First Analysis P201-205

Jacob Raillon

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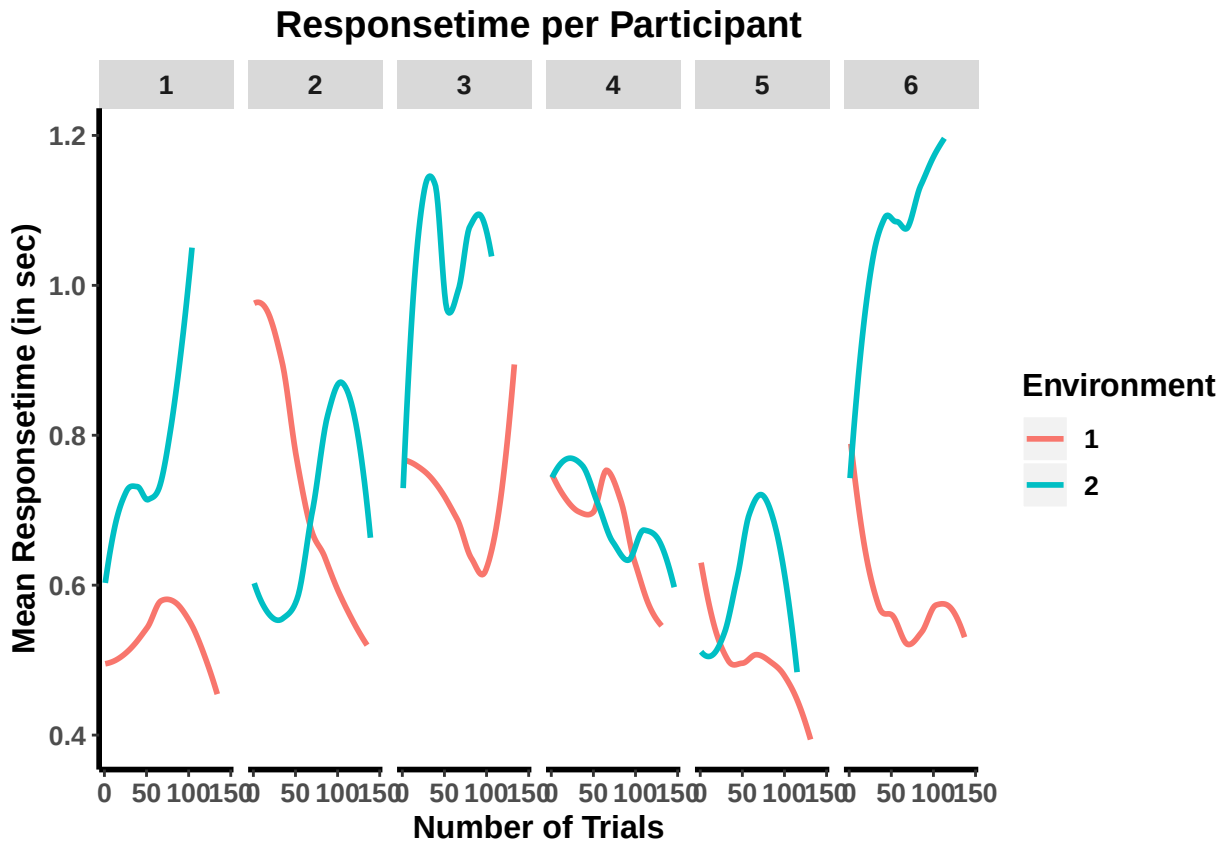
```
##Reponsetime per participant over trials
data %>% ggplot(aes(x=trialIdx, y=responseRT,color=factor(blockIdx))) +geom_smooth(aes( group=blockIdx)
```

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

```
## Warning: Removed 8 rows containing non-finite values (stat_smooth).
```




```
ggsave("graph_responsetime_particpants_nonsocial.png", width = 8, height = 4)
```

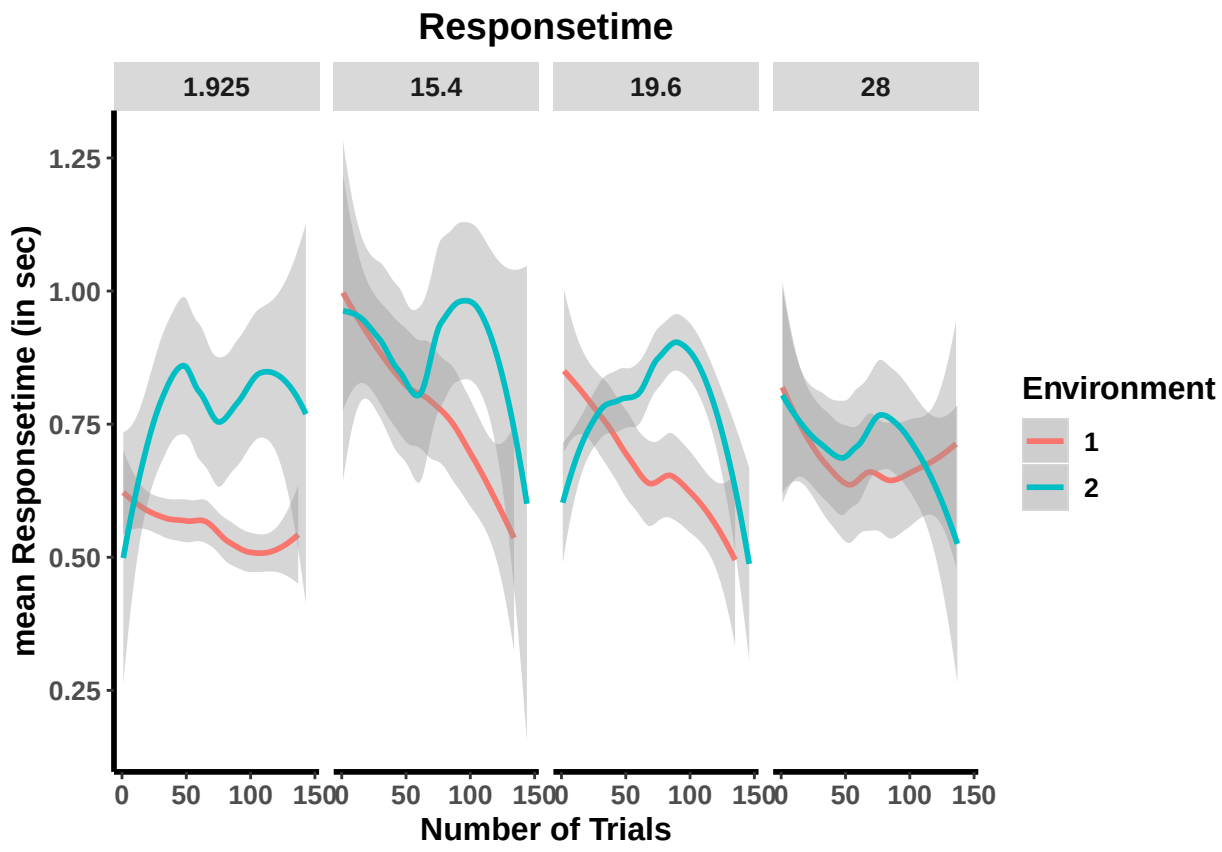
```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

```
## Warning: Removed 8 rows containing non-finite values (stat_smooth).
```

```
##Responsetime per option
data %>% ggplot(aes(x=trialIdx, y=responseRT,color=factor(blockIdx)))+
geom_smooth(aes( group=blockIdx), se = T) + facet_grid(~data$scheduledHt)+ggtitle("Responsetime")+labs(
```

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

```
## Warning: Removed 8 rows containing non-finite values (stat_smooth).
```

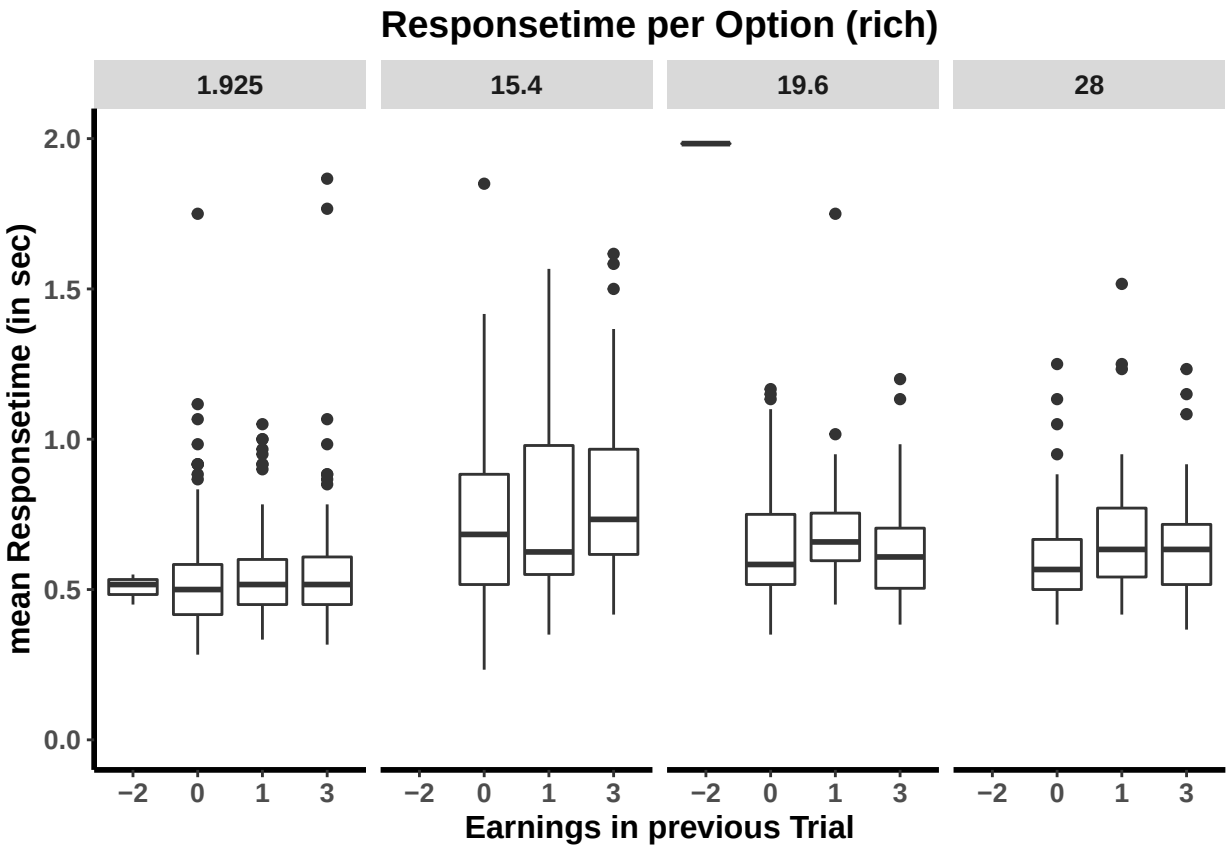



