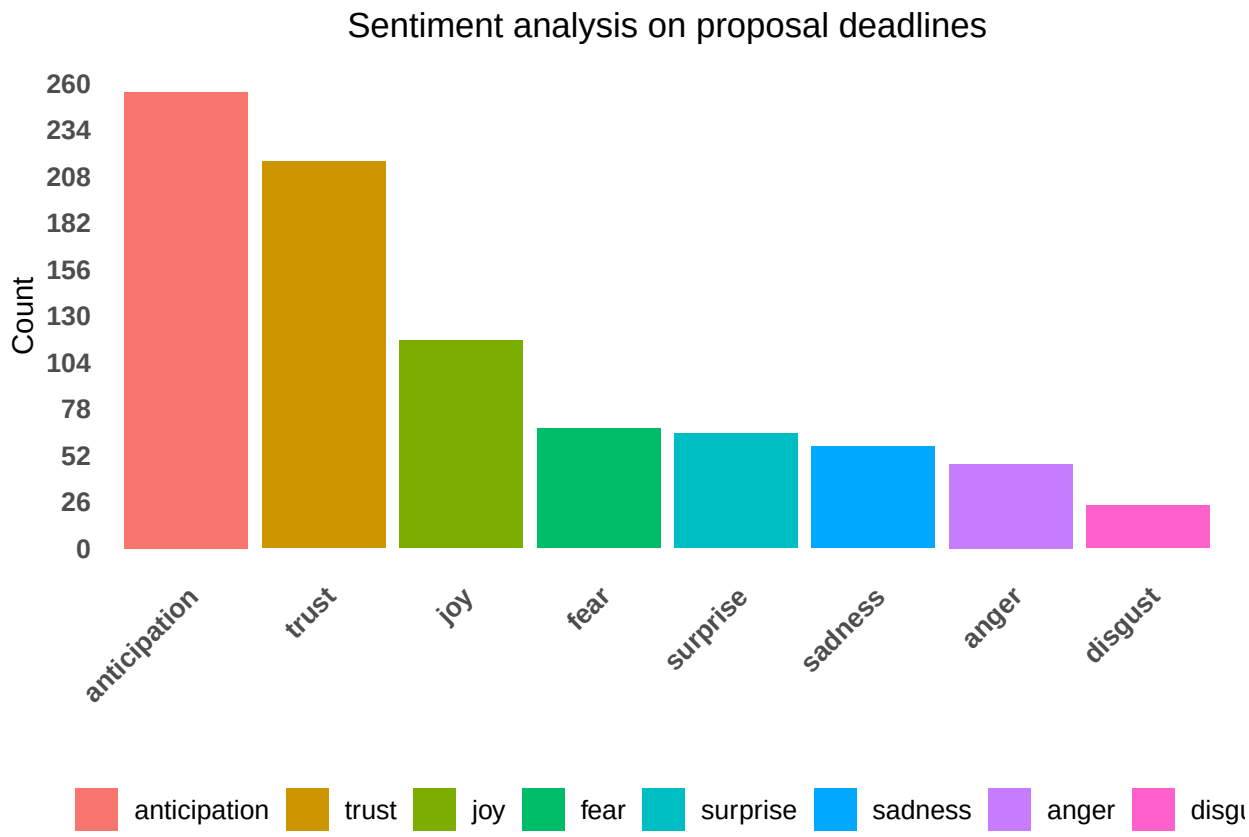
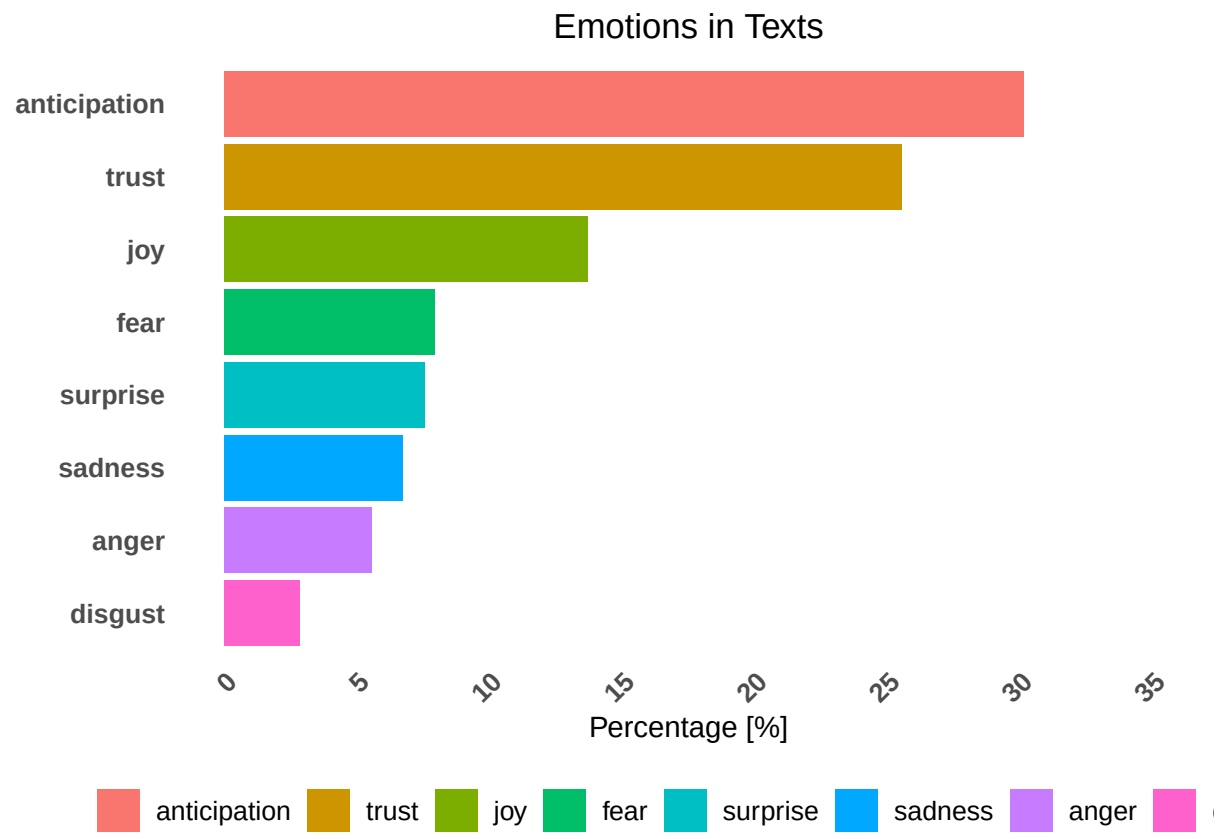
```r
ylimit= round_any(max(td_new2$count), 10,f = ceiling)

legend_order=levels(reorder(td_new2$sentiment, -td_new2$count))

barplot<-ggplot(data = td_new2, aes(x = reorder(sentiment, -count), y = count)) +
  geom_bar(aes(fill = sentiment), stat = "identity", position = "dodge")+
  theme_minimal() +
  scale_y_continuous(breaks = seq(0, ylimit, by = 26),
                     limits = c(0, ylimit)) +
  theme(
    panel.grid.major = element_blank(),
    panel.grid.minor = element_blank(),
    plot.title = element_text(hjust = 0.5),
    axis.text.x = element_text(
      face = "bold",
      size = 10 ,
      angle = 45,
      hjust = 1
    ),
    axis.text.y = element_text(face = "bold", size = 10),
    legend.position = "bottom",
    legend.title = element_blank(),
    legend.text = element_text(size = 10),
  )+labs(x = "", y = "Count", title = "Sentiment analysis on proposal deadlines") +
  guides(fill = guide_legend(nrow = 1))+
  # scale_fill_discrete(limits = c("anticipation", "trust", "joy", "fear",  "sadness", "surprise", "ang
  scale_fill_discrete(limits = legend_order[1:8])
barplot
```




```
Data_Frame=as.data.frame(sort(colSums(prop.table(d[, 1:8]))))
