode1:egoistic\_center | -0.02 | 0.10 | -0.18 | 0.854 |
| framing\_conditionFrameCode2:egoistic\_center | 0.04 | 0.09 | 0.48 | 0.631 |
| norm\_condition1:egoistic\_center | 0.06 | 0.07 | 0.94 | 0.345 |
| norm\_condition2:egoistic\_center | -0.02 | 0.04 | -0.52 | 0.602 |
| norm\_condition3:egoistic\_center | 0.01 | 0.03 | 0.54 | 0.591 |
| norm\_condition4:egoistic\_center | 0.02 | 0.02 | 0.75 | 0.453 |
| framing\_conditionFrameCode1:hedonic\_center | 0.03 | 0.13 | 0.22 | 0.828 |
| framing\_conditionFrameCode2:hedonic\_center | 0.14 | 0.11 | 1.25 | 0.211 |
| norm\_condition1:hedonic\_center | 0.01 | 0.09 | 0.14 | 0.891 |
| norm\_condition2:hedonic\_center | 0.06 | 0.05 | 1.20 | 0.230 |
| norm\_condition3:hedonic\_center | -0.05 | 0.04 | -1.28 | 0.201 |
| norm\_condition4:hedonic\_center | -0.04 | 0.02 | -1.76 | 0.079 |
| framing\_conditionFrameCode1:ingroup\_center | 0.02 | 0.08 | 0.30 | 0.764 |
| framing\_conditionFrameCode2:ingroup\_center | -0.06 | 0.07 | -0.78 | 0.436 |
| norm\_condition1:ingroup\_center | 0.00 | 0.05 | 0.09 | 0.932 |
| norm\_condition2:ingroup\_center | -0.01 | 0.03 | -0.32 | 0.748 |
| norm\_condition3:ingroup\_center | 0.00 | 0.02 | 0.18 | 0.860 |
| norm\_condition4:ingroup\_center | -0.01 | 0.02 | -0.90 | 0.369 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.09 | 0.18 | -0.50 | 0.618 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.04 | 0.14 | 0.31 | 0.758 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.12 | 0.11 | -1.15 | 0.251 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.11 | 0.08 | 1.28 | 0.200 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.15 | 0.08 | 1.99 | 0.047 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.07 | 0.06 | 1.20 | 0.231 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.06 | 0.07 | 0.93 | 0.351 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.11 | 0.05 | 2.38 | 0.017 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.12 | 0.25 | -0.48 | 0.631 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.23 | 0.21 | 1.13 | 0.260 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.25 | 0.14 | 1.79 | 0.074 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.00 | 0.11 | 0.00 | 0.998 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.16 | 0.11 | -1.55 | 0.122 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.07 | 0.08 | -0.79 | 0.428 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | -0.02 | 0.08 | -0.25 | 0.803 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.08 | 0.06 | -1.33 | 0.182 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.09 | 0.17 | 0.52 | 0.605 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.11 | 0.14 | 0.77 | 0.439 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.02 | 0.09 | -0.26 | 0.798 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.17 | 0.08 | 2.14 | 0.033 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.08 | 0.06 | 1.31 | 0.189 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.03 | 0.06 | 0.57 | 0.569 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.06 | 0.05 | -1.17 | 0.241 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.04 | 0.04 | -0.89 | 0.371 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.03 | 0.22 | -0.13 | 0.897 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.22 | 0.19 | -1.14 | 0.253 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.15 | 0.12 | -1.30 | 0.194 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | 0.01 | 0.10 | 0.08 | 0.934 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.13 | 0.09 | -1.42 | 0.155 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | 0.00 | 0.07 | -0.05 | 0.963 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | 0.00 | 0.06 | -0.02 | 0.986 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.03 | 0.05 | 0.60 | 0.551 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.19 | 0.13 | 1.51 | 0.131 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.04 | 0.11 | 0.37 | 0.708 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.12 | 0.08 | 1.56 | 0.118 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03 | 0.06 | -0.52 | 0.604 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.04 | 0.05 | 0.71 | 0.476 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03 | 0.05 | -0.68 | 0.498 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.09 | 0.04 | -2.32 | 0.021 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.04 | 0.04 | 1.13 | 0.257 |

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-36)

Table 2 Regression Results Using Imputed Data 1

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.39 | [4.32, 4.45] | 128.07 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.03 | [-0.13, 0.19] | 0.37 | 1038 | .712 |
| Framing conditionFrameCode2 | 0.14 | [0.00, 0.27] | 1.95 | 1038 | .052 |
| Norm condition1 | -0.01 | [-0.11, 0.09] | -0.24 | 1038 | .810 |
| Norm condition2 | 0.03 | [-0.03, 0.09] | 0.91 | 1038 | .363 |
| Norm condition3 | -0.04 | [-0.09, 0.00] | -2.09 | 1038 | .037 |
| Norm condition4 | -0.02 | [-0.05, 0.02] | -1.00 | 1038 | .318 |
| Biospheric center | 0.36 | [0.27, 0.45] | 7.71 | 1038 | < .001 |
| Altruistic center | 0.08 | [-0.05, 0.20] | 1.24 | 1038 | .217 |
| Egoistic center | -0.29 | [-0.38, -0.21] | -6.85 | 1038 | < .001 |
| Hedonic center | -0.08 | [-0.19, 0.02] | -1.53 | 1038 | .125 |
| Ingroup center | 0.03 | [-0.04, 0.09] | 0.75 | 1038 | .452 |
| Self dec center | -0.12 | [-0.20, -0.03] | -2.72 | 1038 | .007 |
| Impress manag center | -0.01 | [-0.09, 0.07] | -0.27 | 1038 | .791 |
| Clothing center | 0.01 | [-0.08, 0.09] | 0.12 | 1038 | .904 |
| Gender1 | 0.14 | [-0.01, 0.29] | 1.89 | 1038 | .059 |
| Age center | -0.04 | [-0.08, -0.01] | -2.50 | 1038 | .013 |
| Framing conditionFrameCode1 Norm condition1 | 0.20 | [-0.05, 0.45] | 1.60 | 1038 | .110 |
| Framing conditionFrameCode2 Norm condition1 | -0.11 | [-0.32, 0.11] | -0.96 | 1038 | .337 |
| Framing conditionFrameCode1 Norm condition2 | -0.01 | [-0.15, 0.14] | -0.07 | 1038 | .944 |
| Framing conditionFrameCode2 Norm condition2 | -0.04 | [-0.16, 0.09] | -0.57 | 1038 | .569 |
| Framing conditionFrameCode1 Norm condition3 | 0.03 | [-0.07, 0.13] | 0.55 | 1038 | .586 |
| Framing conditionFrameCode2 Norm condition3 | 0.03 | [-0.06, 0.12] | 0.59 | 1038 | .555 |
| Framing conditionFrameCode1 Norm condition4 | 0.02 | [-0.06, 0.11] | 0.56 | 1038 | .575 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.08, 0.05] | -0.43 | 1038 | .668 |
| Framing conditionFrameCode1 Biospheric center | -0.07 | [-0.30, 0.17] | -0.54 | 1038 | .587 |
| Framing conditionFrameCode2 Biospheric center | 0.07 | [-0.11, 0.25] | 0.75 | 1038 | .453 |
| Norm condition1 Biospheric center | -0.08 | [-0.21, 0.06] | -1.08 | 1038 | .280 |
| Norm condition2 Biospheric center | 0.08 | [0.00, 0.16] | 1.92 | 1038 | .055 |
| Norm condition3 Biospheric center | -0.05 | [-0.11, 0.01] | -1.70 | 1038 | .090 |
| Norm condition4 Biospheric center | -0.04 | [-0.09, 0.01] | -1.64 | 1038 | .101 |
| Framing conditionFrameCode1 Altruistic center | 0.02 | [-0.29, 0.33] | 0.13 | 1038 | .896 |
| Framing conditionFrameCode2 Altruistic center | -0.13 | [-0.38, 0.11] | -1.05 | 1038 | .295 |
| Norm condition1 Altruistic center | -0.14 | [-0.33, 0.06] | -1.39 | 1038 | .165 |
| Norm condition2 Altruistic center | -0.02 | [-0.12, 0.09] | -0.28 | 1038 | .780 |
| Norm condition3 Altruistic center | 0.03 | [-0.05, 0.11] | 0.73 | 1038 | .464 |
| Norm condition4 Altruistic center | 0.06 | [0.00, 0.12] | 2.10 | 1038 | .036 |
| Framing conditionFrameCode1 Egoistic center | -0.02 | [-0.22, 0.18] | -0.18 | 1038 | .854 |
| Framing conditionFrameCode2 Egoistic center | 0.04 | [-0.13, 0.21] | 0.48 | 1038 | .631 |
| Norm condition1 Egoistic center | 0.06 | [-0.07, 0.20] | 0.94 | 1038 | .345 |
| Norm condition2 Egoistic center | -0.02 | [-0.09, 0.05] | -0.52 | 1038 | .602 |
| Norm condition3 Egoistic center | 0.01 | [-0.04, 0.07] | 0.54 | 1038 | .591 |
| Norm condition4 Egoistic center | 0.02 | [-0.03, 0.06] | 0.75 | 1038 | .453 |
| Framing conditionFrameCode1 Hedonic center | 0.03 | [-0.23, 0.29] | 0.22 | 1038 | .828 |
| Framing conditionFrameCode2 Hedonic center | 0.14 | [-0.08, 0.36] | 1.25 | 1038 | .211 |
| Norm condition1 Hedonic center | 0.01 | [-0.16, 0.19] | 0.14 | 1038 | .891 |
| Norm condition2 Hedonic center | 0.06 | [-0.04, 0.15] | 1.20 | 1038 | .230 |
| Norm condition3 Hedonic center | -0.05 | [-0.11, 0.02] | -1.28 | 1038 | .201 |
| Norm condition4 Hedonic center | -0.04 | [-0.09, 0.01] | -1.76 | 1038 | .079 |
| Framing conditionFrameCode1 Ingroup center | 0.02 | [-0.14, 0.19] | 0.30 | 1038 | .764 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.19, 0.08] | -0.78 | 1038 | .436 |
| Norm condition1 Ingroup center | 0.00 | [-0.10, 0.11] | 0.09 | 1038 | .932 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.32 | 1038 | .748 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.05] | 0.18 | 1038 | .860 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.90 | 1038 | .369 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.09 | [-0.44, 0.26] | -0.50 | 1038 | .618 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.04 | [-0.24, 0.33] | 0.31 | 1038 | .758 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.12 | [-0.33, 0.09] | -1.15 | 1038 | .251 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.11 | [-0.06, 0.27] | 1.28 | 1038 | .200 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.15 | [0.00, 0.30] | 1.99 | 1038 | .047 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.07 | [-0.04, 0.18] | 1.20 | 1038 | .231 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.06 | [-0.07, 0.20] | 0.93 | 1038 | .351 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.11 | [0.02, 0.21] | 2.38 | 1038 | .017 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.12 | [-0.60, 0.37] | -0.48 | 1038 | .631 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.23 | [-0.17, 0.64] | 1.13 | 1038 | .260 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.25 | [-0.02, 0.52] | 1.79 | 1038 | .074 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | 0.00 | [-0.22, 0.22] | 0.00 | 1038 | .998 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.16 | [-0.37, 0.04] | -1.55 | 1038 | .122 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.07 | [-0.23, 0.10] | -0.79 | 1038 | .428 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | -0.02 | [-0.17, 0.13] | -0.25 | 1038 | .803 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.08 | [-0.19, 0.04] | -1.33 | 1038 | .182 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.09 | [-0.25, 0.43] | 0.52 | 1038 | .605 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.11 | [-0.16, 0.37] | 0.77 | 1038 | .439 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.02 | [-0.19, 0.15] | -0.26 | 1038 | .798 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.17 | [0.01, 0.32] | 2.14 | 1038 | .033 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.08 | [-0.04, 0.21] | 1.31 | 1038 | .189 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.03 | [-0.08, 0.14] | 0.57 | 1038 | .569 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.06 | [-0.17, 0.04] | -1.17 | 1038 | .241 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.04 | [-0.12, 0.05] | -0.89 | 1038 | .371 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | -0.03 | [-0.46, 0.41] | -0.13 | 1038 | .897 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.22 | [-0.58, 0.15] | -1.14 | 1038 | .253 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.15 | [-0.38, 0.08] | -1.30 | 1038 | .194 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | 0.01 | [-0.19, 0.21] | 0.08 | 1038 | .934 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.13 | [-0.30, 0.05] | -1.42 | 1038 | .155 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | 0.00 | [-0.15, 0.14] | -0.05 | 1038 | .963 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | 0.00 | [-0.12, 0.12] | -0.02 | 1038 | .986 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.03 | [-0.07, 0.13] | 0.60 | 1038 | .551 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.19 | [-0.06, 0.44] | 1.51 | 1038 | .131 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.04 | [-0.18, 0.26] | 0.37 | 1038 | .708 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.12 | [-0.03, 0.27] | 1.56 | 1038 | .118 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.09] | -0.52 | 1038 | .604 |
| 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] | -0.68 | 1038 | .498 |
| 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] | 1.13 | 1038 | .257 |

*Note.* DV = Consumer Intentions

Standardized regression coefficients

APA summary of standardized coefficients

print\_summ\_std\_imp1 <- apa\_print(summ\_std\_imp1)  
  
apa\_table(print\_summ\_std\_imp1)

(#tab:unnamed-chunk-38)

\*\*

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | -0.02 | [-0.08, 0.03] | -0.76 | 1038 | .448 |
| Framing conditionFrameCode1 | 0.03 | [-0.11, 0.16] | 0.37 | 1038 | .712 |
| Framing conditionFrameCode2 | 0.11 | [0.00, 0.23] | 1.95 | 1038 | .052 |
| Norm condition1 | -0.01 | [-0.10, 0.07] | -0.24 | 1038 | .810 |
| Norm condition2 | 0.02 | [-0.03, 0.07] | 0.91 | 1038 | .363 |
| Norm condition3 | -0.04 | [-0.07, 0.00] | -2.09 | 1038 | .037 |
| Norm condition4 | -0.01 | [-0.04, 0.01] | -1.00 | 1038 | .318 |
| Scalebiospheric | 0.30 | [0.22, 0.38] | 7.71 | 1038 | < .001 |
| Scalealtruistic | 0.05 | [-0.03, 0.14] | 1.24 | 1038 | .217 |
| Scaleegoistic | -0.23 | [-0.29, -0.16] | -6.85 | 1038 | < .001 |
| Scalehedonic | -0.06 | [-0.13, 0.02] | -1.53 | 1038 | .125 |
| Scaleingroup identification | 0.02 | [-0.03, 0.08] | 0.75 | 1038 | .452 |
| Scaleself deceptive sdr | -0.08 | [-0.14, -0.02] | -2.72 | 1038 | .007 |
| Scaleimpress manag sdr | -0.01 | [-0.07, 0.05] | -0.27 | 1038 | .791 |
| Scaleclothing interest | 0.00 | [-0.06, 0.06] | 0.12 | 1038 | .904 |
| Gender1 | 0.12 | [0.00, 0.25] | 1.89 | 1038 | .059 |
| ScaleAge | -0.07 | [-0.13, -0.02] | -2.50 | 1038 | .013 |
| Framing conditionFrameCode1 Norm condition1 | 0.17 | [-0.04, 0.38] | 1.60 | 1038 | .110 |
| Framing conditionFrameCode2 Norm condition1 | -0.09 | [-0.27, 0.09] | -0.96 | 1038 | .337 |
| Framing conditionFrameCode1 Norm condition2 | 0.00 | [-0.13, 0.12] | -0.07 | 1038 | .944 |
| Framing conditionFrameCode2 Norm condition2 | -0.03 | [-0.13, 0.07] | -0.57 | 1038 | .569 |
| Framing conditionFrameCode1 Norm condition3 | 0.02 | [-0.06, 0.11] | 0.55 | 1038 | .586 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.05, 0.10] | 0.59 | 1038 | .555 |
| Framing conditionFrameCode1 Norm condition4 | 0.02 | [-0.05, 0.09] | 0.56 | 1038 | .575 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.07, 0.04] | -0.43 | 1038 | .668 |
| Framing conditionFrameCode1 Scalebiospheric | -0.05 | [-0.25, 0.14] | -0.54 | 1038 | .587 |
| Framing conditionFrameCode2 Scalebiospheric | 0.06 | [-0.09, 0.21] | 0.75 | 1038 | .453 |
| Norm condition1 Scalebiospheric | -0.06 | [-0.18, 0.05] | -1.08 | 1038 | .280 |
| Norm condition2 Scalebiospheric | 0.07 | [0.00, 0.13] | 1.92 | 1038 | .055 |
| Norm condition3 Scalebiospheric | -0.04 | [-0.09, 0.01] | -1.70 | 1038 | .090 |
| Norm condition4 Scalebiospheric | -0.03 | [-0.08, 0.01] | -1.64 | 1038 | .101 |
| Framing conditionFrameCode1 Scalealtruistic | 0.01 | [-0.19, 0.22] | 0.13 | 1038 | .896 |
| Framing conditionFrameCode2 Scalealtruistic | -0.09 | [-0.26, 0.08] | -1.05 | 1038 | .295 |
| Norm condition1 Scalealtruistic | -0.09 | [-0.23, 0.04] | -1.39 | 1038 | .165 |
| Norm condition2 Scalealtruistic | -0.01 | [-0.08, 0.06] | -0.28 | 1038 | .780 |
| Norm condition3 Scalealtruistic | 0.02 | [-0.03, 0.08] | 0.73 | 1038 | .464 |
| Norm condition4 Scalealtruistic | 0.04 | [0.00, 0.08] | 2.10 | 1038 | .036 |
| Framing conditionFrameCode1 Scaleegoistic | -0.01 | [-0.17, 0.14] | -0.18 | 1038 | .854 |
| Framing conditionFrameCode2 Scaleegoistic | 0.03 | [-0.10, 0.16] | 0.48 | 1038 | .631 |
| Norm condition1 Scaleegoistic | 0.05 | [-0.05, 0.15] | 0.94 | 1038 | .345 |
| Norm condition2 Scaleegoistic | -0.01 | [-0.07, 0.04] | -0.52 | 1038 | .602 |
| Norm condition3 Scaleegoistic | 0.01 | [-0.03, 0.05] | 0.54 | 1038 | .591 |
| Norm condition4 Scaleegoistic | 0.01 | [-0.02, 0.04] | 0.75 | 1038 | .453 |
| Framing conditionFrameCode1 Scalehedonic | 0.02 | [-0.15, 0.19] | 0.22 | 1038 | .828 |
| Framing conditionFrameCode2 Scalehedonic | 0.09 | [-0.05, 0.24] | 1.25 | 1038 | .211 |
| Norm condition1 Scalehedonic | 0.01 | [-0.11, 0.13] | 0.14 | 1038 | .891 |
| Norm condition2 Scalehedonic | 0.04 | [-0.02, 0.10] | 1.20 | 1038 | .230 |
| Norm condition3 Scalehedonic | -0.03 | [-0.08, 0.02] | -1.28 | 1038 | .201 |
| Norm condition4 Scalehedonic | -0.03 | [-0.06, 0.00] | -1.76 | 1038 | .079 |
| Framing conditionFrameCode1 Scaleingroup identification | 0.02 | [-0.12, 0.16] | 0.30 | 1038 | .764 |
| Framing conditionFrameCode2 Scaleingroup identification | -0.05 | [-0.17, 0.07] | -0.78 | 1038 | .436 |
| Norm condition1 Scaleingroup identification | 0.00 | [-0.08, 0.09] | 0.09 | 1038 | .932 |
| Norm condition2 Scaleingroup identification | -0.01 | [-0.06, 0.04] | -0.32 | 1038 | .748 |
| Norm condition3 Scaleingroup identification | 0.00 | [-0.03, 0.04] | 0.18 | 1038 | .860 |
| Norm condition4 Scaleingroup identification | -0.01 | [-0.04, 0.01] | -0.90 | 1038 | .369 |
| Framing conditionFrameCode1 Norm condition1 Scalebiospheric | -0.07 | [-0.37, 0.22] | -0.50 | 1038 | .618 |
| Framing conditionFrameCode2 Norm condition1 Scalebiospheric | 0.04 | [-0.20, 0.27] | 0.31 | 1038 | .758 |
| Framing conditionFrameCode1 Norm condition2 Scalebiospheric | -0.10 | [-0.27, 0.07] | -1.15 | 1038 | .251 |
| Framing conditionFrameCode2 Norm condition2 Scalebiospheric | 0.09 | [-0.05, 0.23] | 1.28 | 1038 | .200 |
| Framing conditionFrameCode1 Norm condition3 Scalebiospheric | 0.13 | [0.00, 0.25] | 1.99 | 1038 | .047 |
| Framing conditionFrameCode2 Norm condition3 Scalebiospheric | 0.06 | [-0.04, 0.15] | 1.20 | 1038 | .231 |
| Framing conditionFrameCode1 Norm condition4 Scalebiospheric | 0.05 | [-0.06, 0.16] | 0.93 | 1038 | .351 |
| Framing conditionFrameCode2 Norm condition4 Scalebiospheric | 0.09 | [0.02, 0.17] | 2.38 | 1038 | .017 |
| Framing conditionFrameCode1 Norm condition1 Scalealtruistic | -0.08 | [-0.41, 0.25] | -0.48 | 1038 | .631 |
| Framing conditionFrameCode2 Norm condition1 Scalealtruistic | 0.16 | [-0.12, 0.43] | 1.13 | 1038 | .260 |
| Framing conditionFrameCode1 Norm condition2 Scalealtruistic | 0.17 | [-0.02, 0.35] | 1.79 | 1038 | .074 |
| Framing conditionFrameCode2 Norm condition2 Scalealtruistic | 0.00 | [-0.15, 0.15] | 0.00 | 1038 | .998 |
| Framing conditionFrameCode1 Norm condition3 Scalealtruistic | -0.11 | [-0.25, 0.03] | -1.55 | 1038 | .122 |
| Framing conditionFrameCode2 Norm condition3 Scalealtruistic | -0.05 | [-0.16, 0.07] | -0.79 | 1038 | .428 |
| Framing conditionFrameCode1 Norm condition4 Scalealtruistic | -0.01 | [-0.11, 0.09] | -0.25 | 1038 | .803 |
| Framing conditionFrameCode2 Norm condition4 Scalealtruistic | -0.05 | [-0.13, 0.02] | -1.33 | 1038 | .182 |
| Framing conditionFrameCode1 Norm condition1 Scaleegoistic | 0.07 | [-0.19, 0.33] | 0.52 | 1038 | .605 |
| Framing conditionFrameCode2 Norm condition1 Scaleegoistic | 0.08 | [-0.13, 0.29] | 0.77 | 1038 | .439 |
| Framing conditionFrameCode1 Norm condition2 Scaleegoistic | -0.02 | [-0.15, 0.12] | -0.26 | 1038 | .798 |
| Framing conditionFrameCode2 Norm condition2 Scaleegoistic | 0.13 | [0.01, 0.25] | 2.14 | 1038 | .033 |
| Framing conditionFrameCode1 Norm condition3 Scaleegoistic | 0.06 | [-0.03, 0.16] | 1.31 | 1038 | .189 |
| Framing conditionFrameCode2 Norm condition3 Scaleegoistic | 0.02 | [-0.06, 0.11] | 0.57 | 1038 | .569 |
| Framing conditionFrameCode1 Norm condition4 Scaleegoistic | -0.05 | [-0.13, 0.03] | -1.17 | 1038 | .241 |
| Framing conditionFrameCode2 Norm condition4 Scaleegoistic | -0.03 | [-0.09, 0.04] | -0.89 | 1038 | .371 |
| Framing conditionFrameCode1 Norm condition1 Scalehedonic | -0.02 | [-0.31, 0.27] | -0.13 | 1038 | .897 |
| Framing conditionFrameCode2 Norm condition1 Scalehedonic | -0.14 | [-0.39, 0.10] | -1.14 | 1038 | .253 |
| Framing conditionFrameCode1 Norm condition2 Scalehedonic | -0.10 | [-0.25, 0.05] | -1.30 | 1038 | .194 |
| Framing conditionFrameCode2 Norm condition2 Scalehedonic | 0.01 | [-0.13, 0.14] | 0.08 | 1038 | .934 |
| Framing conditionFrameCode1 Norm condition3 Scalehedonic | -0.08 | [-0.20, 0.03] | -1.42 | 1038 | .155 |
| Framing conditionFrameCode2 Norm condition3 Scalehedonic | 0.00 | [-0.10, 0.09] | -0.05 | 1038 | .963 |
| Framing conditionFrameCode1 Norm condition4 Scalehedonic | 0.00 | [-0.08, 0.08] | -0.02 | 1038 | .986 |
| Framing conditionFrameCode2 Norm condition4 Scalehedonic | 0.02 | [-0.05, 0.09] | 0.60 | 1038 | .551 |
| Framing conditionFrameCode1 Norm condition1 Scaleingroup identification | 0.16 | [-0.05, 0.38] | 1.51 | 1038 | .131 |
| Framing conditionFrameCode2 Norm condition1 Scaleingroup identification | 0.04 | [-0.15, 0.22] | 0.37 | 1038 | .708 |
| Framing conditionFrameCode1 Norm condition2 Scaleingroup identification | 0.10 | [-0.03, 0.23] | 1.56 | 1038 | .118 |
| Framing conditionFrameCode2 Norm condition2 Scaleingroup identification | -0.03 | [-0.14, 0.08] | -0.52 | 1038 | .604 |
| Framing conditionFrameCode1 Norm condition3 Scaleingroup identification | 0.03 | [-0.06, 0.12] | 0.71 | 1038 | .476 |
| Framing conditionFrameCode2 Norm condition3 Scaleingroup identification | -0.03 | [-0.10, 0.05] | -0.68 | 1038 | .498 |
| Framing conditionFrameCode1 Norm condition4 Scaleingroup identification | -0.08 | [-0.15, -0.01] | -2.32 | 1038 | .021 |
| Framing conditionFrameCode2 Norm condition4 Scaleingroup identification | 0.03 | [-0.02, 0.09] | 1.13 | 1038 | .257 |

#### ANOVA summary

anova(mod\_mice\_imp1) %>%  
 knitr::kable(digits = c(1, 2, 2, 2, 3))

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.69 | 2.35 | 2.06 | 0.128 |
| norm\_condition | 4 | 8.17 | 2.04 | 1.79 | 0.128 |
| biospheric\_center | 1 | 146.01 | 146.01 | 128.22 | 0.000 |
| altruistic\_center | 1 | 0.17 | 0.17 | 0.15 | 0.696 |
| egoistic\_center | 1 | 124.08 | 124.08 | 108.96 | 0.000 |
| hedonic\_center | 1 | 2.95 | 2.95 | 2.59 | 0.108 |
| ingroup\_center | 1 | 4.13 | 4.13 | 3.63 | 0.057 |
| self\_dec\_center | 1 | 14.19 | 14.19 | 12.46 | 0.000 |
| impress\_manag\_center | 1 | 0.01 | 0.01 | 0.01 | 0.910 |
| clothing\_center | 1 | 0.70 | 0.70 | 0.61 | 0.433 |
| Gender | 1 | 5.90 | 5.90 | 5.18 | 0.023 |
| Age\_center | 1 | 7.33 | 7.33 | 6.44 | 0.011 |
| framing\_condition:norm\_condition | 8 | 5.70 | 0.71 | 0.63 | 0.757 |
| framing\_condition:biospheric\_center | 2 | 0.57 | 0.28 | 0.25 | 0.779 |
| norm\_condition:biospheric\_center | 4 | 15.10 | 3.77 | 3.31 | 0.010 |
| framing\_condition:altruistic\_center | 2 | 0.44 | 0.22 | 0.19 | 0.825 |
| norm\_condition:altruistic\_center | 4 | 2.58 | 0.65 | 0.57 | 0.687 |
| framing\_condition:egoistic\_center | 2 | 0.82 | 0.41 | 0.36 | 0.699 |
| norm\_condition:egoistic\_center | 4 | 2.10 | 0.52 | 0.46 | 0.765 |
| framing\_condition:hedonic\_center | 2 | 1.75 | 0.87 | 0.77 | 0.465 |
| norm\_condition:hedonic\_center | 4 | 8.11 | 2.03 | 1.78 | 0.130 |
| framing\_condition:ingroup\_center | 2 | 1.07 | 0.54 | 0.47 | 0.624 |
| norm\_condition:ingroup\_center | 4 | 0.39 | 0.10 | 0.09 | 0.987 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 15.46 | 1.93 | 1.70 | 0.095 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 12.79 | 1.60 | 1.40 | 0.190 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 11.31 | 1.41 | 1.24 | 0.271 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 5.81 | 0.73 | 0.64 | 0.746 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 13.82 | 1.73 | 1.52 | 0.147 |
| Residuals | 1038 | 1182.04 | 1.14 | NA | NA |

Effect Size

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

|  | eta.sq | eta.sq.part |
| --- | --- | --- |
| framing\_condition | 0.003 | 0.005 |
| norm\_condition | 0.005 | 0.007 |
| biospheric\_center | 0.050 | 0.063 |
| altruistic\_center | 0.001 | 0.001 |
| egoistic\_center | 0.040 | 0.051 |
| hedonic\_center | 0.002 | 0.003 |
| ingroup\_center | 0.000 | 0.001 |
| self\_dec\_center | 0.005 | 0.007 |
| impress\_manag\_center | 0.000 | 0.000 |
| clothing\_center | 0.000 | 0.000 |
| Gender | 0.003 | 0.003 |
| Age\_center | 0.004 | 0.006 |
| framing\_condition:norm\_condition | 0.003 | 0.004 |
| framing\_condition:biospheric\_center | 0.001 | 0.001 |
| norm\_condition:biospheric\_center | 0.007 | 0.009 |
| framing\_condition:altruistic\_center | 0.001 | 0.001 |
| norm\_condition:altruistic\_center | 0.005 | 0.007 |
| framing\_condition:egoistic\_center | 0.000 | 0.000 |
| norm\_condition:egoistic\_center | 0.001 | 0.002 |
| framing\_condition:hedonic\_center | 0.001 | 0.002 |
| norm\_condition:hedonic\_center | 0.004 | 0.006 |
| framing\_condition:ingroup\_center | 0.000 | 0.001 |
| norm\_condition:ingroup\_center | 0.001 | 0.001 |
| framing\_condition:norm\_condition:biospheric\_center | 0.011 | 0.014 |
| framing\_condition:norm\_condition:altruistic\_center | 0.007 | 0.010 |
| framing\_condition:norm\_condition:egoistic\_center | 0.007 | 0.010 |
| framing\_condition:norm\_condition:hedonic\_center | 0.004 | 0.005 |
| framing\_condition:norm\_condition:ingroup\_center | 0.009 | 0.012 |