```
ggsave("graph_responsetime_options_nonsocial.jpg", width = 8, height = 4)
```

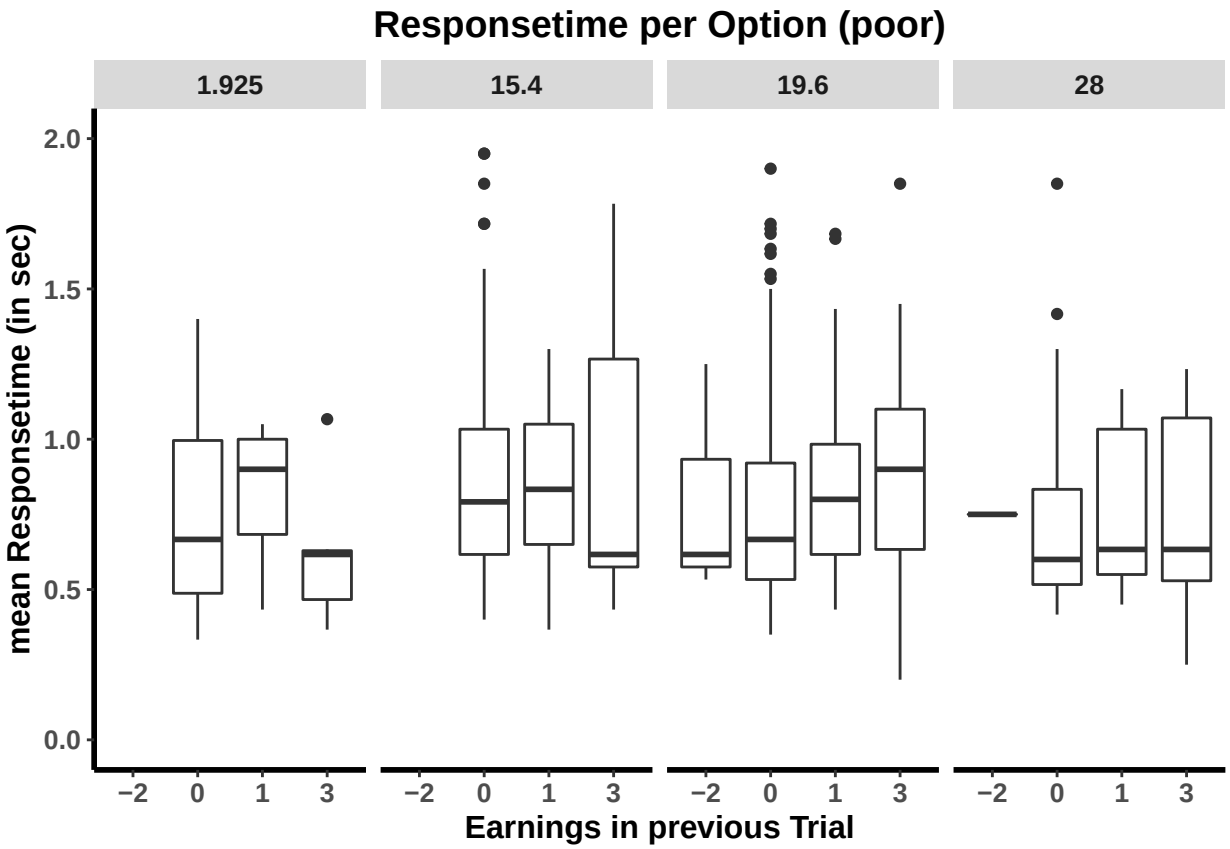
```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

```
## Warning: Removed 8 rows containing non-finite values (stat_smooth).
```

```
##boxplots reaction time on prev earning(rich)
data %>% filter(blockIdx== 1,is.na(prev_Earn) == FALSE)  %>% ggplot(aes(x=factor(prev_Earn), y=responsel
```

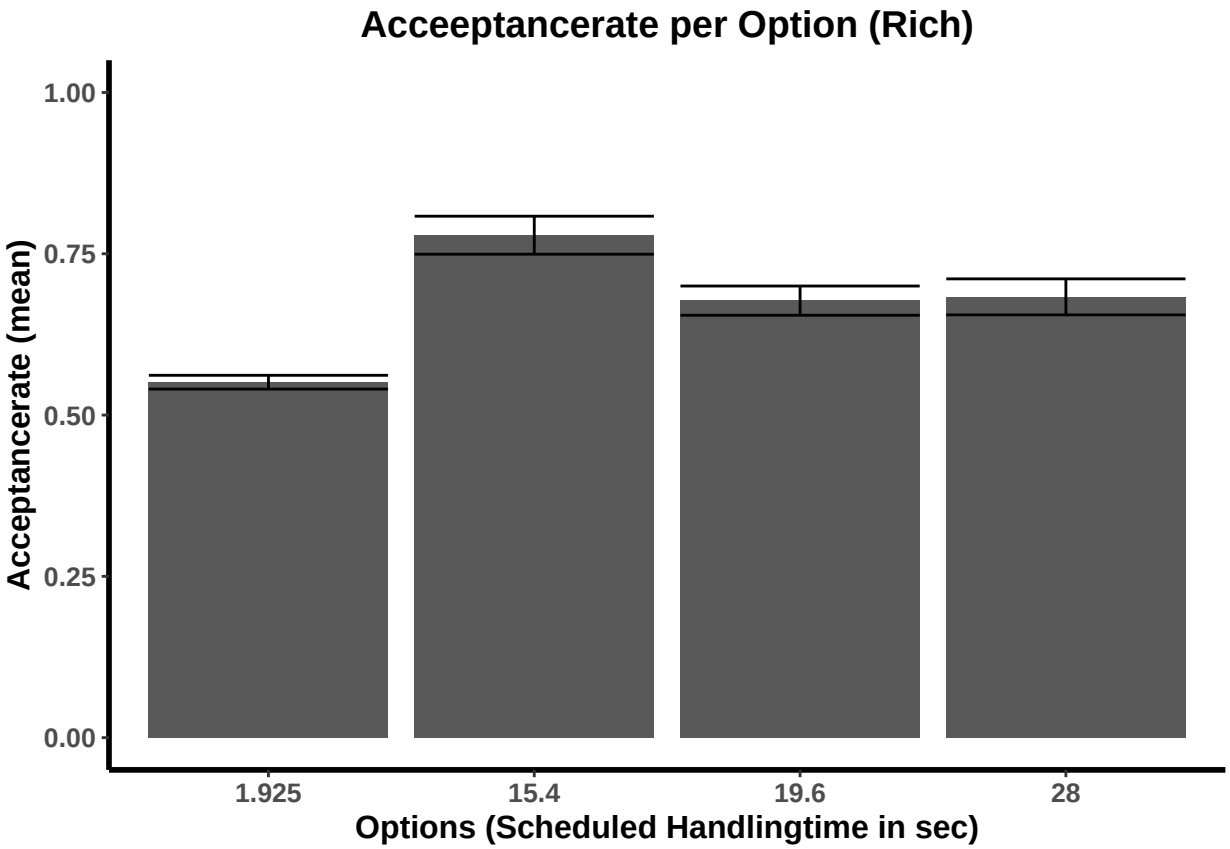



```
ggsave("boxplot_bl1_nonsocial.jpg", width = 6, height = 4)

##boxplots reaction time on prev earning(poor)
data %>% filter(blockIdx== 2,is.na(prev_Earn) == FALSE)  %>% ggplot(aes(x=factor(prev_Earn), y=responsel
```

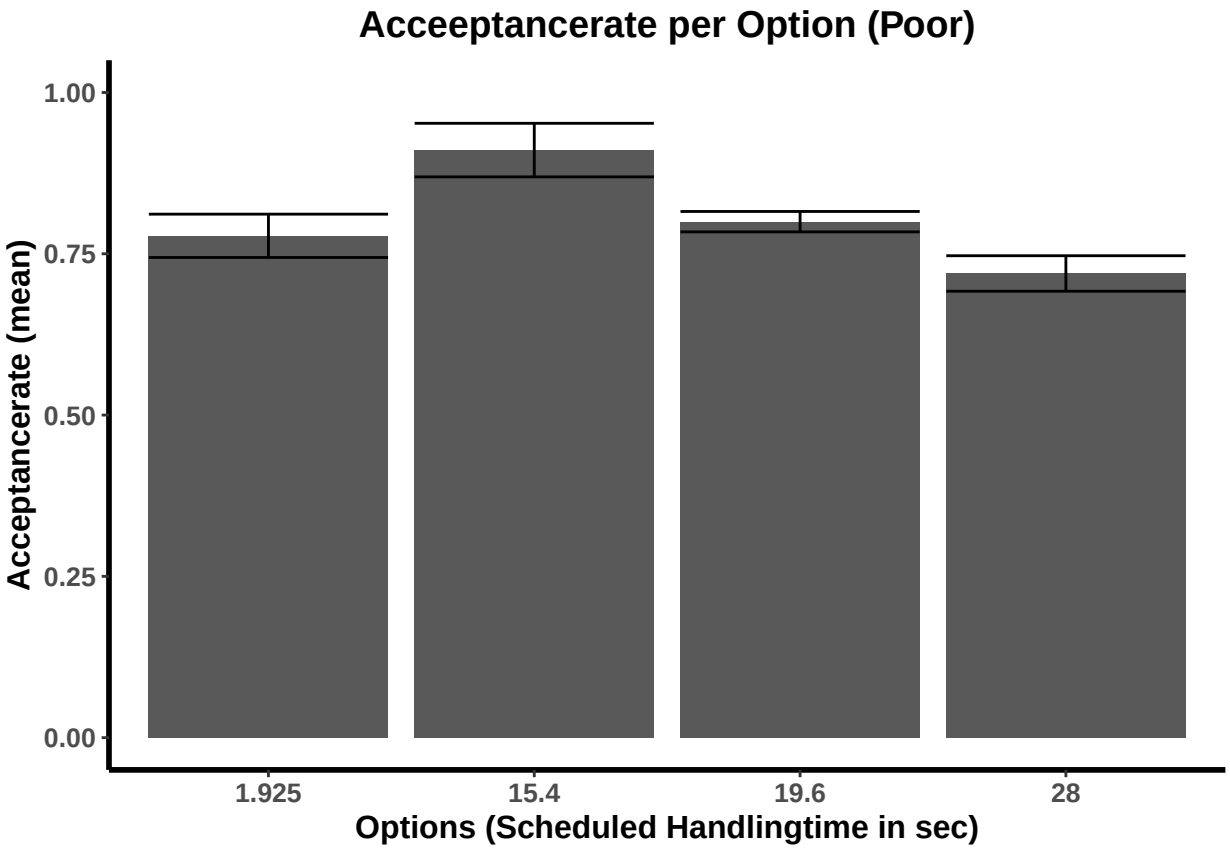



```
ggsave("boxplot_bl2_nonsocial.jpg", width = 6, height = 4)
```

```
##Acceptancerate per option (rich)
data %>% filter(blockIdx== 1 ) %>% group_by(scheduledHt) %>% summarise(se0=sd(responseRT,na.rm=TRUE)/sq
```

