Quality of Life in Canada

Project by:

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1. The link to the group video presentation

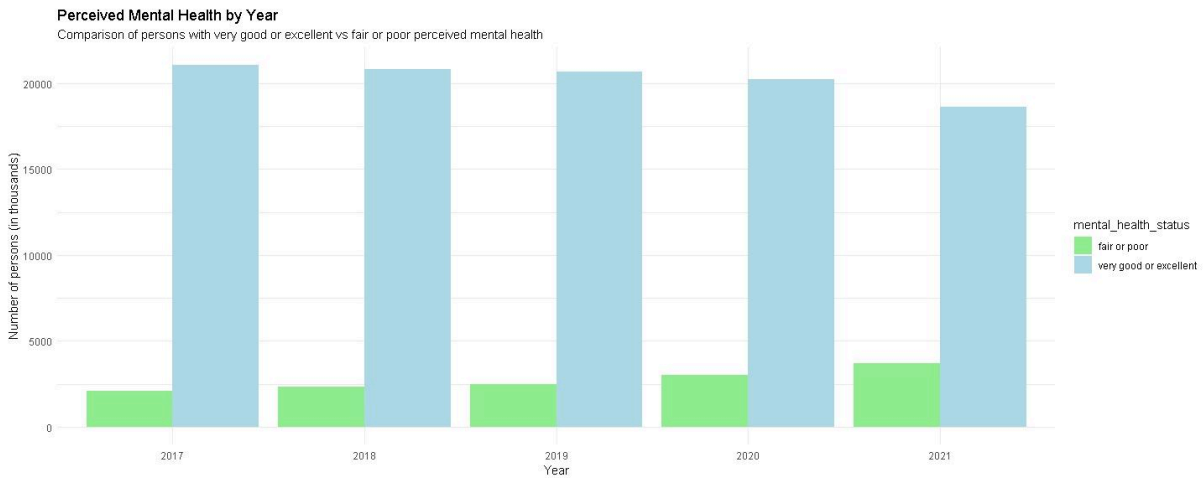
https://www.canva.com/design/DAFgsRqPgtM/ozZ1Cc3GKB6hZqJbtgpL0Q/view?utm_content=DAFgsRqPgtM&utm_campaign=designshare&utm_medium=link&utm_source=recording_view

2. R Code for our Project

```
library(readr)

library(dplyr)

library(ggplot2)

library(reshape)

library(tidyr)


#Graph 1

mental_health <- read_csv("mental_health.csv" , col_types = cols(), skip = 0)

mental_health
```

Bar Chart for perceived mental health for Canadians

```
ggplot(mental_health, aes(x = as.factor(Year), y = num_persons, fill = mental_health_status)) +
  geom_bar(stat = "identity", position = "dodge") +
  labs(x = "Year", y = "Number of persons (in thousands)",
       title = "Perceived Mental Health by Year",
       subtitle = "Comparison of persons with very good or excellent vs fair or poor perceived mental health") +
  scale_fill_manual(values = c("lightgreen", "lightblue")) +
  theme_minimal()
```



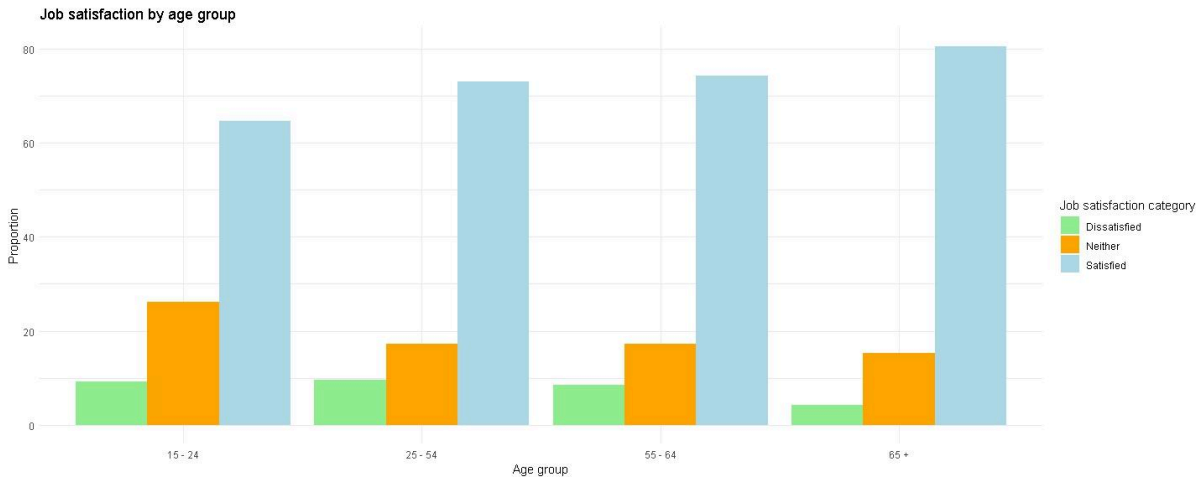
#Graph 2

```
Job <- read_csv("Job satisfaction.csv" , col_types = cols(), skip = 0)
Job
```