### 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

Succinct summary

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.39 | 0.03 | 128.50 | 0.000 |
| framing\_conditionFrameCode1 | 0.04 | 0.08 | 0.47 | 0.641 |
| framing\_conditionFrameCode2 | 0.13 | 0.07 | 1.87 | 0.062 |
| norm\_condition1 | -0.02 | 0.05 | -0.32 | 0.750 |
| norm\_condition2 | 0.03 | 0.03 | 0.92 | 0.360 |
| norm\_condition3 | -0.04 | 0.02 | -2.00 | 0.046 |
| norm\_condition4 | -0.01 | 0.02 | -0.87 | 0.387 |
| biospheric\_center | 0.36 | 0.05 | 7.85 | 0.000 |
| altruistic\_center | 0.07 | 0.06 | 1.13 | 0.259 |
| egoistic\_center | -0.30 | 0.04 | -7.01 | 0.000 |
| hedonic\_center | -0.09 | 0.05 | -1.63 | 0.104 |
| ingroup\_center | 0.03 | 0.03 | 0.92 | 0.356 |
| self\_dec\_center | -0.11 | 0.04 | -2.46 | 0.014 |
| impress\_manag\_center | -0.02 | 0.04 | -0.45 | 0.652 |
| clothing\_center | 0.00 | 0.05 | 0.03 | 0.975 |
| Gender1 | 0.16 | 0.08 | 2.11 | 0.035 |
| Age\_center | -0.04 | 0.02 | -2.01 | 0.045 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.19 | 0.13 | 1.51 | 0.131 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.10 | 0.11 | -0.95 | 0.341 |
| framing\_conditionFrameCode1:norm\_condition2 | 0.00 | 0.08 | -0.04 | 0.971 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.04 | 0.06 | -0.61 | 0.545 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.03 | 0.05 | 0.49 | 0.621 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02 | 0.05 | 0.52 | 0.603 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.03 | 0.04 | 0.68 | 0.494 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.02 | 0.03 | -0.44 | 0.658 |
| framing\_conditionFrameCode1:biospheric\_center | -0.04 | 0.12 | -0.31 | 0.754 |
| framing\_conditionFrameCode2:biospheric\_center | 0.05 | 0.09 | 0.60 | 0.550 |
| norm\_condition1:biospheric\_center | -0.06 | 0.07 | -0.90 | 0.369 |
| norm\_condition2:biospheric\_center | 0.08 | 0.04 | 1.82 | 0.069 |
| norm\_condition3:biospheric\_center | -0.05 | 0.03 | -1.80 | 0.072 |
| norm\_condition4:biospheric\_center | -0.04 | 0.03 | -1.75 | 0.081 |
| framing\_conditionFrameCode1:altruistic\_center | 0.00 | 0.16 | 0.00 | 0.996 |
| framing\_conditionFrameCode2:altruistic\_center | -0.12 | 0.13 | -0.98 | 0.328 |
| norm\_condition1:altruistic\_center | -0.12 | 0.10 | -1.18 | 0.237 |
| norm\_condition2:altruistic\_center | -0.01 | 0.05 | -0.19 | 0.846 |
| norm\_condition3:altruistic\_center | 0.04 | 0.04 | 0.85 | 0.394 |
| norm\_condition4:altruistic\_center | 0.07 | 0.03 | 2.39 | 0.017 |
| framing\_conditionFrameCode1:egoistic\_center | -0.04 | 0.10 | -0.38 | 0.705 |
| framing\_conditionFrameCode2:egoistic\_center | 0.05 | 0.09 | 0.63 | 0.532 |
| norm\_condition1:egoistic\_center | 0.05 | 0.07 | 0.68 | 0.499 |
| norm\_condition2:egoistic\_center | -0.02 | 0.04 | -0.44 | 0.662 |
| norm\_condition3:egoistic\_center | 0.02 | 0.03 | 0.69 | 0.492 |
| norm\_condition4:egoistic\_center | 0.02 | 0.02 | 0.74 | 0.457 |
| framing\_conditionFrameCode1:hedonic\_center | 0.02 | 0.13 | 0.16 | 0.873 |
| framing\_conditionFrameCode2:hedonic\_center | 0.14 | 0.11 | 1.26 | 0.207 |
| norm\_condition1:hedonic\_center | 0.02 | 0.09 | 0.25 | 0.802 |
| norm\_condition2:hedonic\_center | 0.06 | 0.05 | 1.19 | 0.235 |
| norm\_condition3:hedonic\_center | -0.05 | 0.04 | -1.32 | 0.188 |
| norm\_condition4:hedonic\_center | -0.05 | 0.02 | -1.90 | 0.058 |
| framing\_conditionFrameCode1:ingroup\_center | 0.03 | 0.08 | 0.33 | 0.743 |
| framing\_conditionFrameCode2:ingroup\_center | -0.06 | 0.07 | -0.89 | 0.373 |
| norm\_condition1:ingroup\_center | 0.00 | 0.05 | 0.06 | 0.954 |
| norm\_condition2:ingroup\_center | -0.01 | 0.03 | -0.38 | 0.708 |
| norm\_condition3:ingroup\_center | 0.00 | 0.02 | 0.16 | 0.875 |
| norm\_condition4:ingroup\_center | -0.01 | 0.02 | -0.90 | 0.368 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.06 | 0.18 | -0.33 | 0.740 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.02 | 0.14 | 0.15 | 0.882 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.13 | 0.11 | -1.22 | 0.224 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.12 | 0.08 | 1.37 | 0.171 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.15 | 0.08 | 2.01 | 0.045 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.07 | 0.06 | 1.20 | 0.231 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.06 | 0.07 | 0.89 | 0.372 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.12 | 0.05 | 2.44 | 0.015 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.03 | 0.24 | -0.14 | 0.891 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.20 | 0.21 | 0.98 | 0.325 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.26 | 0.14 | 1.86 | 0.063 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | -0.01 | 0.11 | -0.09 | 0.925 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.16 | 0.11 | -1.49 | 0.136 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.07 | 0.08 | -0.87 | 0.384 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | 0.00 | 0.08 | -0.03 | 0.978 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.09 | 0.06 | -1.52 | 0.128 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.03 | 0.17 | 0.16 | 0.870 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.13 | 0.14 | 0.96 | 0.339 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.01 | 0.09 | -0.16 | 0.870 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.16 | 0.08 | 2.04 | 0.041 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.08 | 0.06 | 1.33 | 0.185 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.03 | 0.06 | 0.45 | 0.651 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.06 | 0.05 | -1.10 | 0.271 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.04 | 0.04 | -0.94 | 0.347 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.01 | 0.21 | -0.05 | 0.959 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.23 | 0.19 | -1.22 | 0.221 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.14 | 0.12 | -1.24 | 0.214 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | 0.01 | 0.10 | 0.08 | 0.934 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.13 | 0.09 | -1.46 | 0.145 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | 0.00 | 0.07 | 0.00 | 0.998 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.01 | 0.06 | -0.16 | 0.876 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.04 | 0.05 | 0.72 | 0.474 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.17 | 0.13 | 1.32 | 0.188 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.04 | 0.11 | 0.37 | 0.710 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.12 | 0.08 | 1.52 | 0.128 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03 | 0.06 | -0.48 | 0.629 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.03 | 0.05 | 0.62 | 0.538 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03 | 0.05 | -0.62 | 0.533 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.09 | 0.04 | -2.21 | 0.027 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.04 | 0.04 | 1.12 | 0.263 |

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-44)

Table 3 Regression Results Using Imputed Data 2

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.39 | [4.32, 4.45] | 128.50 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.04 | [-0.12, 0.20] | 0.47 | 1038 | .641 |
| Framing conditionFrameCode2 | 0.13 | [-0.01, 0.27] | 1.87 | 1038 | .062 |
| Norm condition1 | -0.02 | [-0.12, 0.08] | -0.32 | 1038 | .750 |
| Norm condition2 | 0.03 | [-0.03, 0.09] | 0.92 | 1038 | .360 |
| Norm condition3 | -0.04 | [-0.08, 0.00] | -2.00 | 1038 | .046 |
| Norm condition4 | -0.01 | [-0.05, 0.02] | -0.87 | 1038 | .387 |
| Biospheric center | 0.36 | [0.27, 0.46] | 7.85 | 1038 | < .001 |
| Altruistic center | 0.07 | [-0.05, 0.20] | 1.13 | 1038 | .259 |
| Egoistic center | -0.30 | [-0.38, -0.22] | -7.01 | 1038 | < .001 |
| Hedonic center | -0.09 | [-0.19, 0.02] | -1.63 | 1038 | .104 |
| Ingroup center | 0.03 | [-0.04, 0.10] | 0.92 | 1038 | .356 |
| Self dec center | -0.11 | [-0.19, -0.02] | -2.46 | 1038 | .014 |
| Impress manag center | -0.02 | [-0.10, 0.06] | -0.45 | 1038 | .652 |
| Clothing center | 0.00 | [-0.09, 0.09] | 0.03 | 1038 | .975 |
| Gender1 | 0.16 | [0.01, 0.31] | 2.11 | 1038 | .035 |
| Age center | -0.04 | [-0.07, 0.00] | -2.01 | 1038 | .045 |
| Framing conditionFrameCode1 Norm condition1 | 0.19 | [-0.06, 0.44] | 1.51 | 1038 | .131 |
| Framing conditionFrameCode2 Norm condition1 | -0.10 | [-0.32, 0.11] | -0.95 | 1038 | .341 |
| Framing conditionFrameCode1 Norm condition2 | 0.00 | [-0.15, 0.15] | -0.04 | 1038 | .971 |
| Framing conditionFrameCode2 Norm condition2 | -0.04 | [-0.16, 0.08] | -0.61 | 1038 | .545 |
| Framing conditionFrameCode1 Norm condition3 | 0.03 | [-0.08, 0.13] | 0.49 | 1038 | .621 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.07, 0.11] | 0.52 | 1038 | .603 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.05, 0.11] | 0.68 | 1038 | .494 |
| Framing conditionFrameCode2 Norm condition4 | -0.02 | [-0.08, 0.05] | -0.44 | 1038 | .658 |
| Framing conditionFrameCode1 Biospheric center | -0.04 | [-0.27, 0.20] | -0.31 | 1038 | .754 |
| Framing conditionFrameCode2 Biospheric center | 0.05 | [-0.13, 0.23] | 0.60 | 1038 | .550 |
| Norm condition1 Biospheric center | -0.06 | [-0.20, 0.07] | -0.90 | 1038 | .369 |
| Norm condition2 Biospheric center | 0.08 | [-0.01, 0.16] | 1.82 | 1038 | .069 |
| Norm condition3 Biospheric center | -0.05 | [-0.11, 0.00] | -1.80 | 1038 | .072 |
| Norm condition4 Biospheric center | -0.04 | [-0.09, 0.01] | -1.75 | 1038 | .081 |
| Framing conditionFrameCode1 Altruistic center | 0.00 | [-0.30, 0.31] | 0.00 | 1038 | .996 |
| Framing conditionFrameCode2 Altruistic center | -0.12 | [-0.37, 0.12] | -0.98 | 1038 | .328 |
| Norm condition1 Altruistic center | -0.12 | [-0.31, 0.08] | -1.18 | 1038 | .237 |
| Norm condition2 Altruistic center | -0.01 | [-0.12, 0.10] | -0.19 | 1038 | .846 |
| Norm condition3 Altruistic center | 0.04 | [-0.05, 0.12] | 0.85 | 1038 | .394 |
| Norm condition4 Altruistic center | 0.07 | [0.01, 0.13] | 2.39 | 1038 | .017 |
| Framing conditionFrameCode1 Egoistic center | -0.04 | [-0.24, 0.16] | -0.38 | 1038 | .705 |
| Framing conditionFrameCode2 Egoistic center | 0.05 | [-0.11, 0.22] | 0.63 | 1038 | .532 |
| Norm condition1 Egoistic center | 0.05 | [-0.09, 0.18] | 0.68 | 1038 | .499 |
| Norm condition2 Egoistic center | -0.02 | [-0.09, 0.06] | -0.44 | 1038 | .662 |
| Norm condition3 Egoistic center | 0.02 | [-0.03, 0.07] | 0.69 | 1038 | .492 |
| Norm condition4 Egoistic center | 0.02 | [-0.03, 0.06] | 0.74 | 1038 | .457 |
| Framing conditionFrameCode1 Hedonic center | 0.02 | [-0.24, 0.28] | 0.16 | 1038 | .873 |
| Framing conditionFrameCode2 Hedonic center | 0.14 | [-0.08, 0.36] | 1.26 | 1038 | .207 |
| Norm condition1 Hedonic center | 0.02 | [-0.15, 0.19] | 0.25 | 1038 | .802 |
| Norm condition2 Hedonic center | 0.06 | [-0.04, 0.15] | 1.19 | 1038 | .235 |
| Norm condition3 Hedonic center | -0.05 | [-0.12, 0.02] | -1.32 | 1038 | .188 |
| Norm condition4 Hedonic center | -0.05 | [-0.10, 0.00] | -1.90 | 1038 | .058 |
| Framing conditionFrameCode1 Ingroup center | 0.03 | [-0.13, 0.19] | 0.33 | 1038 | .743 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.20, 0.08] | -0.89 | 1038 | .373 |
| Norm condition1 Ingroup center | 0.00 | [-0.10, 0.11] | 0.06 | 1038 | .954 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.38 | 1038 | .708 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.05] | 0.16 | 1038 | .875 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.90 | 1038 | .368 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.06 | [-0.41, 0.29] | -0.33 | 1038 | .740 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.02 | [-0.26, 0.30] | 0.15 | 1038 | .882 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.13 | [-0.33, 0.08] | -1.22 | 1038 | .224 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.12 | [-0.05, 0.28] | 1.37 | 1038 | .171 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.15 | [0.00, 0.30] | 2.01 | 1038 | .045 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.07 | [-0.04, 0.18] | 1.20 | 1038 | .231 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.06 | [-0.07, 0.19] | 0.89 | 1038 | .372 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.12 | [0.02, 0.21] | 2.44 | 1038 | .015 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.03 | [-0.51, 0.44] | -0.14 | 1038 | .891 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.20 | [-0.20, 0.61] | 0.98 | 1038 | .325 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.26 | [-0.01, 0.53] | 1.86 | 1038 | .063 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | -0.01 | [-0.23, 0.21] | -0.09 | 1038 | .925 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.16 | [-0.37, 0.05] | -1.49 | 1038 | .136 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.07 | [-0.24, 0.09] | -0.87 | 1038 | .384 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | 0.00 | [-0.15, 0.15] | -0.03 | 1038 | .978 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.09 | [-0.20, 0.03] | -1.52 | 1038 | .128 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.03 | [-0.31, 0.37] | 0.16 | 1038 | .870 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.13 | [-0.14, 0.40] | 0.96 | 1038 | .339 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.01 | [-0.19, 0.16] | -0.16 | 1038 | .870 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.16 | [0.01, 0.31] | 2.04 | 1038 | .041 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.08 | [-0.04, 0.21] | 1.33 | 1038 | .185 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.03 | [-0.08, 0.13] | 0.45 | 1038 | .651 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.06 | [-0.16, 0.05] | -1.10 | 1038 | .271 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.04 | [-0.12, 0.04] | -0.94 | 1038 | .347 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | -0.01 | [-0.43, 0.41] | -0.05 | 1038 | .959 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.23 | [-0.60, 0.14] | -1.22 | 1038 | .221 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.14 | [-0.37, 0.08] | -1.24 | 1038 | .214 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | 0.01 | [-0.19, 0.21] | 0.08 | 1038 | .934 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.13 | [-0.30, 0.04] | -1.46 | 1038 | .145 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | 0.00 | [-0.14, 0.14] | 0.00 | 1038 | .998 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | -0.01 | [-0.13, 0.11] | -0.16 | 1038 | .876 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.04 | [-0.06, 0.14] | 0.72 | 1038 | .474 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.17 | [-0.08, 0.42] | 1.32 | 1038 | .188 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.04 | [-0.18, 0.26] | 0.37 | 1038 | .710 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.12 | [-0.03, 0.27] | 1.52 | 1038 | .128 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.10] | -0.48 | 1038 | .629 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.03 | [-0.07, 0.14] | 0.62 | 1038 | .538 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.62 | 1038 | .533 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.17, -0.01] | -2.21 | 1038 | .027 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.12 | 1038 | .263 |

*Note.* DV = Consumer Intentions

Standardized regression coefficients

APA summary of standardized coefficients

print\_summ\_std\_imp2 <- apa\_print(summ\_std\_imp2)  
  
apa\_table(print\_summ\_std\_imp2)

(#tab:unnamed-chunk-46)

\*\*

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | -0.02 | [-0.08, 0.04] | -0.73 | 1038 | .465 |
| Framing conditionFrameCode1 | 0.03 | [-0.10, 0.17] | 0.47 | 1038 | .641 |
| Framing conditionFrameCode2 | 0.11 | [-0.01, 0.22] | 1.87 | 1038 | .062 |
| Norm condition1 | -0.01 | [-0.10, 0.07] | -0.32 | 1038 | .750 |
| Norm condition2 | 0.02 | [-0.03, 0.07] | 0.92 | 1038 | .360 |
| Norm condition3 | -0.04 | [-0.07, 0.00] | -2.00 | 1038 | .046 |
| Norm condition4 | -0.01 | [-0.04, 0.02] | -0.87 | 1038 | .387 |
| Scalebiospheric | 0.31 | [0.23, 0.38] | 7.85 | 1038 | < .001 |
| Scalealtruistic | 0.05 | [-0.04, 0.13] | 1.13 | 1038 | .259 |
| Scaleegoistic | -0.23 | [-0.30, -0.17] | -7.01 | 1038 | < .001 |
| Scalehedonic | -0.06 | [-0.13, 0.01] | -1.63 | 1038 | .104 |
| Scaleingroup identification | 0.03 | [-0.03, 0.08] | 0.92 | 1038 | .356 |
| Scaleself deceptive sdr | -0.08 | [-0.14, -0.02] | -2.46 | 1038 | .014 |
| Scaleimpress manag sdr | -0.01 | [-0.07, 0.05] | -0.45 | 1038 | .652 |
| Scaleclothing interest | 0.00 | [-0.06, 0.06] | 0.03 | 1038 | .975 |
| Gender1 | 0.14 | [0.01, 0.26] | 2.11 | 1038 | .035 |
| ScaleAge | -0.06 | [-0.12, 0.00] | -2.01 | 1038 | .045 |
| Framing conditionFrameCode1 Norm condition1 | 0.16 | [-0.05, 0.37] | 1.51 | 1038 | .131 |
| Framing conditionFrameCode2 Norm condition1 | -0.09 | [-0.27, 0.09] | -0.95 | 1038 | .341 |
| Framing conditionFrameCode1 Norm condition2 | 0.00 | [-0.13, 0.12] | -0.04 | 1038 | .971 |
| Framing conditionFrameCode2 Norm condition2 | -0.03 | [-0.13, 0.07] | -0.61 | 1038 | .545 |
| Framing conditionFrameCode1 Norm condition3 | 0.02 | [-0.06, 0.11] | 0.49 | 1038 | .621 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.06, 0.10] | 0.52 | 1038 | .603 |
| Framing conditionFrameCode1 Norm condition4 | 0.02 | [-0.05, 0.09] | 0.68 | 1038 | .494 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.07, 0.04] | -0.44 | 1038 | .658 |
| Framing conditionFrameCode1 Scalebiospheric | -0.03 | [-0.23, 0.17] | -0.31 | 1038 | .754 |
| Framing conditionFrameCode2 Scalebiospheric | 0.05 | [-0.10, 0.20] | 0.60 | 1038 | .550 |
| Norm condition1 Scalebiospheric | -0.05 | [-0.17, 0.06] | -0.90 | 1038 | .369 |
| Norm condition2 Scalebiospheric | 0.06 | [-0.01, 0.13] | 1.82 | 1038 | .069 |
| Norm condition3 Scalebiospheric | -0.04 | [-0.09, 0.00] | -1.80 | 1038 | .072 |
| Norm condition4 Scalebiospheric | -0.04 | [-0.08, 0.00] | -1.75 | 1038 | .081 |
| Framing conditionFrameCode1 Scalealtruistic | 0.00 | [-0.21, 0.21] | 0.00 | 1038 | .996 |
| Framing conditionFrameCode2 Scalealtruistic | -0.08 | [-0.25, 0.08] | -0.98 | 1038 | .328 |
| Norm condition1 Scalealtruistic | -0.08 | [-0.21, 0.05] | -1.18 | 1038 | .237 |
| Norm condition2 Scalealtruistic | -0.01 | [-0.08, 0.07] | -0.19 | 1038 | .846 |
| Norm condition3 Scalealtruistic | 0.02 | [-0.03, 0.08] | 0.85 | 1038 | .394 |
| Norm condition4 Scalealtruistic | 0.05 | [0.01, 0.09] | 2.39 | 1038 | .017 |
| Framing conditionFrameCode1 Scaleegoistic | -0.03 | [-0.19, 0.13] | -0.38 | 1038 | .705 |
| Framing conditionFrameCode2 Scaleegoistic | 0.04 | [-0.09, 0.17] | 0.63 | 1038 | .532 |
| Norm condition1 Scaleegoistic | 0.04 | [-0.07, 0.14] | 0.68 | 1038 | .499 |
| Norm condition2 Scaleegoistic | -0.01 | [-0.07, 0.04] | -0.44 | 1038 | .662 |
| Norm condition3 Scaleegoistic | 0.01 | [-0.03, 0.05] | 0.69 | 1038 | .492 |
| Norm condition4 Scaleegoistic | 0.01 | [-0.02, 0.04] | 0.74 | 1038 | .457 |
| Framing conditionFrameCode1 Scalehedonic | 0.01 | [-0.16, 0.19] | 0.16 | 1038 | .873 |
| Framing conditionFrameCode2 Scalehedonic | 0.09 | [-0.05, 0.24] | 1.26 | 1038 | .207 |
| Norm condition1 Scalehedonic | 0.01 | [-0.10, 0.13] | 0.25 | 1038 | .802 |
| Norm condition2 Scalehedonic | 0.04 | [-0.02, 0.10] | 1.19 | 1038 | .235 |
| Norm condition3 Scalehedonic | -0.03 | [-0.08, 0.02] | -1.32 | 1038 | .188 |
| Norm condition4 Scalehedonic | -0.03 | [-0.06, 0.00] | -1.90 | 1038 | .058 |
| Framing conditionFrameCode1 Scaleingroup identification | 0.02 | [-0.11, 0.16] | 0.33 | 1038 | .743 |
| Framing conditionFrameCode2 Scaleingroup identification | -0.05 | [-0.17, 0.06] | -0.89 | 1038 | .373 |
| Norm condition1 Scaleingroup identification | 0.00 | [-0.09, 0.09] | 0.06 | 1038 | .954 |
| Norm condition2 Scaleingroup identification | -0.01 | [-0.06, 0.04] | -0.38 | 1038 | .708 |
| Norm condition3 Scaleingroup identification | 0.00 | [-0.03, 0.04] | 0.16 | 1038 | .875 |
| Norm condition4 Scaleingroup identification | -0.01 | [-0.04, 0.01] | -0.90 | 1038 | .368 |
| Framing conditionFrameCode1 Norm condition1 Scalebiospheric | -0.05 | [-0.34, 0.24] | -0.33 | 1038 | .740 |
| Framing conditionFrameCode2 Norm condition1 Scalebiospheric | 0.02 | [-0.22, 0.25] | 0.15 | 1038 | .882 |
| Framing conditionFrameCode1 Norm condition2 Scalebiospheric | -0.11 | [-0.28, 0.07] | -1.22 | 1038 | .224 |
| Framing conditionFrameCode2 Norm condition2 Scalebiospheric | 0.10 | [-0.04, 0.24] | 1.37 | 1038 | .171 |
| Framing conditionFrameCode1 Norm condition3 Scalebiospheric | 0.13 | [0.00, 0.25] | 2.01 | 1038 | .045 |
| Framing conditionFrameCode2 Norm condition3 Scalebiospheric | 0.06 | [-0.04, 0.15] | 1.20 | 1038 | .231 |
| Framing conditionFrameCode1 Norm condition4 Scalebiospheric | 0.05 | [-0.06, 0.16] | 0.89 | 1038 | .372 |
| Framing conditionFrameCode2 Norm condition4 Scalebiospheric | 0.10 | [0.02, 0.18] | 2.44 | 1038 | .015 |
| Framing conditionFrameCode1 Norm condition1 Scalealtruistic | -0.02 | [-0.34, 0.30] | -0.14 | 1038 | .891 |
| Framing conditionFrameCode2 Norm condition1 Scalealtruistic | 0.14 | [-0.14, 0.41] | 0.98 | 1038 | .325 |
| Framing conditionFrameCode1 Norm condition2 Scalealtruistic | 0.17 | [-0.01, 0.36] | 1.86 | 1038 | .063 |
| Framing conditionFrameCode2 Norm condition2 Scalealtruistic | -0.01 | [-0.16, 0.14] | -0.09 | 1038 | .925 |
| Framing conditionFrameCode1 Norm condition3 Scalealtruistic | -0.11 | [-0.25, 0.03] | -1.49 | 1038 | .136 |
| Framing conditionFrameCode2 Norm condition3 Scalealtruistic | -0.05 | [-0.16, 0.06] | -0.87 | 1038 | .384 |
| Framing conditionFrameCode1 Norm condition4 Scalealtruistic | 0.00 | [-0.10, 0.10] | -0.03 | 1038 | .978 |
| Framing conditionFrameCode2 Norm condition4 Scalealtruistic | -0.06 | [-0.14, 0.02] | -1.52 | 1038 | .128 |
| Framing conditionFrameCode1 Norm condition1 Scaleegoistic | 0.02 | [-0.24, 0.28] | 0.16 | 1038 | .870 |
| Framing conditionFrameCode2 Norm condition1 Scaleegoistic | 0.10 | [-0.11, 0.31] | 0.96 | 1038 | .339 |
| Framing conditionFrameCode1 Norm condition2 Scaleegoistic | -0.01 | [-0.14, 0.12] | -0.16 | 1038 | .870 |
| Framing conditionFrameCode2 Norm condition2 Scaleegoistic | 0.12 | [0.00, 0.24] | 2.04 | 1038 | .041 |
| Framing conditionFrameCode1 Norm condition3 Scaleegoistic | 0.07 | [-0.03, 0.16] | 1.33 | 1038 | .185 |
| Framing conditionFrameCode2 Norm condition3 Scaleegoistic | 0.02 | [-0.06, 0.10] | 0.45 | 1038 | .651 |
| Framing conditionFrameCode1 Norm condition4 Scaleegoistic | -0.04 | [-0.13, 0.04] | -1.10 | 1038 | .271 |
| Framing conditionFrameCode2 Norm condition4 Scaleegoistic | -0.03 | [-0.10, 0.03] | -0.94 | 1038 | .347 |
| Framing conditionFrameCode1 Norm condition1 Scalehedonic | -0.01 | [-0.29, 0.27] | -0.05 | 1038 | .959 |
| Framing conditionFrameCode2 Norm condition1 Scalehedonic | -0.15 | [-0.40, 0.09] | -1.22 | 1038 | .221 |
| Framing conditionFrameCode1 Norm condition2 Scalehedonic | -0.10 | [-0.25, 0.06] | -1.24 | 1038 | .214 |
| Framing conditionFrameCode2 Norm condition2 Scalehedonic | 0.01 | [-0.13, 0.14] | 0.08 | 1038 | .934 |
| Framing conditionFrameCode1 Norm condition3 Scalehedonic | -0.09 | [-0.20, 0.03] | -1.46 | 1038 | .145 |
| Framing conditionFrameCode2 Norm condition3 Scalehedonic | 0.00 | [-0.10, 0.10] | 0.00 | 1038 | .998 |
| Framing conditionFrameCode1 Norm condition4 Scalehedonic | -0.01 | [-0.09, 0.07] | -0.16 | 1038 | .876 |
| Framing conditionFrameCode2 Norm condition4 Scalehedonic | 0.03 | [-0.04, 0.09] | 0.72 | 1038 | .474 |
| Framing conditionFrameCode1 Norm condition1 Scaleingroup identification | 0.14 | [-0.07, 0.36] | 1.32 | 1038 | .188 |
| Framing conditionFrameCode2 Norm condition1 Scaleingroup identification | 0.04 | [-0.15, 0.22] | 0.37 | 1038 | .710 |
| Framing conditionFrameCode1 Norm condition2 Scaleingroup identification | 0.10 | [-0.03, 0.23] | 1.52 | 1038 | .128 |
| Framing conditionFrameCode2 Norm condition2 Scaleingroup identification | -0.03 | [-0.13, 0.08] | -0.48 | 1038 | .629 |
| Framing conditionFrameCode1 Norm condition3 Scaleingroup identification | 0.03 | [-0.06, 0.12] | 0.62 | 1038 | .538 |
| Framing conditionFrameCode2 Norm condition3 Scaleingroup identification | -0.02 | [-0.10, 0.05] | -0.62 | 1038 | .533 |
| Framing conditionFrameCode1 Norm condition4 Scaleingroup identification | -0.07 | [-0.14, -0.01] | -2.21 | 1038 | .027 |
| Framing conditionFrameCode2 Norm condition4 Scaleingroup identification | 0.03 | [-0.03, 0.09] | 1.12 | 1038 | .263 |

#### ANOVA summary

anova(mod\_mice\_imp2) %>%  
 knitr::kable(digits = c(1, 2, 2, 2, 3))

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.69 | 2.35 | 2.05 | 0.129 |
| norm\_condition | 4 | 8.17 | 2.04 | 1.79 | 0.129 |
| biospheric\_center | 1 | 147.78 | 147.78 | 129.43 | 0.000 |
| altruistic\_center | 1 | 0.14 | 0.14 | 0.12 | 0.731 |
| egoistic\_center | 1 | 124.34 | 124.34 | 108.90 | 0.000 |
| hedonic\_center | 1 | 2.27 | 2.27 | 1.99 | 0.159 |
| ingroup\_center | 1 | 4.48 | 4.48 | 3.92 | 0.048 |
| self\_dec\_center | 1 | 13.47 | 13.47 | 11.80 | 0.001 |
| impress\_manag\_center | 1 | 0.06 | 0.06 | 0.05 | 0.819 |
| clothing\_center | 1 | 0.66 | 0.66 | 0.57 | 0.449 |
| Gender | 1 | 6.54 | 6.54 | 5.72 | 0.017 |
| Age\_center | 1 | 6.41 | 6.41 | 5.62 | 0.018 |
| framing\_condition:norm\_condition | 8 | 5.87 | 0.73 | 0.64 | 0.742 |
| framing\_condition:biospheric\_center | 2 | 0.19 | 0.10 | 0.09 | 0.918 |
| norm\_condition:biospheric\_center | 4 | 13.02 | 3.26 | 2.85 | 0.023 |
| framing\_condition:altruistic\_center | 2 | 0.33 | 0.16 | 0.14 | 0.866 |
| norm\_condition:altruistic\_center | 4 | 3.49 | 0.87 | 0.76 | 0.549 |
| framing\_condition:egoistic\_center | 2 | 1.05 | 0.52 | 0.46 | 0.632 |
| norm\_condition:egoistic\_center | 4 | 1.64 | 0.41 | 0.36 | 0.838 |
| framing\_condition:hedonic\_center | 2 | 1.63 | 0.81 | 0.71 | 0.491 |
| norm\_condition:hedonic\_center | 4 | 9.11 | 2.28 | 1.99 | 0.093 |
| framing\_condition:ingroup\_center | 2 | 1.38 | 0.69 | 0.61 | 0.546 |
| norm\_condition:ingroup\_center | 4 | 0.35 | 0.09 | 0.08 | 0.990 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 14.37 | 1.80 | 1.57 | 0.128 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 13.00 | 1.63 | 1.42 | 0.182 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 10.09 | 1.26 | 1.10 | 0.357 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 6.17 | 0.77 | 0.68 | 0.713 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 12.34 | 1.54 | 1.35 | 0.214 |
| Residuals | 1038 | 1185.17 | 1.14 | NA | NA |

Effect Size

etaSquared(mod\_mice\_imp2) %>%   
 knitr::kable(digits = 3)

|  | eta.sq | eta.sq.part |
| --- | --- | --- |
| framing\_condition | 0.003 | 0.005 |
| norm\_condition | 0.004 | 0.006 |
| biospheric\_center | 0.051 | 0.065 |
| altruistic\_center | 0.001 | 0.001 |
| egoistic\_center | 0.041 | 0.053 |
| hedonic\_center | 0.002 | 0.003 |
| ingroup\_center | 0.001 | 0.001 |
| self\_dec\_center | 0.004 | 0.006 |
| impress\_manag\_center | 0.000 | 0.000 |
| clothing\_center | 0.000 | 0.000 |
| Gender | 0.003 | 0.004 |
| Age\_center | 0.003 | 0.004 |
| framing\_condition:norm\_condition | 0.003 | 0.004 |
| framing\_condition:biospheric\_center | 0.000 | 0.001 |
| norm\_condition:biospheric\_center | 0.007 | 0.009 |
| framing\_condition:altruistic\_center | 0.001 | 0.001 |
| norm\_condition:altruistic\_center | 0.006 | 0.008 |
| framing\_condition:egoistic\_center | 0.000 | 0.001 |
| norm\_condition:egoistic\_center | 0.001 | 0.002 |
| framing\_condition:hedonic\_center | 0.001 | 0.002 |
| norm\_condition:hedonic\_center | 0.005 | 0.007 |
| framing\_condition:ingroup\_center | 0.001 | 0.001 |
| norm\_condition:ingroup\_center | 0.001 | 0.001 |
| framing\_condition:norm\_condition:biospheric\_center | 0.011 | 0.015 |
| framing\_condition:norm\_condition:altruistic\_center | 0.007 | 0.010 |
| framing\_condition:norm\_condition:egoistic\_center | 0.007 | 0.009 |
| framing\_condition:norm\_condition:hedonic\_center | 0.004 | 0.006 |
| framing\_condition:norm\_condition:ingroup\_center | 0.008 | 0.010 |

### Imputed Data 3

#### Regression summary

Succinct summary

summary\_imp3$coefficients %>%  
 knitr::kable(digits = c(2, 2, 2, 3))