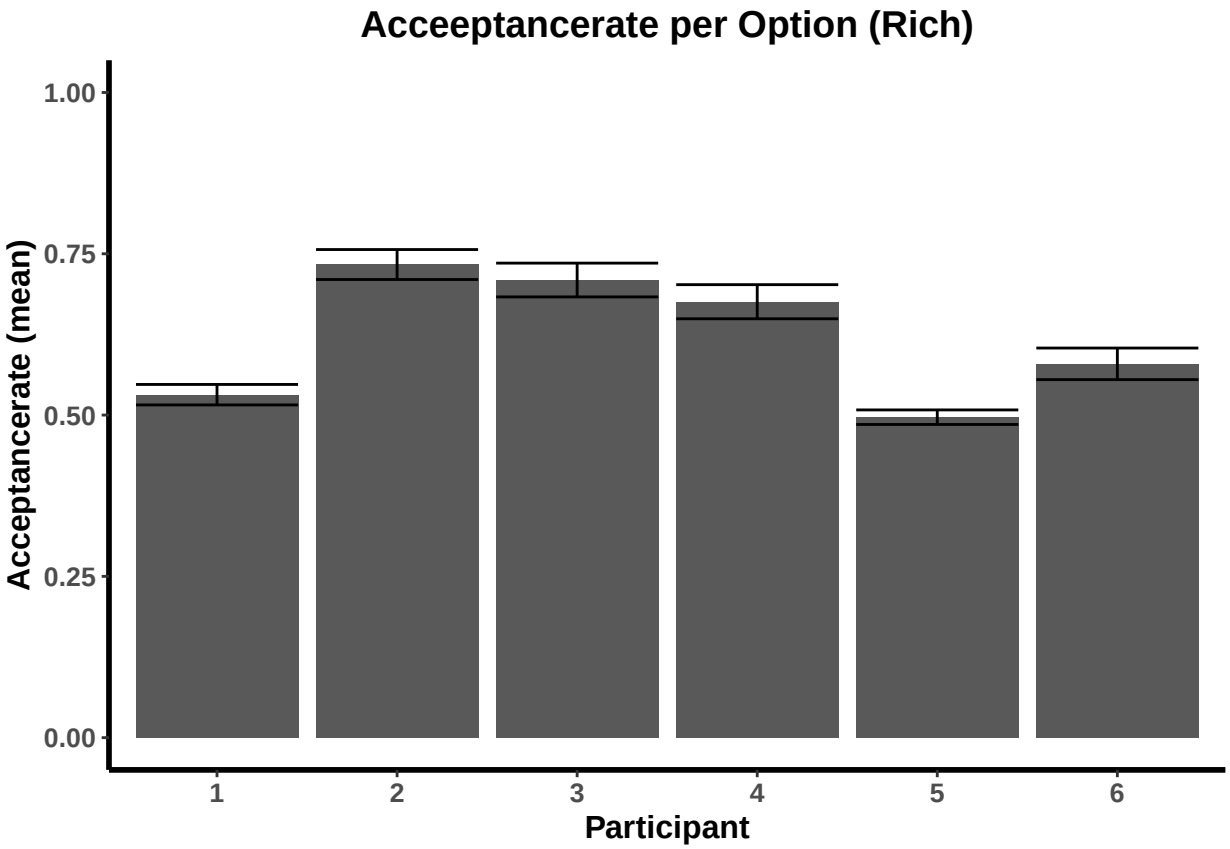



```
ggsave("bar_acceptacnerate_rich_nonsocial.jpg", width = 4, height = 4)

##Acceptancerate per option (poor)
data %>% filter(blockIdx== 2 ) %>% group_by(scheduledHt) %>% summarise(se0=sd(responseRT,na.rm=TRUE)/sq
```




```
ggsave("bar_acceptancerate_poor_nonsocial.jpg", width = 4, height = 4)
```

```
####individual participants
#rich
data0.1<- data %>% filter(blockIdx== 1 ) %>% group_by(participant) %>% summarise(se0=sd(responseRT,na.r

data0.1%>% ggplot(aes(x=factor(participant))) +geom_bar(aes(y=mean0), stat = "identity")  +geom_errorba
```



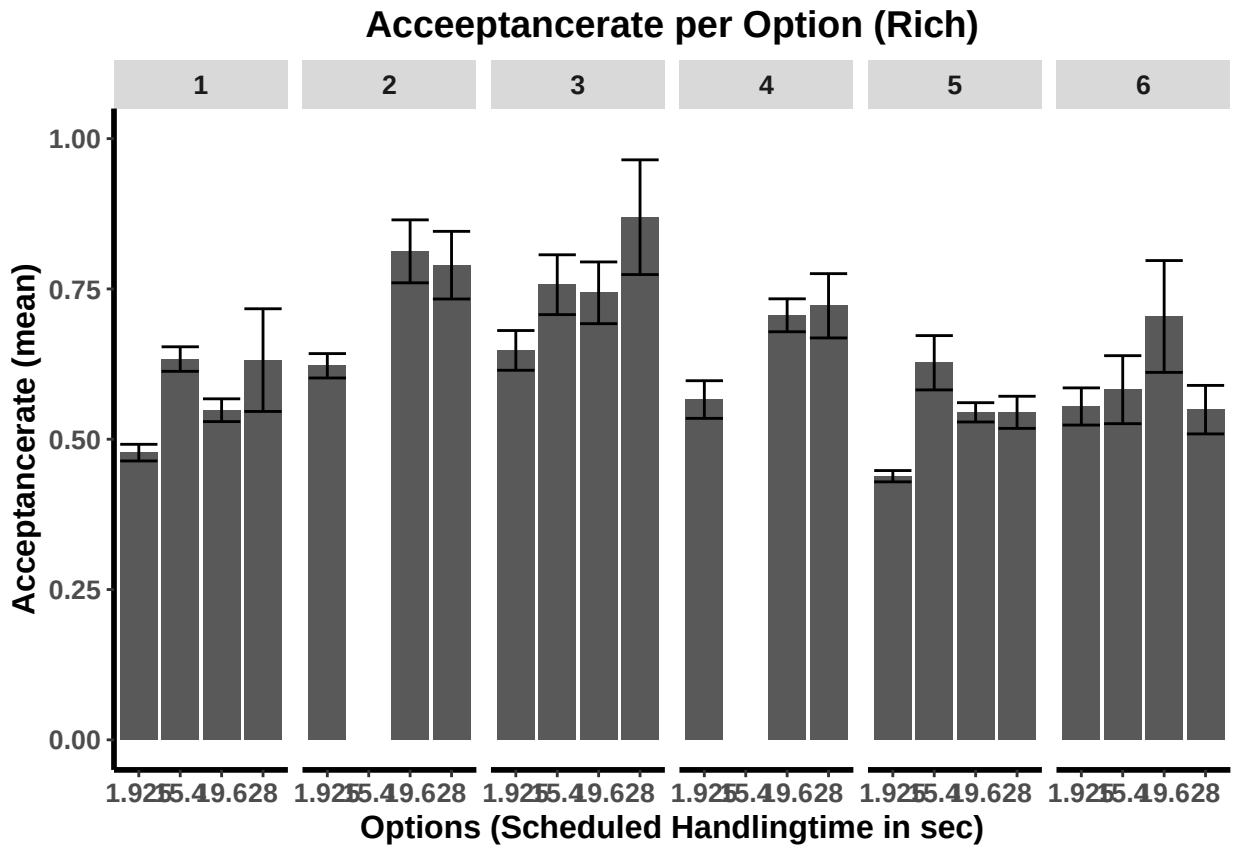

```
ggsave("bar_acceptacnerate_rich_nonsocial.jpg", width = 4, height = 4)
```

```
data0.12<- data %>% filter(blockIdx== 1 ) %>% group_by(scheduledHt,participant) %>% summarise(se0=sd(res
```

```
data0.12%>% ggplot(aes(x=factor(scheduledHt))) +geom_bar(aes(y=mean0), stat = "identity") +facet_grid(~p
```

```
## Warning: Removed 2 rows containing missing values (position_stack).
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```




```
ggsave("bar_acceptacnerate_rich_nonsocial.jpg", width = 4, height = 4)
```

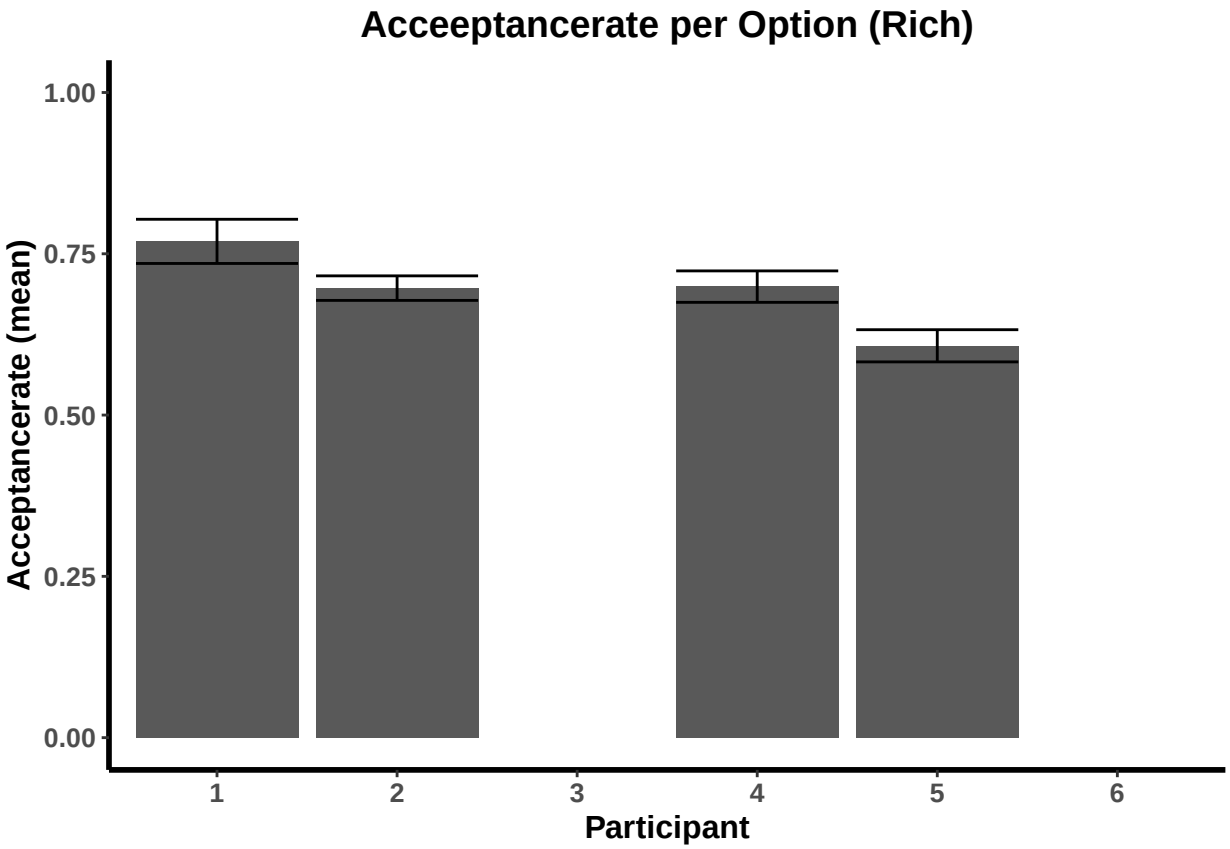
```
## Warning: Removed 2 rows containing missing values (position_stack).
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```

```
#poor
data0.2<- data %>% filter(blockIdx== 2 ) %>% group_by(participant) %>% summarise(se0=sd(responseRT,na.r

data0.2%>% ggplot(aes(x=factor(participant))) +geom_bar(aes(y=mean0), stat = "identity")  +geom_errorba
```

```
## Warning: Removed 2 rows containing missing values (position_stack).
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```