Data_Frame$emotions=rownames(Data_Frame)
colnames(Data_Frame)=c("Percentage", "Emotions")
Data_Frame$Percentage=Data_Frame$Percentage*100


plot <-
  ggplot(Data_Frame, aes(x = reorder(Emotions, Percentage), y = Percentage)) +
  geom_bar(aes(fill = Emotions), stat = "identity", position = "dodge") +
  theme_minimal() +
  labs(x = "", y = "Percentage [%]", title = "Emotions in Texts") +
  scale_y_continuous(breaks = seq(0, 35, by = 5),
                     limits = c(0, 35)) +
  theme(
    panel.grid.major = element_blank(),
    panel.grid.minor = element_blank(),
    plot.title = element_text(hjust = 0.5),
    axis.text.x = element_text(
      face = "bold",
      size = 10 ,
      angle = 45,
      hjust = 1
    ),
    axis.text.y = element_text(face = "bold", size = 10),
    legend.position = "bottom",
    legend.title = element_blank(),
```

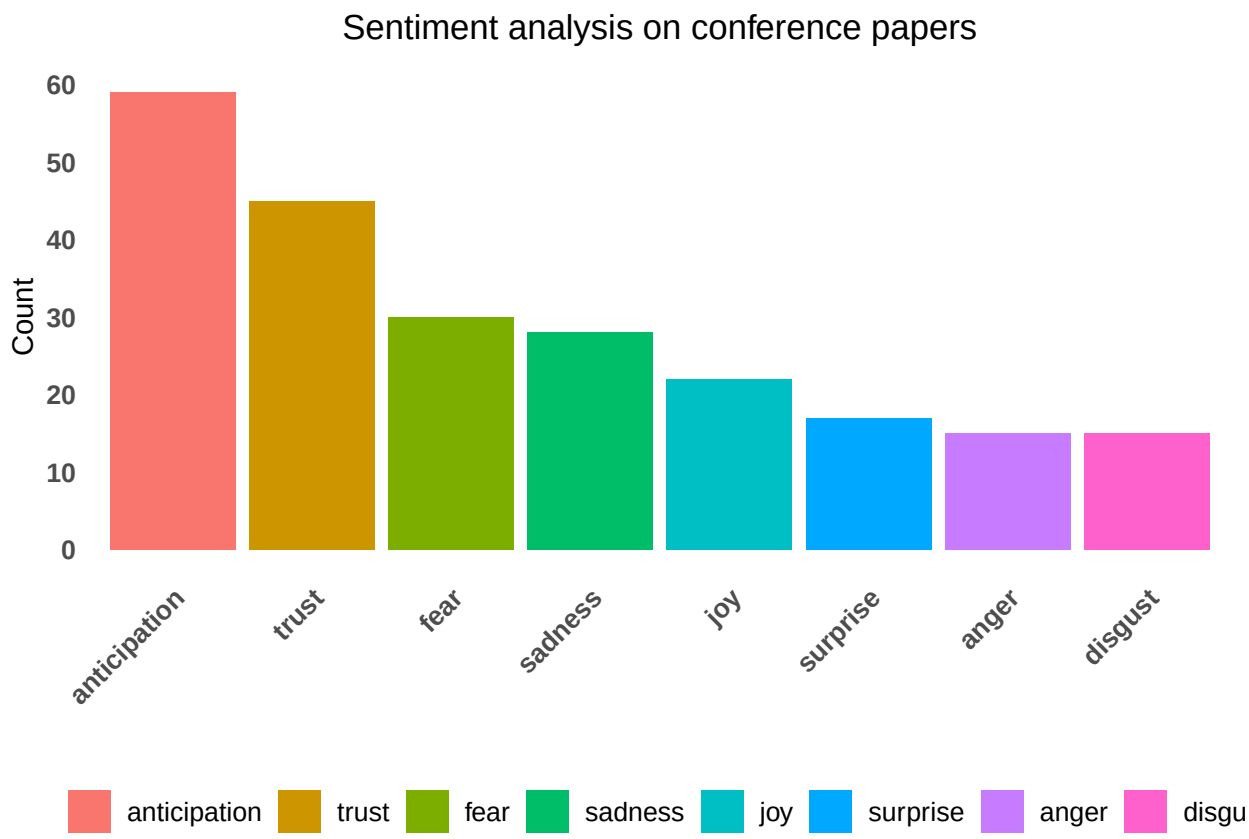
```
    legend.text = element_text(size = 10)
  )+coord_flip()+
  guides(fill = guide_legend(nrow = 1))+
  scale_fill_discrete(limits = legend_order[1:8])
plot
```




```
plots_Proposal=ggarrange(barplot,plot, nrow = 2, ncol = 1, common.legend = TRUE,legend="bottom")
filename<-"Sntiment_proposal.pdf"
full_path<-file.path(plot_dir, filename)
ggsave(full_path, plots_Proposal, width = 8.5, height = 11, units = "in")