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.39 | 0.03 | 128.45 | 0.000 |
| framing\_conditionFrameCode1 | 0.03 | 0.08 | 0.42 | 0.674 |
| framing\_conditionFrameCode2 | 0.14 | 0.07 | 1.97 | 0.049 |
| norm\_condition1 | -0.01 | 0.05 | -0.26 | 0.794 |
| norm\_condition2 | 0.03 | 0.03 | 0.95 | 0.342 |
| norm\_condition3 | -0.04 | 0.02 | -1.97 | 0.049 |
| norm\_condition4 | -0.02 | 0.02 | -0.90 | 0.369 |
| biospheric\_center | 0.36 | 0.05 | 7.86 | 0.000 |
| altruistic\_center | 0.07 | 0.06 | 1.11 | 0.266 |
| egoistic\_center | -0.30 | 0.04 | -7.03 | 0.000 |
| hedonic\_center | -0.09 | 0.05 | -1.73 | 0.084 |
| ingroup\_center | 0.03 | 0.03 | 0.76 | 0.448 |
| self\_dec\_center | -0.10 | 0.04 | -2.43 | 0.015 |
| impress\_manag\_center | -0.01 | 0.04 | -0.25 | 0.799 |
| clothing\_center | 0.00 | 0.05 | 0.09 | 0.930 |
| Gender1 | 0.15 | 0.08 | 1.94 | 0.053 |
| Age\_center | -0.04 | 0.02 | -2.40 | 0.016 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.19 | 0.13 | 1.54 | 0.124 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.11 | 0.11 | -0.95 | 0.340 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.01 | 0.08 | -0.10 | 0.919 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.04 | 0.06 | -0.61 | 0.545 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.03 | 0.05 | 0.51 | 0.613 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02 | 0.05 | 0.53 | 0.597 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.03 | 0.04 | 0.62 | 0.534 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.01 | 0.03 | -0.39 | 0.698 |
| framing\_conditionFrameCode1:biospheric\_center | -0.04 | 0.12 | -0.32 | 0.749 |
| framing\_conditionFrameCode2:biospheric\_center | 0.06 | 0.09 | 0.61 | 0.543 |
| norm\_condition1:biospheric\_center | -0.08 | 0.07 | -1.19 | 0.233 |
| norm\_condition2:biospheric\_center | 0.07 | 0.04 | 1.80 | 0.073 |
| norm\_condition3:biospheric\_center | -0.05 | 0.03 | -1.79 | 0.074 |
| norm\_condition4:biospheric\_center | -0.04 | 0.03 | -1.70 | 0.089 |
| framing\_conditionFrameCode1:altruistic\_center | -0.01 | 0.16 | -0.03 | 0.972 |
| framing\_conditionFrameCode2:altruistic\_center | -0.12 | 0.13 | -0.97 | 0.334 |
| norm\_condition1:altruistic\_center | -0.11 | 0.10 | -1.12 | 0.262 |
| norm\_condition2:altruistic\_center | -0.01 | 0.05 | -0.11 | 0.910 |
| norm\_condition3:altruistic\_center | 0.04 | 0.04 | 0.87 | 0.383 |
| norm\_condition4:altruistic\_center | 0.07 | 0.03 | 2.36 | 0.018 |
| framing\_conditionFrameCode1:egoistic\_center | -0.04 | 0.10 | -0.38 | 0.704 |
| framing\_conditionFrameCode2:egoistic\_center | 0.05 | 0.09 | 0.59 | 0.552 |
| norm\_condition1:egoistic\_center | 0.03 | 0.07 | 0.41 | 0.679 |
| norm\_condition2:egoistic\_center | -0.02 | 0.04 | -0.46 | 0.645 |
| norm\_condition3:egoistic\_center | 0.02 | 0.03 | 0.69 | 0.493 |
| norm\_condition4:egoistic\_center | 0.01 | 0.02 | 0.72 | 0.474 |
| framing\_conditionFrameCode1:hedonic\_center | 0.02 | 0.13 | 0.16 | 0.871 |
| framing\_conditionFrameCode2:hedonic\_center | 0.16 | 0.11 | 1.38 | 0.167 |
| norm\_condition1:hedonic\_center | 0.03 | 0.09 | 0.33 | 0.744 |
| norm\_condition2:hedonic\_center | 0.06 | 0.05 | 1.28 | 0.201 |
| norm\_condition3:hedonic\_center | -0.05 | 0.04 | -1.37 | 0.170 |
| norm\_condition4:hedonic\_center | -0.05 | 0.03 | -1.96 | 0.050 |
| framing\_conditionFrameCode1:ingroup\_center | 0.02 | 0.08 | 0.26 | 0.796 |
| framing\_conditionFrameCode2:ingroup\_center | -0.06 | 0.07 | -0.80 | 0.426 |
| norm\_condition1:ingroup\_center | 0.01 | 0.05 | 0.21 | 0.832 |
| norm\_condition2:ingroup\_center | -0.01 | 0.03 | -0.36 | 0.718 |
| norm\_condition3:ingroup\_center | 0.00 | 0.02 | 0.18 | 0.860 |
| norm\_condition4:ingroup\_center | -0.01 | 0.02 | -0.86 | 0.390 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.11 | 0.18 | -0.64 | 0.521 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.05 | 0.14 | 0.37 | 0.712 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.13 | 0.11 | -1.28 | 0.201 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.12 | 0.08 | 1.43 | 0.153 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.15 | 0.08 | 1.95 | 0.052 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.07 | 0.06 | 1.21 | 0.227 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.06 | 0.07 | 0.89 | 0.374 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.11 | 0.05 | 2.34 | 0.019 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.03 | 0.24 | -0.12 | 0.907 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.19 | 0.21 | 0.93 | 0.354 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.27 | 0.14 | 1.96 | 0.050 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | -0.01 | 0.11 | -0.13 | 0.895 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.16 | 0.11 | -1.48 | 0.139 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.08 | 0.08 | -0.89 | 0.374 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | 0.01 | 0.08 | 0.07 | 0.941 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.09 | 0.06 | -1.49 | 0.137 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | -0.02 | 0.17 | -0.12 | 0.904 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.16 | 0.14 | 1.18 | 0.237 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.02 | 0.09 | -0.24 | 0.811 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.16 | 0.08 | 2.08 | 0.038 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.08 | 0.06 | 1.31 | 0.192 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.02 | 0.06 | 0.44 | 0.659 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.06 | 0.05 | -1.14 | 0.254 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.04 | 0.04 | -0.91 | 0.362 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | 0.04 | 0.22 | 0.18 | 0.854 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.24 | 0.19 | -1.30 | 0.194 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.14 | 0.12 | -1.23 | 0.219 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | 0.00 | 0.10 | 0.00 | 1.000 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.11 | 0.09 | -1.28 | 0.201 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | 0.00 | 0.07 | 0.06 | 0.955 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.02 | 0.06 | -0.31 | 0.758 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.04 | 0.05 | 0.75 | 0.453 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.20 | 0.13 | 1.54 | 0.123 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.03 | 0.11 | 0.27 | 0.790 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.13 | 0.08 | 1.61 | 0.107 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03 | 0.06 | -0.50 | 0.618 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.04 | 0.05 | 0.73 | 0.463 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03 | 0.05 | -0.66 | 0.512 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.09 | 0.04 | -2.25 | 0.025 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.04 | 0.04 | 1.10 | 0.272 |

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-52)

Table 4 Regression Results Using Imputed Data 3

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.39 | [4.32, 4.45] | 128.45 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.03 | [-0.13, 0.20] | 0.42 | 1038 | .674 |
| Framing conditionFrameCode2 | 0.14 | [0.00, 0.27] | 1.97 | 1038 | .049 |
| Norm condition1 | -0.01 | [-0.11, 0.09] | -0.26 | 1038 | .794 |
| Norm condition2 | 0.03 | [-0.03, 0.09] | 0.95 | 1038 | .342 |
| Norm condition3 | -0.04 | [-0.08, 0.00] | -1.97 | 1038 | .049 |
| Norm condition4 | -0.02 | [-0.05, 0.02] | -0.90 | 1038 | .369 |
| Biospheric center | 0.36 | [0.27, 0.46] | 7.86 | 1038 | < .001 |
| Altruistic center | 0.07 | [-0.05, 0.19] | 1.11 | 1038 | .266 |
| Egoistic center | -0.30 | [-0.38, -0.22] | -7.03 | 1038 | < .001 |
| Hedonic center | -0.09 | [-0.20, 0.01] | -1.73 | 1038 | .084 |
| Ingroup center | 0.03 | [-0.04, 0.09] | 0.76 | 1038 | .448 |
| Self dec center | -0.10 | [-0.19, -0.02] | -2.43 | 1038 | .015 |
| Impress manag center | -0.01 | [-0.09, 0.07] | -0.25 | 1038 | .799 |
| Clothing center | 0.00 | [-0.08, 0.09] | 0.09 | 1038 | .930 |
| Gender1 | 0.15 | [0.00, 0.30] | 1.94 | 1038 | .053 |
| Age center | -0.04 | [-0.08, -0.01] | -2.40 | 1038 | .016 |
| Framing conditionFrameCode1 Norm condition1 | 0.19 | [-0.05, 0.44] | 1.54 | 1038 | .124 |
| Framing conditionFrameCode2 Norm condition1 | -0.11 | [-0.32, 0.11] | -0.95 | 1038 | .340 |
| Framing conditionFrameCode1 Norm condition2 | -0.01 | [-0.16, 0.14] | -0.10 | 1038 | .919 |
| Framing conditionFrameCode2 Norm condition2 | -0.04 | [-0.16, 0.08] | -0.61 | 1038 | .545 |
| Framing conditionFrameCode1 Norm condition3 | 0.03 | [-0.08, 0.13] | 0.51 | 1038 | .613 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.07, 0.11] | 0.53 | 1038 | .597 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.06, 0.11] | 0.62 | 1038 | .534 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.08, 0.05] | -0.39 | 1038 | .698 |
| Framing conditionFrameCode1 Biospheric center | -0.04 | [-0.27, 0.20] | -0.32 | 1038 | .749 |
| Framing conditionFrameCode2 Biospheric center | 0.06 | [-0.12, 0.24] | 0.61 | 1038 | .543 |
| Norm condition1 Biospheric center | -0.08 | [-0.22, 0.05] | -1.19 | 1038 | .233 |
| Norm condition2 Biospheric center | 0.07 | [-0.01, 0.16] | 1.80 | 1038 | .073 |
| Norm condition3 Biospheric center | -0.05 | [-0.11, 0.00] | -1.79 | 1038 | .074 |
| Norm condition4 Biospheric center | -0.04 | [-0.09, 0.01] | -1.70 | 1038 | .089 |
| Framing conditionFrameCode1 Altruistic center | -0.01 | [-0.31, 0.30] | -0.03 | 1038 | .972 |
| Framing conditionFrameCode2 Altruistic center | -0.12 | [-0.37, 0.13] | -0.97 | 1038 | .334 |
| Norm condition1 Altruistic center | -0.11 | [-0.30, 0.08] | -1.12 | 1038 | .262 |
| Norm condition2 Altruistic center | -0.01 | [-0.11, 0.10] | -0.11 | 1038 | .910 |
| Norm condition3 Altruistic center | 0.04 | [-0.05, 0.12] | 0.87 | 1038 | .383 |
| Norm condition4 Altruistic center | 0.07 | [0.01, 0.13] | 2.36 | 1038 | .018 |
| Framing conditionFrameCode1 Egoistic center | -0.04 | [-0.24, 0.16] | -0.38 | 1038 | .704 |
| Framing conditionFrameCode2 Egoistic center | 0.05 | [-0.12, 0.22] | 0.59 | 1038 | .552 |
| Norm condition1 Egoistic center | 0.03 | [-0.10, 0.16] | 0.41 | 1038 | .679 |
| Norm condition2 Egoistic center | -0.02 | [-0.09, 0.05] | -0.46 | 1038 | .645 |
| Norm condition3 Egoistic center | 0.02 | [-0.03, 0.07] | 0.69 | 1038 | .493 |
| Norm condition4 Egoistic center | 0.01 | [-0.03, 0.06] | 0.72 | 1038 | .474 |
| Framing conditionFrameCode1 Hedonic center | 0.02 | [-0.24, 0.28] | 0.16 | 1038 | .871 |
| Framing conditionFrameCode2 Hedonic center | 0.16 | [-0.06, 0.38] | 1.38 | 1038 | .167 |
| Norm condition1 Hedonic center | 0.03 | [-0.15, 0.20] | 0.33 | 1038 | .744 |
| Norm condition2 Hedonic center | 0.06 | [-0.03, 0.16] | 1.28 | 1038 | .201 |
| Norm condition3 Hedonic center | -0.05 | [-0.12, 0.02] | -1.37 | 1038 | .170 |
| Norm condition4 Hedonic center | -0.05 | [-0.10, 0.00] | -1.96 | 1038 | .050 |
| Framing conditionFrameCode1 Ingroup center | 0.02 | [-0.14, 0.18] | 0.26 | 1038 | .796 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.20, 0.08] | -0.80 | 1038 | .426 |
| Norm condition1 Ingroup center | 0.01 | [-0.09, 0.11] | 0.21 | 1038 | .832 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.36 | 1038 | .718 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.05] | 0.18 | 1038 | .860 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.86 | 1038 | .390 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.11 | [-0.46, 0.24] | -0.64 | 1038 | .521 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.05 | [-0.23, 0.33] | 0.37 | 1038 | .712 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.13 | [-0.34, 0.07] | -1.28 | 1038 | .201 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.12 | [-0.05, 0.29] | 1.43 | 1038 | .153 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.15 | [0.00, 0.30] | 1.95 | 1038 | .052 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.07 | [-0.04, 0.18] | 1.21 | 1038 | .227 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.06 | [-0.07, 0.19] | 0.89 | 1038 | .374 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.11 | [0.02, 0.20] | 2.34 | 1038 | .019 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.03 | [-0.51, 0.45] | -0.12 | 1038 | .907 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.19 | [-0.21, 0.59] | 0.93 | 1038 | .354 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.27 | [0.00, 0.54] | 1.96 | 1038 | .050 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | -0.01 | [-0.24, 0.21] | -0.13 | 1038 | .895 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.16 | [-0.36, 0.05] | -1.48 | 1038 | .139 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.08 | [-0.24, 0.09] | -0.89 | 1038 | .374 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | 0.01 | [-0.14, 0.16] | 0.07 | 1038 | .941 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.09 | [-0.20, 0.03] | -1.49 | 1038 | .137 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | -0.02 | [-0.35, 0.31] | -0.12 | 1038 | .904 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.16 | [-0.11, 0.43] | 1.18 | 1038 | .237 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.02 | [-0.19, 0.15] | -0.24 | 1038 | .811 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.16 | [0.01, 0.31] | 2.08 | 1038 | .038 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.08 | [-0.04, 0.21] | 1.31 | 1038 | .192 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.02 | [-0.08, 0.13] | 0.44 | 1038 | .659 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.06 | [-0.16, 0.04] | -1.14 | 1038 | .254 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.04 | [-0.12, 0.04] | -0.91 | 1038 | .362 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | 0.04 | [-0.39, 0.47] | 0.18 | 1038 | .854 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.24 | [-0.61, 0.12] | -1.30 | 1038 | .194 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.14 | [-0.37, 0.09] | -1.23 | 1038 | .219 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | 0.00 | [-0.20, 0.20] | 0.00 | 1038 | > .999 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.11 | [-0.29, 0.06] | -1.28 | 1038 | .201 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | 0.00 | [-0.14, 0.15] | 0.06 | 1038 | .955 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | -0.02 | [-0.14, 0.10] | -0.31 | 1038 | .758 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.04 | [-0.06, 0.14] | 0.75 | 1038 | .453 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.20 | [-0.05, 0.45] | 1.54 | 1038 | .123 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.03 | [-0.19, 0.25] | 0.27 | 1038 | .790 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.13 | [-0.03, 0.28] | 1.61 | 1038 | .107 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.09] | -0.50 | 1038 | .618 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.04 | [-0.07, 0.14] | 0.73 | 1038 | .463 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.66 | 1038 | .512 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.17, -0.01] | -2.25 | 1038 | .025 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.10 | 1038 | .272 |

*Note.* DV = Consumer Intentions

Standardized regression coefficients

APA summary of standardized coefficients

print\_summ\_std\_imp3 <- apa\_print(summ\_std\_imp3)  
  
apa\_table(print\_summ\_std\_imp1)

(#tab:unnamed-chunk-54)

\*\*

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | -0.02 | [-0.08, 0.03] | -0.76 | 1038 | .448 |
| Framing conditionFrameCode1 | 0.03 | [-0.11, 0.16] | 0.37 | 1038 | .712 |
| Framing conditionFrameCode2 | 0.11 | [0.00, 0.23] | 1.95 | 1038 | .052 |
| Norm condition1 | -0.01 | [-0.10, 0.07] | -0.24 | 1038 | .810 |
| Norm condition2 | 0.02 | [-0.03, 0.07] | 0.91 | 1038 | .363 |
| Norm condition3 | -0.04 | [-0.07, 0.00] | -2.09 | 1038 | .037 |
| Norm condition4 | -0.01 | [-0.04, 0.01] | -1.00 | 1038 | .318 |
| Scalebiospheric | 0.30 | [0.22, 0.38] | 7.71 | 1038 | < .001 |
| Scalealtruistic | 0.05 | [-0.03, 0.14] | 1.24 | 1038 | .217 |
| Scaleegoistic | -0.23 | [-0.29, -0.16] | -6.85 | 1038 | < .001 |
| Scalehedonic | -0.06 | [-0.13, 0.02] | -1.53 | 1038 | .125 |
| Scaleingroup identification | 0.02 | [-0.03, 0.08] | 0.75 | 1038 | .452 |
| Scaleself deceptive sdr | -0.08 | [-0.14, -0.02] | -2.72 | 1038 | .007 |
| Scaleimpress manag sdr | -0.01 | [-0.07, 0.05] | -0.27 | 1038 | .791 |
| Scaleclothing interest | 0.00 | [-0.06, 0.06] | 0.12 | 1038 | .904 |
| Gender1 | 0.12 | [0.00, 0.25] | 1.89 | 1038 | .059 |
| ScaleAge | -0.07 | [-0.13, -0.02] | -2.50 | 1038 | .013 |
| Framing conditionFrameCode1 Norm condition1 | 0.17 | [-0.04, 0.38] | 1.60 | 1038 | .110 |
| Framing conditionFrameCode2 Norm condition1 | -0.09 | [-0.27, 0.09] | -0.96 | 1038 | .337 |
| Framing conditionFrameCode1 Norm condition2 | 0.00 | [-0.13, 0.12] | -0.07 | 1038 | .944 |
| Framing conditionFrameCode2 Norm condition2 | -0.03 | [-0.13, 0.07] | -0.57 | 1038 | .569 |
| Framing conditionFrameCode1 Norm condition3 | 0.02 | [-0.06, 0.11] | 0.55 | 1038 | .586 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.05, 0.10] | 0.59 | 1038 | .555 |
| Framing conditionFrameCode1 Norm condition4 | 0.02 | [-0.05, 0.09] | 0.56 | 1038 | .575 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.07, 0.04] | -0.43 | 1038 | .668 |
| Framing conditionFrameCode1 Scalebiospheric | -0.05 | [-0.25, 0.14] | -0.54 | 1038 | .587 |
| Framing conditionFrameCode2 Scalebiospheric | 0.06 | [-0.09, 0.21] | 0.75 | 1038 | .453 |
| Norm condition1 Scalebiospheric | -0.06 | [-0.18, 0.05] | -1.08 | 1038 | .280 |
| Norm condition2 Scalebiospheric | 0.07 | [0.00, 0.13] | 1.92 | 1038 | .055 |
| Norm condition3 Scalebiospheric | -0.04 | [-0.09, 0.01] | -1.70 | 1038 | .090 |
| Norm condition4 Scalebiospheric | -0.03 | [-0.08, 0.01] | -1.64 | 1038 | .101 |
| Framing conditionFrameCode1 Scalealtruistic | 0.01 | [-0.19, 0.22] | 0.13 | 1038 | .896 |
| Framing conditionFrameCode2 Scalealtruistic | -0.09 | [-0.26, 0.08] | -1.05 | 1038 | .295 |
| Norm condition1 Scalealtruistic | -0.09 | [-0.23, 0.04] | -1.39 | 1038 | .165 |
| Norm condition2 Scalealtruistic | -0.01 | [-0.08, 0.06] | -0.28 | 1038 | .780 |
| Norm condition3 Scalealtruistic | 0.02 | [-0.03, 0.08] | 0.73 | 1038 | .464 |
| Norm condition4 Scalealtruistic | 0.04 | [0.00, 0.08] | 2.10 | 1038 | .036 |
| Framing conditionFrameCode1 Scaleegoistic | -0.01 | [-0.17, 0.14] | -0.18 | 1038 | .854 |
| Framing conditionFrameCode2 Scaleegoistic | 0.03 | [-0.10, 0.16] | 0.48 | 1038 | .631 |
| Norm condition1 Scaleegoistic | 0.05 | [-0.05, 0.15] | 0.94 | 1038 | .345 |
| Norm condition2 Scaleegoistic | -0.01 | [-0.07, 0.04] | -0.52 | 1038 | .602 |
| Norm condition3 Scaleegoistic | 0.01 | [-0.03, 0.05] | 0.54 | 1038 | .591 |
| Norm condition4 Scaleegoistic | 0.01 | [-0.02, 0.04] | 0.75 | 1038 | .453 |
| Framing conditionFrameCode1 Scalehedonic | 0.02 | [-0.15, 0.19] | 0.22 | 1038 | .828 |
| Framing conditionFrameCode2 Scalehedonic | 0.09 | [-0.05, 0.24] | 1.25 | 1038 | .211 |
| Norm condition1 Scalehedonic | 0.01 | [-0.11, 0.13] | 0.14 | 1038 | .891 |
| Norm condition2 Scalehedonic | 0.04 | [-0.02, 0.10] | 1.20 | 1038 | .230 |
| Norm condition3 Scalehedonic | -0.03 | [-0.08, 0.02] | -1.28 | 1038 | .201 |
| Norm condition4 Scalehedonic | -0.03 | [-0.06, 0.00] | -1.76 | 1038 | .079 |
| Framing conditionFrameCode1 Scaleingroup identification | 0.02 | [-0.12, 0.16] | 0.30 | 1038 | .764 |
| Framing conditionFrameCode2 Scaleingroup identification | -0.05 | [-0.17, 0.07] | -0.78 | 1038 | .436 |
| Norm condition1 Scaleingroup identification | 0.00 | [-0.08, 0.09] | 0.09 | 1038 | .932 |
| Norm condition2 Scaleingroup identification | -0.01 | [-0.06, 0.04] | -0.32 | 1038 | .748 |
| Norm condition3 Scaleingroup identification | 0.00 | [-0.03, 0.04] | 0.18 | 1038 | .860 |
| Norm condition4 Scaleingroup identification | -0.01 | [-0.04, 0.01] | -0.90 | 1038 | .369 |
| Framing conditionFrameCode1 Norm condition1 Scalebiospheric | -0.07 | [-0.37, 0.22] | -0.50 | 1038 | .618 |
| Framing conditionFrameCode2 Norm condition1 Scalebiospheric | 0.04 | [-0.20, 0.27] | 0.31 | 1038 | .758 |
| Framing conditionFrameCode1 Norm condition2 Scalebiospheric | -0.10 | [-0.27, 0.07] | -1.15 | 1038 | .251 |
| Framing conditionFrameCode2 Norm condition2 Scalebiospheric | 0.09 | [-0.05, 0.23] | 1.28 | 1038 | .200 |
| Framing conditionFrameCode1 Norm condition3 Scalebiospheric | 0.13 | [0.00, 0.25] | 1.99 | 1038 | .047 |
| Framing conditionFrameCode2 Norm condition3 Scalebiospheric | 0.06 | [-0.04, 0.15] | 1.20 | 1038 | .231 |
| Framing conditionFrameCode1 Norm condition4 Scalebiospheric | 0.05 | [-0.06, 0.16] | 0.93 | 1038 | .351 |
| Framing conditionFrameCode2 Norm condition4 Scalebiospheric | 0.09 | [0.02, 0.17] | 2.38 | 1038 | .017 |
| Framing conditionFrameCode1 Norm condition1 Scalealtruistic | -0.08 | [-0.41, 0.25] | -0.48 | 1038 | .631 |
| Framing conditionFrameCode2 Norm condition1 Scalealtruistic | 0.16 | [-0.12, 0.43] | 1.13 | 1038 | .260 |
| Framing conditionFrameCode1 Norm condition2 Scalealtruistic | 0.17 | [-0.02, 0.35] | 1.79 | 1038 | .074 |
| Framing conditionFrameCode2 Norm condition2 Scalealtruistic | 0.00 | [-0.15, 0.15] | 0.00 | 1038 | .998 |
| Framing conditionFrameCode1 Norm condition3 Scalealtruistic | -0.11 | [-0.25, 0.03] | -1.55 | 1038 | .122 |
| Framing conditionFrameCode2 Norm condition3 Scalealtruistic | -0.05 | [-0.16, 0.07] | -0.79 | 1038 | .428 |
| Framing conditionFrameCode1 Norm condition4 Scalealtruistic | -0.01 | [-0.11, 0.09] | -0.25 | 1038 | .803 |
| Framing conditionFrameCode2 Norm condition4 Scalealtruistic | -0.05 | [-0.13, 0.02] | -1.33 | 1038 | .182 |
| Framing conditionFrameCode1 Norm condition1 Scaleegoistic | 0.07 | [-0.19, 0.33] | 0.52 | 1038 | .605 |
| Framing conditionFrameCode2 Norm condition1 Scaleegoistic | 0.08 | [-0.13, 0.29] | 0.77 | 1038 | .439 |
| Framing conditionFrameCode1 Norm condition2 Scaleegoistic | -0.02 | [-0.15, 0.12] | -0.26 | 1038 | .798 |
| Framing conditionFrameCode2 Norm condition2 Scaleegoistic | 0.13 | [0.01, 0.25] | 2.14 | 1038 | .033 |
| Framing conditionFrameCode1 Norm condition3 Scaleegoistic | 0.06 | [-0.03, 0.16] | 1.31 | 1038 | .189 |
| Framing conditionFrameCode2 Norm condition3 Scaleegoistic | 0.02 | [-0.06, 0.11] | 0.57 | 1038 | .569 |
| Framing conditionFrameCode1 Norm condition4 Scaleegoistic | -0.05 | [-0.13, 0.03] | -1.17 | 1038 | .241 |
| Framing conditionFrameCode2 Norm condition4 Scaleegoistic | -0.03 | [-0.09, 0.04] | -0.89 | 1038 | .371 |
| Framing conditionFrameCode1 Norm condition1 Scalehedonic | -0.02 | [-0.31, 0.27] | -0.13 | 1038 | .897 |
| Framing conditionFrameCode2 Norm condition1 Scalehedonic | -0.14 | [-0.39, 0.10] | -1.14 | 1038 | .253 |
| Framing conditionFrameCode1 Norm condition2 Scalehedonic | -0.10 | [-0.25, 0.05] | -1.30 | 1038 | .194 |
| Framing conditionFrameCode2 Norm condition2 Scalehedonic | 0.01 | [-0.13, 0.14] | 0.08 | 1038 | .934 |
| Framing conditionFrameCode1 Norm condition3 Scalehedonic | -0.08 | [-0.20, 0.03] | -1.42 | 1038 | .155 |
| Framing conditionFrameCode2 Norm condition3 Scalehedonic | 0.00 | [-0.10, 0.09] | -0.05 | 1038 | .963 |
| Framing conditionFrameCode1 Norm condition4 Scalehedonic | 0.00 | [-0.08, 0.08] | -0.02 | 1038 | .986 |
| Framing conditionFrameCode2 Norm condition4 Scalehedonic | 0.02 | [-0.05, 0.09] | 0.60 | 1038 | .551 |
| Framing conditionFrameCode1 Norm condition1 Scaleingroup identification | 0.16 | [-0.05, 0.38] | 1.51 | 1038 | .131 |
| Framing conditionFrameCode2 Norm condition1 Scaleingroup identification | 0.04 | [-0.15, 0.22] | 0.37 | 1038 | .708 |
| Framing conditionFrameCode1 Norm condition2 Scaleingroup identification | 0.10 | [-0.03, 0.23] | 1.56 | 1038 | .118 |
| Framing conditionFrameCode2 Norm condition2 Scaleingroup identification | -0.03 | [-0.14, 0.08] | -0.52 | 1038 | .604 |
| Framing conditionFrameCode1 Norm condition3 Scaleingroup identification | 0.03 | [-0.06, 0.12] | 0.71 | 1038 | .476 |
| Framing conditionFrameCode2 Norm condition3 Scaleingroup identification | -0.03 | [-0.10, 0.05] | -0.68 | 1038 | .498 |
| Framing conditionFrameCode1 Norm condition4 Scaleingroup identification | -0.08 | [-0.15, -0.01] | -2.32 | 1038 | .021 |
| Framing conditionFrameCode2 Norm condition4 Scaleingroup identification | 0.03 | [-0.02, 0.09] | 1.13 | 1038 | .257 |

#### ANOVA summary

anova(mod\_mice\_imp3) %>%  
 knitr::kable(digits = c(1, 2, 2, 2, 3))

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.69 | 2.35 | 2.06 | 0.128 |
| norm\_condition | 4 | 8.17 | 2.04 | 1.79 | 0.128 |
| biospheric\_center | 1 | 143.42 | 143.42 | 125.95 | 0.000 |
| altruistic\_center | 1 | 0.27 | 0.27 | 0.24 | 0.624 |
| egoistic\_center | 1 | 128.35 | 128.35 | 112.71 | 0.000 |
| hedonic\_center | 1 | 3.54 | 3.54 | 3.11 | 0.078 |
| ingroup\_center | 1 | 4.43 | 4.43 | 3.89 | 0.049 |
| self\_dec\_center | 1 | 12.32 | 12.32 | 10.82 | 0.001 |
| impress\_manag\_center | 1 | 0.00 | 0.00 | 0.00 | 0.999 |
| clothing\_center | 1 | 0.72 | 0.72 | 0.63 | 0.426 |
| Gender | 1 | 5.37 | 5.37 | 4.72 | 0.030 |
| Age\_center | 1 | 6.99 | 6.99 | 6.14 | 0.013 |
| framing\_condition:norm\_condition | 8 | 5.79 | 0.72 | 0.64 | 0.748 |
| framing\_condition:biospheric\_center | 2 | 0.42 | 0.21 | 0.18 | 0.832 |
| norm\_condition:biospheric\_center | 4 | 14.92 | 3.73 | 3.28 | 0.011 |
| framing\_condition:altruistic\_center | 2 | 0.27 | 0.13 | 0.12 | 0.889 |
| norm\_condition:altruistic\_center | 4 | 3.16 | 0.79 | 0.69 | 0.596 |
| framing\_condition:egoistic\_center | 2 | 1.16 | 0.58 | 0.51 | 0.602 |
| norm\_condition:egoistic\_center | 4 | 1.23 | 0.31 | 0.27 | 0.897 |
| framing\_condition:hedonic\_center | 2 | 2.11 | 1.06 | 0.93 | 0.396 |
| norm\_condition:hedonic\_center | 4 | 9.90 | 2.47 | 2.17 | 0.070 |
| framing\_condition:ingroup\_center | 2 | 1.22 | 0.61 | 0.54 | 0.585 |
| norm\_condition:ingroup\_center | 4 | 0.43 | 0.11 | 0.09 | 0.984 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 14.64 | 1.83 | 1.61 | 0.118 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 12.61 | 1.58 | 1.38 | 0.199 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 10.63 | 1.33 | 1.17 | 0.316 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 5.81 | 0.73 | 0.64 | 0.746 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 13.65 | 1.71 | 1.50 | 0.153 |
| Residuals | 1038 | 1181.98 | 1.14 | NA | NA |

Effect Size

etaSquared(mod\_mice\_imp3) %>%   
 knitr::kable(digits = 3)

|  | eta.sq | eta.sq.part |
| --- | --- | --- |
| framing\_condition | 0.004 | 0.005 |
| norm\_condition | 0.004 | 0.006 |
| biospheric\_center | 0.051 | 0.065 |
| altruistic\_center | 0.001 | 0.001 |
| egoistic\_center | 0.041 | 0.053 |
| hedonic\_center | 0.003 | 0.003 |
| ingroup\_center | 0.000 | 0.001 |
| self\_dec\_center | 0.004 | 0.006 |
| impress\_manag\_center | 0.000 | 0.000 |
| clothing\_center | 0.000 | 0.000 |
| Gender | 0.003 | 0.004 |
| Age\_center | 0.004 | 0.006 |
| framing\_condition:norm\_condition | 0.003 | 0.004 |
| framing\_condition:biospheric\_center | 0.000 | 0.001 |
| norm\_condition:biospheric\_center | 0.007 | 0.009 |
| framing\_condition:altruistic\_center | 0.001 | 0.001 |
| norm\_condition:altruistic\_center | 0.006 | 0.007 |
| framing\_condition:egoistic\_center | 0.000 | 0.001 |
| norm\_condition:egoistic\_center | 0.001 | 0.001 |
| framing\_condition:hedonic\_center | 0.002 | 0.002 |
| norm\_condition:hedonic\_center | 0.005 | 0.007 |
| framing\_condition:ingroup\_center | 0.000 | 0.001 |
| norm\_condition:ingroup\_center | 0.001 | 0.001 |
| framing\_condition:norm\_condition:biospheric\_center | 0.011 | 0.015 |
| framing\_condition:norm\_condition:altruistic\_center | 0.008 | 0.010 |
| framing\_condition:norm\_condition:egoistic\_center | 0.007 | 0.010 |
| framing\_condition:norm\_condition:hedonic\_center | 0.004 | 0.005 |
| framing\_condition:norm\_condition:ingroup\_center | 0.009 | 0.011 |