Reshape the data into a longer format for plotting

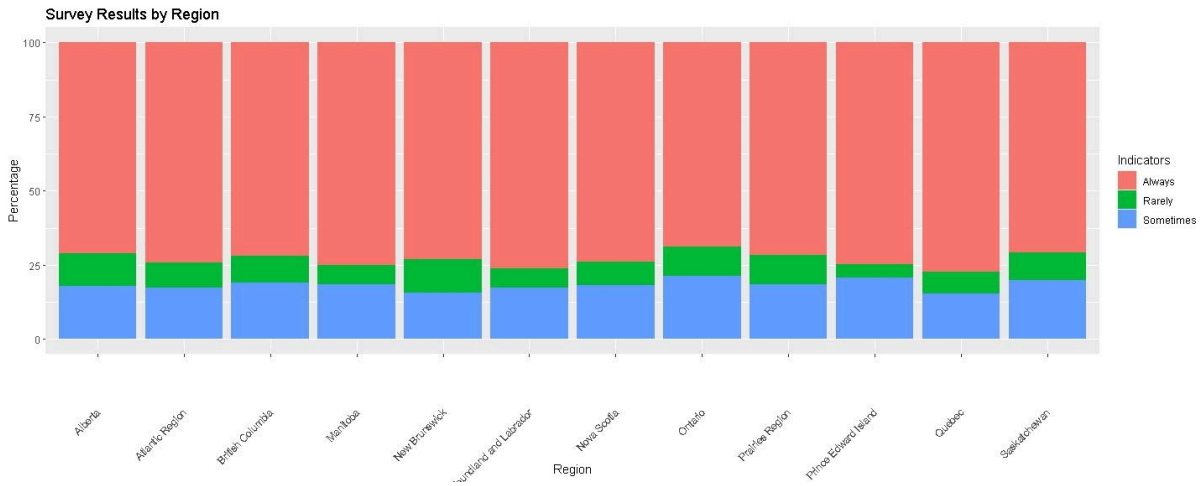
```
Job_new <- tidyr::pivot_longer(Job, cols = c(Satisfied, Neither, Dissatisfied),
                               names_to = "Job_satisfaction", values_to = "Proportion")
```

```
# Create the grouped bar chart
ggplot(Job_new, aes(x = Age_group, y = Proportion, fill = Job_satisfaction)) +
  geom_col(position = "dodge") +
  scale_fill_manual(values = c("lightgreen", "orange", "lightblue")) +
  labs(title = "Job satisfaction by age group",
       x = "Age group",
       y = "Proportion",
       fill = "Job satisfaction category") +
  theme_minimal()
```



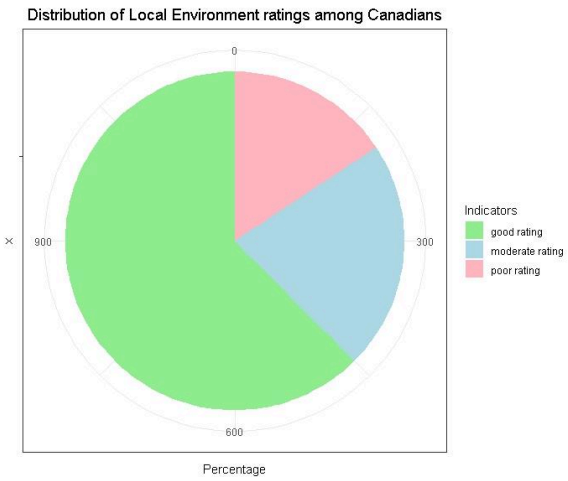

```
#Graph 3
count <- read_csv("Someone_to_count_on.csv" , col_types = cols(), skip = 0)
count

# convert the data frame from wide to long format using tidyr
df_count <- count %>%
```

```
  pivot_longer(cols = -Indicators, names_to = "Region", values_to =
"Percentage")


# create the stacked bar chart using ggplot2
ggplot(df_count, aes(x = Region, y = Percentage, fill = Indicators)) +
  geom_col() +
  labs(title = "Survey Results by Region", x = "Region", y = "Percentage") +
  theme(axis.text.x = element_text(angle = 45, vjust = 0.5, hjust=1))
```