```

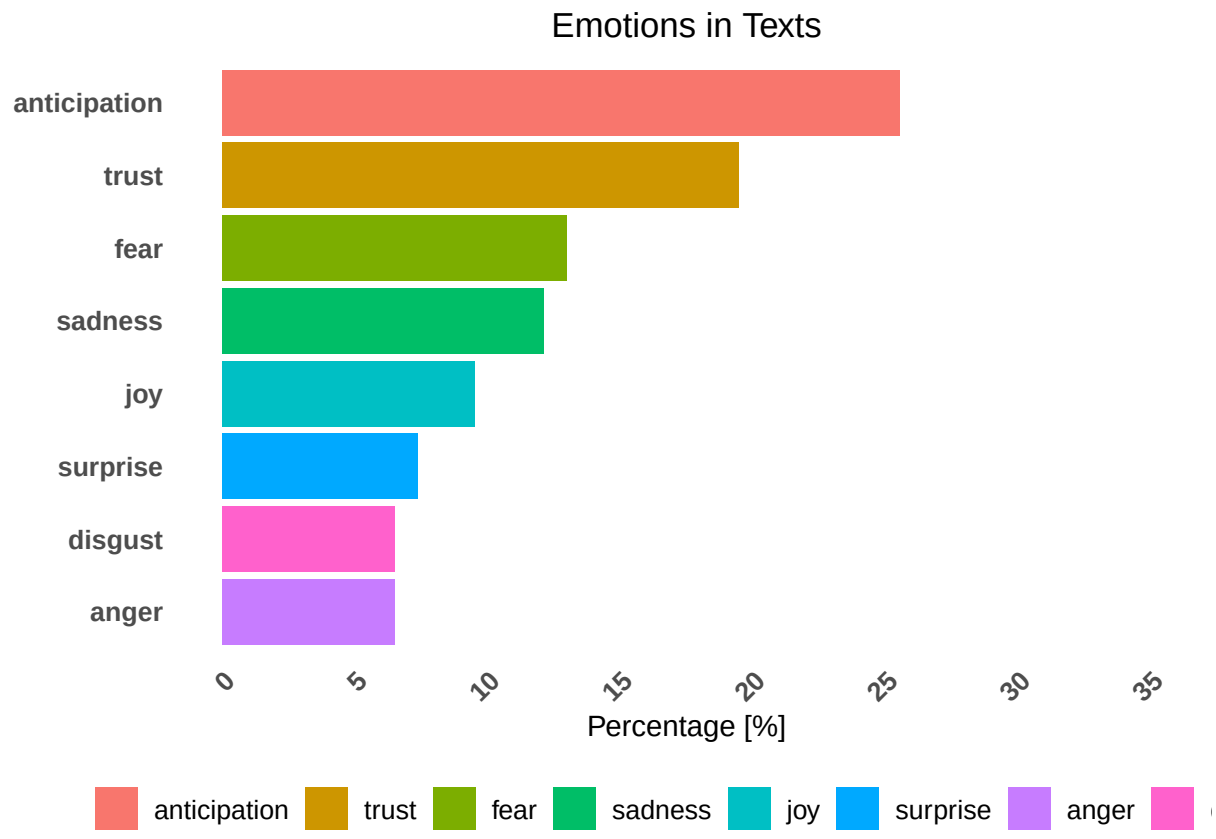
```
ylimit= round_any(max(td_new2$count), 10,f = ceiling)

legend_order=levels(reorder(td_new2$sentiment, -td_new2$count))

barplot<-ggplot(data = td_new2, aes(x = reorder(sentiment, -count), y = count)) +
  geom_bar(aes(fill = sentiment), stat = "identity", position = "dodge")+
  theme_minimal() +
  scale_y_continuous(breaks = seq(0, ylimit, by = 10),
                     limits = c(0, ylimit)) +
  theme(
    panel.grid.major = element_blank(),
    panel.grid.minor = element_blank(),
    plot.title = element_text(hjust = 0.5),
    axis.text.x = element_text(
```

```
      face = "bold",
      size = 10 ,
      angle = 45,
      hjust = 1
    ),
    axis.text.y = element_text(face = "bold", size = 10),
    legend.position = "bottom",
    legend.title = element_blank(),
    legend.text = element_text(size = 10),
  )+labs(x = "", y = "Count", title = "Sentiment analysis on conference papers") +
  guides(fill = guide_legend(nrow = 1))+
  # scale_fill_discrete(limits = c("anticipation", "trust", "joy", "fear",  "sadness", "surprise", "ang
  scale_fill_discrete(limits = legend_order[1:8])
barplot
```




```
Data_Frame=as.data.frame(sort(colSums(prop.table(d[, 1:8]))))