### Imputed Data 4

#### Regression summary

Succinct summary

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.39 | 0.03 | 128.56 | 0.000 |
| framing\_conditionFrameCode1 | 0.03 | 0.08 | 0.40 | 0.686 |
| framing\_conditionFrameCode2 | 0.14 | 0.07 | 2.02 | 0.044 |
| norm\_condition1 | -0.01 | 0.05 | -0.27 | 0.786 |
| norm\_condition2 | 0.03 | 0.03 | 0.91 | 0.364 |
| norm\_condition3 | -0.04 | 0.02 | -1.95 | 0.052 |
| norm\_condition4 | -0.01 | 0.02 | -0.84 | 0.399 |
| biospheric\_center | 0.36 | 0.05 | 7.88 | 0.000 |
| altruistic\_center | 0.09 | 0.06 | 1.48 | 0.140 |
| egoistic\_center | -0.30 | 0.04 | -6.95 | 0.000 |
| hedonic\_center | -0.10 | 0.05 | -1.93 | 0.054 |
| ingroup\_center | 0.02 | 0.03 | 0.69 | 0.491 |
| self\_dec\_center | -0.11 | 0.04 | -2.47 | 0.014 |
| impress\_manag\_center | -0.02 | 0.04 | -0.36 | 0.719 |
| clothing\_center | 0.00 | 0.05 | 0.06 | 0.951 |
| Gender1 | 0.12 | 0.08 | 1.63 | 0.103 |
| Age\_center | -0.06 | 0.02 | -3.08 | 0.002 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.20 | 0.13 | 1.56 | 0.119 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.11 | 0.11 | -0.97 | 0.332 |
| framing\_conditionFrameCode1:norm\_condition2 | -0.01 | 0.08 | -0.18 | 0.859 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.03 | 0.06 | -0.56 | 0.576 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.03 | 0.05 | 0.59 | 0.557 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02 | 0.05 | 0.50 | 0.619 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.04 | 0.04 | 0.83 | 0.406 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.02 | 0.03 | -0.54 | 0.589 |
| framing\_conditionFrameCode1:biospheric\_center | -0.08 | 0.12 | -0.68 | 0.494 |
| framing\_conditionFrameCode2:biospheric\_center | 0.07 | 0.09 | 0.76 | 0.446 |
| norm\_condition1:biospheric\_center | -0.07 | 0.07 | -0.97 | 0.332 |
| norm\_condition2:biospheric\_center | 0.08 | 0.04 | 1.93 | 0.054 |
| norm\_condition3:biospheric\_center | -0.04 | 0.03 | -1.44 | 0.151 |
| norm\_condition4:biospheric\_center | -0.05 | 0.02 | -1.92 | 0.055 |
| framing\_conditionFrameCode1:altruistic\_center | 0.07 | 0.15 | 0.45 | 0.653 |
| framing\_conditionFrameCode2:altruistic\_center | -0.15 | 0.12 | -1.23 | 0.220 |
| norm\_condition1:altruistic\_center | -0.16 | 0.10 | -1.63 | 0.103 |
| norm\_condition2:altruistic\_center | -0.03 | 0.05 | -0.61 | 0.544 |
| norm\_condition3:altruistic\_center | 0.02 | 0.04 | 0.49 | 0.624 |
| norm\_condition4:altruistic\_center | 0.07 | 0.03 | 2.27 | 0.024 |
| framing\_conditionFrameCode1:egoistic\_center | -0.03 | 0.10 | -0.30 | 0.767 |
| framing\_conditionFrameCode2:egoistic\_center | 0.04 | 0.09 | 0.47 | 0.639 |
| norm\_condition1:egoistic\_center | 0.06 | 0.07 | 0.91 | 0.365 |
| norm\_condition2:egoistic\_center | -0.01 | 0.04 | -0.29 | 0.772 |
| norm\_condition3:egoistic\_center | 0.02 | 0.03 | 0.71 | 0.481 |
| norm\_condition4:egoistic\_center | 0.02 | 0.02 | 0.81 | 0.416 |
| framing\_conditionFrameCode1:hedonic\_center | -0.03 | 0.13 | -0.22 | 0.829 |
| framing\_conditionFrameCode2:hedonic\_center | 0.17 | 0.11 | 1.53 | 0.126 |
| norm\_condition1:hedonic\_center | 0.03 | 0.09 | 0.39 | 0.696 |
| norm\_condition2:hedonic\_center | 0.07 | 0.05 | 1.53 | 0.127 |
| norm\_condition3:hedonic\_center | -0.04 | 0.04 | -1.04 | 0.298 |
| norm\_condition4:hedonic\_center | -0.04 | 0.02 | -1.75 | 0.080 |
| framing\_conditionFrameCode1:ingroup\_center | 0.02 | 0.08 | 0.21 | 0.835 |
| framing\_conditionFrameCode2:ingroup\_center | -0.06 | 0.07 | -0.82 | 0.414 |
| norm\_condition1:ingroup\_center | 0.01 | 0.05 | 0.11 | 0.911 |
| norm\_condition2:ingroup\_center | -0.01 | 0.03 | -0.39 | 0.699 |
| norm\_condition3:ingroup\_center | 0.00 | 0.02 | 0.22 | 0.826 |
| norm\_condition4:ingroup\_center | -0.01 | 0.02 | -0.78 | 0.435 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.03 | 0.18 | -0.15 | 0.880 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.04 | 0.14 | 0.25 | 0.802 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.13 | 0.10 | -1.25 | 0.210 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.11 | 0.08 | 1.29 | 0.196 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.13 | 0.07 | 1.75 | 0.081 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.05 | 0.06 | 0.96 | 0.336 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.05 | 0.07 | 0.73 | 0.464 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.12 | 0.05 | 2.55 | 0.011 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.22 | 0.24 | -0.94 | 0.350 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.25 | 0.20 | 1.23 | 0.217 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.22 | 0.14 | 1.62 | 0.106 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.03 | 0.11 | 0.23 | 0.816 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.16 | 0.11 | -1.54 | 0.123 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.05 | 0.08 | -0.54 | 0.587 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | 0.00 | 0.08 | -0.04 | 0.970 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.08 | 0.06 | -1.43 | 0.152 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.08 | 0.17 | 0.46 | 0.643 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.13 | 0.14 | 0.92 | 0.358 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.01 | 0.09 | -0.12 | 0.904 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.16 | 0.08 | 2.07 | 0.039 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.08 | 0.06 | 1.20 | 0.229 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.02 | 0.06 | 0.39 | 0.698 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.05 | 0.05 | -0.96 | 0.340 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.04 | 0.04 | -0.94 | 0.349 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | 0.05 | 0.22 | 0.22 | 0.825 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.26 | 0.19 | -1.37 | 0.172 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.11 | 0.12 | -0.93 | 0.352 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.02 | 0.10 | -0.17 | 0.863 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.11 | 0.09 | -1.28 | 0.202 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | -0.02 | 0.07 | -0.23 | 0.822 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | 0.00 | 0.06 | 0.01 | 0.992 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.03 | 0.05 | 0.57 | 0.570 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.19 | 0.13 | 1.50 | 0.133 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.03 | 0.11 | 0.28 | 0.776 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.11 | 0.08 | 1.43 | 0.153 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03 | 0.06 | -0.48 | 0.634 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.04 | 0.05 | 0.82 | 0.411 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03 | 0.05 | -0.68 | 0.497 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.09 | 0.04 | -2.17 | 0.030 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.04 | 0.04 | 1.14 | 0.256 |

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-60)

Table 5 Regression Results Using Imputed Data 4

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.39 | [4.33, 4.46] | 128.56 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.03 | [-0.13, 0.19] | 0.40 | 1038 | .686 |
| Framing conditionFrameCode2 | 0.14 | [0.00, 0.28] | 2.02 | 1038 | .044 |
| Norm condition1 | -0.01 | [-0.12, 0.09] | -0.27 | 1038 | .786 |
| Norm condition2 | 0.03 | [-0.03, 0.09] | 0.91 | 1038 | .364 |
| Norm condition3 | -0.04 | [-0.08, 0.00] | -1.95 | 1038 | .052 |
| Norm condition4 | -0.01 | [-0.05, 0.02] | -0.84 | 1038 | .399 |
| Biospheric center | 0.36 | [0.27, 0.45] | 7.88 | 1038 | < .001 |
| Altruistic center | 0.09 | [-0.03, 0.22] | 1.48 | 1038 | .140 |
| Egoistic center | -0.30 | [-0.38, -0.21] | -6.95 | 1038 | < .001 |
| Hedonic center | -0.10 | [-0.21, 0.00] | -1.93 | 1038 | .054 |
| Ingroup center | 0.02 | [-0.04, 0.09] | 0.69 | 1038 | .491 |
| Self dec center | -0.11 | [-0.19, -0.02] | -2.47 | 1038 | .014 |
| Impress manag center | -0.02 | [-0.10, 0.07] | -0.36 | 1038 | .719 |
| Clothing center | 0.00 | [-0.09, 0.09] | 0.06 | 1038 | .951 |
| Gender1 | 0.12 | [-0.03, 0.27] | 1.63 | 1038 | .103 |
| Age center | -0.06 | [-0.09, -0.02] | -3.08 | 1038 | .002 |
| Framing conditionFrameCode1 Norm condition1 | 0.20 | [-0.05, 0.44] | 1.56 | 1038 | .119 |
| Framing conditionFrameCode2 Norm condition1 | -0.11 | [-0.32, 0.11] | -0.97 | 1038 | .332 |
| Framing conditionFrameCode1 Norm condition2 | -0.01 | [-0.16, 0.13] | -0.18 | 1038 | .859 |
| Framing conditionFrameCode2 Norm condition2 | -0.03 | [-0.16, 0.09] | -0.56 | 1038 | .576 |
| Framing conditionFrameCode1 Norm condition3 | 0.03 | [-0.07, 0.13] | 0.59 | 1038 | .557 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.07, 0.11] | 0.50 | 1038 | .619 |
| Framing conditionFrameCode1 Norm condition4 | 0.04 | [-0.05, 0.12] | 0.83 | 1038 | .406 |
| Framing conditionFrameCode2 Norm condition4 | -0.02 | [-0.09, 0.05] | -0.54 | 1038 | .589 |
| Framing conditionFrameCode1 Biospheric center | -0.08 | [-0.31, 0.15] | -0.68 | 1038 | .494 |
| Framing conditionFrameCode2 Biospheric center | 0.07 | [-0.11, 0.25] | 0.76 | 1038 | .446 |
| Norm condition1 Biospheric center | -0.07 | [-0.20, 0.07] | -0.97 | 1038 | .332 |
| Norm condition2 Biospheric center | 0.08 | [0.00, 0.16] | 1.93 | 1038 | .054 |
| Norm condition3 Biospheric center | -0.04 | [-0.10, 0.02] | -1.44 | 1038 | .151 |
| Norm condition4 Biospheric center | -0.05 | [-0.10, 0.00] | -1.92 | 1038 | .055 |
| Framing conditionFrameCode1 Altruistic center | 0.07 | [-0.23, 0.37] | 0.45 | 1038 | .653 |
| Framing conditionFrameCode2 Altruistic center | -0.15 | [-0.40, 0.09] | -1.23 | 1038 | .220 |
| Norm condition1 Altruistic center | -0.16 | [-0.35, 0.03] | -1.63 | 1038 | .103 |
| Norm condition2 Altruistic center | -0.03 | [-0.14, 0.07] | -0.61 | 1038 | .544 |
| Norm condition3 Altruistic center | 0.02 | [-0.06, 0.10] | 0.49 | 1038 | .624 |
| Norm condition4 Altruistic center | 0.07 | [0.01, 0.12] | 2.27 | 1038 | .024 |
| Framing conditionFrameCode1 Egoistic center | -0.03 | [-0.23, 0.17] | -0.30 | 1038 | .767 |
| Framing conditionFrameCode2 Egoistic center | 0.04 | [-0.13, 0.21] | 0.47 | 1038 | .639 |
| Norm condition1 Egoistic center | 0.06 | [-0.07, 0.19] | 0.91 | 1038 | .365 |
| Norm condition2 Egoistic center | -0.01 | [-0.08, 0.06] | -0.29 | 1038 | .772 |
| Norm condition3 Egoistic center | 0.02 | [-0.03, 0.07] | 0.71 | 1038 | .481 |
| Norm condition4 Egoistic center | 0.02 | [-0.02, 0.06] | 0.81 | 1038 | .416 |
| Framing conditionFrameCode1 Hedonic center | -0.03 | [-0.29, 0.23] | -0.22 | 1038 | .829 |
| Framing conditionFrameCode2 Hedonic center | 0.17 | [-0.05, 0.39] | 1.53 | 1038 | .126 |
| Norm condition1 Hedonic center | 0.03 | [-0.14, 0.21] | 0.39 | 1038 | .696 |
| Norm condition2 Hedonic center | 0.07 | [-0.02, 0.17] | 1.53 | 1038 | .127 |
| Norm condition3 Hedonic center | -0.04 | [-0.11, 0.03] | -1.04 | 1038 | .298 |
| Norm condition4 Hedonic center | -0.04 | [-0.09, 0.01] | -1.75 | 1038 | .080 |
| Framing conditionFrameCode1 Ingroup center | 0.02 | [-0.14, 0.18] | 0.21 | 1038 | .835 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.20, 0.08] | -0.82 | 1038 | .414 |
| Norm condition1 Ingroup center | 0.01 | [-0.10, 0.11] | 0.11 | 1038 | .911 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.39 | 1038 | .699 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.05] | 0.22 | 1038 | .826 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.78 | 1038 | .435 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.03 | [-0.37, 0.32] | -0.15 | 1038 | .880 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.04 | [-0.24, 0.32] | 0.25 | 1038 | .802 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.13 | [-0.34, 0.07] | -1.25 | 1038 | .210 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.11 | [-0.06, 0.27] | 1.29 | 1038 | .196 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.13 | [-0.02, 0.28] | 1.75 | 1038 | .081 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.05 | [-0.06, 0.17] | 0.96 | 1038 | .336 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.05 | [-0.08, 0.18] | 0.73 | 1038 | .464 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.12 | [0.03, 0.21] | 2.55 | 1038 | .011 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.22 | [-0.69, 0.24] | -0.94 | 1038 | .350 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.25 | [-0.15, 0.65] | 1.23 | 1038 | .217 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.22 | [-0.05, 0.49] | 1.62 | 1038 | .106 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | 0.03 | [-0.19, 0.25] | 0.23 | 1038 | .816 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.16 | [-0.37, 0.04] | -1.54 | 1038 | .123 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.05 | [-0.21, 0.12] | -0.54 | 1038 | .587 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | 0.00 | [-0.15, 0.14] | -0.04 | 1038 | .970 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.08 | [-0.20, 0.03] | -1.43 | 1038 | .152 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.08 | [-0.26, 0.42] | 0.46 | 1038 | .643 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.13 | [-0.14, 0.39] | 0.92 | 1038 | .358 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.01 | [-0.18, 0.16] | -0.12 | 1038 | .904 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.16 | [0.01, 0.31] | 2.07 | 1038 | .039 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.08 | [-0.05, 0.20] | 1.20 | 1038 | .229 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.02 | [-0.09, 0.13] | 0.39 | 1038 | .698 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.05 | [-0.15, 0.05] | -0.96 | 1038 | .340 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.04 | [-0.12, 0.04] | -0.94 | 1038 | .349 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | 0.05 | [-0.38, 0.47] | 0.22 | 1038 | .825 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.26 | [-0.63, 0.11] | -1.37 | 1038 | .172 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.11 | [-0.34, 0.12] | -0.93 | 1038 | .352 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | -0.02 | [-0.22, 0.18] | -0.17 | 1038 | .863 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.11 | [-0.29, 0.06] | -1.28 | 1038 | .202 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | -0.02 | [-0.16, 0.13] | -0.23 | 1038 | .822 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | 0.00 | [-0.12, 0.12] | 0.01 | 1038 | .992 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.03 | [-0.07, 0.13] | 0.57 | 1038 | .570 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.19 | [-0.06, 0.44] | 1.50 | 1038 | .133 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.03 | [-0.19, 0.25] | 0.28 | 1038 | .776 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.11 | [-0.04, 0.26] | 1.43 | 1038 | .153 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.10] | -0.48 | 1038 | .634 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.04 | [-0.06, 0.15] | 0.82 | 1038 | .411 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.68 | 1038 | .497 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.16, -0.01] | -2.17 | 1038 | .030 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.14 | 1038 | .256 |

*Note.* DV = Consumer Intentions

Standardized regression coefficients

APA summary of standardized coefficients

print\_summ\_std\_imp4 <- apa\_print(summ\_std\_imp4)  
  
apa\_table(print\_summ\_std\_imp4)

(#tab:unnamed-chunk-62)

\*\*

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | -0.02 | [-0.07, 0.04] | -0.60 | 1038 | .551 |
| Framing conditionFrameCode1 | 0.03 | [-0.11, 0.16] | 0.40 | 1038 | .686 |
| Framing conditionFrameCode2 | 0.12 | [0.00, 0.23] | 2.02 | 1038 | .044 |
| Norm condition1 | -0.01 | [-0.10, 0.07] | -0.27 | 1038 | .786 |
| Norm condition2 | 0.02 | [-0.03, 0.07] | 0.91 | 1038 | .364 |
| Norm condition3 | -0.03 | [-0.07, 0.00] | -1.95 | 1038 | .052 |
| Norm condition4 | -0.01 | [-0.04, 0.02] | -0.84 | 1038 | .399 |
| Scalebiospheric | 0.30 | [0.23, 0.38] | 7.88 | 1038 | < .001 |
| Scalealtruistic | 0.06 | [-0.02, 0.15] | 1.48 | 1038 | .140 |
| Scaleegoistic | -0.23 | [-0.29, -0.16] | -6.95 | 1038 | < .001 |
| Scalehedonic | -0.07 | [-0.14, 0.00] | -1.93 | 1038 | .054 |
| Scaleingroup identification | 0.02 | [-0.04, 0.08] | 0.69 | 1038 | .491 |
| Scaleself deceptive sdr | -0.08 | [-0.14, -0.02] | -2.47 | 1038 | .014 |
| Scaleimpress manag sdr | -0.01 | [-0.07, 0.05] | -0.36 | 1038 | .719 |
| Scaleclothing interest | 0.00 | [-0.06, 0.06] | 0.06 | 1038 | .951 |
| Gender1 | 0.10 | [-0.02, 0.23] | 1.63 | 1038 | .103 |
| ScaleAge | -0.09 | [-0.15, -0.03] | -3.08 | 1038 | .002 |
| Framing conditionFrameCode1 Norm condition1 | 0.17 | [-0.04, 0.37] | 1.56 | 1038 | .119 |
| Framing conditionFrameCode2 Norm condition1 | -0.09 | [-0.27, 0.09] | -0.97 | 1038 | .332 |
| Framing conditionFrameCode1 Norm condition2 | -0.01 | [-0.14, 0.11] | -0.18 | 1038 | .859 |
| Framing conditionFrameCode2 Norm condition2 | -0.03 | [-0.13, 0.07] | -0.56 | 1038 | .576 |
| Framing conditionFrameCode1 Norm condition3 | 0.03 | [-0.06, 0.11] | 0.59 | 1038 | .557 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.06, 0.10] | 0.50 | 1038 | .619 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.04, 0.10] | 0.83 | 1038 | .406 |
| Framing conditionFrameCode2 Norm condition4 | -0.02 | [-0.07, 0.04] | -0.54 | 1038 | .589 |
| Framing conditionFrameCode1 Scalebiospheric | -0.07 | [-0.26, 0.13] | -0.68 | 1038 | .494 |
| Framing conditionFrameCode2 Scalebiospheric | 0.06 | [-0.09, 0.21] | 0.76 | 1038 | .446 |
| Norm condition1 Scalebiospheric | -0.06 | [-0.17, 0.06] | -0.97 | 1038 | .332 |
| Norm condition2 Scalebiospheric | 0.07 | [0.00, 0.13] | 1.93 | 1038 | .054 |
| Norm condition3 Scalebiospheric | -0.03 | [-0.08, 0.01] | -1.44 | 1038 | .151 |
| Norm condition4 Scalebiospheric | -0.04 | [-0.08, 0.00] | -1.92 | 1038 | .055 |
| Framing conditionFrameCode1 Scalealtruistic | 0.05 | [-0.16, 0.25] | 0.45 | 1038 | .653 |
| Framing conditionFrameCode2 Scalealtruistic | -0.10 | [-0.27, 0.06] | -1.23 | 1038 | .220 |
| Norm condition1 Scalealtruistic | -0.11 | [-0.24, 0.02] | -1.63 | 1038 | .103 |
| Norm condition2 Scalealtruistic | -0.02 | [-0.09, 0.05] | -0.61 | 1038 | .544 |
| Norm condition3 Scalealtruistic | 0.01 | [-0.04, 0.07] | 0.49 | 1038 | .624 |
| Norm condition4 Scalealtruistic | 0.04 | [0.01, 0.08] | 2.27 | 1038 | .024 |
| Framing conditionFrameCode1 Scaleegoistic | -0.02 | [-0.18, 0.13] | -0.30 | 1038 | .767 |
| Framing conditionFrameCode2 Scaleegoistic | 0.03 | [-0.10, 0.16] | 0.47 | 1038 | .639 |
| Norm condition1 Scaleegoistic | 0.05 | [-0.06, 0.15] | 0.91 | 1038 | .365 |
| Norm condition2 Scaleegoistic | -0.01 | [-0.06, 0.05] | -0.29 | 1038 | .772 |
| Norm condition3 Scaleegoistic | 0.01 | [-0.03, 0.05] | 0.71 | 1038 | .481 |
| Norm condition4 Scaleegoistic | 0.01 | [-0.02, 0.04] | 0.81 | 1038 | .416 |
| Framing conditionFrameCode1 Scalehedonic | -0.02 | [-0.19, 0.15] | -0.22 | 1038 | .829 |
| Framing conditionFrameCode2 Scalehedonic | 0.11 | [-0.03, 0.26] | 1.53 | 1038 | .126 |
| Norm condition1 Scalehedonic | 0.02 | [-0.09, 0.14] | 0.39 | 1038 | .696 |
| Norm condition2 Scalehedonic | 0.05 | [-0.01, 0.11] | 1.53 | 1038 | .127 |
| Norm condition3 Scalehedonic | -0.02 | [-0.07, 0.02] | -1.04 | 1038 | .298 |
| Norm condition4 Scalehedonic | -0.03 | [-0.06, 0.00] | -1.75 | 1038 | .080 |
| Framing conditionFrameCode1 Scaleingroup identification | 0.01 | [-0.12, 0.15] | 0.21 | 1038 | .835 |
| Framing conditionFrameCode2 Scaleingroup identification | -0.05 | [-0.17, 0.07] | -0.82 | 1038 | .414 |
| Norm condition1 Scaleingroup identification | 0.01 | [-0.08, 0.09] | 0.11 | 1038 | .911 |
| Norm condition2 Scaleingroup identification | -0.01 | [-0.06, 0.04] | -0.39 | 1038 | .699 |
| Norm condition3 Scaleingroup identification | 0.00 | [-0.03, 0.04] | 0.22 | 1038 | .826 |
| Norm condition4 Scaleingroup identification | -0.01 | [-0.04, 0.02] | -0.78 | 1038 | .435 |
| Framing conditionFrameCode1 Norm condition1 Scalebiospheric | -0.02 | [-0.31, 0.27] | -0.15 | 1038 | .880 |
| Framing conditionFrameCode2 Norm condition1 Scalebiospheric | 0.03 | [-0.20, 0.26] | 0.25 | 1038 | .802 |
| Framing conditionFrameCode1 Norm condition2 Scalebiospheric | -0.11 | [-0.28, 0.06] | -1.25 | 1038 | .210 |
| Framing conditionFrameCode2 Norm condition2 Scalebiospheric | 0.09 | [-0.05, 0.23] | 1.29 | 1038 | .196 |
| Framing conditionFrameCode1 Norm condition3 Scalebiospheric | 0.11 | [-0.01, 0.23] | 1.75 | 1038 | .081 |
| Framing conditionFrameCode2 Norm condition3 Scalebiospheric | 0.05 | [-0.05, 0.14] | 0.96 | 1038 | .336 |
| Framing conditionFrameCode1 Norm condition4 Scalebiospheric | 0.04 | [-0.07, 0.15] | 0.73 | 1038 | .464 |
| Framing conditionFrameCode2 Norm condition4 Scalebiospheric | 0.10 | [0.02, 0.18] | 2.55 | 1038 | .011 |
| Framing conditionFrameCode1 Norm condition1 Scalealtruistic | -0.15 | [-0.47, 0.17] | -0.94 | 1038 | .350 |
| Framing conditionFrameCode2 Norm condition1 Scalealtruistic | 0.17 | [-0.10, 0.44] | 1.23 | 1038 | .217 |
| Framing conditionFrameCode1 Norm condition2 Scalealtruistic | 0.15 | [-0.03, 0.33] | 1.62 | 1038 | .106 |
| Framing conditionFrameCode2 Norm condition2 Scalealtruistic | 0.02 | [-0.13, 0.17] | 0.23 | 1038 | .816 |
| Framing conditionFrameCode1 Norm condition3 Scalealtruistic | -0.11 | [-0.25, 0.03] | -1.54 | 1038 | .123 |
| Framing conditionFrameCode2 Norm condition3 Scalealtruistic | -0.03 | [-0.14, 0.08] | -0.54 | 1038 | .587 |
| Framing conditionFrameCode1 Norm condition4 Scalealtruistic | 0.00 | [-0.10, 0.10] | -0.04 | 1038 | .970 |
| Framing conditionFrameCode2 Norm condition4 Scalealtruistic | -0.06 | [-0.13, 0.02] | -1.43 | 1038 | .152 |
| Framing conditionFrameCode1 Norm condition1 Scaleegoistic | 0.06 | [-0.20, 0.32] | 0.46 | 1038 | .643 |
| Framing conditionFrameCode2 Norm condition1 Scaleegoistic | 0.10 | [-0.11, 0.31] | 0.92 | 1038 | .358 |
| Framing conditionFrameCode1 Norm condition2 Scaleegoistic | -0.01 | [-0.14, 0.12] | -0.12 | 1038 | .904 |
| Framing conditionFrameCode2 Norm condition2 Scaleegoistic | 0.12 | [0.01, 0.24] | 2.07 | 1038 | .039 |
| Framing conditionFrameCode1 Norm condition3 Scaleegoistic | 0.06 | [-0.04, 0.16] | 1.20 | 1038 | .229 |
| Framing conditionFrameCode2 Norm condition3 Scaleegoistic | 0.02 | [-0.07, 0.10] | 0.39 | 1038 | .698 |
| Framing conditionFrameCode1 Norm condition4 Scaleegoistic | -0.04 | [-0.12, 0.04] | -0.96 | 1038 | .340 |
| Framing conditionFrameCode2 Norm condition4 Scaleegoistic | -0.03 | [-0.10, 0.03] | -0.94 | 1038 | .349 |
| Framing conditionFrameCode1 Norm condition1 Scalehedonic | 0.03 | [-0.25, 0.32] | 0.22 | 1038 | .825 |
| Framing conditionFrameCode2 Norm condition1 Scalehedonic | -0.17 | [-0.42, 0.07] | -1.37 | 1038 | .172 |
| Framing conditionFrameCode1 Norm condition2 Scalehedonic | -0.07 | [-0.22, 0.08] | -0.93 | 1038 | .352 |
| Framing conditionFrameCode2 Norm condition2 Scalehedonic | -0.01 | [-0.15, 0.12] | -0.17 | 1038 | .863 |
| Framing conditionFrameCode1 Norm condition3 Scalehedonic | -0.08 | [-0.19, 0.04] | -1.28 | 1038 | .202 |
| Framing conditionFrameCode2 Norm condition3 Scalehedonic | -0.01 | [-0.11, 0.08] | -0.23 | 1038 | .822 |
| Framing conditionFrameCode1 Norm condition4 Scalehedonic | 0.00 | [-0.08, 0.08] | 0.01 | 1038 | .992 |
| Framing conditionFrameCode2 Norm condition4 Scalehedonic | 0.02 | [-0.05, 0.09] | 0.57 | 1038 | .570 |
| Framing conditionFrameCode1 Norm condition1 Scaleingroup identification | 0.16 | [-0.05, 0.38] | 1.50 | 1038 | .133 |
| Framing conditionFrameCode2 Norm condition1 Scaleingroup identification | 0.03 | [-0.16, 0.21] | 0.28 | 1038 | .776 |
| Framing conditionFrameCode1 Norm condition2 Scaleingroup identification | 0.09 | [-0.04, 0.22] | 1.43 | 1038 | .153 |
| Framing conditionFrameCode2 Norm condition2 Scaleingroup identification | -0.03 | [-0.13, 0.08] | -0.48 | 1038 | .634 |
| Framing conditionFrameCode1 Norm condition3 Scaleingroup identification | 0.04 | [-0.05, 0.13] | 0.82 | 1038 | .411 |
| Framing conditionFrameCode2 Norm condition3 Scaleingroup identification | -0.03 | [-0.10, 0.05] | -0.68 | 1038 | .497 |
| Framing conditionFrameCode1 Norm condition4 Scaleingroup identification | -0.07 | [-0.14, -0.01] | -2.17 | 1038 | .030 |
| Framing conditionFrameCode2 Norm condition4 Scaleingroup identification | 0.03 | [-0.02, 0.09] | 1.14 | 1038 | .256 |

#### ANOVA summary

anova(mod\_mice\_imp4) %>%  
 knitr::kable(digits = c(1, 2, 2, 2, 3))

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.69 | 2.35 | 2.06 | 0.128 |
| norm\_condition | 4 | 8.17 | 2.04 | 1.80 | 0.127 |
| biospheric\_center | 1 | 146.55 | 146.55 | 128.86 | 0.000 |
| altruistic\_center | 1 | 0.05 | 0.05 | 0.04 | 0.839 |
| egoistic\_center | 1 | 125.18 | 125.18 | 110.07 | 0.000 |
| hedonic\_center | 1 | 3.18 | 3.18 | 2.80 | 0.095 |
| ingroup\_center | 1 | 4.18 | 4.18 | 3.67 | 0.056 |
| self\_dec\_center | 1 | 13.24 | 13.24 | 11.64 | 0.001 |
| impress\_manag\_center | 1 | 0.01 | 0.01 | 0.01 | 0.935 |
| clothing\_center | 1 | 0.73 | 0.73 | 0.65 | 0.422 |
| Gender | 1 | 5.47 | 5.47 | 4.81 | 0.028 |
| Age\_center | 1 | 10.60 | 10.60 | 9.32 | 0.002 |
| framing\_condition:norm\_condition | 8 | 6.54 | 0.82 | 0.72 | 0.675 |
| framing\_condition:biospheric\_center | 2 | 0.53 | 0.26 | 0.23 | 0.792 |
| norm\_condition:biospheric\_center | 4 | 12.99 | 3.25 | 2.86 | 0.023 |
| framing\_condition:altruistic\_center | 2 | 0.68 | 0.34 | 0.30 | 0.740 |
| norm\_condition:altruistic\_center | 4 | 3.43 | 0.86 | 0.75 | 0.556 |
| framing\_condition:egoistic\_center | 2 | 0.90 | 0.45 | 0.39 | 0.675 |
| norm\_condition:egoistic\_center | 4 | 2.71 | 0.68 | 0.60 | 0.666 |
| framing\_condition:hedonic\_center | 2 | 2.35 | 1.17 | 1.03 | 0.356 |
| norm\_condition:hedonic\_center | 4 | 8.61 | 2.15 | 1.89 | 0.109 |
| framing\_condition:ingroup\_center | 2 | 1.21 | 0.60 | 0.53 | 0.588 |
| norm\_condition:ingroup\_center | 4 | 0.32 | 0.08 | 0.07 | 0.991 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 15.26 | 1.91 | 1.68 | 0.100 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 12.64 | 1.58 | 1.39 | 0.197 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 9.37 | 1.17 | 1.03 | 0.411 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 5.23 | 0.65 | 0.57 | 0.799 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 12.84 | 1.60 | 1.41 | 0.187 |
| Residuals | 1038 | 1180.55 | 1.14 | NA | NA |

Effect Size

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

|  | eta.sq | eta.sq.part |
| --- | --- | --- |
| framing\_condition | 0.004 | 0.005 |
| norm\_condition | 0.004 | 0.006 |
| biospheric\_center | 0.051 | 0.065 |
| altruistic\_center | 0.001 | 0.002 |
| egoistic\_center | 0.041 | 0.052 |
| hedonic\_center | 0.003 | 0.004 |
| ingroup\_center | 0.000 | 0.000 |
| self\_dec\_center | 0.004 | 0.006 |
| impress\_manag\_center | 0.000 | 0.000 |
| clothing\_center | 0.000 | 0.000 |
| Gender | 0.002 | 0.003 |
| Age\_center | 0.007 | 0.009 |
| framing\_condition:norm\_condition | 0.004 | 0.005 |
| framing\_condition:biospheric\_center | 0.001 | 0.001 |
| norm\_condition:biospheric\_center | 0.006 | 0.008 |
| framing\_condition:altruistic\_center | 0.001 | 0.002 |
| norm\_condition:altruistic\_center | 0.006 | 0.008 |
| framing\_condition:egoistic\_center | 0.000 | 0.000 |
| norm\_condition:egoistic\_center | 0.002 | 0.002 |
| framing\_condition:hedonic\_center | 0.002 | 0.003 |
| norm\_condition:hedonic\_center | 0.005 | 0.007 |
| framing\_condition:ingroup\_center | 0.000 | 0.001 |
| norm\_condition:ingroup\_center | 0.001 | 0.001 |
| framing\_condition:norm\_condition:biospheric\_center | 0.010 | 0.014 |
| framing\_condition:norm\_condition:altruistic\_center | 0.007 | 0.010 |
| framing\_condition:norm\_condition:egoistic\_center | 0.007 | 0.009 |
| framing\_condition:norm\_condition:hedonic\_center | 0.004 | 0.005 |
| framing\_condition:norm\_condition:ingroup\_center | 0.008 | 0.011 |