```
ggsave("bar_acceptacnerate_poor_participant.jpg", width = 4, height = 4)
```

```
## Warning: Removed 2 rows containing missing values (position_stack).
```

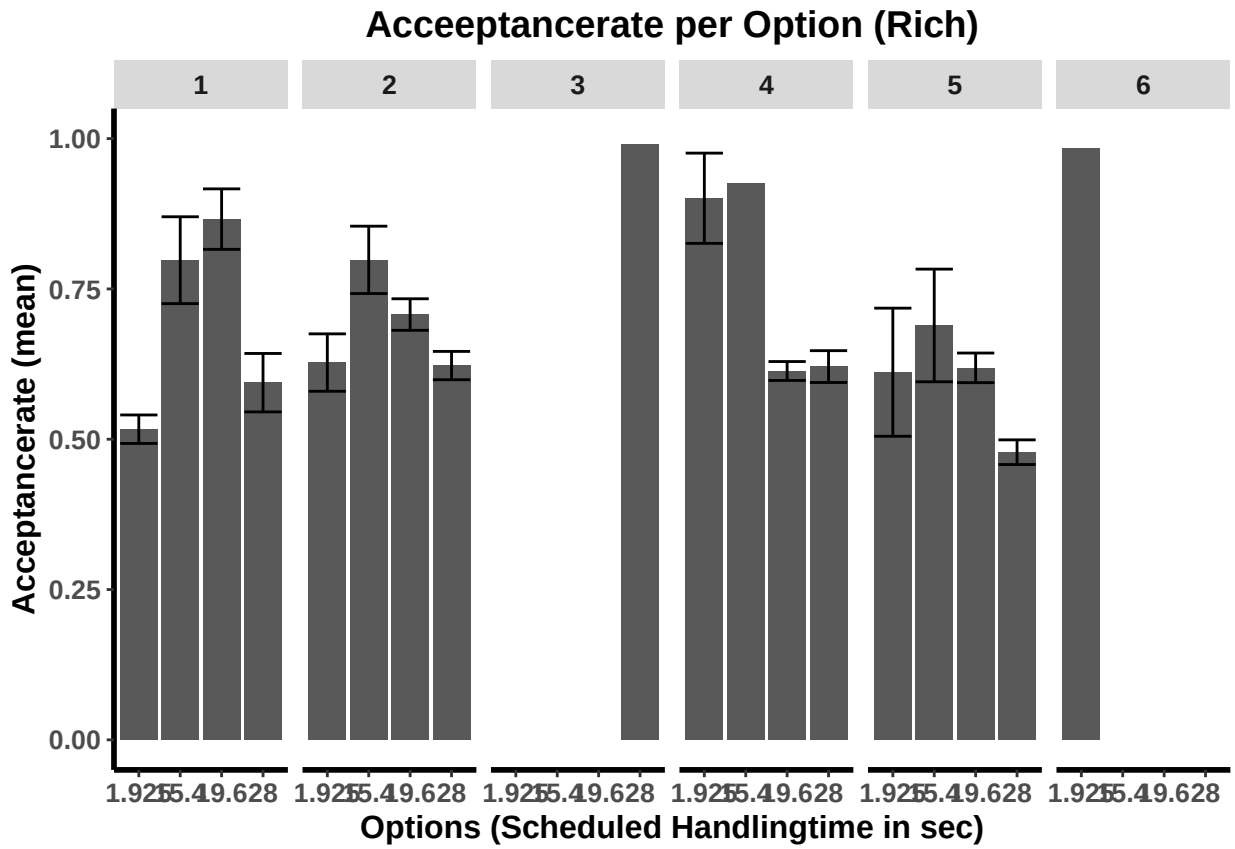
```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```

```
data0.21<- data %>% filter(blockIdx== 2 ) %>% group_by(scheduledHt,participant) %>% summarise(se0=sd(res
```

```
data0.21%>% ggplot(aes(x=factor(scheduledHt))) +geom_bar(aes(y=mean0), stat = "identity") +facet_grid(~
```

```
## Warning: Removed 6 rows containing missing values (position_stack).
```

```
## Warning: Removed 9 rows containing missing values (geom_errorbar).
```



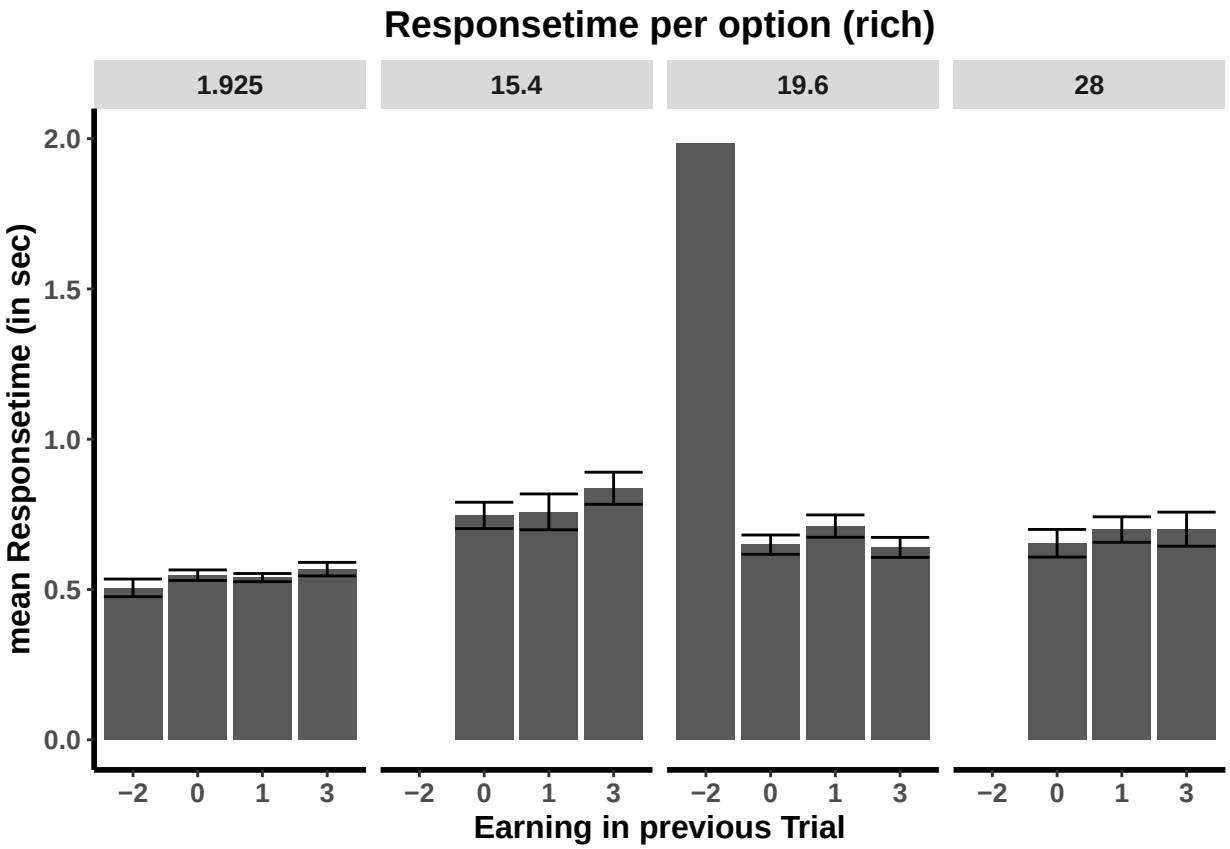

```
ggsave("bar_acceptacnerate_poor_participant.jpg", width = 4, height = 4)
```

```
## Warning: Removed 6 rows containing missing values (position_stack).
```

```
## Warning: Removed 9 rows containing missing values (geom_errorbar).
```

```
###Creating dataframe for SE
##Data frame for rich condition

data1<- data %>% filter(blockIdx== 1,is.na(prev_Earn) == FALSE ) %>% group_by(prev_Earn,scheduledHt) %>%

##Data frame for poor condition
data2<- data %>% filter(blockIdx== 2, is.na(prev_Earn) == FALSE) %>% group_by(prev_Earn,scheduledHt) %>%


##bargraphs responsetime on prev earning
#rich
data1 %>% ggplot(aes(x=factor(prev_Earn))) +geom_bar(aes(y=mean1), stat = "identity")  +facet_grid(~sche
```

```
## Warning: Removed 1 rows containing missing values (geom_errorbar).
```

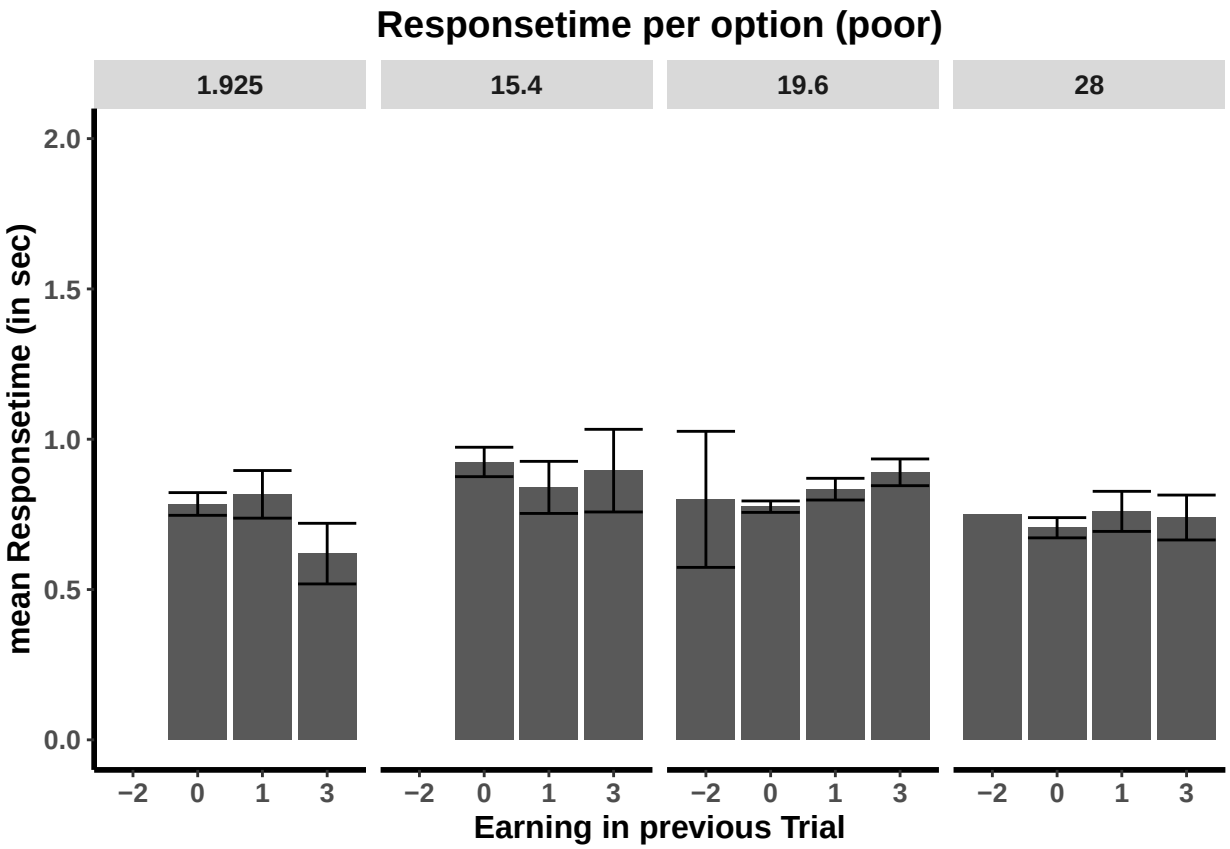



```
ggsave("bar_Responsetimeperoption_nonsocial.jpg", width = 6, height = 4)
```

```
## Warning: Removed 1 rows containing missing values (geom_errorbar).
```

```
#poor
data2 %>% ggplot(aes(x=factor(prev_Earn))) +geom_bar(aes(y=mean2), stat = "identity")  +facet_grid(~sch
```

```
## Warning: Removed 1 rows containing missing values (geom_errorbar).
```