Data_Frame$emotions=rownames(Data_Frame)
colnames(Data_Frame)=c("Percentage", "Emotions")
Data_Frame$Percentage=Data_Frame$Percentage*100


plot <-
  ggplot(Data_Frame, aes(x = reorder(Emotions, Percentage), y = Percentage)) +
  geom_bar(aes(fill = Emotions), stat = "identity", position = "dodge") +
  theme_minimal() +
```

```
  labs(x = "", y = "Percentage [%]", title = "Emotions in Texts") +
  scale_y_continuous(breaks = seq(0, 35, by = 5),
                     limits = c(0, 35)) +
  theme(
    panel.grid.major = element_blank(),
    panel.grid.minor = element_blank(),
    plot.title = element_text(hjust = 0.5),
    axis.text.x = element_text(
      face = "bold",
      size = 10 ,
      angle = 45,
      hjust = 1
    ),
    axis.text.y = element_text(face = "bold", size = 10),
    legend.position = "bottom",
    legend.title = element_blank(),
    legend.text = element_text(size = 10)
  )+coord_flip()+
  guides(fill = guide_legend(nrow = 1))+
  scale_fill_discrete(limits = legend_order[1:8])
plot
```




```
plots_Proposal=ggarrange(barplot,plot, nrow = 2, ncol = 1, common.legend = TRUE,legend="bottom")
filename<-"Sntiment_conf_paper.pdf"
full_path<-file.path(plot_dir, filename)
```

```
ggsave(full_path, plots_Proposal, width = 8.5, height = 11, units = "in")
```