### Imputed Data 5

#### Regression summary

Succinct summary

|  | Estimate | Std. Error | t value | Pr(>|t|) |
| --- | --- | --- | --- | --- |
| (Intercept) | 4.39 | 0.03 | 128.39 | 0.000 |
| framing\_conditionFrameCode1 | 0.03 | 0.08 | 0.38 | 0.704 |
| framing\_conditionFrameCode2 | 0.13 | 0.07 | 1.92 | 0.055 |
| norm\_condition1 | -0.02 | 0.05 | -0.36 | 0.720 |
| norm\_condition2 | 0.03 | 0.03 | 0.98 | 0.326 |
| norm\_condition3 | -0.04 | 0.02 | -1.90 | 0.058 |
| norm\_condition4 | -0.02 | 0.02 | -0.91 | 0.362 |
| biospheric\_center | 0.36 | 0.05 | 7.89 | 0.000 |
| altruistic\_center | 0.07 | 0.06 | 1.17 | 0.244 |
| egoistic\_center | -0.30 | 0.04 | -6.93 | 0.000 |
| hedonic\_center | -0.10 | 0.05 | -1.80 | 0.072 |
| ingroup\_center | 0.03 | 0.03 | 0.96 | 0.337 |
| self\_dec\_center | -0.11 | 0.04 | -2.65 | 0.008 |
| impress\_manag\_center | -0.02 | 0.04 | -0.42 | 0.675 |
| clothing\_center | 0.00 | 0.05 | 0.09 | 0.924 |
| Gender1 | 0.15 | 0.08 | 2.05 | 0.041 |
| Age\_center | -0.03 | 0.02 | -1.79 | 0.073 |
| framing\_conditionFrameCode1:norm\_condition1 | 0.20 | 0.13 | 1.58 | 0.114 |
| framing\_conditionFrameCode2:norm\_condition1 | -0.10 | 0.11 | -0.88 | 0.379 |
| framing\_conditionFrameCode1:norm\_condition2 | 0.00 | 0.08 | -0.01 | 0.994 |
| framing\_conditionFrameCode2:norm\_condition2 | -0.04 | 0.06 | -0.64 | 0.525 |
| framing\_conditionFrameCode1:norm\_condition3 | 0.02 | 0.05 | 0.42 | 0.672 |
| framing\_conditionFrameCode2:norm\_condition3 | 0.02 | 0.05 | 0.45 | 0.656 |
| framing\_conditionFrameCode1:norm\_condition4 | 0.03 | 0.04 | 0.60 | 0.546 |
| framing\_conditionFrameCode2:norm\_condition4 | -0.01 | 0.03 | -0.40 | 0.691 |
| framing\_conditionFrameCode1:biospheric\_center | -0.02 | 0.12 | -0.18 | 0.856 |
| framing\_conditionFrameCode2:biospheric\_center | 0.06 | 0.09 | 0.63 | 0.529 |
| norm\_condition1:biospheric\_center | -0.06 | 0.07 | -0.82 | 0.410 |
| norm\_condition2:biospheric\_center | 0.08 | 0.04 | 1.89 | 0.059 |
| norm\_condition3:biospheric\_center | -0.05 | 0.03 | -1.72 | 0.085 |
| norm\_condition4:biospheric\_center | -0.04 | 0.02 | -1.62 | 0.105 |
| framing\_conditionFrameCode1:altruistic\_center | 0.01 | 0.16 | 0.07 | 0.942 |
| framing\_conditionFrameCode2:altruistic\_center | -0.12 | 0.13 | -0.97 | 0.333 |
| norm\_condition1:altruistic\_center | -0.11 | 0.10 | -1.14 | 0.254 |
| norm\_condition2:altruistic\_center | -0.01 | 0.06 | -0.22 | 0.825 |
| norm\_condition3:altruistic\_center | 0.03 | 0.04 | 0.66 | 0.507 |
| norm\_condition4:altruistic\_center | 0.07 | 0.03 | 2.29 | 0.022 |
| framing\_conditionFrameCode1:egoistic\_center | -0.04 | 0.10 | -0.35 | 0.725 |
| framing\_conditionFrameCode2:egoistic\_center | 0.05 | 0.09 | 0.56 | 0.574 |
| norm\_condition1:egoistic\_center | 0.05 | 0.07 | 0.73 | 0.463 |
| norm\_condition2:egoistic\_center | -0.02 | 0.04 | -0.56 | 0.577 |
| norm\_condition3:egoistic\_center | 0.02 | 0.03 | 0.65 | 0.513 |
| norm\_condition4:egoistic\_center | 0.01 | 0.02 | 0.68 | 0.495 |
| framing\_conditionFrameCode1:hedonic\_center | -0.01 | 0.13 | -0.05 | 0.958 |
| framing\_conditionFrameCode2:hedonic\_center | 0.16 | 0.11 | 1.42 | 0.157 |
| norm\_condition1:hedonic\_center | 0.00 | 0.09 | -0.04 | 0.971 |
| norm\_condition2:hedonic\_center | 0.07 | 0.05 | 1.36 | 0.174 |
| norm\_condition3:hedonic\_center | -0.04 | 0.04 | -1.25 | 0.210 |
| norm\_condition4:hedonic\_center | -0.05 | 0.03 | -1.87 | 0.062 |
| framing\_conditionFrameCode1:ingroup\_center | 0.03 | 0.08 | 0.31 | 0.758 |
| framing\_conditionFrameCode2:ingroup\_center | -0.06 | 0.07 | -0.87 | 0.385 |
| norm\_condition1:ingroup\_center | 0.01 | 0.05 | 0.23 | 0.816 |
| norm\_condition2:ingroup\_center | -0.01 | 0.03 | -0.44 | 0.663 |
| norm\_condition3:ingroup\_center | 0.00 | 0.02 | 0.16 | 0.873 |
| norm\_condition4:ingroup\_center | -0.01 | 0.02 | -0.90 | 0.366 |
| framing\_conditionFrameCode1:norm\_condition1:biospheric\_center | -0.01 | 0.18 | -0.06 | 0.953 |
| framing\_conditionFrameCode2:norm\_condition1:biospheric\_center | 0.01 | 0.14 | 0.10 | 0.921 |
| framing\_conditionFrameCode1:norm\_condition2:biospheric\_center | -0.14 | 0.11 | -1.29 | 0.198 |
| framing\_conditionFrameCode2:norm\_condition2:biospheric\_center | 0.11 | 0.08 | 1.34 | 0.180 |
| framing\_conditionFrameCode1:norm\_condition3:biospheric\_center | 0.15 | 0.07 | 1.97 | 0.050 |
| framing\_conditionFrameCode2:norm\_condition3:biospheric\_center | 0.07 | 0.06 | 1.17 | 0.240 |
| framing\_conditionFrameCode1:norm\_condition4:biospheric\_center | 0.07 | 0.07 | 1.05 | 0.292 |
| framing\_conditionFrameCode2:norm\_condition4:biospheric\_center | 0.11 | 0.05 | 2.34 | 0.019 |
| framing\_conditionFrameCode1:norm\_condition1:altruistic\_center | -0.06 | 0.25 | -0.23 | 0.815 |
| framing\_conditionFrameCode2:norm\_condition1:altruistic\_center | 0.19 | 0.21 | 0.92 | 0.355 |
| framing\_conditionFrameCode1:norm\_condition2:altruistic\_center | 0.26 | 0.14 | 1.86 | 0.064 |
| framing\_conditionFrameCode2:norm\_condition2:altruistic\_center | 0.00 | 0.11 | -0.02 | 0.982 |
| framing\_conditionFrameCode1:norm\_condition3:altruistic\_center | -0.14 | 0.11 | -1.37 | 0.172 |
| framing\_conditionFrameCode2:norm\_condition3:altruistic\_center | -0.06 | 0.08 | -0.74 | 0.460 |
| framing\_conditionFrameCode1:norm\_condition4:altruistic\_center | -0.02 | 0.08 | -0.20 | 0.838 |
| framing\_conditionFrameCode2:norm\_condition4:altruistic\_center | -0.08 | 0.06 | -1.46 | 0.143 |
| framing\_conditionFrameCode1:norm\_condition1:egoistic\_center | 0.06 | 0.18 | 0.36 | 0.721 |
| framing\_conditionFrameCode2:norm\_condition1:egoistic\_center | 0.12 | 0.14 | 0.90 | 0.368 |
| framing\_conditionFrameCode1:norm\_condition2:egoistic\_center | -0.02 | 0.09 | -0.26 | 0.797 |
| framing\_conditionFrameCode2:norm\_condition2:egoistic\_center | 0.17 | 0.08 | 2.12 | 0.034 |
| framing\_conditionFrameCode1:norm\_condition3:egoistic\_center | 0.08 | 0.06 | 1.19 | 0.234 |
| framing\_conditionFrameCode2:norm\_condition3:egoistic\_center | 0.02 | 0.06 | 0.45 | 0.655 |
| framing\_conditionFrameCode1:norm\_condition4:egoistic\_center | -0.06 | 0.05 | -1.21 | 0.228 |
| framing\_conditionFrameCode2:norm\_condition4:egoistic\_center | -0.04 | 0.04 | -0.89 | 0.373 |
| framing\_conditionFrameCode1:norm\_condition1:hedonic\_center | -0.09 | 0.22 | -0.39 | 0.694 |
| framing\_conditionFrameCode2:norm\_condition1:hedonic\_center | -0.19 | 0.19 | -0.99 | 0.323 |
| framing\_conditionFrameCode1:norm\_condition2:hedonic\_center | -0.12 | 0.12 | -1.07 | 0.287 |
| framing\_conditionFrameCode2:norm\_condition2:hedonic\_center | -0.01 | 0.10 | -0.06 | 0.953 |
| framing\_conditionFrameCode1:norm\_condition3:hedonic\_center | -0.11 | 0.09 | -1.20 | 0.231 |
| framing\_conditionFrameCode2:norm\_condition3:hedonic\_center | 0.00 | 0.07 | -0.01 | 0.992 |
| framing\_conditionFrameCode1:norm\_condition4:hedonic\_center | -0.01 | 0.06 | -0.13 | 0.895 |
| framing\_conditionFrameCode2:norm\_condition4:hedonic\_center | 0.04 | 0.05 | 0.72 | 0.470 |
| framing\_conditionFrameCode1:norm\_condition1:ingroup\_center | 0.19 | 0.13 | 1.45 | 0.147 |
| framing\_conditionFrameCode2:norm\_condition1:ingroup\_center | 0.03 | 0.11 | 0.30 | 0.763 |
| framing\_conditionFrameCode1:norm\_condition2:ingroup\_center | 0.12 | 0.08 | 1.56 | 0.120 |
| framing\_conditionFrameCode2:norm\_condition2:ingroup\_center | -0.03 | 0.06 | -0.49 | 0.627 |
| framing\_conditionFrameCode1:norm\_condition3:ingroup\_center | 0.03 | 0.05 | 0.64 | 0.526 |
| framing\_conditionFrameCode2:norm\_condition3:ingroup\_center | -0.03 | 0.05 | -0.61 | 0.541 |
| framing\_conditionFrameCode1:norm\_condition4:ingroup\_center | -0.09 | 0.04 | -2.17 | 0.030 |
| framing\_conditionFrameCode2:norm\_condition4:ingroup\_center | 0.04 | 0.04 | 1.14 | 0.254 |

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-68)

Table 6 Regression Results Using Imputed Data 5

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | 4.39 | [4.32, 4.45] | 128.39 | 1038 | < .001 |
| Framing conditionFrameCode1 | 0.03 | [-0.13, 0.19] | 0.38 | 1038 | .704 |
| Framing conditionFrameCode2 | 0.13 | [0.00, 0.27] | 1.92 | 1038 | .055 |
| Norm condition1 | -0.02 | [-0.12, 0.08] | -0.36 | 1038 | .720 |
| Norm condition2 | 0.03 | [-0.03, 0.09] | 0.98 | 1038 | .326 |
| Norm condition3 | -0.04 | [-0.08, 0.00] | -1.90 | 1038 | .058 |
| Norm condition4 | -0.02 | [-0.05, 0.02] | -0.91 | 1038 | .362 |
| Biospheric center | 0.36 | [0.27, 0.46] | 7.89 | 1038 | < .001 |
| Altruistic center | 0.07 | [-0.05, 0.20] | 1.17 | 1038 | .244 |
| Egoistic center | -0.30 | [-0.38, -0.21] | -6.93 | 1038 | < .001 |
| Hedonic center | -0.10 | [-0.20, 0.01] | -1.80 | 1038 | .072 |
| Ingroup center | 0.03 | [-0.03, 0.10] | 0.96 | 1038 | .337 |
| Self dec center | -0.11 | [-0.20, -0.03] | -2.65 | 1038 | .008 |
| Impress manag center | -0.02 | [-0.10, 0.07] | -0.42 | 1038 | .675 |
| Clothing center | 0.00 | [-0.08, 0.09] | 0.09 | 1038 | .924 |
| Gender1 | 0.15 | [0.01, 0.30] | 2.05 | 1038 | .041 |
| Age center | -0.03 | [-0.07, 0.00] | -1.79 | 1038 | .073 |
| Framing conditionFrameCode1 Norm condition1 | 0.20 | [-0.05, 0.45] | 1.58 | 1038 | .114 |
| Framing conditionFrameCode2 Norm condition1 | -0.10 | [-0.31, 0.12] | -0.88 | 1038 | .379 |
| Framing conditionFrameCode1 Norm condition2 | 0.00 | [-0.15, 0.15] | -0.01 | 1038 | .994 |
| Framing conditionFrameCode2 Norm condition2 | -0.04 | [-0.16, 0.08] | -0.64 | 1038 | .525 |
| Framing conditionFrameCode1 Norm condition3 | 0.02 | [-0.08, 0.12] | 0.42 | 1038 | .672 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.07, 0.11] | 0.45 | 1038 | .656 |
| Framing conditionFrameCode1 Norm condition4 | 0.03 | [-0.06, 0.11] | 0.60 | 1038 | .546 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.08, 0.05] | -0.40 | 1038 | .691 |
| Framing conditionFrameCode1 Biospheric center | -0.02 | [-0.26, 0.21] | -0.18 | 1038 | .856 |
| Framing conditionFrameCode2 Biospheric center | 0.06 | [-0.12, 0.24] | 0.63 | 1038 | .529 |
| Norm condition1 Biospheric center | -0.06 | [-0.20, 0.08] | -0.82 | 1038 | .410 |
| Norm condition2 Biospheric center | 0.08 | [0.00, 0.16] | 1.89 | 1038 | .059 |
| Norm condition3 Biospheric center | -0.05 | [-0.11, 0.01] | -1.72 | 1038 | .085 |
| Norm condition4 Biospheric center | -0.04 | [-0.09, 0.01] | -1.62 | 1038 | .105 |
| Framing conditionFrameCode1 Altruistic center | 0.01 | [-0.29, 0.32] | 0.07 | 1038 | .942 |
| Framing conditionFrameCode2 Altruistic center | -0.12 | [-0.37, 0.13] | -0.97 | 1038 | .333 |
| Norm condition1 Altruistic center | -0.11 | [-0.31, 0.08] | -1.14 | 1038 | .254 |
| Norm condition2 Altruistic center | -0.01 | [-0.12, 0.10] | -0.22 | 1038 | .825 |
| Norm condition3 Altruistic center | 0.03 | [-0.05, 0.11] | 0.66 | 1038 | .507 |
| Norm condition4 Altruistic center | 0.07 | [0.01, 0.12] | 2.29 | 1038 | .022 |
| Framing conditionFrameCode1 Egoistic center | -0.04 | [-0.24, 0.17] | -0.35 | 1038 | .725 |
| Framing conditionFrameCode2 Egoistic center | 0.05 | [-0.12, 0.22] | 0.56 | 1038 | .574 |
| Norm condition1 Egoistic center | 0.05 | [-0.08, 0.18] | 0.73 | 1038 | .463 |
| Norm condition2 Egoistic center | -0.02 | [-0.09, 0.05] | -0.56 | 1038 | .577 |
| Norm condition3 Egoistic center | 0.02 | [-0.03, 0.07] | 0.65 | 1038 | .513 |
| Norm condition4 Egoistic center | 0.01 | [-0.03, 0.06] | 0.68 | 1038 | .495 |
| Framing conditionFrameCode1 Hedonic center | -0.01 | [-0.27, 0.25] | -0.05 | 1038 | .958 |
| Framing conditionFrameCode2 Hedonic center | 0.16 | [-0.06, 0.38] | 1.42 | 1038 | .157 |
| Norm condition1 Hedonic center | 0.00 | [-0.18, 0.17] | -0.04 | 1038 | .971 |
| Norm condition2 Hedonic center | 0.07 | [-0.03, 0.16] | 1.36 | 1038 | .174 |
| Norm condition3 Hedonic center | -0.04 | [-0.11, 0.02] | -1.25 | 1038 | .210 |
| Norm condition4 Hedonic center | -0.05 | [-0.10, 0.00] | -1.87 | 1038 | .062 |
| Framing conditionFrameCode1 Ingroup center | 0.03 | [-0.14, 0.19] | 0.31 | 1038 | .758 |
| Framing conditionFrameCode2 Ingroup center | -0.06 | [-0.20, 0.08] | -0.87 | 1038 | .385 |
| Norm condition1 Ingroup center | 0.01 | [-0.09, 0.12] | 0.23 | 1038 | .816 |
| Norm condition2 Ingroup center | -0.01 | [-0.07, 0.05] | -0.44 | 1038 | .663 |
| Norm condition3 Ingroup center | 0.00 | [-0.04, 0.05] | 0.16 | 1038 | .873 |
| Norm condition4 Ingroup center | -0.01 | [-0.05, 0.02] | -0.90 | 1038 | .366 |
| Framing conditionFrameCode1 Norm condition1 Biospheric center | -0.01 | [-0.36, 0.34] | -0.06 | 1038 | .953 |
| Framing conditionFrameCode2 Norm condition1 Biospheric center | 0.01 | [-0.27, 0.30] | 0.10 | 1038 | .921 |
| Framing conditionFrameCode1 Norm condition2 Biospheric center | -0.14 | [-0.34, 0.07] | -1.29 | 1038 | .198 |
| Framing conditionFrameCode2 Norm condition2 Biospheric center | 0.11 | [-0.05, 0.28] | 1.34 | 1038 | .180 |
| Framing conditionFrameCode1 Norm condition3 Biospheric center | 0.15 | [0.00, 0.29] | 1.97 | 1038 | .050 |
| Framing conditionFrameCode2 Norm condition3 Biospheric center | 0.07 | [-0.04, 0.18] | 1.17 | 1038 | .240 |
| Framing conditionFrameCode1 Norm condition4 Biospheric center | 0.07 | [-0.06, 0.20] | 1.05 | 1038 | .292 |
| Framing conditionFrameCode2 Norm condition4 Biospheric center | 0.11 | [0.02, 0.20] | 2.34 | 1038 | .019 |
| Framing conditionFrameCode1 Norm condition1 Altruistic center | -0.06 | [-0.54, 0.43] | -0.23 | 1038 | .815 |
| Framing conditionFrameCode2 Norm condition1 Altruistic center | 0.19 | [-0.22, 0.60] | 0.92 | 1038 | .355 |
| Framing conditionFrameCode1 Norm condition2 Altruistic center | 0.26 | [-0.01, 0.53] | 1.86 | 1038 | .064 |
| Framing conditionFrameCode2 Norm condition2 Altruistic center | 0.00 | [-0.23, 0.22] | -0.02 | 1038 | .982 |
| Framing conditionFrameCode1 Norm condition3 Altruistic center | -0.14 | [-0.35, 0.06] | -1.37 | 1038 | .172 |
| Framing conditionFrameCode2 Norm condition3 Altruistic center | -0.06 | [-0.23, 0.10] | -0.74 | 1038 | .460 |
| Framing conditionFrameCode1 Norm condition4 Altruistic center | -0.02 | [-0.16, 0.13] | -0.20 | 1038 | .838 |
| Framing conditionFrameCode2 Norm condition4 Altruistic center | -0.08 | [-0.20, 0.03] | -1.46 | 1038 | .143 |
| Framing conditionFrameCode1 Norm condition1 Egoistic center | 0.06 | [-0.28, 0.41] | 0.36 | 1038 | .721 |
| Framing conditionFrameCode2 Norm condition1 Egoistic center | 0.12 | [-0.15, 0.40] | 0.90 | 1038 | .368 |
| Framing conditionFrameCode1 Norm condition2 Egoistic center | -0.02 | [-0.20, 0.15] | -0.26 | 1038 | .797 |
| Framing conditionFrameCode2 Norm condition2 Egoistic center | 0.17 | [0.01, 0.32] | 2.12 | 1038 | .034 |
| Framing conditionFrameCode1 Norm condition3 Egoistic center | 0.08 | [-0.05, 0.20] | 1.19 | 1038 | .234 |
| Framing conditionFrameCode2 Norm condition3 Egoistic center | 0.02 | [-0.08, 0.13] | 0.45 | 1038 | .655 |
| Framing conditionFrameCode1 Norm condition4 Egoistic center | -0.06 | [-0.17, 0.04] | -1.21 | 1038 | .228 |
| Framing conditionFrameCode2 Norm condition4 Egoistic center | -0.04 | [-0.12, 0.05] | -0.89 | 1038 | .373 |
| Framing conditionFrameCode1 Norm condition1 Hedonic center | -0.09 | [-0.52, 0.35] | -0.39 | 1038 | .694 |
| Framing conditionFrameCode2 Norm condition1 Hedonic center | -0.19 | [-0.56, 0.18] | -0.99 | 1038 | .323 |
| Framing conditionFrameCode1 Norm condition2 Hedonic center | -0.12 | [-0.35, 0.10] | -1.07 | 1038 | .287 |
| Framing conditionFrameCode2 Norm condition2 Hedonic center | -0.01 | [-0.21, 0.20] | -0.06 | 1038 | .953 |
| Framing conditionFrameCode1 Norm condition3 Hedonic center | -0.11 | [-0.28, 0.07] | -1.20 | 1038 | .231 |
| Framing conditionFrameCode2 Norm condition3 Hedonic center | 0.00 | [-0.14, 0.14] | -0.01 | 1038 | .992 |
| Framing conditionFrameCode1 Norm condition4 Hedonic center | -0.01 | [-0.13, 0.11] | -0.13 | 1038 | .895 |
| Framing conditionFrameCode2 Norm condition4 Hedonic center | 0.04 | [-0.06, 0.14] | 0.72 | 1038 | .470 |
| Framing conditionFrameCode1 Norm condition1 Ingroup center | 0.19 | [-0.07, 0.44] | 1.45 | 1038 | .147 |
| Framing conditionFrameCode2 Norm condition1 Ingroup center | 0.03 | [-0.19, 0.25] | 0.30 | 1038 | .763 |
| Framing conditionFrameCode1 Norm condition2 Ingroup center | 0.12 | [-0.03, 0.27] | 1.56 | 1038 | .120 |
| Framing conditionFrameCode2 Norm condition2 Ingroup center | -0.03 | [-0.16, 0.10] | -0.49 | 1038 | .627 |
| Framing conditionFrameCode1 Norm condition3 Ingroup center | 0.03 | [-0.07, 0.14] | 0.64 | 1038 | .526 |
| Framing conditionFrameCode2 Norm condition3 Ingroup center | -0.03 | [-0.12, 0.06] | -0.61 | 1038 | .541 |
| Framing conditionFrameCode1 Norm condition4 Ingroup center | -0.09 | [-0.17, -0.01] | -2.17 | 1038 | .030 |
| Framing conditionFrameCode2 Norm condition4 Ingroup center | 0.04 | [-0.03, 0.11] | 1.14 | 1038 | .254 |

*Note.* DV = Consumer Intentions

Standardized regression coefficients

APA summary of standardized coefficients

print\_summ\_std\_imp5 <- apa\_print(summ\_std\_imp5)  
  
apa\_table(print\_summ\_std\_imp5)

(#tab:unnamed-chunk-70)

\*\*

| Predictor |  | 95% CI |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Intercept | -0.02 | [-0.08, 0.03] | -0.76 | 1038 | .445 |
| Framing conditionFrameCode1 | 0.03 | [-0.11, 0.16] | 0.38 | 1038 | .704 |
| Framing conditionFrameCode2 | 0.11 | [0.00, 0.23] | 1.92 | 1038 | .055 |
| Norm condition1 | -0.02 | [-0.10, 0.07] | -0.36 | 1038 | .720 |
| Norm condition2 | 0.02 | [-0.02, 0.07] | 0.98 | 1038 | .326 |
| Norm condition3 | -0.03 | [-0.07, 0.00] | -1.90 | 1038 | .058 |
| Norm condition4 | -0.01 | [-0.04, 0.01] | -0.91 | 1038 | .362 |
| Scalebiospheric | 0.31 | [0.23, 0.38] | 7.89 | 1038 | < .001 |
| Scalealtruistic | 0.05 | [-0.03, 0.13] | 1.17 | 1038 | .244 |
| Scaleegoistic | -0.23 | [-0.29, -0.16] | -6.93 | 1038 | < .001 |
| Scalehedonic | -0.07 | [-0.14, 0.01] | -1.80 | 1038 | .072 |
| Scaleingroup identification | 0.03 | [-0.03, 0.08] | 0.96 | 1038 | .337 |
| Scaleself deceptive sdr | -0.08 | [-0.14, -0.02] | -2.65 | 1038 | .008 |
| Scaleimpress manag sdr | -0.01 | [-0.07, 0.05] | -0.42 | 1038 | .675 |
| Scaleclothing interest | 0.00 | [-0.06, 0.06] | 0.09 | 1038 | .924 |
| Gender1 | 0.13 | [0.01, 0.25] | 2.05 | 1038 | .041 |
| ScaleAge | -0.05 | [-0.11, 0.01] | -1.79 | 1038 | .073 |
| Framing conditionFrameCode1 Norm condition1 | 0.17 | [-0.04, 0.38] | 1.58 | 1038 | .114 |
| Framing conditionFrameCode2 Norm condition1 | -0.08 | [-0.26, 0.10] | -0.88 | 1038 | .379 |
| Framing conditionFrameCode1 Norm condition2 | 0.00 | [-0.13, 0.12] | -0.01 | 1038 | .994 |
| Framing conditionFrameCode2 Norm condition2 | -0.03 | [-0.14, 0.07] | -0.64 | 1038 | .525 |
| Framing conditionFrameCode1 Norm condition3 | 0.02 | [-0.07, 0.10] | 0.42 | 1038 | .672 |
| Framing conditionFrameCode2 Norm condition3 | 0.02 | [-0.06, 0.09] | 0.45 | 1038 | .656 |
| Framing conditionFrameCode1 Norm condition4 | 0.02 | [-0.05, 0.09] | 0.60 | 1038 | .546 |
| Framing conditionFrameCode2 Norm condition4 | -0.01 | [-0.07, 0.05] | -0.40 | 1038 | .691 |
| Framing conditionFrameCode1 Scalebiospheric | -0.02 | [-0.22, 0.18] | -0.18 | 1038 | .856 |
| Framing conditionFrameCode2 Scalebiospheric | 0.05 | [-0.10, 0.20] | 0.63 | 1038 | .529 |
| Norm condition1 Scalebiospheric | -0.05 | [-0.17, 0.07] | -0.82 | 1038 | .410 |
| Norm condition2 Scalebiospheric | 0.07 | [0.00, 0.14] | 1.89 | 1038 | .059 |
| Norm condition3 Scalebiospheric | -0.04 | [-0.09, 0.01] | -1.72 | 1038 | .085 |
| Norm condition4 Scalebiospheric | -0.03 | [-0.07, 0.01] | -1.62 | 1038 | .105 |
| Framing conditionFrameCode1 Scalealtruistic | 0.01 | [-0.20, 0.21] | 0.07 | 1038 | .942 |
| Framing conditionFrameCode2 Scalealtruistic | -0.08 | [-0.25, 0.08] | -0.97 | 1038 | .333 |
| Norm condition1 Scalealtruistic | -0.08 | [-0.21, 0.06] | -1.14 | 1038 | .254 |
| Norm condition2 Scalealtruistic | -0.01 | [-0.08, 0.07] | -0.22 | 1038 | .825 |
| Norm condition3 Scalealtruistic | 0.02 | [-0.04, 0.07] | 0.66 | 1038 | .507 |
| Norm condition4 Scalealtruistic | 0.05 | [0.01, 0.08] | 2.29 | 1038 | .022 |
| Framing conditionFrameCode1 Scaleegoistic | -0.03 | [-0.18, 0.13] | -0.35 | 1038 | .725 |
| Framing conditionFrameCode2 Scaleegoistic | 0.04 | [-0.09, 0.17] | 0.56 | 1038 | .574 |
| Norm condition1 Scaleegoistic | 0.04 | [-0.06, 0.14] | 0.73 | 1038 | .463 |
| Norm condition2 Scaleegoistic | -0.02 | [-0.07, 0.04] | -0.56 | 1038 | .577 |
| Norm condition3 Scaleegoistic | 0.01 | [-0.03, 0.05] | 0.65 | 1038 | .513 |
| Norm condition4 Scaleegoistic | 0.01 | [-0.02, 0.04] | 0.68 | 1038 | .495 |
| Framing conditionFrameCode1 Scalehedonic | 0.00 | [-0.18, 0.17] | -0.05 | 1038 | .958 |
| Framing conditionFrameCode2 Scalehedonic | 0.11 | [-0.04, 0.25] | 1.42 | 1038 | .157 |
| Norm condition1 Scalehedonic | 0.00 | [-0.12, 0.11] | -0.04 | 1038 | .971 |
| Norm condition2 Scalehedonic | 0.04 | [-0.02, 0.11] | 1.36 | 1038 | .174 |
| Norm condition3 Scalehedonic | -0.03 | [-0.08, 0.02] | -1.25 | 1038 | .210 |
| Norm condition4 Scalehedonic | -0.03 | [-0.06, 0.00] | -1.87 | 1038 | .062 |
| Framing conditionFrameCode1 Scaleingroup identification | 0.02 | [-0.12, 0.16] | 0.31 | 1038 | .758 |
| Framing conditionFrameCode2 Scaleingroup identification | -0.05 | [-0.17, 0.07] | -0.87 | 1038 | .385 |
| Norm condition1 Scaleingroup identification | 0.01 | [-0.08, 0.10] | 0.23 | 1038 | .816 |
| Norm condition2 Scaleingroup identification | -0.01 | [-0.06, 0.04] | -0.44 | 1038 | .663 |
| Norm condition3 Scaleingroup identification | 0.00 | [-0.03, 0.04] | 0.16 | 1038 | .873 |
| Norm condition4 Scaleingroup identification | -0.01 | [-0.04, 0.01] | -0.90 | 1038 | .366 |
| Framing conditionFrameCode1 Norm condition1 Scalebiospheric | -0.01 | [-0.30, 0.29] | -0.06 | 1038 | .953 |
| Framing conditionFrameCode2 Norm condition1 Scalebiospheric | 0.01 | [-0.23, 0.25] | 0.10 | 1038 | .921 |
| Framing conditionFrameCode1 Norm condition2 Scalebiospheric | -0.11 | [-0.29, 0.06] | -1.29 | 1038 | .198 |
| Framing conditionFrameCode2 Norm condition2 Scalebiospheric | 0.10 | [-0.04, 0.24] | 1.34 | 1038 | .180 |
| Framing conditionFrameCode1 Norm condition3 Scalebiospheric | 0.12 | [0.00, 0.25] | 1.97 | 1038 | .050 |
| Framing conditionFrameCode2 Norm condition3 Scalebiospheric | 0.06 | [-0.04, 0.15] | 1.17 | 1038 | .240 |
| Framing conditionFrameCode1 Norm condition4 Scalebiospheric | 0.06 | [-0.05, 0.17] | 1.05 | 1038 | .292 |
| Framing conditionFrameCode2 Norm condition4 Scalebiospheric | 0.09 | [0.02, 0.17] | 2.34 | 1038 | .019 |
| Framing conditionFrameCode1 Norm condition1 Scalealtruistic | -0.04 | [-0.37, 0.29] | -0.23 | 1038 | .815 |
| Framing conditionFrameCode2 Norm condition1 Scalealtruistic | 0.13 | [-0.15, 0.41] | 0.92 | 1038 | .355 |
| Framing conditionFrameCode1 Norm condition2 Scalealtruistic | 0.18 | [-0.01, 0.36] | 1.86 | 1038 | .064 |
| Framing conditionFrameCode2 Norm condition2 Scalealtruistic | 0.00 | [-0.15, 0.15] | -0.02 | 1038 | .982 |
| Framing conditionFrameCode1 Norm condition3 Scalealtruistic | -0.10 | [-0.24, 0.04] | -1.37 | 1038 | .172 |
| Framing conditionFrameCode2 Norm condition3 Scalealtruistic | -0.04 | [-0.16, 0.07] | -0.74 | 1038 | .460 |
| Framing conditionFrameCode1 Norm condition4 Scalealtruistic | -0.01 | [-0.11, 0.09] | -0.20 | 1038 | .838 |
| Framing conditionFrameCode2 Norm condition4 Scalealtruistic | -0.06 | [-0.13, 0.02] | -1.46 | 1038 | .143 |
| Framing conditionFrameCode1 Norm condition1 Scaleegoistic | 0.05 | [-0.22, 0.31] | 0.36 | 1038 | .721 |
| Framing conditionFrameCode2 Norm condition1 Scaleegoistic | 0.10 | [-0.11, 0.30] | 0.90 | 1038 | .368 |
| Framing conditionFrameCode1 Norm condition2 Scaleegoistic | -0.02 | [-0.15, 0.12] | -0.26 | 1038 | .797 |
| Framing conditionFrameCode2 Norm condition2 Scaleegoistic | 0.13 | [0.01, 0.25] | 2.12 | 1038 | .034 |
| Framing conditionFrameCode1 Norm condition3 Scaleegoistic | 0.06 | [-0.04, 0.16] | 1.19 | 1038 | .234 |
| Framing conditionFrameCode2 Norm condition3 Scaleegoistic | 0.02 | [-0.06, 0.10] | 0.45 | 1038 | .655 |
| Framing conditionFrameCode1 Norm condition4 Scaleegoistic | -0.05 | [-0.13, 0.03] | -1.21 | 1038 | .228 |
| Framing conditionFrameCode2 Norm condition4 Scaleegoistic | -0.03 | [-0.09, 0.04] | -0.89 | 1038 | .373 |
| Framing conditionFrameCode1 Norm condition1 Scalehedonic | -0.06 | [-0.35, 0.23] | -0.39 | 1038 | .694 |
| Framing conditionFrameCode2 Norm condition1 Scalehedonic | -0.12 | [-0.37, 0.12] | -0.99 | 1038 | .323 |
| Framing conditionFrameCode1 Norm condition2 Scalehedonic | -0.08 | [-0.24, 0.07] | -1.07 | 1038 | .287 |
| Framing conditionFrameCode2 Norm condition2 Scalehedonic | 0.00 | [-0.14, 0.13] | -0.06 | 1038 | .953 |
| Framing conditionFrameCode1 Norm condition3 Scalehedonic | -0.07 | [-0.19, 0.05] | -1.20 | 1038 | .231 |
| Framing conditionFrameCode2 Norm condition3 Scalehedonic | 0.00 | [-0.10, 0.09] | -0.01 | 1038 | .992 |
| Framing conditionFrameCode1 Norm condition4 Scalehedonic | -0.01 | [-0.09, 0.08] | -0.13 | 1038 | .895 |
| Framing conditionFrameCode2 Norm condition4 Scalehedonic | 0.03 | [-0.04, 0.09] | 0.72 | 1038 | .470 |
| Framing conditionFrameCode1 Norm condition1 Scaleingroup identification | 0.16 | [-0.06, 0.37] | 1.45 | 1038 | .147 |
| Framing conditionFrameCode2 Norm condition1 Scaleingroup identification | 0.03 | [-0.16, 0.22] | 0.30 | 1038 | .763 |
| Framing conditionFrameCode1 Norm condition2 Scaleingroup identification | 0.10 | [-0.03, 0.23] | 1.56 | 1038 | .120 |
| Framing conditionFrameCode2 Norm condition2 Scaleingroup identification | -0.03 | [-0.14, 0.08] | -0.49 | 1038 | .627 |
| Framing conditionFrameCode1 Norm condition3 Scaleingroup identification | 0.03 | [-0.06, 0.12] | 0.64 | 1038 | .526 |
| Framing conditionFrameCode2 Norm condition3 Scaleingroup identification | -0.02 | [-0.10, 0.05] | -0.61 | 1038 | .541 |
| Framing conditionFrameCode1 Norm condition4 Scaleingroup identification | -0.07 | [-0.14, -0.01] | -2.17 | 1038 | .030 |
| Framing conditionFrameCode2 Norm condition4 Scaleingroup identification | 0.03 | [-0.02, 0.09] | 1.14 | 1038 | .254 |