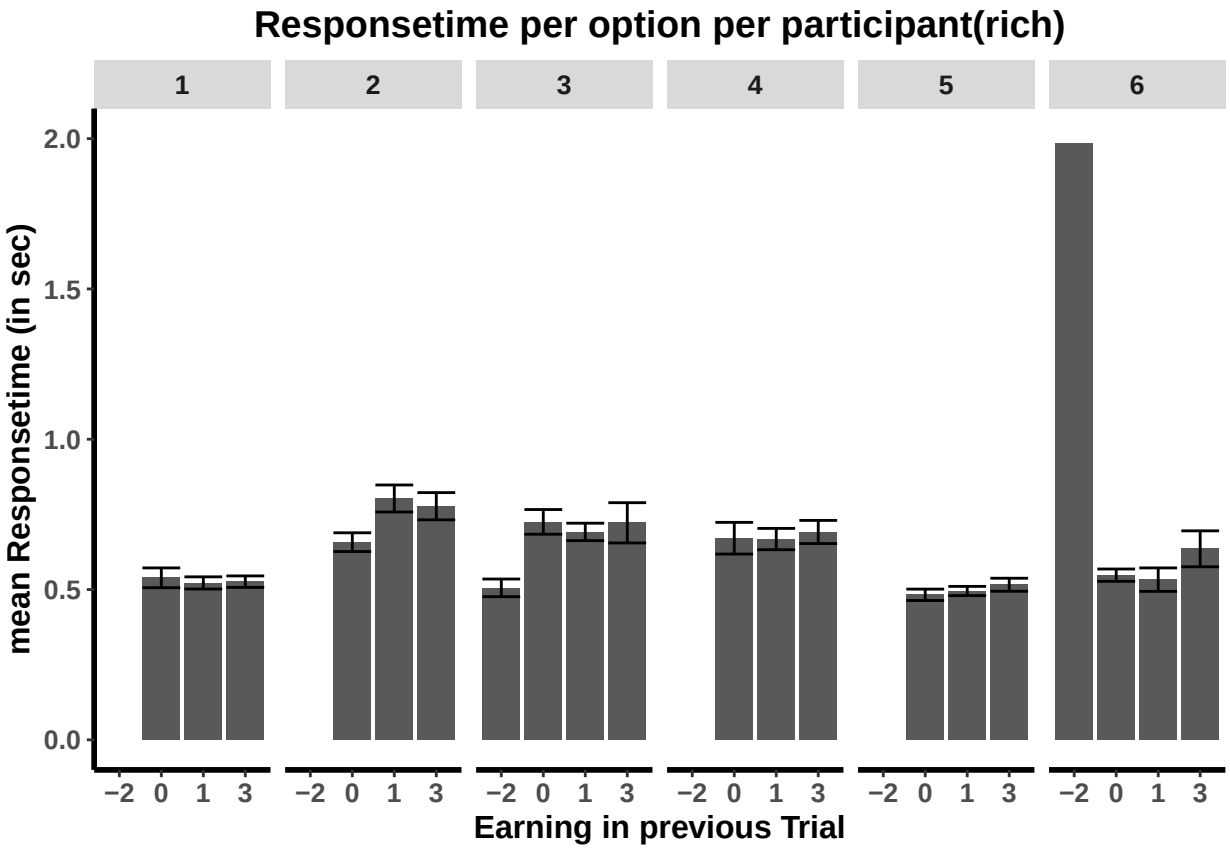



```
ggsave("bar_Responsetimeperoption_nonsocial.jpg", width = 6, height = 4)
```

```
## Warning: Removed 1 rows containing missing values (geom_errorbar).
```

```
####individual participants
#rich
data1.1<- data %>% filter(blockIdx== 1,is.na(prev_Earn) == FALSE ) %>% group_by(prev_Earn,participant) %

data1.1 %>% ggplot(aes(x=factor(prev_Earn))) +geom_bar(aes(y=mean1.1), stat = "identity")  +facet_grid(~
```

```
## Warning: Removed 1 rows containing missing values (geom_errorbar).
```



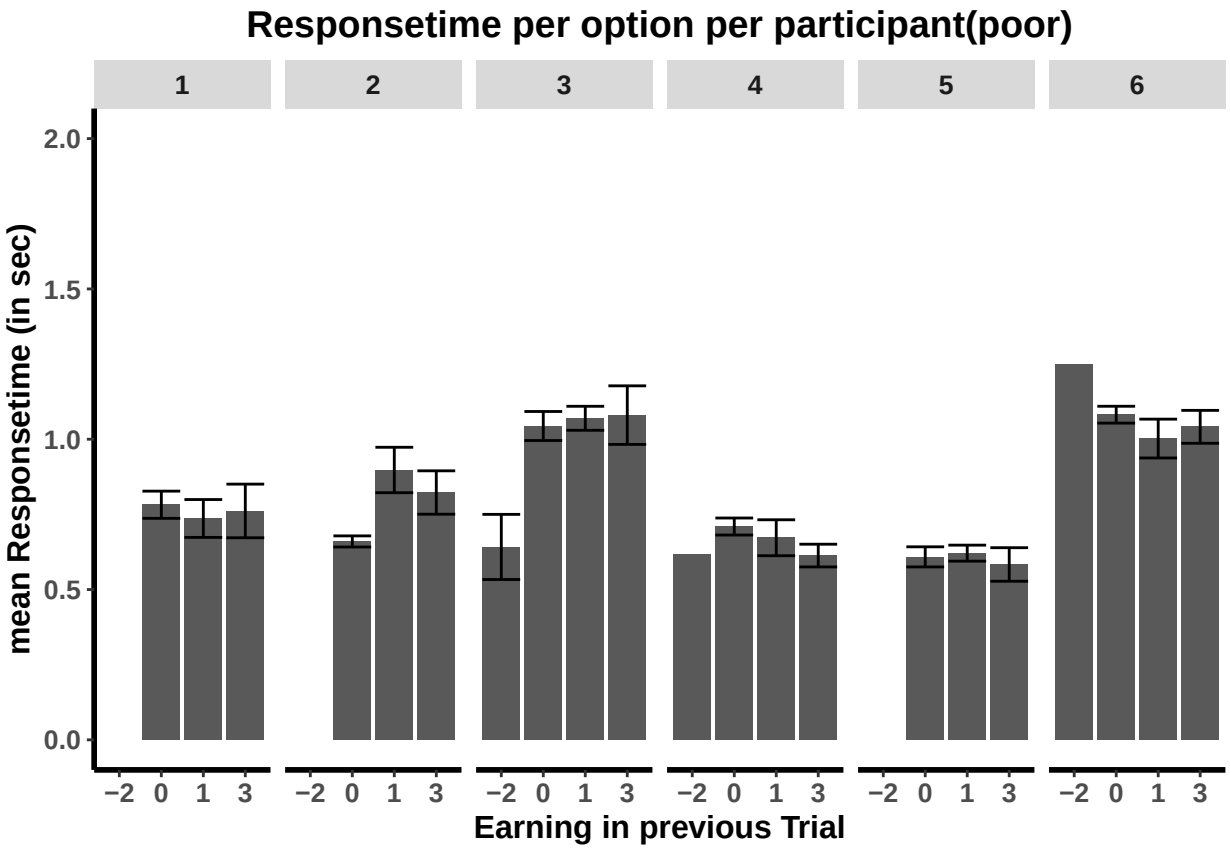

```
ggsave("bar_Responsetimeperoption_rich_particpant.jpg", width = 6, height = 4)
```

```
## Warning: Removed 1 rows containing missing values (geom_errorbar).
```

```
data2.1<- data %>% filter(blockIdx== 2,is.na(prev_Earn) == FALSE ) %>% group_by(prev_Earn,participant) %
```

```
data2.1 %>% ggplot(aes(x=factor(prev_Earn))) +geom_bar(aes(y=mean2.1), stat = "identity")  +facet_grid(
```