#### ANOVA summary

anova(mod\_mice\_imp5) %>%  
 knitr::kable(digits = c(1, 2, 2, 2, 3))

|  | Df | Sum Sq | Mean Sq | F value | Pr(>F) |
| --- | --- | --- | --- | --- | --- |
| framing\_condition | 2 | 4.69 | 2.35 | 2.05 | 0.130 |
| norm\_condition | 4 | 8.17 | 2.04 | 1.78 | 0.130 |
| biospheric\_center | 1 | 141.33 | 141.33 | 123.26 | 0.000 |
| altruistic\_center | 1 | 0.15 | 0.15 | 0.13 | 0.719 |
| egoistic\_center | 1 | 125.57 | 125.57 | 109.52 | 0.000 |
| hedonic\_center | 1 | 3.53 | 3.53 | 3.08 | 0.080 |
| ingroup\_center | 1 | 4.71 | 4.71 | 4.11 | 0.043 |
| self\_dec\_center | 1 | 14.18 | 14.18 | 12.36 | 0.000 |
| impress\_manag\_center | 1 | 0.01 | 0.01 | 0.01 | 0.921 |
| clothing\_center | 1 | 0.71 | 0.71 | 0.62 | 0.431 |
| Gender | 1 | 6.16 | 6.16 | 5.37 | 0.021 |
| Age\_center | 1 | 4.90 | 4.90 | 4.28 | 0.039 |
| framing\_condition:norm\_condition | 8 | 5.54 | 0.69 | 0.60 | 0.775 |
| framing\_condition:biospheric\_center | 2 | 0.49 | 0.25 | 0.22 | 0.806 |
| norm\_condition:biospheric\_center | 4 | 14.37 | 3.59 | 3.13 | 0.014 |
| framing\_condition:altruistic\_center | 2 | 0.38 | 0.19 | 0.17 | 0.846 |
| norm\_condition:altruistic\_center | 4 | 2.86 | 0.72 | 0.62 | 0.646 |
| framing\_condition:egoistic\_center | 2 | 1.17 | 0.59 | 0.51 | 0.599 |
| norm\_condition:egoistic\_center | 4 | 1.48 | 0.37 | 0.32 | 0.862 |
| framing\_condition:hedonic\_center | 2 | 2.08 | 1.04 | 0.91 | 0.404 |
| norm\_condition:hedonic\_center | 4 | 9.33 | 2.33 | 2.03 | 0.088 |
| framing\_condition:ingroup\_center | 2 | 1.38 | 0.69 | 0.60 | 0.547 |
| norm\_condition:ingroup\_center | 4 | 0.48 | 0.12 | 0.10 | 0.981 |
| framing\_condition:norm\_condition:biospheric\_center | 8 | 14.06 | 1.76 | 1.53 | 0.141 |
| framing\_condition:norm\_condition:altruistic\_center | 8 | 12.44 | 1.55 | 1.36 | 0.212 |
| framing\_condition:norm\_condition:egoistic\_center | 8 | 10.43 | 1.30 | 1.14 | 0.335 |
| framing\_condition:norm\_condition:hedonic\_center | 8 | 4.68 | 0.58 | 0.51 | 0.850 |
| framing\_condition:norm\_condition:ingroup\_center | 8 | 12.75 | 1.59 | 1.39 | 0.196 |
| Residuals | 1038 | 1190.15 | 1.15 | NA | NA |

Effect Size

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

|  | eta.sq | eta.sq.part |
| --- | --- | --- |
| framing\_condition | 0.003 | 0.005 |
| norm\_condition | 0.004 | 0.006 |
| biospheric\_center | 0.051 | 0.064 |
| altruistic\_center | 0.001 | 0.001 |
| egoistic\_center | 0.041 | 0.053 |
| hedonic\_center | 0.003 | 0.004 |
| ingroup\_center | 0.001 | 0.001 |
| self\_dec\_center | 0.005 | 0.007 |
| impress\_manag\_center | 0.000 | 0.000 |
| clothing\_center | 0.000 | 0.000 |
| Gender | 0.003 | 0.004 |
| Age\_center | 0.002 | 0.003 |
| framing\_condition:norm\_condition | 0.003 | 0.004 |
| framing\_condition:biospheric\_center | 0.000 | 0.001 |
| norm\_condition:biospheric\_center | 0.006 | 0.009 |
| framing\_condition:altruistic\_center | 0.001 | 0.001 |
| norm\_condition:altruistic\_center | 0.005 | 0.007 |
| framing\_condition:egoistic\_center | 0.000 | 0.001 |
| norm\_condition:egoistic\_center | 0.001 | 0.002 |
| framing\_condition:hedonic\_center | 0.002 | 0.002 |
| norm\_condition:hedonic\_center | 0.005 | 0.007 |
| framing\_condition:ingroup\_center | 0.001 | 0.001 |
| norm\_condition:ingroup\_center | 0.001 | 0.001 |
| framing\_condition:norm\_condition:biospheric\_center | 0.011 | 0.014 |
| framing\_condition:norm\_condition:altruistic\_center | 0.007 | 0.009 |
| framing\_condition:norm\_condition:egoistic\_center | 0.007 | 0.009 |
| framing\_condition:norm\_condition:hedonic\_center | 0.003 | 0.004 |
| framing\_condition:norm\_condition:ingroup\_center | 0.008 | 0.011 |

## 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")

Text Settings

text\_settings <- theme(text = element\_text(size = 20)) +  
 theme(plot.title = element\_text(size = 20, face = 'bold')) +  
 theme(axis.title.x = element\_text(face = 'bold')) +  
 theme(axis.title.y = element\_text(face = 'bold')) +  
 theme(axis.text.x = element\_text(size = 20)) +  
 theme(axis.text.y = element\_text(size = 20)) +  
 theme(axis.ticks = element\_blank())

### 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

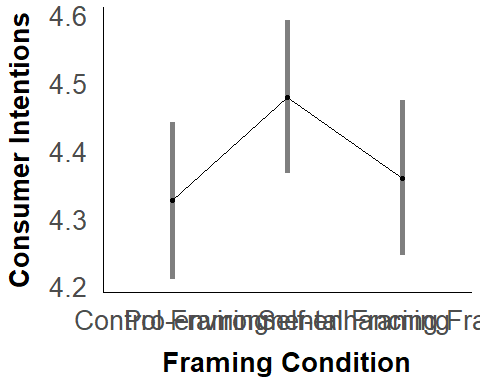
frame\_means <- emmeans(mod\_mice, pairwise ~ framing\_condition, adjust = "none")  
  
frame\_means$emmeans %>%  
 knitr::kable(digits = 2)

| framing\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | 4.33 | 0.06 | 1038 | 4.21 | 4.44 |
| pro\_env\_framing | 4.48 | 0.06 | 1038 | 4.37 | 4.59 |
| self\_enh\_framing | 4.36 | 0.06 | 1038 | 4.25 | 4.47 |

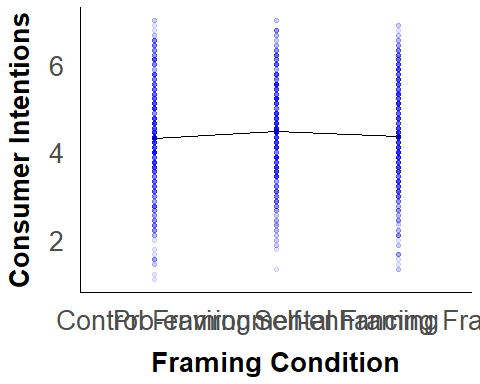
frame\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_framing - pro\_env\_framing | -0.153 | 0.081 | 1038 | -1.878 | 0.061 |
| control\_framing - self\_enh\_framing | -0.033 | 0.082 | 1038 | -0.408 | 0.683 |
| pro\_env\_framing - self\_enh\_framing | 0.119 | 0.081 | 1038 | 1.473 | 0.141 |

# without data overlaid  
emmip(mod\_mice, ~ framing\_condition, CIs = TRUE, CIarg = list(lwd = 2, 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() + text\_settings



# 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() + text\_settings



* 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) %>% knitr::kable(digits = 2)

| contrast | effect.size | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| (control\_framing - pro\_env\_framing) | -0.14 | 0.08 | 1038 | -0.29 | 0.01 |
| (control\_framing - self\_enh\_framing) | -0.03 | 0.08 | 1038 | -0.18 | 0.12 |
| (pro\_env\_framing - self\_enh\_framing) | 0.11 | 0.08 | 1038 | -0.04 | 0.26 |

### 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:

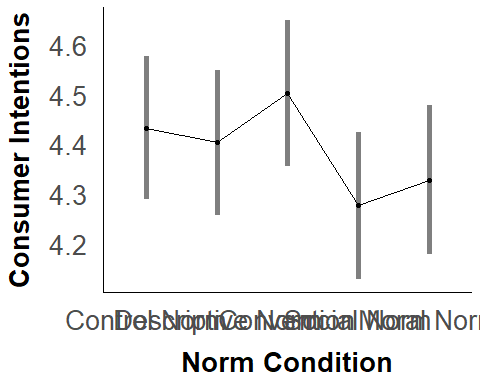
norm\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition, adjust = "none")  
  
norm\_means$emmeans %>%   
 knitr::kable(digits = 2)

| norm\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | 4.43 | 0.07 | 1038 | 4.29 | 4.58 |
| descriptive\_norm | 4.40 | 0.07 | 1038 | 4.26 | 4.55 |
| convention\_norm | 4.50 | 0.07 | 1038 | 4.36 | 4.65 |
| social\_norm | 4.28 | 0.08 | 1038 | 4.13 | 4.42 |
| moral\_norm | 4.33 | 0.08 | 1038 | 4.18 | 4.48 |

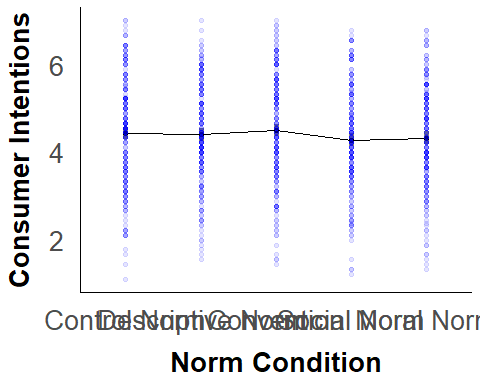
norm\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | 0.030 | 0.103 | 1038 | 0.290 | 0.772 |
| control\_norm - convention\_norm | -0.069 | 0.104 | 1038 | -0.668 | 0.504 |
| control\_norm - social\_norm | 0.156 | 0.104 | 1038 | 1.503 | 0.133 |
| control\_norm - moral\_norm | 0.105 | 0.105 | 1038 | 1.003 | 0.316 |
| descriptive\_norm - convention\_norm | -0.099 | 0.104 | 1038 | -0.951 | 0.342 |
| descriptive\_norm - social\_norm | 0.126 | 0.105 | 1038 | 1.206 | 0.228 |
| descriptive\_norm - moral\_norm | 0.075 | 0.105 | 1038 | 0.713 | 0.476 |
| convention\_norm - social\_norm | 0.226 | 0.105 | 1038 | 2.149 | 0.032 |
| convention\_norm - moral\_norm | 0.174 | 0.106 | 1038 | 1.645 | 0.100 |
| social\_norm - moral\_norm | -0.051 | 0.106 | 1038 | -0.483 | 0.629 |

# without data overlaid  
emmip(mod\_mice, ~ norm\_condition, CIs = TRUE, CIarg = list(lwd = 2, 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() + text\_settings



# 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() + text\_settings



* 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) %>%  
 knitr::kable(digits = 2)

| contrast | effect.size | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| (control\_norm - descriptive\_norm) | 0.03 | 0.1 | 1038 | -0.16 | 0.22 |
| (control\_norm - convention\_norm) | -0.06 | 0.1 | 1038 | -0.26 | 0.13 |
| (control\_norm - social\_norm) | 0.15 | 0.1 | 1038 | -0.04 | 0.34 |
| (control\_norm - moral\_norm) | 0.10 | 0.1 | 1038 | -0.09 | 0.29 |
| (descriptive\_norm - convention\_norm) | -0.09 | 0.1 | 1038 | -0.28 | 0.10 |
| (descriptive\_norm - social\_norm) | 0.12 | 0.1 | 1038 | -0.07 | 0.31 |
| (descriptive\_norm - moral\_norm) | 0.07 | 0.1 | 1038 | -0.12 | 0.26 |
| (convention\_norm - social\_norm) | 0.21 | 0.1 | 1038 | 0.02 | 0.40 |
| (convention\_norm - moral\_norm) | 0.16 | 0.1 | 1038 | -0.03 | 0.36 |
| (social\_norm - moral\_norm) | -0.05 | 0.1 | 1038 | -0.24 | 0.15 |

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:

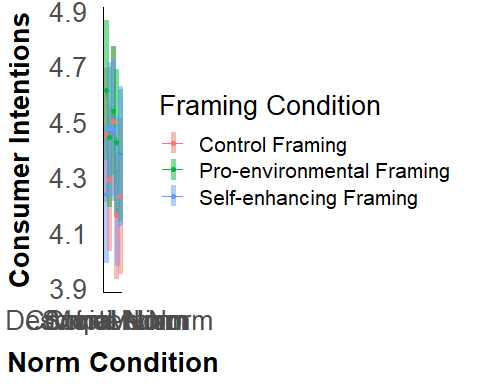
cell\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition | framing\_condition, adjust = "none")  
  
cell\_means$emmeans %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm | control\_framing | 4.45 | 0.12 | 1038 | 4.21 | 4.69 |
| descriptive\_norm | control\_framing | 4.29 | 0.13 | 1038 | 4.03 | 4.55 |
| convention\_norm | control\_framing | 4.50 | 0.14 | 1038 | 4.23 | 4.77 |
| social\_norm | control\_framing | 4.16 | 0.12 | 1038 | 3.93 | 4.39 |
| moral\_norm | control\_framing | 4.23 | 0.14 | 1038 | 3.95 | 4.51 |
| control\_norm | pro\_env\_framing | 4.61 | 0.13 | 1038 | 4.36 | 4.86 |
| descriptive\_norm | pro\_env\_framing | 4.44 | 0.13 | 1038 | 4.19 | 4.69 |
| convention\_norm | pro\_env\_framing | 4.54 | 0.12 | 1038 | 4.30 | 4.77 |
| social\_norm | pro\_env\_framing | 4.42 | 0.13 | 1038 | 4.16 | 4.69 |
| moral\_norm | pro\_env\_framing | 4.38 | 0.12 | 1038 | 4.14 | 4.62 |
| control\_norm | self\_enh\_framing | 4.24 | 0.13 | 1038 | 3.99 | 4.49 |
| descriptive\_norm | self\_enh\_framing | 4.47 | 0.12 | 1038 | 4.23 | 4.71 |
| convention\_norm | self\_enh\_framing | 4.47 | 0.13 | 1038 | 4.21 | 4.72 |
| social\_norm | self\_enh\_framing | 4.24 | 0.14 | 1038 | 3.98 | 4.51 |
| moral\_norm | self\_enh\_framing | 4.38 | 0.13 | 1038 | 4.12 | 4.63 |

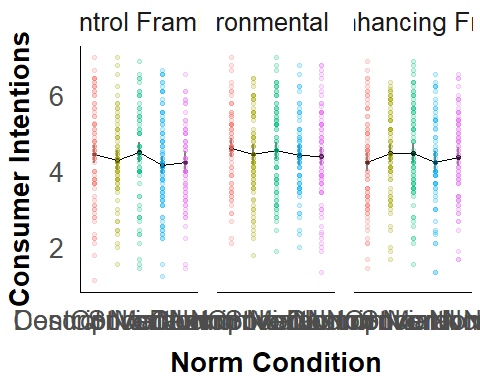
cell\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | framing\_condition | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | control\_framing | 0.157 | 0.181 | 1038 | 0.868 | 0.386 |
| control\_norm - convention\_norm | control\_framing | -0.052 | 0.184 | 1038 | -0.280 | 0.779 |
| control\_norm - social\_norm | control\_framing | 0.289 | 0.169 | 1038 | 1.708 | 0.088 |
| control\_norm - moral\_norm | control\_framing | 0.219 | 0.189 | 1038 | 1.159 | 0.247 |
| descriptive\_norm - convention\_norm | control\_framing | -0.209 | 0.191 | 1038 | -1.095 | 0.274 |
| descriptive\_norm - social\_norm | control\_framing | 0.132 | 0.176 | 1038 | 0.749 | 0.454 |
| descriptive\_norm - moral\_norm | control\_framing | 0.062 | 0.195 | 1038 | 0.318 | 0.751 |
| convention\_norm - social\_norm | control\_framing | 0.341 | 0.180 | 1038 | 1.897 | 0.058 |
| convention\_norm - moral\_norm | control\_framing | 0.271 | 0.198 | 1038 | 1.366 | 0.172 |
| social\_norm - moral\_norm | control\_framing | -0.070 | 0.184 | 1038 | -0.380 | 0.704 |
| control\_norm - descriptive\_norm | pro\_env\_framing | 0.169 | 0.181 | 1038 | 0.931 | 0.352 |
| control\_norm - convention\_norm | pro\_env\_framing | 0.074 | 0.174 | 1038 | 0.426 | 0.670 |
| control\_norm - social\_norm | pro\_env\_framing | 0.187 | 0.185 | 1038 | 1.011 | 0.312 |
| control\_norm - moral\_norm | pro\_env\_framing | 0.234 | 0.176 | 1038 | 1.330 | 0.184 |
| descriptive\_norm - convention\_norm | pro\_env\_framing | -0.094 | 0.174 | 1038 | -0.542 | 0.588 |
| descriptive\_norm - social\_norm | pro\_env\_framing | 0.019 | 0.185 | 1038 | 0.100 | 0.920 |
| descriptive\_norm - moral\_norm | pro\_env\_framing | 0.065 | 0.176 | 1038 | 0.372 | 0.710 |
| convention\_norm - social\_norm | pro\_env\_framing | 0.113 | 0.178 | 1038 | 0.635 | 0.526 |
| convention\_norm - moral\_norm | pro\_env\_framing | 0.160 | 0.168 | 1038 | 0.949 | 0.343 |
| social\_norm - moral\_norm | pro\_env\_framing | 0.047 | 0.179 | 1038 | 0.261 | 0.794 |
| control\_norm - descriptive\_norm | self\_enh\_framing | -0.236 | 0.175 | 1038 | -1.346 | 0.179 |
| control\_norm - convention\_norm | self\_enh\_framing | -0.230 | 0.182 | 1038 | -1.269 | 0.205 |
| control\_norm - social\_norm | self\_enh\_framing | -0.007 | 0.187 | 1038 | -0.039 | 0.969 |
| control\_norm - moral\_norm | self\_enh\_framing | -0.138 | 0.180 | 1038 | -0.764 | 0.445 |
| descriptive\_norm - convention\_norm | self\_enh\_framing | 0.006 | 0.177 | 1038 | 0.031 | 0.975 |
| descriptive\_norm - social\_norm | self\_enh\_framing | 0.229 | 0.183 | 1038 | 1.249 | 0.212 |
| descriptive\_norm - moral\_norm | self\_enh\_framing | 0.098 | 0.177 | 1038 | 0.554 | 0.580 |
| convention\_norm - social\_norm | self\_enh\_framing | 0.223 | 0.188 | 1038 | 1.185 | 0.236 |
| convention\_norm - moral\_norm | self\_enh\_framing | 0.093 | 0.184 | 1038 | 0.504 | 0.615 |
| social\_norm - moral\_norm | self\_enh\_framing | -0.130 | 0.188 | 1038 | -0.695 | 0.487 |

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ norm\_condition, CIs = TRUE, CIarg = list(lwd = 2, 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() + text\_settings



# 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() + text\_settings



* 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) %>%  
 knitr::kable(digits = 2)

| contrast | framing\_condition | effect.size | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| (control\_norm - descriptive\_norm) | control\_framing | 0.15 | 0.17 | 1038 | -0.19 | 0.48 |
| (control\_norm - convention\_norm) | control\_framing | -0.05 | 0.17 | 1038 | -0.39 | 0.29 |
| (control\_norm - social\_norm) | control\_framing | 0.27 | 0.16 | 1038 | -0.04 | 0.58 |
| (control\_norm - moral\_norm) | control\_framing | 0.21 | 0.18 | 1038 | -0.14 | 0.55 |
| (descriptive\_norm - convention\_norm) | control\_framing | -0.20 | 0.18 | 1038 | -0.55 | 0.15 |
| (descriptive\_norm - social\_norm) | control\_framing | 0.12 | 0.17 | 1038 | -0.20 | 0.45 |
| (descriptive\_norm - moral\_norm) | control\_framing | 0.06 | 0.18 | 1038 | -0.30 | 0.42 |
| (convention\_norm - social\_norm) | control\_framing | 0.32 | 0.17 | 1038 | -0.01 | 0.65 |
| (convention\_norm - moral\_norm) | control\_framing | 0.25 | 0.19 | 1038 | -0.11 | 0.62 |
| (social\_norm - moral\_norm) | control\_framing | -0.07 | 0.17 | 1038 | -0.40 | 0.27 |
| (control\_norm - descriptive\_norm) | pro\_env\_framing | 0.16 | 0.17 | 1038 | -0.17 | 0.49 |
| (control\_norm - convention\_norm) | pro\_env\_framing | 0.07 | 0.16 | 1038 | -0.25 | 0.39 |
| (control\_norm - social\_norm) | pro\_env\_framing | 0.18 | 0.17 | 1038 | -0.16 | 0.52 |
| (control\_norm - moral\_norm) | pro\_env\_framing | 0.22 | 0.16 | 1038 | -0.10 | 0.54 |
| (descriptive\_norm - convention\_norm) | pro\_env\_framing | -0.09 | 0.16 | 1038 | -0.41 | 0.23 |
| (descriptive\_norm - social\_norm) | pro\_env\_framing | 0.02 | 0.17 | 1038 | -0.32 | 0.36 |
| (descriptive\_norm - moral\_norm) | pro\_env\_framing | 0.06 | 0.16 | 1038 | -0.26 | 0.38 |
| (convention\_norm - social\_norm) | pro\_env\_framing | 0.11 | 0.17 | 1038 | -0.22 | 0.43 |
| (convention\_norm - moral\_norm) | pro\_env\_framing | 0.15 | 0.16 | 1038 | -0.16 | 0.46 |
| (social\_norm - moral\_norm) | pro\_env\_framing | 0.04 | 0.17 | 1038 | -0.29 | 0.37 |
| (control\_norm - descriptive\_norm) | self\_enh\_framing | -0.22 | 0.16 | 1038 | -0.54 | 0.10 |
| (control\_norm - convention\_norm) | self\_enh\_framing | -0.22 | 0.17 | 1038 | -0.55 | 0.12 |
| (control\_norm - social\_norm) | self\_enh\_framing | -0.01 | 0.17 | 1038 | -0.35 | 0.34 |
| (control\_norm - moral\_norm) | self\_enh\_framing | -0.13 | 0.17 | 1038 | -0.46 | 0.20 |
| (descriptive\_norm - convention\_norm) | self\_enh\_framing | 0.01 | 0.17 | 1038 | -0.32 | 0.33 |
| (descriptive\_norm - social\_norm) | self\_enh\_framing | 0.21 | 0.17 | 1038 | -0.12 | 0.55 |
| (descriptive\_norm - moral\_norm) | self\_enh\_framing | 0.09 | 0.17 | 1038 | -0.23 | 0.42 |
| (convention\_norm - social\_norm) | self\_enh\_framing | 0.21 | 0.18 | 1038 | -0.14 | 0.55 |
| (convention\_norm - moral\_norm) | self\_enh\_framing | 0.09 | 0.17 | 1038 | -0.25 | 0.42 |
| (social\_norm - moral\_norm) | self\_enh\_framing | -0.12 | 0.18 | 1038 | -0.47 | 0.22 |

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 %>%   
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm | control\_framing | 4.45 | 0.12 | 1038 | 4.21 | 4.69 |
| control\_norm | pro\_env\_framing | 4.61 | 0.13 | 1038 | 4.36 | 4.86 |
| control\_norm | self\_enh\_framing | 4.24 | 0.13 | 1038 | 3.99 | 4.49 |

control\_norm\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm control\_framing - control\_norm pro\_env\_framing | -0.162 | 0.178 | 1038 | -0.914 | 0.361 |
| control\_norm control\_framing - control\_norm self\_enh\_framing | 0.212 | 0.177 | 1038 | 1.197 | 0.232 |
| control\_norm pro\_env\_framing - control\_norm self\_enh\_framing | 0.374 | 0.180 | 1038 | 2.078 | 0.038 |

eff\_size(control\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool) %>%  
 knitr::kable(digits = 2)

| contrast | effect.size | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| (control\_norm control\_framing - control\_norm pro\_env\_framing) | -0.15 | 0.17 | 1038 | -0.48 | 0.17 |
| (control\_norm control\_framing - control\_norm self\_enh\_framing) | 0.20 | 0.17 | 1038 | -0.13 | 0.52 |
| (control\_norm pro\_env\_framing - control\_norm self\_enh\_framing) | 0.35 | 0.17 | 1038 | 0.02 | 0.68 |

# 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 %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| descriptive\_norm | control\_framing | 4.29 | 0.13 | 1038 | 4.03 | 4.55 |
| descriptive\_norm | pro\_env\_framing | 4.44 | 0.13 | 1038 | 4.19 | 4.69 |
| descriptive\_norm | self\_enh\_framing | 4.47 | 0.12 | 1038 | 4.23 | 4.71 |

descr\_norm\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| descriptive\_norm control\_framing - descriptive\_norm pro\_env\_framing | -0.151 | 0.185 | 1038 | -0.818 | 0.414 |
| descriptive\_norm control\_framing - descriptive\_norm self\_enh\_framing | -0.181 | 0.179 | 1038 | -1.012 | 0.312 |
| descriptive\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing | -0.030 | 0.177 | 1038 | -0.172 | 0.864 |

eff\_size(descr\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool) %>%  
 knitr::kable(digits = 2)

| contrast | effect.size | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| (descriptive\_norm control\_framing - descriptive\_norm pro\_env\_framing) | -0.14 | 0.17 | 1038 | -0.48 | 0.20 |
| (descriptive\_norm control\_framing - descriptive\_norm self\_enh\_framing) | -0.17 | 0.17 | 1038 | -0.50 | 0.16 |
| (descriptive\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing) | -0.03 | 0.17 | 1038 | -0.35 | 0.30 |

# 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 %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| convention\_norm | control\_framing | 4.50 | 0.14 | 1038 | 4.23 | 4.77 |
| convention\_norm | pro\_env\_framing | 4.54 | 0.12 | 1038 | 4.30 | 4.77 |
| convention\_norm | self\_enh\_framing | 4.47 | 0.13 | 1038 | 4.21 | 4.72 |

conv\_norm\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| convention\_norm control\_framing - convention\_norm pro\_env\_framing | -0.037 | 0.181 | 1038 | -0.202 | 0.840 |
| convention\_norm control\_framing - convention\_norm self\_enh\_framing | 0.033 | 0.189 | 1038 | 0.174 | 0.862 |
| convention\_norm pro\_env\_framing - convention\_norm self\_enh\_framing | 0.069 | 0.176 | 1038 | 0.395 | 0.693 |

eff\_size(conv\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool) %>%  
 knitr::kable(digits = 2)

| contrast | effect.size | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| (convention\_norm control\_framing - convention\_norm pro\_env\_framing) | -0.03 | 0.17 | 1038 | -0.37 | 0.30 |
| (convention\_norm control\_framing - convention\_norm self\_enh\_framing) | 0.03 | 0.18 | 1038 | -0.32 | 0.38 |
| (convention\_norm pro\_env\_framing - convention\_norm self\_enh\_framing) | 0.07 | 0.16 | 1038 | -0.26 | 0.39 |

# 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 %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| social\_norm | control\_framing | 4.16 | 0.12 | 1038 | 3.93 | 4.39 |
| social\_norm | pro\_env\_framing | 4.42 | 0.13 | 1038 | 4.16 | 4.69 |
| social\_norm | self\_enh\_framing | 4.24 | 0.14 | 1038 | 3.98 | 4.51 |

soc\_norm\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| social\_norm control\_framing - social\_norm pro\_env\_framing | -0.265 | 0.177 | 1038 | -1.493 | 0.136 |
| social\_norm control\_framing - social\_norm self\_enh\_framing | -0.085 | 0.179 | 1038 | -0.474 | 0.636 |
| social\_norm pro\_env\_framing - social\_norm self\_enh\_framing | 0.180 | 0.191 | 1038 | 0.938 | 0.348 |

eff\_size(soc\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool) %>%  
 knitr::kable(digits = 2)

| contrast | effect.size | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| (social\_norm control\_framing - social\_norm pro\_env\_framing) | -0.25 | 0.17 | 1038 | -0.57 | 0.08 |
| (social\_norm control\_framing - social\_norm self\_enh\_framing) | -0.08 | 0.17 | 1038 | -0.41 | 0.25 |
| (social\_norm pro\_env\_framing - social\_norm self\_enh\_framing) | 0.17 | 0.18 | 1038 | -0.18 | 0.52 |

# 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 %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| moral\_norm | control\_framing | 4.23 | 0.14 | 1038 | 3.95 | 4.51 |
| moral\_norm | pro\_env\_framing | 4.38 | 0.12 | 1038 | 4.14 | 4.62 |
| moral\_norm | self\_enh\_framing | 4.38 | 0.13 | 1038 | 4.12 | 4.63 |

moral\_norm\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| moral\_norm control\_framing - moral\_norm pro\_env\_framing | -0.148 | 0.187 | 1038 | -0.790 | 0.430 |
| moral\_norm control\_framing - moral\_norm self\_enh\_framing | -0.145 | 0.193 | 1038 | -0.753 | 0.451 |
| moral\_norm pro\_env\_framing - moral\_norm self\_enh\_framing | 0.002 | 0.176 | 1038 | 0.013 | 0.989 |

eff\_size(moral\_norm\_means, sigma = sigma\_pool, edf = df\_resid\_pool) %>%  
 knitr::kable(digits = 2)

| contrast | effect.size | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| (moral\_norm control\_framing - moral\_norm pro\_env\_framing) | -0.14 | 0.18 | 1038 | -0.48 | 0.21 |
| (moral\_norm control\_framing - moral\_norm self\_enh\_framing) | -0.14 | 0.18 | 1038 | -0.49 | 0.22 |
| (moral\_norm pro\_env\_framing - moral\_norm self\_enh\_framing) | 0.00 | 0.17 | 1038 | -0.32 | 0.33 |

### 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 %>%  
 knitr::kable(digits = 2)

| norm\_condition | biospheric\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | 0.45 | 0.10 | 1038 | 0.26 | 0.64 |
| descriptive\_norm | 0.31 | 0.10 | 1038 | 0.11 | 0.51 |
| convention\_norm | 0.61 | 0.10 | 1038 | 0.41 | 0.81 |
| social\_norm | 0.26 | 0.10 | 1038 | 0.06 | 0.46 |
| moral\_norm | 0.19 | 0.11 | 1038 | -0.04 | 0.42 |

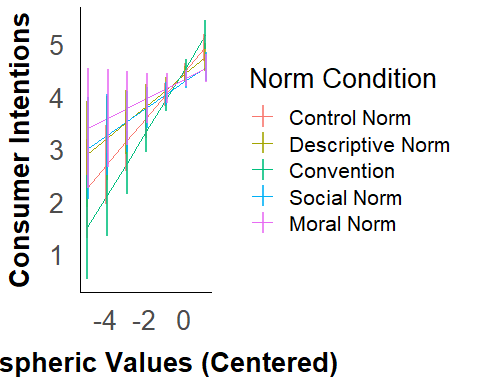
bio\_norm\_contr <- contrast(bio\_norm\_means, "pairwise")  
  
bio\_norm\_contr %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | 0.139 | 0.142 | 1038 | 0.981 | 0.864 |
| control\_norm - convention\_norm | -0.163 | 0.142 | 1038 | -1.150 | 0.780 |
| control\_norm - social\_norm | 0.188 | 0.142 | 1038 | 1.325 | 0.676 |
| control\_norm - moral\_norm | 0.256 | 0.150 | 1038 | 1.706 | 0.431 |
| descriptive\_norm - convention\_norm | -0.302 | 0.145 | 1038 | -2.083 | 0.228 |
| descriptive\_norm - social\_norm | 0.048 | 0.145 | 1038 | 0.334 | 0.997 |
| descriptive\_norm - moral\_norm | 0.117 | 0.154 | 1038 | 0.761 | 0.942 |
| convention\_norm - social\_norm | 0.351 | 0.144 | 1038 | 2.434 | 0.107 |
| convention\_norm - moral\_norm | 0.419 | 0.154 | 1038 | 2.720 | 0.052 |
| social\_norm - moral\_norm | 0.069 | 0.154 | 1038 | 0.445 | 0.992 |

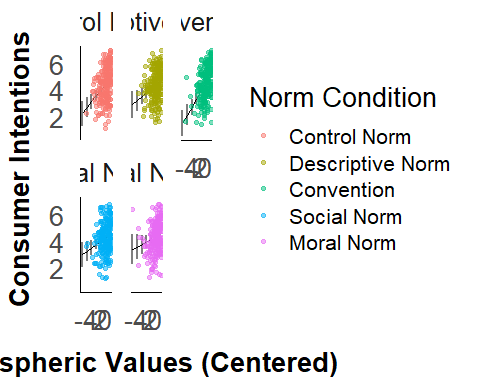
# On a single graph  
describe(average\_df$biospheric\_center)

## 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 1.59 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() + text\_settings