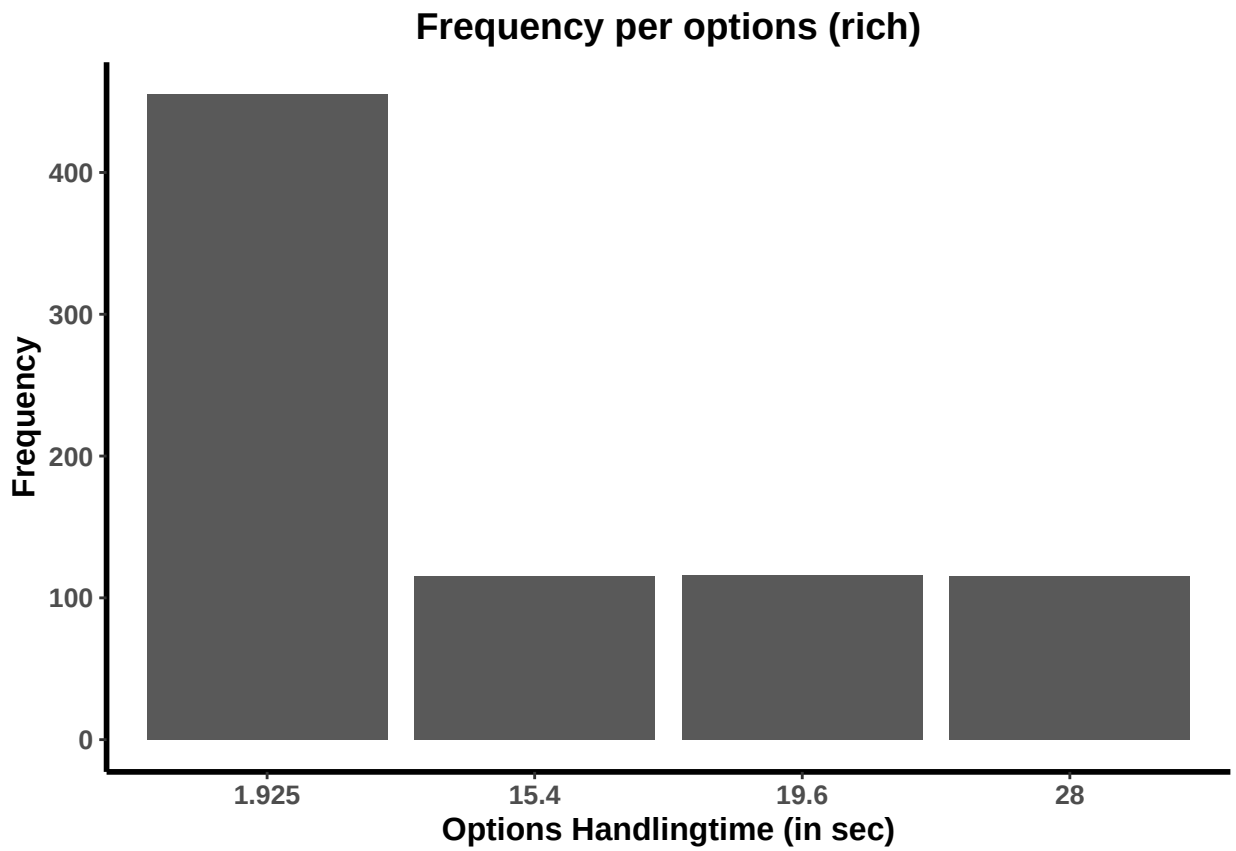
```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```



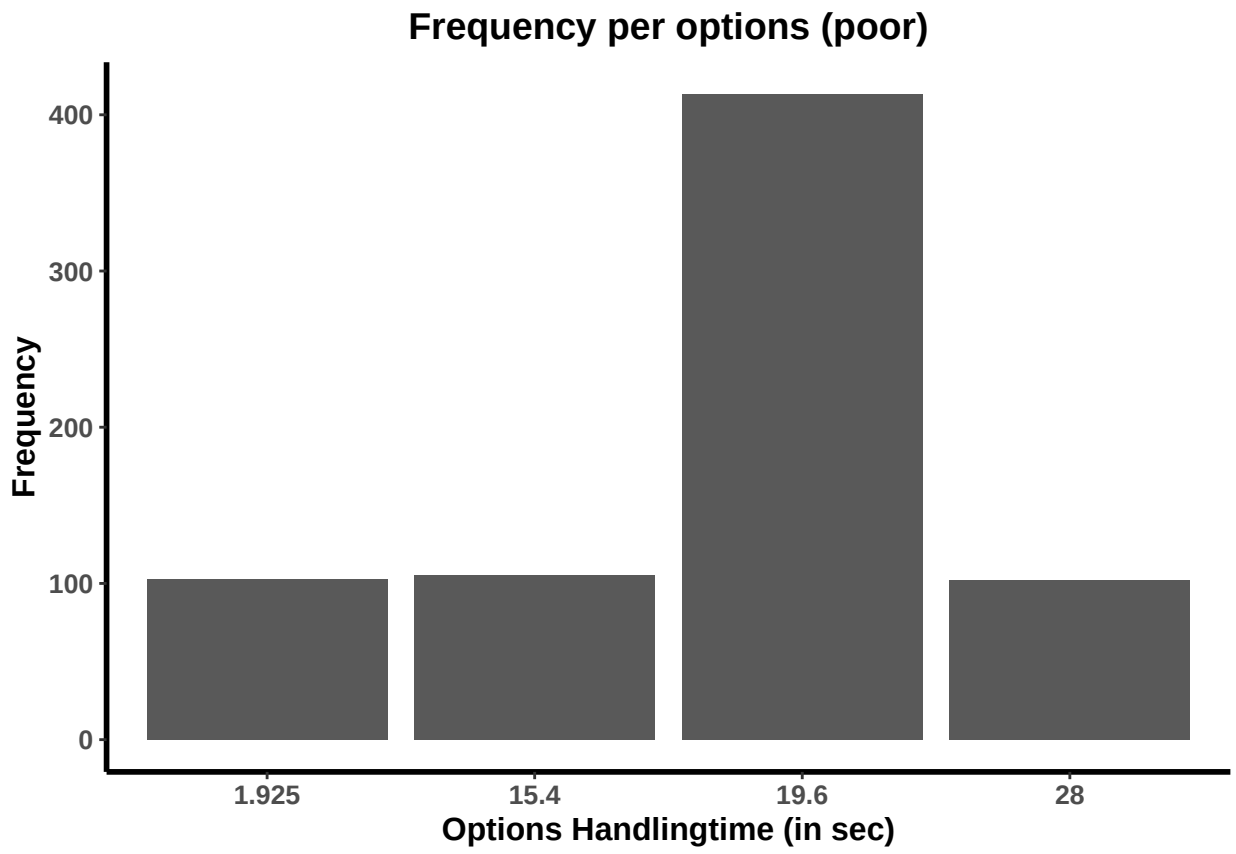

```
ggsave("bar_Responsetimeperoption_poor_particpant.jpg", width = 6, height = 4)
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```

```
##frequency of options
#rich
data %>% filter(blockIdx==1) %>% count(scheduledHt) %>% ggplot(aes(x=factor(scheduledHt), y=n))+geom_ba
```



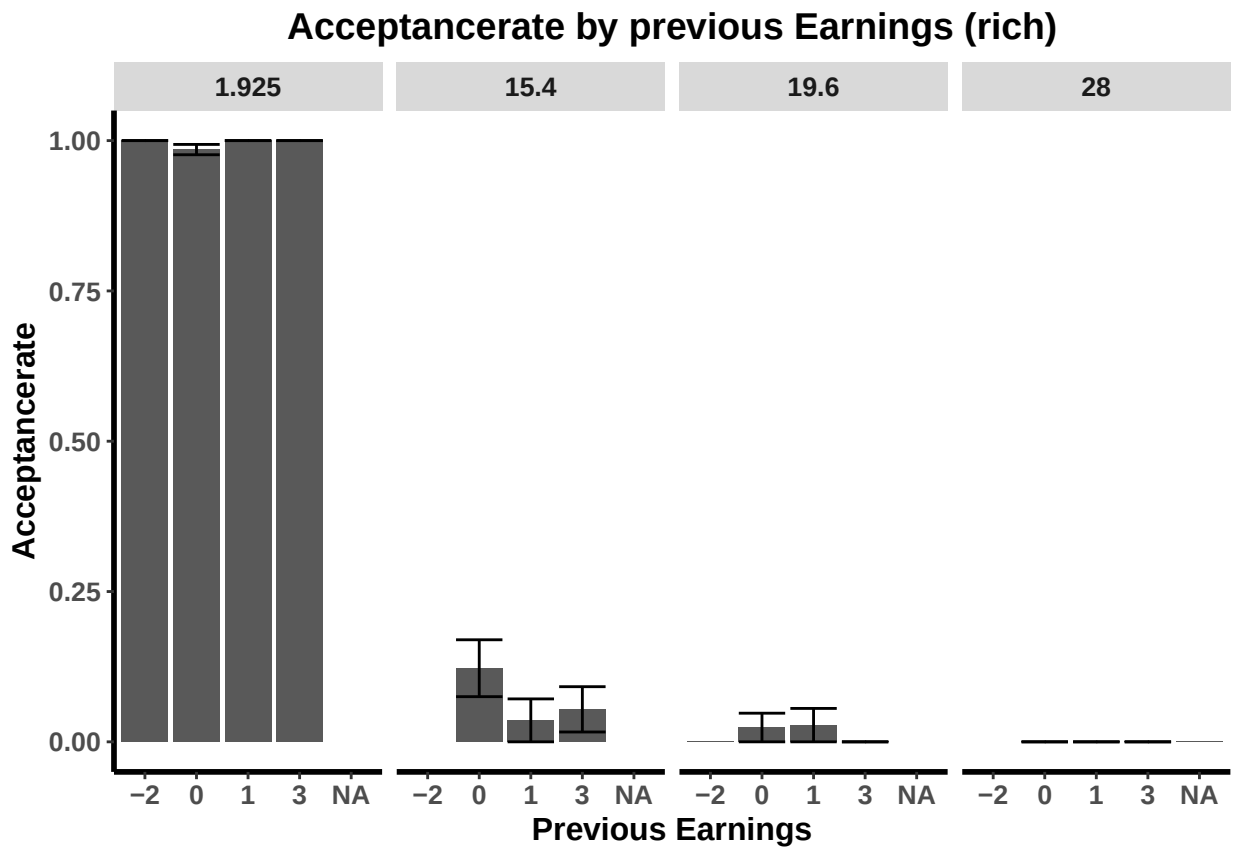

```
ggsave("frequency_options_rich_nonsocial.jpg", width = 4, height = 4)

#poor
data %>% filter(blockIdx==2) %>% count(scheduledHt) %>% ggplot(aes(x=factor(scheduledHt), y=n))+geom_ba
```




```
ggsave("frequency_options_poor_nonsocial.jpg", width = 4, height = 4)
```

```
##genral acceptance rate

#filetring missed trials

data <-data %>% filter(trialEarnings >-1) %>% mutate(Decision=ifelse(trialEarnings==0,0,1))

##Acceptance rate per option cretaing data frame

#rich
data3<- data %>% filter(blockIdx== 1 )  %>% group_by(prev_Earn,scheduledHt) %>% summarise(se3=sd(Decisi

#poor
data4<- data %>% filter(blockIdx== 2 ) %>% group_by(prev_Earn,scheduledHt) %>% summarise(se4=sd(Decisio

##plotting: aceeptance rate per previous earnings split for each option

#rich
data3 %>% ggplot(aes(x=factor(prev_Earn))) +geom_bar(aes(y=mean3), stat = "identity")  +facet_grid(~sch
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```

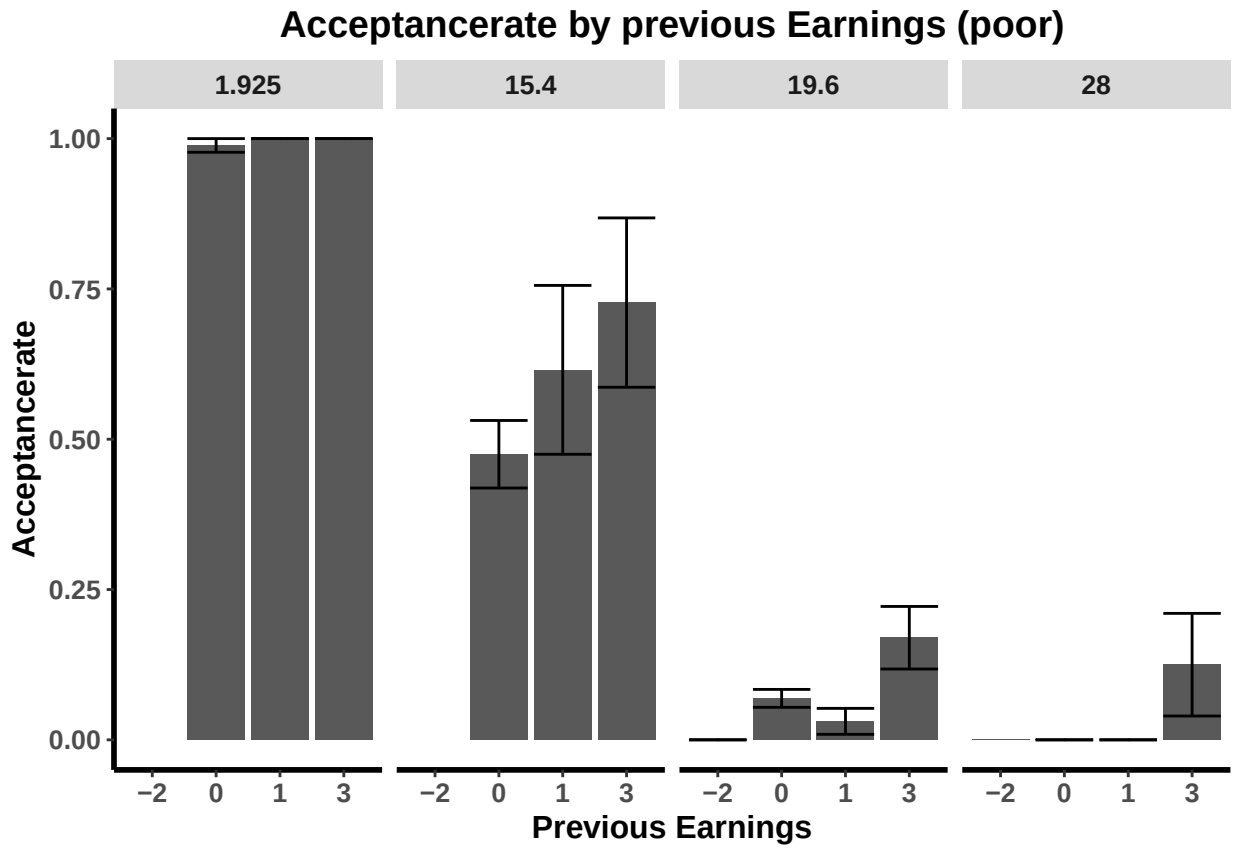