# 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() + text\_settings



* 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 %>%  
 knitr::kable(digits = 2)

| norm\_condition | biospheric\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | 0.45 | 0.10 | 1038 | 0.26 | 0.64 |
| descriptive\_norm | 0.31 | 0.10 | 1038 | 0.11 | 0.51 |
| convention\_norm | 0.61 | 0.10 | 1038 | 0.41 | 0.81 |
| social\_norm | 0.26 | 0.10 | 1038 | 0.06 | 0.46 |
| moral\_norm | 0.19 | 0.11 | 1038 | -0.04 | 0.42 |

bio\_norm\_slopes$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | 0.139 | 0.142 | 1038 | 0.981 | 0.327 |
| control\_norm - convention\_norm | -0.163 | 0.142 | 1038 | -1.150 | 0.250 |
| control\_norm - social\_norm | 0.188 | 0.142 | 1038 | 1.325 | 0.186 |
| control\_norm - moral\_norm | 0.256 | 0.150 | 1038 | 1.706 | 0.088 |
| descriptive\_norm - convention\_norm | -0.302 | 0.145 | 1038 | -2.083 | 0.037 |
| descriptive\_norm - social\_norm | 0.048 | 0.145 | 1038 | 0.334 | 0.739 |
| descriptive\_norm - moral\_norm | 0.117 | 0.154 | 1038 | 0.761 | 0.447 |
| convention\_norm - social\_norm | 0.351 | 0.144 | 1038 | 2.434 | 0.015 |
| convention\_norm - moral\_norm | 0.419 | 0.154 | 1038 | 2.720 | 0.007 |
| social\_norm - moral\_norm | 0.069 | 0.154 | 1038 | 0.445 | 0.657 |

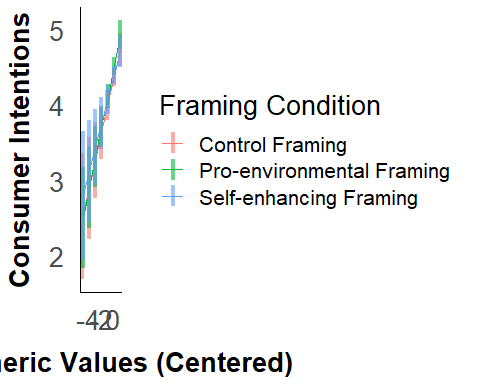
The relationship between biospheric values and consumer intentions was significantly stronger in the convention norm condition (b = 0.61) compared to the moral norm condition (b = 0.20), t(1039) = -2.69, p = .007, and in the convention norm condition compared to the social norm condition (b = 0.26),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

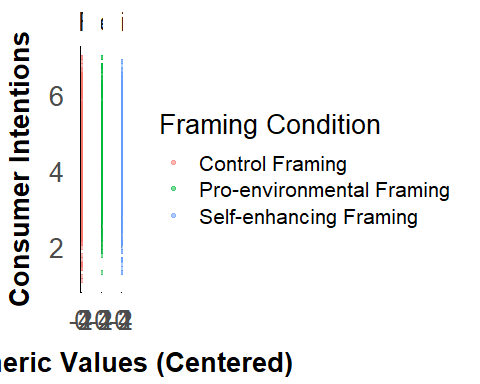
bio\_frame\_slopes <- emtrends(mod\_mice, ~framing\_condition, var = "biospheric\_center", adjust = "none")  
  
bio\_frame\_slopes %>%   
 knitr::kable(digits = 2)

| framing\_condition | biospheric\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | 0.37 | 0.09 | 1038 | 0.20 | 0.53 |
| pro\_env\_framing | 0.40 | 0.07 | 1038 | 0.27 | 0.54 |
| self\_enh\_framing | 0.32 | 0.09 | 1038 | 0.15 | 0.49 |

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ biospheric\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.5, alpha = 0.6), 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() + text\_settings



# 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() + text\_settings



* 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 %>%  
 knitr::kable(digits = 2)

| framing\_condition | biospheric\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | 0.37 | 0.09 | 1038 | 0.20 | 0.53 |
| pro\_env\_framing | 0.40 | 0.07 | 1038 | 0.27 | 0.54 |
| self\_enh\_framing | 0.32 | 0.09 | 1038 | 0.15 | 0.49 |

bio\_frame\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_framing - pro\_env\_framing | -0.037 | 0.110 | 1038 | -0.336 | 0.737 |
| control\_framing - self\_enh\_framing | 0.049 | 0.123 | 1038 | 0.398 | 0.690 |
| pro\_env\_framing - self\_enh\_framing | 0.086 | 0.111 | 1038 | 0.770 | 0.441 |

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

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

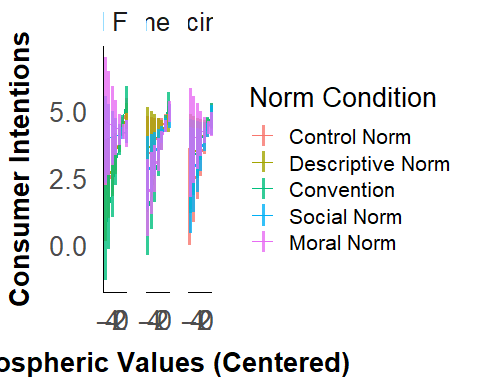
bio\_frame\_norm\_trends <- emtrends(mod\_mice, pairwise~norm\_condition | framing\_condition, var = "biospheric\_center", adjust = "none")  
  
bio\_frame\_norm\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | biospheric\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm | control\_framing | 0.57 | 0.16 | 1038 | 0.26 | 0.88 |
| descriptive\_norm | control\_framing | 0.47 | 0.19 | 1038 | 0.08 | 0.85 |
| convention\_norm | control\_framing | 0.83 | 0.19 | 1038 | 0.46 | 1.20 |
| social\_norm | control\_framing | 0.05 | 0.17 | 1038 | -0.28 | 0.38 |
| moral\_norm | control\_framing | -0.08 | 0.24 | 1038 | -0.55 | 0.39 |
| control\_norm | pro\_env\_framing | 0.27 | 0.16 | 1038 | -0.04 | 0.58 |
| descriptive\_norm | pro\_env\_framing | 0.18 | 0.16 | 1038 | -0.14 | 0.49 |
| convention\_norm | pro\_env\_framing | 0.68 | 0.16 | 1038 | 0.36 | 1.00 |
| social\_norm | pro\_env\_framing | 0.35 | 0.14 | 1038 | 0.07 | 0.64 |
| moral\_norm | pro\_env\_framing | 0.54 | 0.15 | 1038 | 0.25 | 0.83 |
| control\_norm | self\_enh\_framing | 0.50 | 0.19 | 1038 | 0.13 | 0.87 |
| descriptive\_norm | self\_enh\_framing | 0.28 | 0.18 | 1038 | -0.08 | 0.64 |
| convention\_norm | self\_enh\_framing | 0.32 | 0.18 | 1038 | -0.04 | 0.67 |
| social\_norm | self\_enh\_framing | 0.37 | 0.21 | 1038 | -0.03 | 0.78 |
| moral\_norm | self\_enh\_framing | 0.11 | 0.20 | 1038 | -0.28 | 0.51 |

bio\_frame\_norm\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | framing\_condition | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | control\_framing | 0.102 | 0.250 | 1038 | 0.408 | 0.684 |
| control\_norm - convention\_norm | control\_framing | -0.263 | 0.244 | 1038 | -1.078 | 0.281 |
| control\_norm - social\_norm | control\_framing | 0.520 | 0.229 | 1038 | 2.271 | 0.023 |
| control\_norm - moral\_norm | control\_framing | 0.646 | 0.285 | 1038 | 2.264 | 0.024 |
| descriptive\_norm - convention\_norm | control\_framing | -0.365 | 0.270 | 1038 | -1.355 | 0.176 |
| descriptive\_norm - social\_norm | control\_framing | 0.418 | 0.259 | 1038 | 1.615 | 0.107 |
| descriptive\_norm - moral\_norm | control\_framing | 0.544 | 0.307 | 1038 | 1.770 | 0.077 |
| convention\_norm - social\_norm | control\_framing | 0.783 | 0.250 | 1038 | 3.128 | 0.002 |
| convention\_norm - moral\_norm | control\_framing | 0.909 | 0.302 | 1038 | 3.008 | 0.003 |
| social\_norm - moral\_norm | control\_framing | 0.126 | 0.290 | 1038 | 0.434 | 0.664 |
| control\_norm - descriptive\_norm | pro\_env\_framing | 0.095 | 0.225 | 1038 | 0.421 | 0.674 |
| control\_norm - convention\_norm | pro\_env\_framing | -0.413 | 0.229 | 1038 | -1.807 | 0.071 |
| control\_norm - social\_norm | pro\_env\_framing | -0.085 | 0.214 | 1038 | -0.398 | 0.690 |
| control\_norm - moral\_norm | pro\_env\_framing | -0.266 | 0.217 | 1038 | -1.227 | 0.220 |
| descriptive\_norm - convention\_norm | pro\_env\_framing | -0.507 | 0.229 | 1038 | -2.220 | 0.027 |
| descriptive\_norm - social\_norm | pro\_env\_framing | -0.180 | 0.214 | 1038 | -0.841 | 0.401 |
| descriptive\_norm - moral\_norm | pro\_env\_framing | -0.361 | 0.216 | 1038 | -1.667 | 0.096 |
| convention\_norm - social\_norm | pro\_env\_framing | 0.328 | 0.218 | 1038 | 1.504 | 0.133 |
| convention\_norm - moral\_norm | pro\_env\_framing | 0.147 | 0.221 | 1038 | 0.665 | 0.506 |
| social\_norm - moral\_norm | pro\_env\_framing | -0.181 | 0.206 | 1038 | -0.878 | 0.380 |
| control\_norm - descriptive\_norm | self\_enh\_framing | 0.222 | 0.266 | 1038 | 0.834 | 0.405 |
| control\_norm - convention\_norm | self\_enh\_framing | 0.187 | 0.263 | 1038 | 0.713 | 0.476 |
| control\_norm - social\_norm | self\_enh\_framing | 0.128 | 0.282 | 1038 | 0.454 | 0.650 |
| control\_norm - moral\_norm | self\_enh\_framing | 0.389 | 0.276 | 1038 | 1.411 | 0.159 |
| descriptive\_norm - convention\_norm | self\_enh\_framing | -0.035 | 0.256 | 1038 | -0.135 | 0.893 |
| descriptive\_norm - social\_norm | self\_enh\_framing | -0.094 | 0.275 | 1038 | -0.341 | 0.733 |
| descriptive\_norm - moral\_norm | self\_enh\_framing | 0.167 | 0.270 | 1038 | 0.618 | 0.536 |
| convention\_norm - social\_norm | self\_enh\_framing | -0.059 | 0.276 | 1038 | -0.214 | 0.830 |
| convention\_norm - moral\_norm | self\_enh\_framing | 0.202 | 0.272 | 1038 | 0.741 | 0.459 |
| social\_norm - moral\_norm | self\_enh\_framing | 0.261 | 0.291 | 1038 | 0.895 | 0.371 |

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ biospheric\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



# 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:

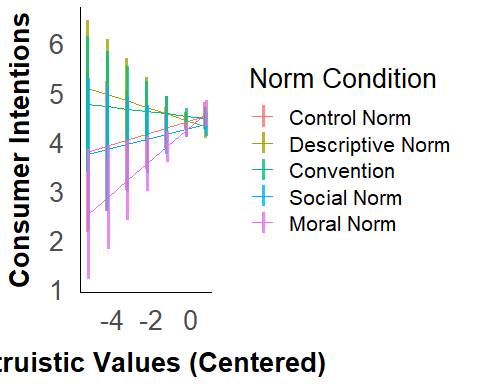
emtrends(mod\_mice, ~norm\_condition, var = "altruistic\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| norm\_condition | altruistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | 0.12 | 0.16 | 1038 | -0.19 | 0.43 |
| descriptive\_norm | -0.13 | 0.13 | 1038 | -0.39 | 0.13 |
| convention\_norm | -0.05 | 0.13 | 1038 | -0.31 | 0.21 |
| social\_norm | 0.10 | 0.15 | 1038 | -0.19 | 0.39 |
| moral\_norm | 0.34 | 0.13 | 1038 | 0.09 | 0.60 |

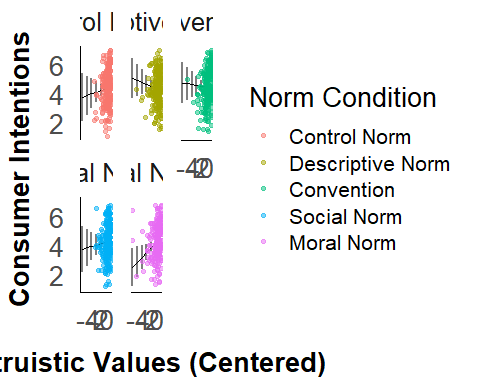
# On a single graph  
describe(average\_df$altruistic\_center)

## vars n mean sd median trimmed mad min max range skew kurtosis se  
## X1 1 1133 0 0.8 0.29 0.12 0.74 -5.21 0.79 6 -1.91 6.1 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 = 1.2, 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() + text\_settings



# 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() + text\_settings



* 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?

alt\_norm\_trends <- emtrends(mod\_mice, pairwise~norm\_condition, var = "altruistic\_center", adjust = "none")  
  
alt\_norm\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| norm\_condition | altruistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | 0.12 | 0.16 | 1038 | -0.19 | 0.43 |
| descriptive\_norm | -0.13 | 0.13 | 1038 | -0.39 | 0.13 |
| convention\_norm | -0.05 | 0.13 | 1038 | -0.31 | 0.21 |
| social\_norm | 0.10 | 0.15 | 1038 | -0.19 | 0.39 |
| moral\_norm | 0.34 | 0.13 | 1038 | 0.09 | 0.60 |

alt\_norm\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | 0.255 | 0.202 | 1038 | 1.261 | 0.208 |
| control\_norm - convention\_norm | 0.174 | 0.205 | 1038 | 0.847 | 0.397 |
| control\_norm - social\_norm | 0.023 | 0.216 | 1038 | 0.104 | 0.917 |
| control\_norm - moral\_norm | -0.220 | 0.202 | 1038 | -1.091 | 0.275 |
| descriptive\_norm - convention\_norm | -0.081 | 0.186 | 1038 | -0.434 | 0.664 |
| descriptive\_norm - social\_norm | -0.232 | 0.198 | 1038 | -1.175 | 0.240 |
| descriptive\_norm - moral\_norm | -0.475 | 0.184 | 1038 | -2.586 | 0.010 |
| convention\_norm - social\_norm | -0.151 | 0.198 | 1038 | -0.764 | 0.445 |
| convention\_norm - moral\_norm | -0.394 | 0.185 | 1038 | -2.130 | 0.033 |
| social\_norm - moral\_norm | -0.243 | 0.196 | 1038 | -1.238 | 0.216 |

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.

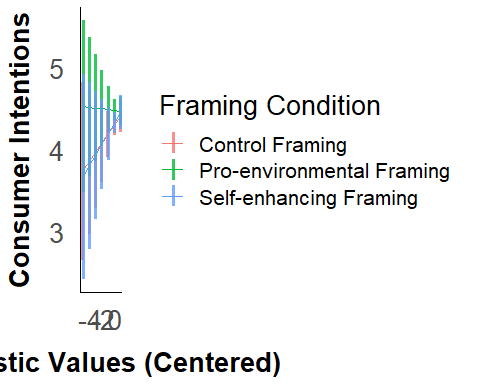
The relationship between altruistic values and consumer intentions was also significantly stronger in the moral norm condition (b = 0.36) compared to the convention norm condition (b = -0.05), t(1039) = -2.17, p = .031.

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

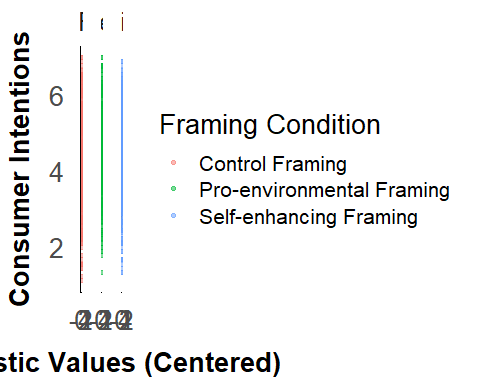
emtrends(mod\_mice, ~framing\_condition, var = "altruistic\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| framing\_condition | altruistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | 0.11 | 0.11 | 1038 | -0.10 | 0.32 |
| pro\_env\_framing | -0.01 | 0.10 | 1038 | -0.21 | 0.19 |
| self\_enh\_framing | 0.13 | 0.12 | 1038 | -0.11 | 0.37 |

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ altruistic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



# 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() + text\_settings



* 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?

alt\_frame\_trends <- emtrends(mod\_mice, pairwise~framing\_condition, var = "altruistic\_center", adjust = "none")  
  
alt\_frame\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| framing\_condition | altruistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | 0.11 | 0.11 | 1038 | -0.10 | 0.32 |
| pro\_env\_framing | -0.01 | 0.10 | 1038 | -0.21 | 0.19 |
| self\_enh\_framing | 0.13 | 0.12 | 1038 | -0.11 | 0.37 |

alt\_frame\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_framing - pro\_env\_framing | 0.121 | 0.144 | 1038 | 0.839 | 0.402 |
| control\_framing - self\_enh\_framing | -0.019 | 0.159 | 1038 | -0.121 | 0.903 |
| pro\_env\_framing - self\_enh\_framing | -0.140 | 0.155 | 1038 | -0.905 | 0.366 |

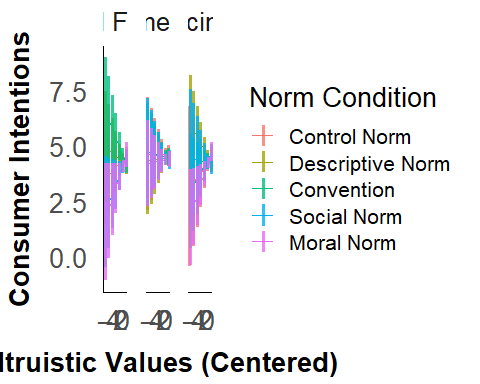
No, the difference between any two slopes was not significant.

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

emtrends(mod\_mice, ~norm\_condition | framing\_condition, var = "altruistic\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | altruistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm | control\_framing | 0.18 | 0.20 | 1038 | -0.21 | 0.56 |
| descriptive\_norm | control\_framing | -0.13 | 0.24 | 1038 | -0.61 | 0.35 |
| convention\_norm | control\_framing | -0.40 | 0.23 | 1038 | -0.85 | 0.05 |
| social\_norm | control\_framing | 0.40 | 0.24 | 1038 | -0.06 | 0.87 |
| moral\_norm | control\_framing | 0.50 | 0.27 | 1038 | -0.02 | 1.02 |
| control\_norm | pro\_env\_framing | -0.01 | 0.25 | 1038 | -0.49 | 0.47 |
| descriptive\_norm | pro\_env\_framing | 0.02 | 0.23 | 1038 | -0.42 | 0.47 |
| convention\_norm | pro\_env\_framing | -0.04 | 0.21 | 1038 | -0.45 | 0.38 |
| social\_norm | pro\_env\_framing | -0.06 | 0.23 | 1038 | -0.51 | 0.39 |
| moral\_norm | pro\_env\_framing | 0.03 | 0.19 | 1038 | -0.33 | 0.40 |
| control\_norm | self\_enh\_framing | 0.20 | 0.35 | 1038 | -0.48 | 0.88 |
| descriptive\_norm | self\_enh\_framing | -0.29 | 0.21 | 1038 | -0.70 | 0.13 |
| convention\_norm | self\_enh\_framing | 0.29 | 0.24 | 1038 | -0.19 | 0.77 |
| social\_norm | self\_enh\_framing | -0.04 | 0.30 | 1038 | -0.62 | 0.54 |
| moral\_norm | self\_enh\_framing | 0.50 | 0.21 | 1038 | 0.08 | 0.91 |

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ altruistic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



* 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:

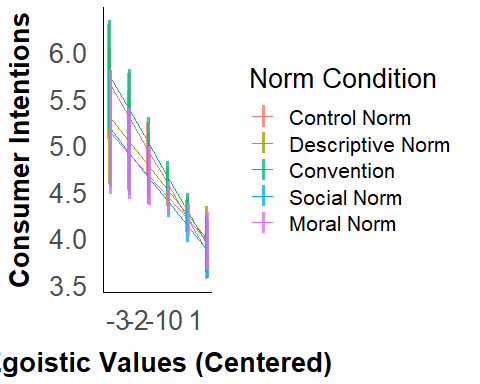
emtrends(mod\_mice, ~norm\_condition, var = "egoistic\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| norm\_condition | egoistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | -0.36 | 0.09 | 1038 | -0.54 | -0.19 |
| descriptive\_norm | -0.26 | 0.10 | 1038 | -0.47 | -0.06 |
| convention\_norm | -0.36 | 0.09 | 1038 | -0.53 | -0.19 |
| social\_norm | -0.26 | 0.09 | 1038 | -0.44 | -0.08 |
| moral\_norm | -0.24 | 0.09 | 1038 | -0.42 | -0.05 |

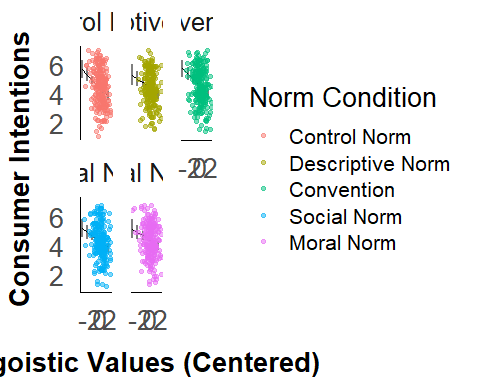
# On a single graph  
describe(average\_df$egoistic\_center)

## 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 -0.39 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 = 1.2, 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() + text\_settings



# 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() + text\_settings



* 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?

ego\_norm\_trends <- emtrends(mod\_mice, pairwise~norm\_condition, var = "egoistic\_center", adjust = "none")  
  
ego\_norm\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| norm\_condition | egoistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | -0.36 | 0.09 | 1038 | -0.54 | -0.19 |
| descriptive\_norm | -0.26 | 0.10 | 1038 | -0.47 | -0.06 |
| convention\_norm | -0.36 | 0.09 | 1038 | -0.53 | -0.19 |
| social\_norm | -0.26 | 0.09 | 1038 | -0.44 | -0.08 |
| moral\_norm | -0.24 | 0.09 | 1038 | -0.42 | -0.05 |

ego\_norm\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | -0.099 | 0.139 | 1038 | -0.717 | 0.474 |
| control\_norm - convention\_norm | -0.001 | 0.124 | 1038 | -0.005 | 0.996 |
| control\_norm - social\_norm | -0.102 | 0.127 | 1038 | -0.801 | 0.423 |
| control\_norm - moral\_norm | -0.127 | 0.130 | 1038 | -0.980 | 0.327 |
| descriptive\_norm - convention\_norm | 0.099 | 0.134 | 1038 | 0.736 | 0.462 |
| descriptive\_norm - social\_norm | -0.002 | 0.138 | 1038 | -0.015 | 0.988 |
| descriptive\_norm - moral\_norm | -0.028 | 0.140 | 1038 | -0.200 | 0.842 |
| convention\_norm - social\_norm | -0.101 | 0.123 | 1038 | -0.818 | 0.414 |
| convention\_norm - moral\_norm | -0.127 | 0.126 | 1038 | -1.006 | 0.315 |
| social\_norm - moral\_norm | -0.026 | 0.129 | 1038 | -0.199 | 0.842 |

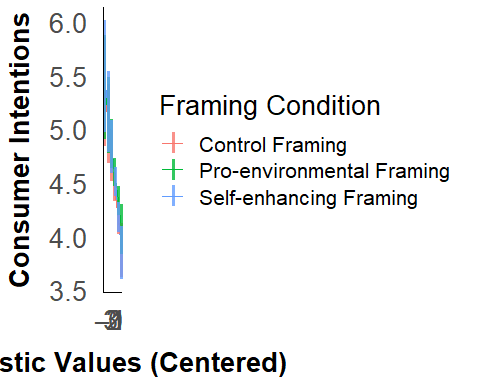
No, the difference between any two slopes was not significant.

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

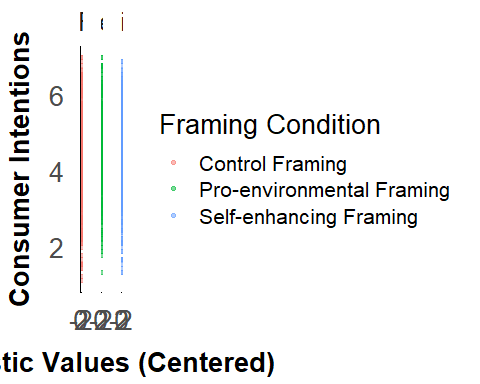
emtrends(mod\_mice, ~framing\_condition, var = "egoistic\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| framing\_condition | egoistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | -0.30 | 0.07 | 1038 | -0.44 | -0.15 |
| pro\_env\_framing | -0.27 | 0.07 | 1038 | -0.40 | -0.13 |
| self\_enh\_framing | -0.33 | 0.07 | 1038 | -0.47 | -0.18 |

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ egoistic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



# 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() + text\_settings



* 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?

ego\_frame\_trends <- emtrends(mod\_mice, pairwise~framing\_condition, var = "egoistic\_center", adjust = "none")  
  
ego\_frame\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| framing\_condition | egoistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | -0.30 | 0.07 | 1038 | -0.44 | -0.15 |
| pro\_env\_framing | -0.27 | 0.07 | 1038 | -0.40 | -0.13 |
| self\_enh\_framing | -0.33 | 0.07 | 1038 | -0.47 | -0.18 |

ego\_frame\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_framing - pro\_env\_framing | -0.030 | 0.100 | 1038 | -0.306 | 0.760 |
| control\_framing - self\_enh\_framing | 0.033 | 0.103 | 1038 | 0.317 | 0.752 |
| pro\_env\_framing - self\_enh\_framing | 0.063 | 0.100 | 1038 | 0.628 | 0.530 |

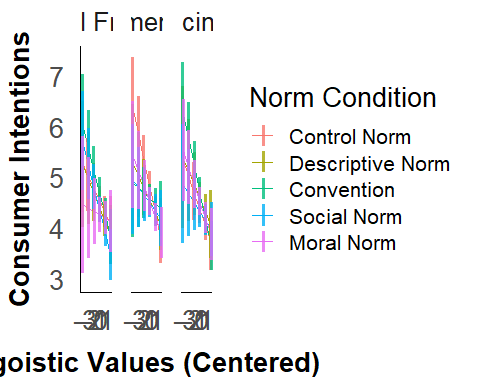
No, the difference between any two slopes was not significant.

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

emtrends(mod\_mice, ~norm\_condition | framing\_condition, var = "egoistic\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | egoistic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm | control\_framing | -0.24 | 0.15 | 1038 | -0.53 | 0.05 |
| descriptive\_norm | control\_framing | -0.28 | 0.18 | 1038 | -0.62 | 0.07 |
| convention\_norm | control\_framing | -0.44 | 0.15 | 1038 | -0.73 | -0.16 |
| social\_norm | control\_framing | -0.45 | 0.14 | 1038 | -0.73 | -0.17 |
| moral\_norm | control\_framing | -0.07 | 0.19 | 1038 | -0.44 | 0.31 |
| control\_norm | pro\_env\_framing | -0.52 | 0.14 | 1038 | -0.79 | -0.24 |
| descriptive\_norm | pro\_env\_framing | -0.24 | 0.16 | 1038 | -0.56 | 0.07 |
| convention\_norm | pro\_env\_framing | -0.11 | 0.16 | 1038 | -0.42 | 0.21 |
| social\_norm | pro\_env\_framing | -0.15 | 0.16 | 1038 | -0.46 | 0.16 |
| moral\_norm | pro\_env\_framing | -0.31 | 0.15 | 1038 | -0.60 | -0.02 |
| control\_norm | self\_enh\_framing | -0.33 | 0.17 | 1038 | -0.67 | 0.01 |
| descriptive\_norm | self\_enh\_framing | -0.27 | 0.20 | 1038 | -0.67 | 0.13 |
| convention\_norm | self\_enh\_framing | -0.54 | 0.13 | 1038 | -0.80 | -0.27 |
| social\_norm | self\_enh\_framing | -0.18 | 0.16 | 1038 | -0.50 | 0.14 |
| moral\_norm | self\_enh\_framing | -0.33 | 0.14 | 1038 | -0.62 | -0.05 |

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ egoistic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



* 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:

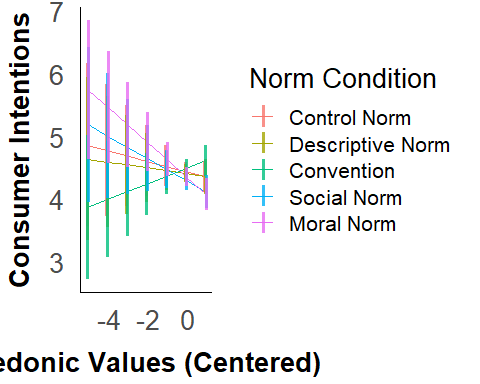
emtrends(mod\_mice, ~norm\_condition, var = "hedonic\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| norm\_condition | hedonic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | -0.08 | 0.13 | 1038 | -0.33 | 0.16 |
| descriptive\_norm | -0.05 | 0.13 | 1038 | -0.30 | 0.21 |
| convention\_norm | 0.12 | 0.11 | 1038 | -0.10 | 0.35 |
| social\_norm | -0.18 | 0.12 | 1038 | -0.42 | 0.06 |
| moral\_norm | -0.28 | 0.11 | 1038 | -0.49 | -0.06 |

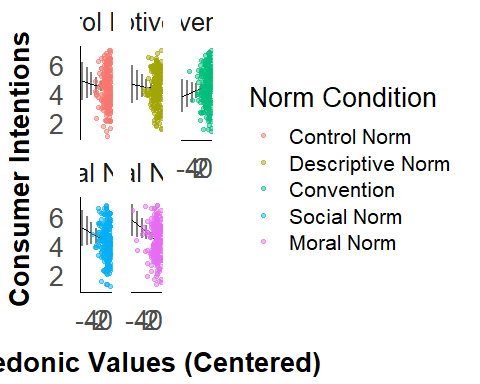
# On a single graph  
describe(average\_df$hedonic\_center)

## 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 -1.45 3.69 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 = 1.2, 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() + text\_settings



# 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() + text\_settings



* 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?

hed\_norm\_trends <- emtrends(mod\_mice, pairwise~norm\_condition, var = "hedonic\_center", adjust = "none")  
  
hed\_norm\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| norm\_condition | hedonic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | -0.08 | 0.13 | 1038 | -0.33 | 0.16 |
| descriptive\_norm | -0.05 | 0.13 | 1038 | -0.30 | 0.21 |
| convention\_norm | 0.12 | 0.11 | 1038 | -0.10 | 0.35 |
| social\_norm | -0.18 | 0.12 | 1038 | -0.42 | 0.06 |
| moral\_norm | -0.28 | 0.11 | 1038 | -0.49 | -0.06 |

hed\_norm\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | -0.038 | 0.180 | 1038 | -0.209 | 0.834 |
| control\_norm - convention\_norm | -0.208 | 0.170 | 1038 | -1.221 | 0.222 |
| control\_norm - social\_norm | 0.094 | 0.176 | 1038 | 0.534 | 0.593 |
| control\_norm - moral\_norm | 0.193 | 0.167 | 1038 | 1.156 | 0.248 |
| descriptive\_norm - convention\_norm | -0.170 | 0.173 | 1038 | -0.985 | 0.325 |
| descriptive\_norm - social\_norm | 0.132 | 0.179 | 1038 | 0.738 | 0.460 |
| descriptive\_norm - moral\_norm | 0.230 | 0.170 | 1038 | 1.355 | 0.176 |
| convention\_norm - social\_norm | 0.302 | 0.167 | 1038 | 1.810 | 0.071 |
| convention\_norm - moral\_norm | 0.400 | 0.158 | 1038 | 2.530 | 0.012 |
| social\_norm - moral\_norm | 0.098 | 0.164 | 1038 | 0.601 | 0.548 |

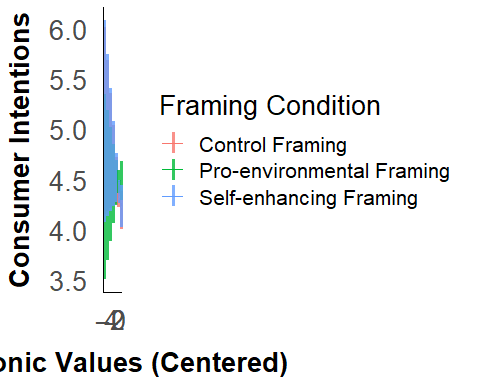
There was a significant difference in the relationship between hedonic values and consumer intentions between the convention norm condition (b = 0.12) and the moral norm condition (b = -0.30), t(1039) = 2.66, p = .008.

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

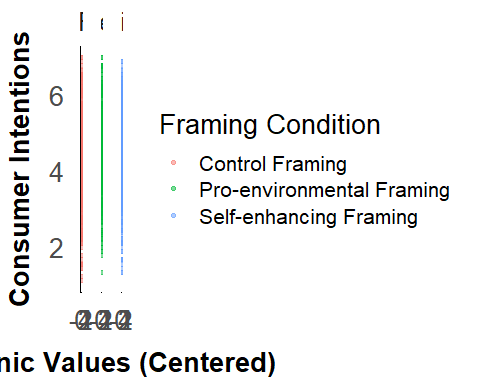
emtrends(mod\_mice, ~framing\_condition, var = "hedonic\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| framing\_condition | hedonic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | -0.15 | 0.09 | 1038 | -0.33 | 0.03 |
| pro\_env\_framing | 0.01 | 0.09 | 1038 | -0.17 | 0.19 |
| self\_enh\_framing | -0.14 | 0.10 | 1038 | -0.34 | 0.05 |

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ hedonic\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



# 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() + text\_settings



* 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?

hed\_frame\_trends <- emtrends(mod\_mice, pairwise~framing\_condition, var = "hedonic\_center", adjust = "none")  
  
hed\_frame\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| framing\_condition | hedonic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | -0.15 | 0.09 | 1038 | -0.33 | 0.03 |
| pro\_env\_framing | 0.01 | 0.09 | 1038 | -0.17 | 0.19 |
| self\_enh\_framing | -0.14 | 0.10 | 1038 | -0.34 | 0.05 |

hed\_frame\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_framing - pro\_env\_framing | -0.157 | 0.129 | 1038 | -1.219 | 0.223 |
| control\_framing - self\_enh\_framing | -0.007 | 0.134 | 1038 | -0.053 | 0.958 |
| pro\_env\_framing - self\_enh\_framing | 0.150 | 0.134 | 1038 | 1.119 | 0.263 |

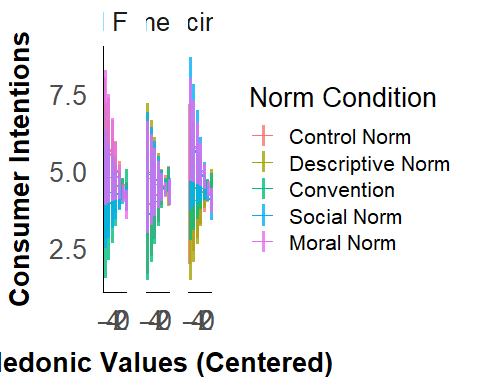
No, there was no significant difference between any two pairs of slopes.