```
ggsave("bars_acceptancerate_rich.jpg", width = 6, height = 4)
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```

```
#poor
data4 %>% ggplot(aes(x=factor(prev_Earn))) +geom_bar(aes(y=mean4), stat = "identity")  +facet_grid(~sch
```

```
## Warning: Removed 1 rows containing missing values (geom_errorbar).
```

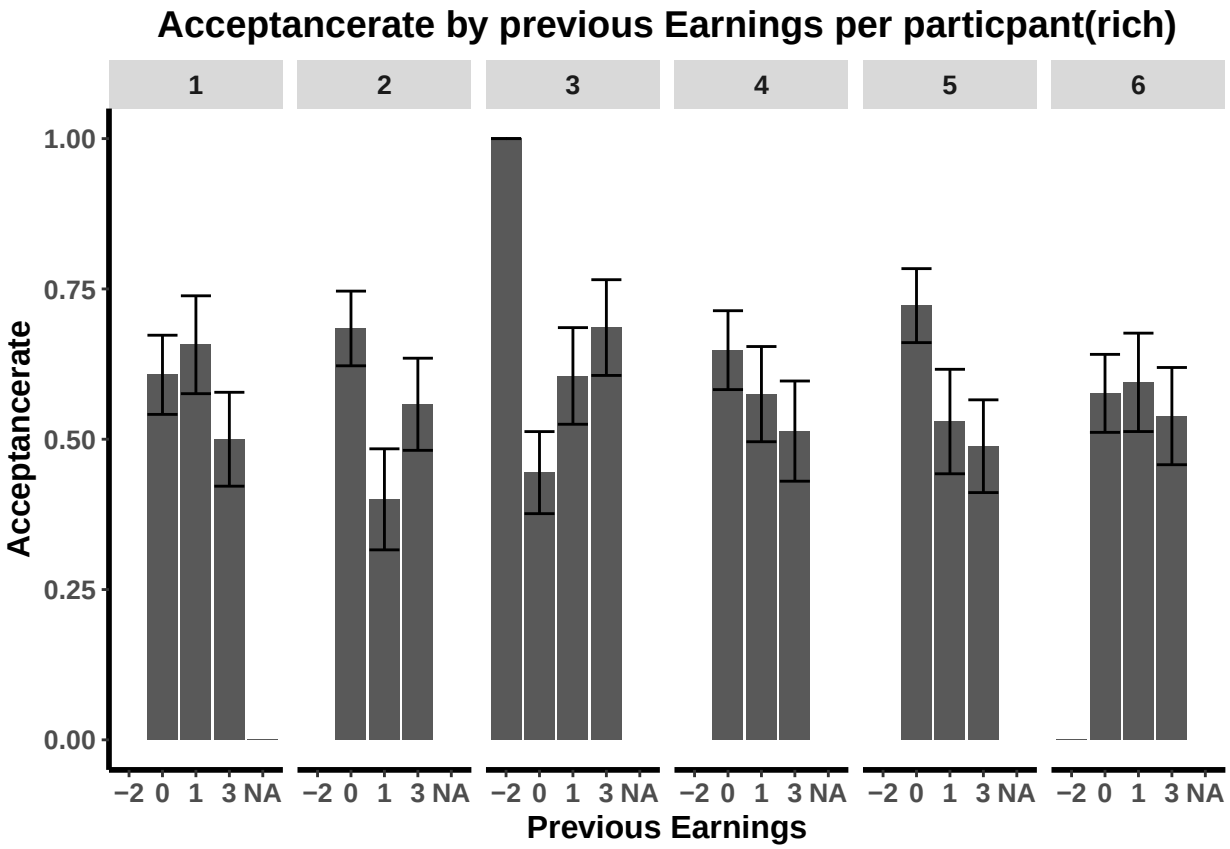



```
ggsave("bars_acceptancerate_poor.jpg", width = 6, height = 4)
```

```
## Warning: Removed 1 rows containing missing values (geom_errorbar).
```

```
##individual participants
#rich
data3.1<- data %>% filter(blockIdx== 1 )  %>% group_by(prev_Earn,participant) %>% summarise(se3.1=sd(De

data3.1 %>% ggplot(aes(x=factor(prev_Earn))) +geom_bar(aes(y=mean3.1), stat = "identity")  +facet_grid(
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```

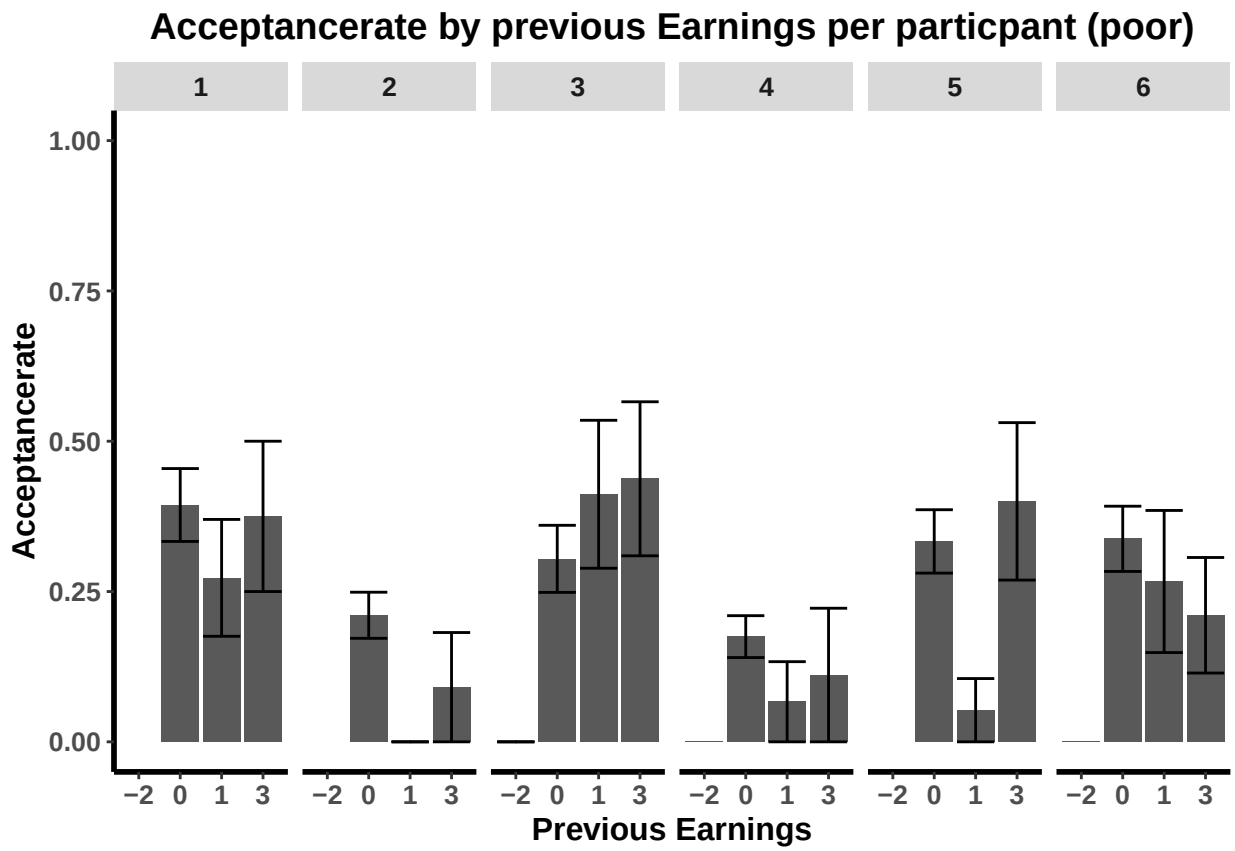



```
ggsave("bars_acceptancerate_partipants_rich.jpg", width = 6, height = 4)
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```

```
#poor
data3.2<- data %>% filter(blockIdx== 2 )  %>% group_by(prev_Earn,participant) %>% summarise(se3.2=sd(De

data3.2 %>% ggplot(aes(x=factor(prev_Earn))) +geom_bar(aes(y=mean3.2), stat = "identity")  +facet_grid(
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```



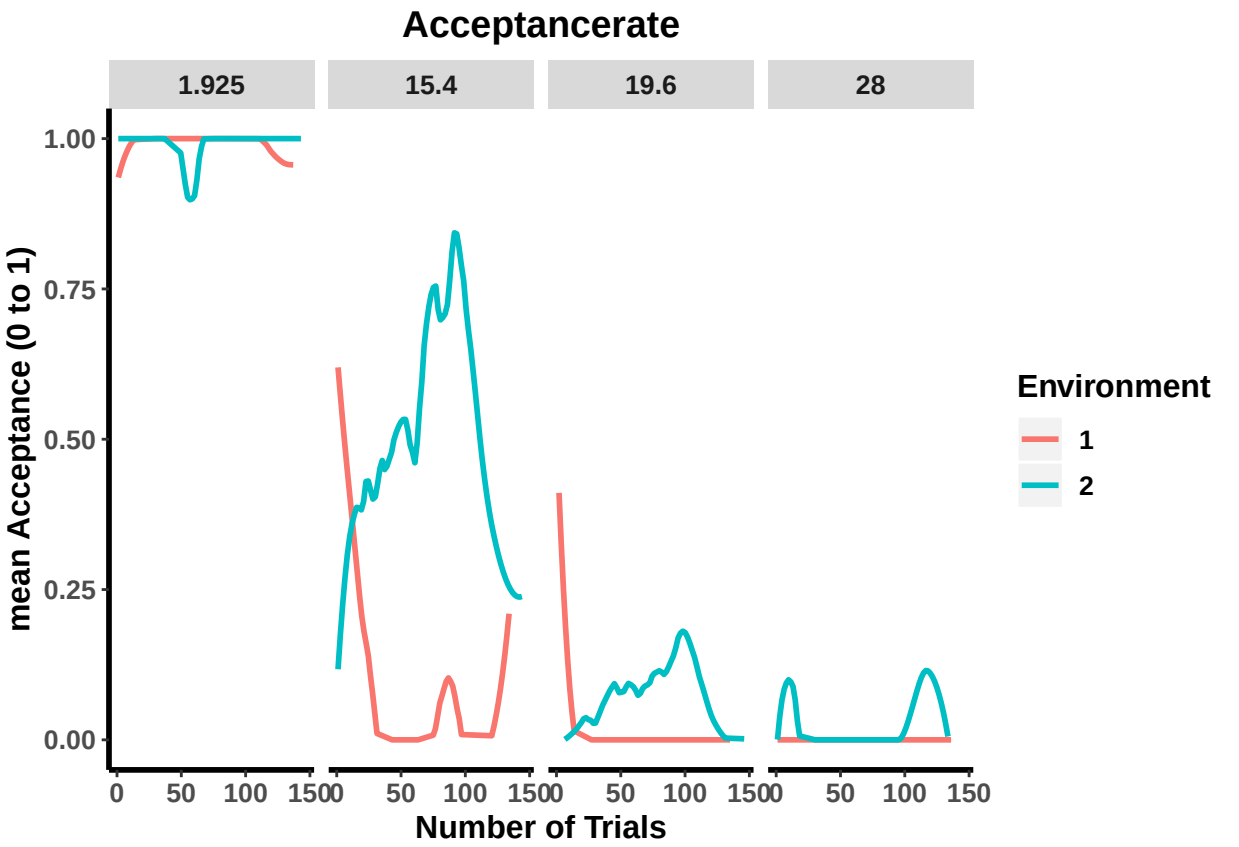