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

emtrends(mod\_mice, ~norm\_condition | framing\_condition, var = "hedonic\_center", adjust = "none") %>%   
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | hedonic\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm | control\_framing | -0.34 | 0.18 | 1038 | -0.70 | 0.02 |
| descriptive\_norm | control\_framing | -0.14 | 0.22 | 1038 | -0.57 | 0.29 |
| convention\_norm | control\_framing | 0.15 | 0.21 | 1038 | -0.27 | 0.57 |
| social\_norm | control\_framing | -0.05 | 0.19 | 1038 | -0.42 | 0.32 |
| moral\_norm | control\_framing | -0.36 | 0.22 | 1038 | -0.79 | 0.06 |
| control\_norm | pro\_env\_framing | 0.15 | 0.21 | 1038 | -0.27 | 0.57 |
| descriptive\_norm | pro\_env\_framing | -0.12 | 0.22 | 1038 | -0.54 | 0.31 |
| convention\_norm | pro\_env\_framing | 0.20 | 0.20 | 1038 | -0.20 | 0.60 |
| social\_norm | pro\_env\_framing | -0.11 | 0.19 | 1038 | -0.49 | 0.27 |
| moral\_norm | pro\_env\_framing | -0.08 | 0.18 | 1038 | -0.44 | 0.28 |
| control\_norm | self\_enh\_framing | -0.06 | 0.26 | 1038 | -0.57 | 0.44 |
| descriptive\_norm | self\_enh\_framing | 0.12 | 0.24 | 1038 | -0.36 | 0.59 |
| convention\_norm | self\_enh\_framing | 0.02 | 0.17 | 1038 | -0.32 | 0.35 |
| social\_norm | self\_enh\_framing | -0.38 | 0.25 | 1038 | -0.87 | 0.10 |
| moral\_norm | self\_enh\_framing | -0.39 | 0.17 | 1038 | -0.72 | -0.06 |

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ hedonic\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



* 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:

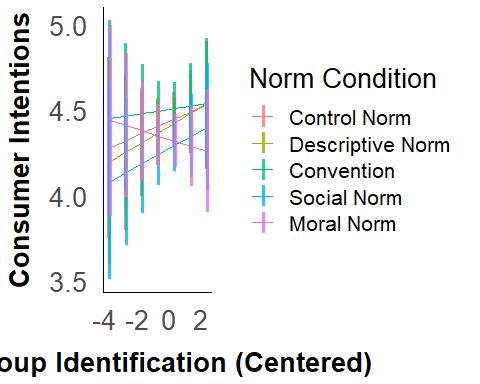
emtrends(mod\_mice, ~norm\_condition, var = "ingroup\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| norm\_condition | ingroup\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | 0.04 | 0.07 | 1038 | -0.10 | 0.18 |
| descriptive\_norm | 0.06 | 0.08 | 1038 | -0.10 | 0.21 |
| convention\_norm | 0.01 | 0.08 | 1038 | -0.14 | 0.17 |
| social\_norm | 0.05 | 0.08 | 1038 | -0.09 | 0.20 |
| moral\_norm | -0.03 | 0.07 | 1038 | -0.17 | 0.11 |

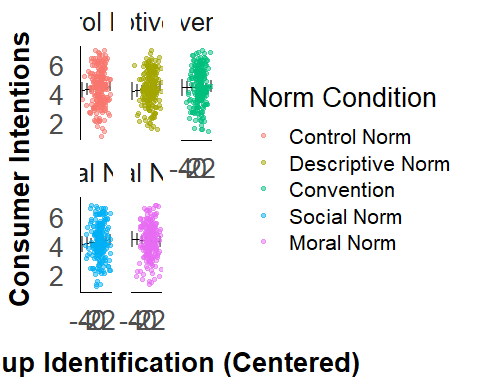
# On a single graph  
describe(average\_df$ingroup\_center)

## 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 = 1.2, 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() + text\_settings



# 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() + text\_settings



* 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?

ing\_norm\_trends <- emtrends(mod\_mice, pairwise~norm\_condition, var = "ingroup\_center", adjust = "none")  
  
ing\_norm\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| norm\_condition | ingroup\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_norm | 0.04 | 0.07 | 1038 | -0.10 | 0.18 |
| descriptive\_norm | 0.06 | 0.08 | 1038 | -0.10 | 0.21 |
| convention\_norm | 0.01 | 0.08 | 1038 | -0.14 | 0.17 |
| social\_norm | 0.05 | 0.08 | 1038 | -0.09 | 0.20 |
| moral\_norm | -0.03 | 0.07 | 1038 | -0.17 | 0.11 |

ing\_norm\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm - descriptive\_norm | -0.015 | 0.105 | 1038 | -0.140 | 0.889 |
| control\_norm - convention\_norm | 0.028 | 0.105 | 1038 | 0.264 | 0.792 |
| control\_norm - social\_norm | -0.011 | 0.104 | 1038 | -0.106 | 0.915 |
| control\_norm - moral\_norm | 0.072 | 0.103 | 1038 | 0.701 | 0.484 |
| descriptive\_norm - convention\_norm | 0.043 | 0.109 | 1038 | 0.389 | 0.698 |
| descriptive\_norm - social\_norm | 0.004 | 0.108 | 1038 | 0.034 | 0.973 |
| descriptive\_norm - moral\_norm | 0.087 | 0.107 | 1038 | 0.815 | 0.415 |
| convention\_norm - social\_norm | -0.039 | 0.108 | 1038 | -0.360 | 0.719 |
| convention\_norm - moral\_norm | 0.044 | 0.107 | 1038 | 0.417 | 0.677 |
| social\_norm - moral\_norm | 0.083 | 0.105 | 1038 | 0.792 | 0.429 |

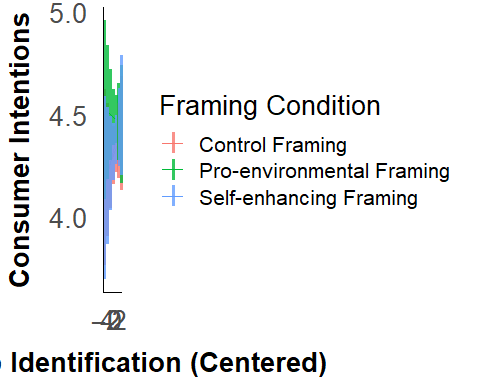
No, there was no significant difference between any two pairs of slopes.

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

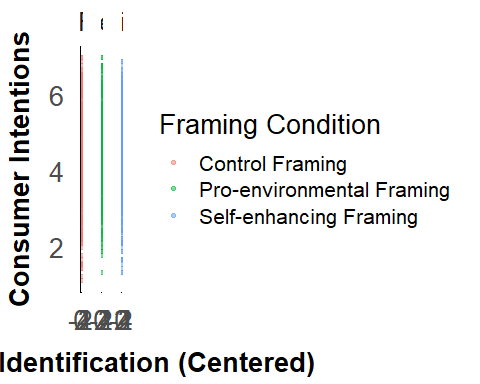
emtrends(mod\_mice, ~framing\_condition, var = "ingroup\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| framing\_condition | ingroup\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | 0.04 | 0.06 | 1038 | -0.08 | 0.15 |
| pro\_env\_framing | -0.01 | 0.06 | 1038 | -0.13 | 0.10 |
| self\_enh\_framing | 0.06 | 0.06 | 1038 | -0.06 | 0.18 |

# without data overlaid  
emmip(mod\_mice, framing\_condition ~ ingroup\_center, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



# 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() + text\_settings



* 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?

ing\_frame\_trends <- emtrends(mod\_mice, pairwise~framing\_condition, var = "ingroup\_center", adjust = "none")  
  
ing\_frame\_trends$emtrends %>%  
 knitr::kable(digits = 2)

| framing\_condition | ingroup\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- |
| control\_framing | 0.04 | 0.06 | 1038 | -0.08 | 0.15 |
| pro\_env\_framing | -0.01 | 0.06 | 1038 | -0.13 | 0.10 |
| self\_enh\_framing | 0.06 | 0.06 | 1038 | -0.06 | 0.18 |

ing\_frame\_trends$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_framing - pro\_env\_framing | 0.047 | 0.081 | 1038 | 0.586 | 0.558 |
| control\_framing - self\_enh\_framing | -0.023 | 0.082 | 1038 | -0.280 | 0.779 |
| pro\_env\_framing - self\_enh\_framing | -0.070 | 0.083 | 1038 | -0.847 | 0.397 |

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

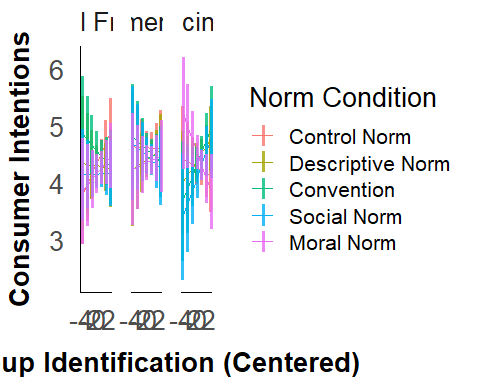
Exploratory RQ1: Is there a three-way interaction between ingroup identification, framing, and norm condition?

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

emtrends(mod\_mice, ~norm\_condition | framing\_condition, var = "ingroup\_center", adjust = "none") %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | ingroup\_center.trend | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm | control\_framing | 0.18 | 0.12 | 1038 | -0.05 | 0.41 |
| descriptive\_norm | control\_framing | -0.01 | 0.15 | 1038 | -0.31 | 0.28 |
| convention\_norm | control\_framing | -0.10 | 0.13 | 1038 | -0.36 | 0.16 |
| social\_norm | control\_framing | 0.00 | 0.11 | 1038 | -0.21 | 0.22 |
| moral\_norm | control\_framing | 0.10 | 0.12 | 1038 | -0.13 | 0.33 |
| control\_norm | pro\_env\_framing | -0.01 | 0.13 | 1038 | -0.26 | 0.25 |
| descriptive\_norm | pro\_env\_framing | 0.06 | 0.13 | 1038 | -0.20 | 0.31 |
| convention\_norm | pro\_env\_framing | -0.07 | 0.12 | 1038 | -0.32 | 0.17 |
| social\_norm | pro\_env\_framing | -0.07 | 0.13 | 1038 | -0.33 | 0.19 |
| moral\_norm | pro\_env\_framing | 0.04 | 0.13 | 1038 | -0.22 | 0.29 |
| control\_norm | self\_enh\_framing | -0.05 | 0.13 | 1038 | -0.30 | 0.20 |
| descriptive\_norm | self\_enh\_framing | 0.13 | 0.12 | 1038 | -0.10 | 0.36 |
| convention\_norm | self\_enh\_framing | 0.22 | 0.14 | 1038 | -0.07 | 0.50 |
| social\_norm | self\_enh\_framing | 0.23 | 0.15 | 1038 | -0.06 | 0.51 |
| moral\_norm | self\_enh\_framing | -0.23 | 0.13 | 1038 | -0.49 | 0.03 |

# without data overlaid  
emmip(mod\_mice, norm\_condition ~ ingroup\_center | framing\_condition, at = at\_list, CIs = TRUE, CIarg = list(lwd = 1.2, 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() + text\_settings



* 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?

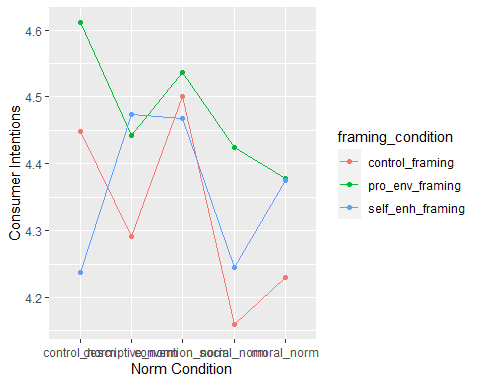
cell\_int\_means <- emmeans(mod\_mice, pairwise ~ norm\_condition\*framing\_condition, adjust = "none")  
  
cell\_int\_means$emmeans %>%  
 knitr::kable(digits = 2)

| norm\_condition | framing\_condition | emmean | SE | df | lower.CL | upper.CL |
| --- | --- | --- | --- | --- | --- | --- |
| control\_norm | control\_framing | 4.45 | 0.12 | 1038 | 4.21 | 4.69 |
| descriptive\_norm | control\_framing | 4.29 | 0.13 | 1038 | 4.03 | 4.55 |
| convention\_norm | control\_framing | 4.50 | 0.14 | 1038 | 4.23 | 4.77 |
| social\_norm | control\_framing | 4.16 | 0.12 | 1038 | 3.93 | 4.39 |
| moral\_norm | control\_framing | 4.23 | 0.14 | 1038 | 3.95 | 4.51 |
| control\_norm | pro\_env\_framing | 4.61 | 0.13 | 1038 | 4.36 | 4.86 |
| descriptive\_norm | pro\_env\_framing | 4.44 | 0.13 | 1038 | 4.19 | 4.69 |
| convention\_norm | pro\_env\_framing | 4.54 | 0.12 | 1038 | 4.30 | 4.77 |
| social\_norm | pro\_env\_framing | 4.42 | 0.13 | 1038 | 4.16 | 4.69 |
| moral\_norm | pro\_env\_framing | 4.38 | 0.12 | 1038 | 4.14 | 4.62 |
| control\_norm | self\_enh\_framing | 4.24 | 0.13 | 1038 | 3.99 | 4.49 |
| descriptive\_norm | self\_enh\_framing | 4.47 | 0.12 | 1038 | 4.23 | 4.71 |
| convention\_norm | self\_enh\_framing | 4.47 | 0.13 | 1038 | 4.21 | 4.72 |
| social\_norm | self\_enh\_framing | 4.24 | 0.14 | 1038 | 3.98 | 4.51 |
| moral\_norm | self\_enh\_framing | 4.38 | 0.13 | 1038 | 4.12 | 4.63 |

cell\_int\_means$contrasts %>%  
 knitr::kable(digits = 3)

| contrast | estimate | SE | df | t.ratio | p.value |
| --- | --- | --- | --- | --- | --- |
| control\_norm control\_framing - descriptive\_norm control\_framing | 0.157 | 0.181 | 1038 | 0.868 | 0.386 |
| control\_norm control\_framing - convention\_norm control\_framing | -0.052 | 0.184 | 1038 | -0.280 | 0.779 |
| control\_norm control\_framing - social\_norm control\_framing | 0.289 | 0.169 | 1038 | 1.708 | 0.088 |
| control\_norm control\_framing - moral\_norm control\_framing | 0.219 | 0.189 | 1038 | 1.159 | 0.247 |
| control\_norm control\_framing - control\_norm pro\_env\_framing | -0.162 | 0.178 | 1038 | -0.914 | 0.361 |
| control\_norm control\_framing - descriptive\_norm pro\_env\_framing | 0.006 | 0.178 | 1038 | 0.034 | 0.973 |
| control\_norm control\_framing - convention\_norm pro\_env\_framing | -0.088 | 0.171 | 1038 | -0.517 | 0.605 |
| control\_norm control\_framing - social\_norm pro\_env\_framing | 0.025 | 0.182 | 1038 | 0.135 | 0.892 |
| control\_norm control\_framing - moral\_norm pro\_env\_framing | 0.071 | 0.172 | 1038 | 0.415 | 0.679 |
| control\_norm control\_framing - control\_norm self\_enh\_framing | 0.212 | 0.177 | 1038 | 1.197 | 0.232 |
| control\_norm control\_framing - descriptive\_norm self\_enh\_framing | -0.024 | 0.173 | 1038 | -0.141 | 0.888 |
| control\_norm control\_framing - convention\_norm self\_enh\_framing | -0.019 | 0.178 | 1038 | -0.105 | 0.916 |
| control\_norm control\_framing - social\_norm self\_enh\_framing | 0.204 | 0.184 | 1038 | 1.110 | 0.267 |
| control\_norm control\_framing - moral\_norm self\_enh\_framing | 0.074 | 0.179 | 1038 | 0.413 | 0.679 |
| descriptive\_norm control\_framing - convention\_norm control\_framing | -0.209 | 0.191 | 1038 | -1.095 | 0.274 |
| descriptive\_norm control\_framing - social\_norm control\_framing | 0.132 | 0.176 | 1038 | 0.749 | 0.454 |
| descriptive\_norm control\_framing - moral\_norm control\_framing | 0.062 | 0.195 | 1038 | 0.318 | 0.751 |
| descriptive\_norm control\_framing - control\_norm pro\_env\_framing | -0.320 | 0.184 | 1038 | -1.734 | 0.083 |
| descriptive\_norm control\_framing - descriptive\_norm pro\_env\_framing | -0.151 | 0.185 | 1038 | -0.818 | 0.414 |
| descriptive\_norm control\_framing - convention\_norm pro\_env\_framing | -0.245 | 0.178 | 1038 | -1.382 | 0.167 |
| descriptive\_norm control\_framing - social\_norm pro\_env\_framing | -0.132 | 0.188 | 1038 | -0.705 | 0.481 |
| descriptive\_norm control\_framing - moral\_norm pro\_env\_framing | -0.086 | 0.179 | 1038 | -0.479 | 0.632 |
| descriptive\_norm control\_framing - control\_norm self\_enh\_framing | 0.054 | 0.183 | 1038 | 0.298 | 0.766 |
| descriptive\_norm control\_framing - descriptive\_norm self\_enh\_framing | -0.181 | 0.179 | 1038 | -1.012 | 0.312 |
| descriptive\_norm control\_framing - convention\_norm self\_enh\_framing | -0.176 | 0.186 | 1038 | -0.946 | 0.344 |
| descriptive\_norm control\_framing - social\_norm self\_enh\_framing | 0.047 | 0.191 | 1038 | 0.247 | 0.805 |
| descriptive\_norm control\_framing - moral\_norm self\_enh\_framing | -0.083 | 0.185 | 1038 | -0.451 | 0.652 |
| convention\_norm control\_framing - social\_norm control\_framing | 0.341 | 0.180 | 1038 | 1.897 | 0.058 |
| convention\_norm control\_framing - moral\_norm control\_framing | 0.271 | 0.198 | 1038 | 1.366 | 0.172 |
| convention\_norm control\_framing - control\_norm pro\_env\_framing | -0.111 | 0.187 | 1038 | -0.592 | 0.554 |
| convention\_norm control\_framing - descriptive\_norm pro\_env\_framing | 0.058 | 0.187 | 1038 | 0.309 | 0.758 |
| convention\_norm control\_framing - convention\_norm pro\_env\_framing | -0.037 | 0.181 | 1038 | -0.202 | 0.840 |
| convention\_norm control\_framing - social\_norm pro\_env\_framing | 0.076 | 0.191 | 1038 | 0.399 | 0.690 |
| convention\_norm control\_framing - moral\_norm pro\_env\_framing | 0.123 | 0.182 | 1038 | 0.675 | 0.500 |
| convention\_norm control\_framing - control\_norm self\_enh\_framing | 0.263 | 0.187 | 1038 | 1.411 | 0.158 |
| convention\_norm control\_framing - descriptive\_norm self\_enh\_framing | 0.027 | 0.183 | 1038 | 0.149 | 0.881 |
| convention\_norm control\_framing - convention\_norm self\_enh\_framing | 0.033 | 0.189 | 1038 | 0.174 | 0.862 |
| convention\_norm control\_framing - social\_norm self\_enh\_framing | 0.256 | 0.194 | 1038 | 1.322 | 0.186 |
| convention\_norm control\_framing - moral\_norm self\_enh\_framing | 0.125 | 0.188 | 1038 | 0.668 | 0.504 |
| social\_norm control\_framing - moral\_norm control\_framing | -0.070 | 0.184 | 1038 | -0.380 | 0.704 |
| social\_norm control\_framing - control\_norm pro\_env\_framing | -0.452 | 0.173 | 1038 | -2.614 | 0.009 |
| social\_norm control\_framing - descriptive\_norm pro\_env\_framing | -0.283 | 0.173 | 1038 | -1.635 | 0.102 |
| social\_norm control\_framing - convention\_norm pro\_env\_framing | -0.377 | 0.166 | 1038 | -2.276 | 0.023 |
| social\_norm control\_framing - social\_norm pro\_env\_framing | -0.265 | 0.177 | 1038 | -1.493 | 0.136 |
| social\_norm control\_framing - moral\_norm pro\_env\_framing | -0.218 | 0.167 | 1038 | -1.304 | 0.193 |
| social\_norm control\_framing - control\_norm self\_enh\_framing | -0.078 | 0.172 | 1038 | -0.453 | 0.651 |
| social\_norm control\_framing - descriptive\_norm self\_enh\_framing | -0.314 | 0.169 | 1038 | -1.861 | 0.063 |
| social\_norm control\_framing - convention\_norm self\_enh\_framing | -0.308 | 0.174 | 1038 | -1.770 | 0.077 |
| social\_norm control\_framing - social\_norm self\_enh\_framing | -0.085 | 0.179 | 1038 | -0.474 | 0.636 |
| social\_norm control\_framing - moral\_norm self\_enh\_framing | -0.215 | 0.173 | 1038 | -1.242 | 0.214 |
| moral\_norm control\_framing - control\_norm pro\_env\_framing | -0.382 | 0.192 | 1038 | -1.986 | 0.047 |
| moral\_norm control\_framing - descriptive\_norm pro\_env\_framing | -0.213 | 0.192 | 1038 | -1.109 | 0.268 |
| moral\_norm control\_framing - convention\_norm pro\_env\_framing | -0.307 | 0.186 | 1038 | -1.656 | 0.098 |
| moral\_norm control\_framing - social\_norm pro\_env\_framing | -0.195 | 0.196 | 1038 | -0.993 | 0.321 |
| moral\_norm control\_framing - moral\_norm pro\_env\_framing | -0.148 | 0.187 | 1038 | -0.790 | 0.430 |
| moral\_norm control\_framing - control\_norm self\_enh\_framing | -0.008 | 0.191 | 1038 | -0.040 | 0.968 |
| moral\_norm control\_framing - descriptive\_norm self\_enh\_framing | -0.244 | 0.188 | 1038 | -1.297 | 0.195 |
| moral\_norm control\_framing - convention\_norm self\_enh\_framing | -0.238 | 0.194 | 1038 | -1.229 | 0.219 |
| moral\_norm control\_framing - social\_norm self\_enh\_framing | -0.015 | 0.199 | 1038 | -0.075 | 0.940 |
| moral\_norm control\_framing - moral\_norm self\_enh\_framing | -0.145 | 0.193 | 1038 | -0.753 | 0.451 |
| control\_norm pro\_env\_framing - descriptive\_norm pro\_env\_framing | 0.169 | 0.181 | 1038 | 0.931 | 0.352 |
| control\_norm pro\_env\_framing - convention\_norm pro\_env\_framing | 0.074 | 0.174 | 1038 | 0.426 | 0.670 |
| control\_norm pro\_env\_framing - social\_norm pro\_env\_framing | 0.187 | 0.185 | 1038 | 1.011 | 0.312 |
| control\_norm pro\_env\_framing - moral\_norm pro\_env\_framing | 0.234 | 0.176 | 1038 | 1.330 | 0.184 |
| control\_norm pro\_env\_framing - control\_norm self\_enh\_framing | 0.374 | 0.180 | 1038 | 2.078 | 0.038 |
| control\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing | 0.138 | 0.177 | 1038 | 0.782 | 0.434 |
| control\_norm pro\_env\_framing - convention\_norm self\_enh\_framing | 0.144 | 0.183 | 1038 | 0.786 | 0.432 |
| control\_norm pro\_env\_framing - social\_norm self\_enh\_framing | 0.367 | 0.187 | 1038 | 1.956 | 0.051 |
| control\_norm pro\_env\_framing - moral\_norm self\_enh\_framing | 0.236 | 0.181 | 1038 | 1.302 | 0.193 |
| descriptive\_norm pro\_env\_framing - convention\_norm pro\_env\_framing | -0.094 | 0.174 | 1038 | -0.542 | 0.588 |
| descriptive\_norm pro\_env\_framing - social\_norm pro\_env\_framing | 0.019 | 0.185 | 1038 | 0.100 | 0.920 |
| descriptive\_norm pro\_env\_framing - moral\_norm pro\_env\_framing | 0.065 | 0.176 | 1038 | 0.372 | 0.710 |
| descriptive\_norm pro\_env\_framing - control\_norm self\_enh\_framing | 0.206 | 0.180 | 1038 | 1.141 | 0.254 |
| descriptive\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing | -0.030 | 0.177 | 1038 | -0.172 | 0.864 |
| descriptive\_norm pro\_env\_framing - convention\_norm self\_enh\_framing | -0.025 | 0.183 | 1038 | -0.136 | 0.892 |
| descriptive\_norm pro\_env\_framing - social\_norm self\_enh\_framing | 0.198 | 0.188 | 1038 | 1.056 | 0.291 |
| descriptive\_norm pro\_env\_framing - moral\_norm self\_enh\_framing | 0.068 | 0.182 | 1038 | 0.373 | 0.709 |
| convention\_norm pro\_env\_framing - social\_norm pro\_env\_framing | 0.113 | 0.178 | 1038 | 0.635 | 0.526 |
| convention\_norm pro\_env\_framing - moral\_norm pro\_env\_framing | 0.160 | 0.168 | 1038 | 0.949 | 0.343 |
| convention\_norm pro\_env\_framing - control\_norm self\_enh\_framing | 0.300 | 0.173 | 1038 | 1.733 | 0.083 |
| convention\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing | 0.064 | 0.169 | 1038 | 0.378 | 0.706 |
| convention\_norm pro\_env\_framing - convention\_norm self\_enh\_framing | 0.069 | 0.176 | 1038 | 0.395 | 0.693 |
| convention\_norm pro\_env\_framing - social\_norm self\_enh\_framing | 0.293 | 0.181 | 1038 | 1.617 | 0.106 |
| convention\_norm pro\_env\_framing - moral\_norm self\_enh\_framing | 0.162 | 0.175 | 1038 | 0.928 | 0.353 |
| social\_norm pro\_env\_framing - moral\_norm pro\_env\_framing | 0.047 | 0.179 | 1038 | 0.261 | 0.794 |
| social\_norm pro\_env\_framing - control\_norm self\_enh\_framing | 0.187 | 0.184 | 1038 | 1.018 | 0.309 |
| social\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing | -0.049 | 0.180 | 1038 | -0.271 | 0.786 |
| social\_norm pro\_env\_framing - convention\_norm self\_enh\_framing | -0.043 | 0.187 | 1038 | -0.232 | 0.816 |
| social\_norm pro\_env\_framing - social\_norm self\_enh\_framing | 0.180 | 0.191 | 1038 | 0.938 | 0.348 |
| social\_norm pro\_env\_framing - moral\_norm self\_enh\_framing | 0.049 | 0.185 | 1038 | 0.265 | 0.791 |
| moral\_norm pro\_env\_framing - control\_norm self\_enh\_framing | 0.140 | 0.174 | 1038 | 0.804 | 0.421 |
| moral\_norm pro\_env\_framing - descriptive\_norm self\_enh\_framing | -0.096 | 0.171 | 1038 | -0.560 | 0.575 |
| moral\_norm pro\_env\_framing - convention\_norm self\_enh\_framing | -0.090 | 0.177 | 1038 | -0.510 | 0.610 |
| moral\_norm pro\_env\_framing - social\_norm self\_enh\_framing | 0.133 | 0.182 | 1038 | 0.728 | 0.467 |
| moral\_norm pro\_env\_framing - moral\_norm self\_enh\_framing | 0.002 | 0.176 | 1038 | 0.013 | 0.989 |
| control\_norm self\_enh\_framing - descriptive\_norm self\_enh\_framing | -0.236 | 0.175 | 1038 | -1.346 | 0.179 |
| control\_norm self\_enh\_framing - convention\_norm self\_enh\_framing | -0.230 | 0.182 | 1038 | -1.269 | 0.205 |
| control\_norm self\_enh\_framing - social\_norm self\_enh\_framing | -0.007 | 0.187 | 1038 | -0.039 | 0.969 |
| control\_norm self\_enh\_framing - moral\_norm self\_enh\_framing | -0.138 | 0.180 | 1038 | -0.764 | 0.445 |
| descriptive\_norm self\_enh\_framing - convention\_norm self\_enh\_framing | 0.006 | 0.177 | 1038 | 0.031 | 0.975 |
| descriptive\_norm self\_enh\_framing - social\_norm self\_enh\_framing | 0.229 | 0.183 | 1038 | 1.249 | 0.212 |
| descriptive\_norm self\_enh\_framing - moral\_norm self\_enh\_framing | 0.098 | 0.177 | 1038 | 0.554 | 0.580 |
| convention\_norm self\_enh\_framing - social\_norm self\_enh\_framing | 0.223 | 0.188 | 1038 | 1.185 | 0.236 |
| convention\_norm self\_enh\_framing - moral\_norm self\_enh\_framing | 0.093 | 0.184 | 1038 | 0.504 | 0.615 |
| social\_norm self\_enh\_framing - moral\_norm self\_enh\_framing | -0.130 | 0.188 | 1038 | -0.695 | 0.487 |

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.

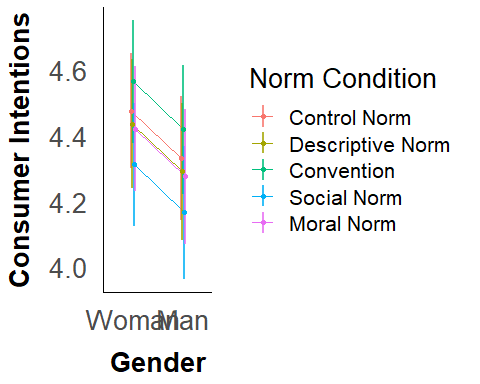
### Gender Interactions (exploratory)

Gender X Norm

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

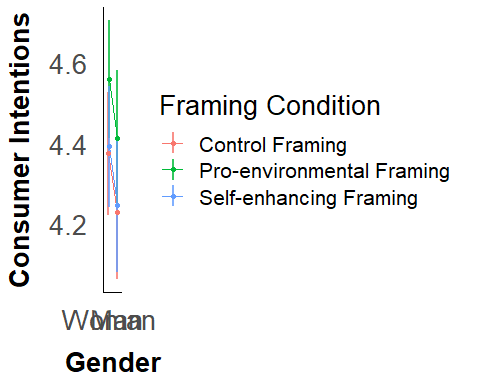
## norm\_condition Gender framing\_condition emmean SE df lower.CL upper.CL  
## control\_norm Woman control\_framing 4.52 0.127 1038 4.27 4.77  
## descriptive\_norm Woman control\_framing 4.36 0.135 1038 4.10 4.63  
## convention\_norm Woman control\_framing 4.57 0.141 1038 4.30 4.85  
## social\_norm Woman control\_framing 4.23 0.120 1038 4.00 4.47  
## moral\_norm Woman control\_framing 4.30 0.147 1038 4.01 4.59  
## control\_norm Man control\_framing 4.38 0.132 1038 4.12 4.63  
## descriptive\_norm Man control\_framing 4.22 0.142 1038 3.94 4.50  
## convention\_norm Man control\_framing 4.43 0.144 1038 4.15 4.71  
## social\_norm Man control\_framing 4.09 0.125 1038 3.84 4.33  
## moral\_norm Man control\_framing 4.16 0.150 1038 3.86 4.45  
## control\_norm Woman pro\_env\_framing 4.68 0.132 1038 4.43 4.94  
## descriptive\_norm Woman pro\_env\_framing 4.52 0.132 1038 4.26 4.78  
## convention\_norm Woman pro\_env\_framing 4.61 0.121 1038 4.37 4.85  
## social\_norm Woman pro\_env\_framing 4.50 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 4.54 0.136 1038 4.27 4.81  
## descriptive\_norm Man pro\_env\_framing 4.37 0.136 1038 4.10 4.64  
## convention\_norm Man pro\_env\_framing 4.46 0.129 1038 4.21 4.72  
## social\_norm Man pro\_env\_framing 4.35 0.144 1038 4.07 4.63  
## moral\_norm Man pro\_env\_framing 4.30 0.132 1038 4.05 4.56  
## control\_norm Woman self\_enh\_framing 4.31 0.129 1038 4.06 4.56  
## descriptive\_norm Woman self\_enh\_framing 4.55 0.125 1038 4.30 4.79  
## convention\_norm Woman self\_enh\_framing 4.54 0.134 1038 4.28 4.80  
## social\_norm Woman self\_enh\_framing 4.32 0.141 1038 4.04 4.59  
## moral\_norm Woman self\_enh\_framing 4.45 0.133 1038 4.19 4.71  
## control\_norm Man self\_enh\_framing 4.16 0.136 1038 3.90 4.43  
## descriptive\_norm Man self\_enh\_framing 4.40 0.130 1038 4.14 4.66  
## convention\_norm Man self\_enh\_framing 4.39 0.137 1038 4.13 4.66  
## social\_norm Man self\_enh\_framing 4.17 0.144 1038 3.89 4.45  
## moral\_norm Man self\_enh\_framing 4.30 0.137 1038 4.03 4.57  
##   
## 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() + text\_settings



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() + text\_settings



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() + text\_settings