```
ggsave("bars_acceptancerate_participants_poor.jpg", width = 6, height = 4)
```

```
## Warning: Removed 2 rows containing missing values (geom_errorbar).
```

```
##acceptance rate per option over time (graph)
data  %>% ggplot(aes(x=trialIdx, y=Decision,color=factor(blockIdx)))+
geom_smooth(aes( group=blockIdx), se = F, span=0.3) +ylim(c(0,1))+ facet_grid(~scheduledHt)+ggtitle("Ac
```

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

```
## Warning: Removed 110 rows containing missing values (geom_smooth).
```

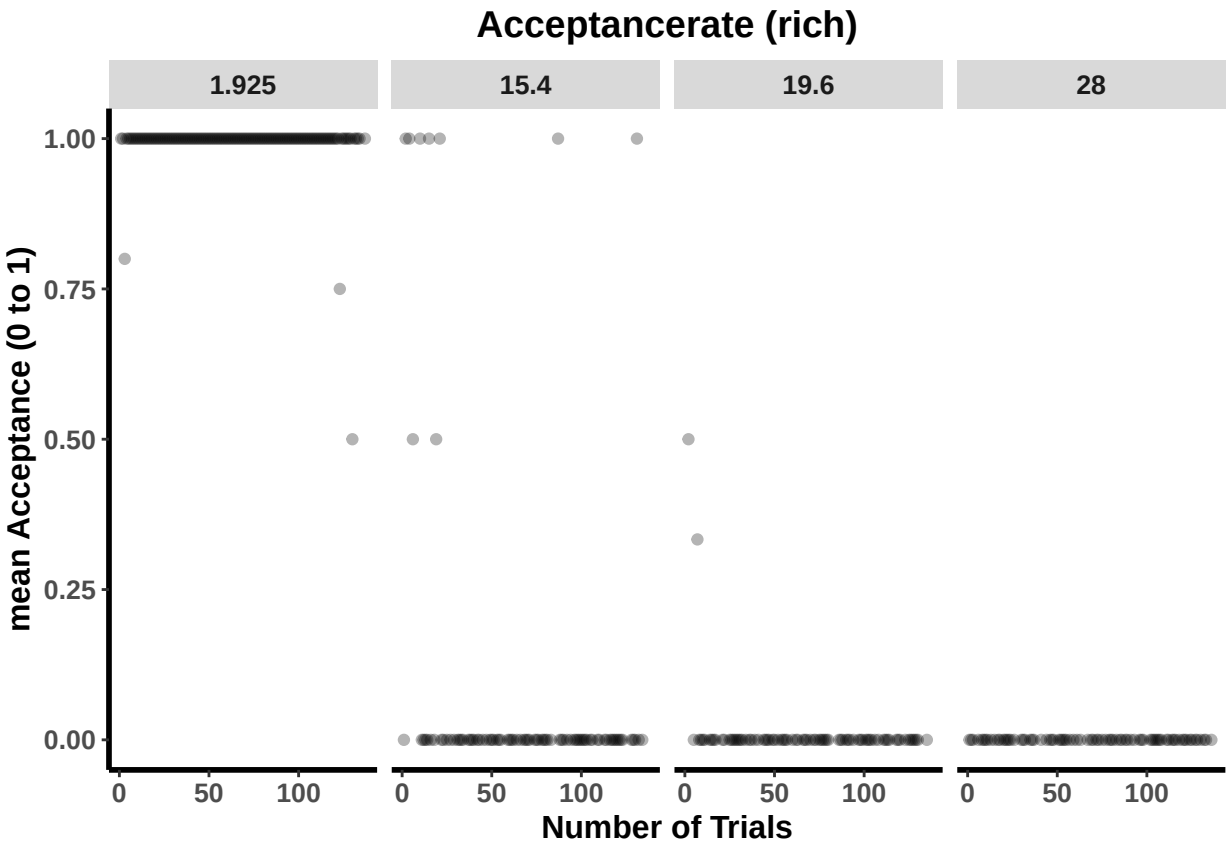



```
ggsave("graph_acceptancerate.jpg", width = 6, height = 4)
```

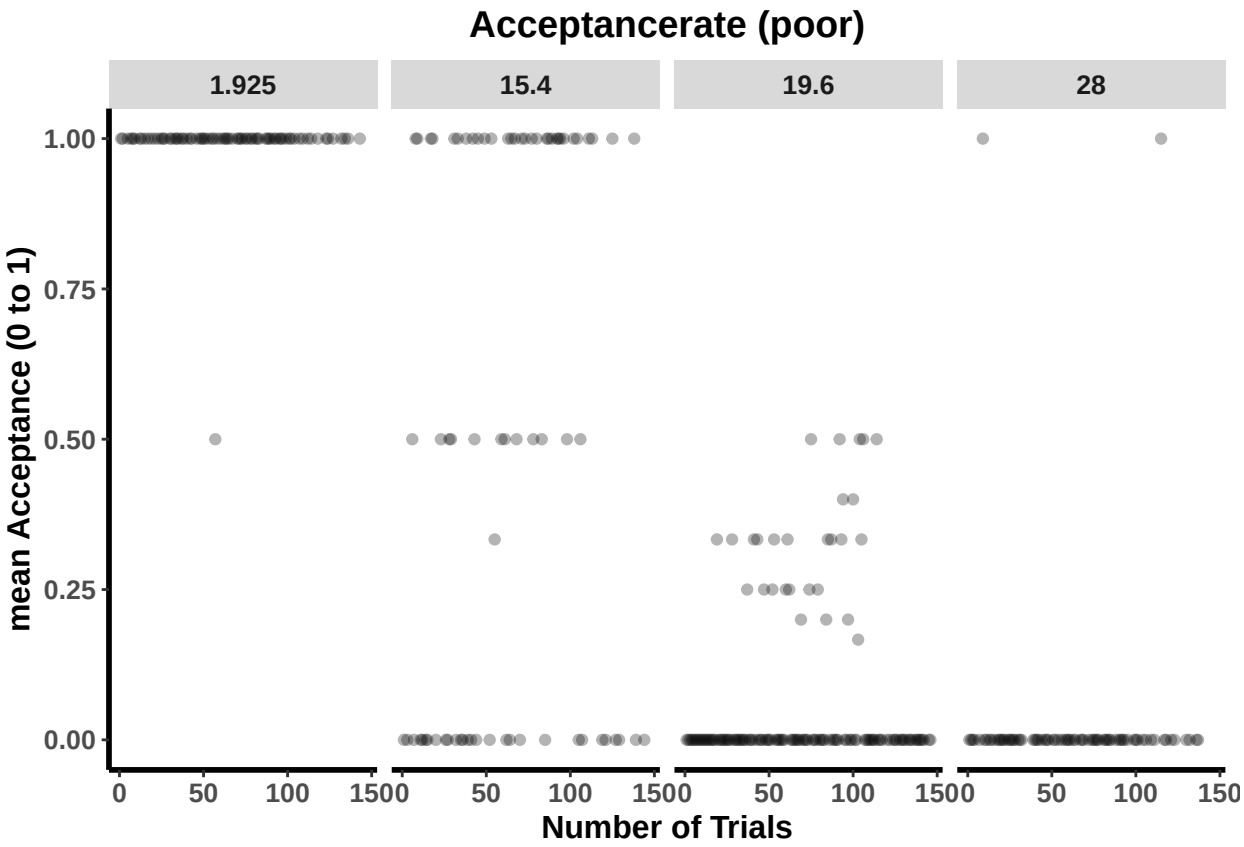
```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

```
## Warning: Removed 110 rows containing missing values (geom_smooth).
```

```
##creating dataframe:accceptancerate per options points
#rich
data5<- data %>% filter(blockIdx== 1 ) %>% group_by(scheduledHt,trialIdx) %>% summarise(se5=sd(Decision

#poor
data6<- data %>% filter(blockIdx== 2 ) %>% group_by(scheduledHt,trialIdx) %>% summarise(se6=sd(Decision

#creating plot:accceptancerate per options points
#rich
data5  %>% ggplot(aes(x=trialIdx, y=mean5))+
geom_point(alpha=0.3) + facet_grid(~scheduledHt)+ggtitle("Acceptancerate")+labs(color = "Environment",y=
```




```
ggsave("point_acceptancerate_options_poor_nonsocial.jpg", width = 6, height = 4)

#poor
data6  %>% ggplot(aes(x=trialIdx, y=mean6))+
geom_point(alpha=0.3) + facet_grid(~scheduledHt)+ggtitle("Acceptancerate")+labs(color = "Environment",y=
```




```
ggsave("point_acceptancerate_options_poor_nonsocial.jpg", width = 6, height = 4)
```

##waste

#further indiviudal analysis #particpanat1 data7<- data %>% filter(participant==1) %>% group_by(scheduledHt,trialIdx, blockIdx, Decision) %>% summarise(se5=sd(Decision)/sqrt(sum(!is.na(Decision))),mean5=mean(Decision))

data7 %>% ggplot(aes(x=trialIdx, y=mean5))+ geom_point(alpha=0.3) + facet_grid(~scheduledHt)+ggtitle("Acceptancera = "Environment",y="mean Acceptance (0 to 1)", x= "Number of Trials")+ggtitle("Acceptancerate (rich)")+labs(color = "Environment",y="mean Acceptance (0 to 1)", x= "Number of Trials") +myTheme

data7 %>% ggplot(aes(x=factor(prev_Earn), y=mean(Decision))) +geom_point()

data7 %>% ggplot(aes(x=factor(prev_Earn),y=Decision)) +geom_point() +facet_grid(~scheduledHt) +ggtitle("Acceptancerate by previous Earnings (rich)") +labs(y="Acceptancerate", x= "Previous Earnings")+myTheme

data6<- data %>% filter(blockIdx== 2) %>% group_by(scheduledHt,trialIdx, participant) %>% summarise(se6=sd(Decision)/sqrt(sum(!is.na(Decision))),mean6=mean(Decision))

data %>% filter(blockIdx== 2) %>% ggplot(aes(x=trialIdx, y=Decision, color=factor(participant)))+ geom_point() + facet_grid(~scheduledHt)+stat_smooth(aes(color=factor(participant)),method="loess",span = 0.1,se=F)+ggtitle("Acceptancerate")+labs(color = "Participant",y="mean Acceptance (0 to 1)", x= "Number of Trials")

data5 %>% ggplot(aes(x=scheduledHt,y=mean5)) +geom_point(aes(alpha=0.1))+facet_grid(~scheduledHt)

lm.fit(data5$mean5$ $data5$trialIdx)

graph<- lm(data5$mean5$ $data5$trialIdx) abline(0.3324981, 0.0001785)

plot(data5$mean5 $data5trialIdx) %>% abline(lm(data5$mean5 $data5trialIdx))

data5<- data %>% filter(blockIdx== 1) %>% group_by(scheduledHt,trialIdx) %>% summarise(se5=sd(Decision)/sqrt(sum

data5 %>% ggplot(aes(x=factor(trialIdx))) +geom_smooth(aes(group=BlockIdx))

geom_errorbar(aes(ymin=mean5-se5, ymax=mean5+se5)) +ylim(c(0,1)) "'