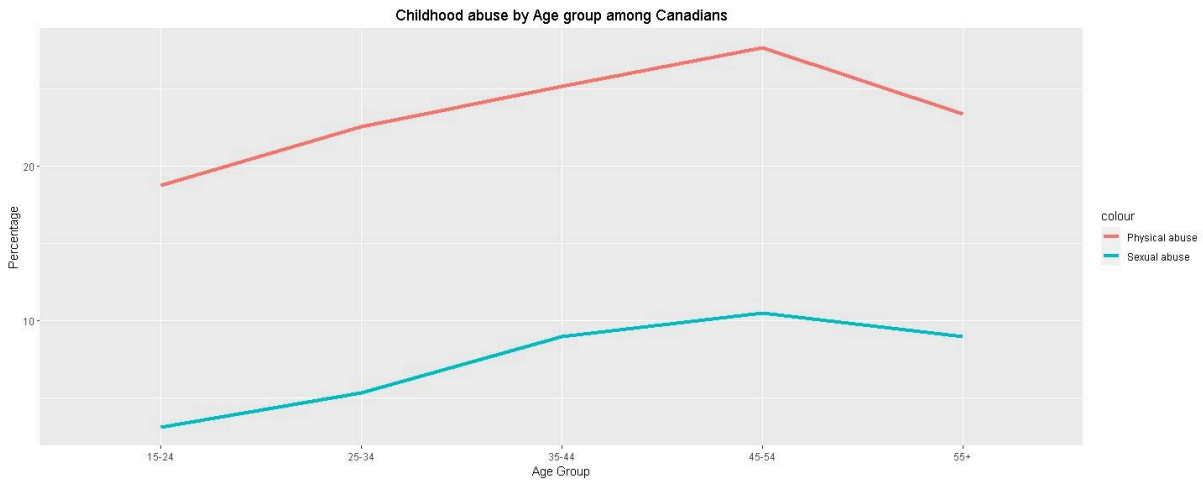

```
#graph 4
local_env <- read_csv("local_environment.csv" , col_types = cols(), skip = 0)
local_env


# Summarize the data by indicators
local_env_summary <- data.frame(
  Indicators = local_env$Indicators,
  Percentage = rowSums(local_env[, -1])
)
```

```
# Create the pie chart
ggplot(local_env_summary, aes(x = "", y = Percentage, fill = Indicators)) +
  geom_bar(width = 1, stat = "identity") +
  coord_polar(theta = "y") +
  labs(fill = "Indicators") +
  ggtitle("Distribution of Local Environment ratings among Canadians") +
  scale_fill_manual(values = c("lightgreen", "lightblue", "lightpink")) +
  theme_bw() +
  theme(
    legend.position = "right",
    plot.title = element_text(hjust = 0.5, size = 14)
  )
```




```
#graph 5
df<- read_csv("childhood_maltreatment.csv" , col_types = cols(), skip = 0)
df

#creating plot
```

```
ggplot(df, aes(x = Age_group)) +
  geom_line(aes(y = Physical_abuse, color = "Physical abuse", group = 1), size = 1.5) +
  geom_line(aes(y = Sexual_abuse, color = "Sexual abuse", group = 1), size = 1.5)+
  labs(title = "Childhood abuse by Age group among Canadians",
       x = "Age Group",
       y = "Percentage") +
  scale_size(range = c(1, 2), guide = "none") +
  theme(plot.title = element_text(hjust = 0.5))
```



3. Infographics

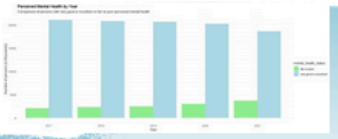
LOOKING AFTER OUR

Mental Health

INFOGRAPHIC

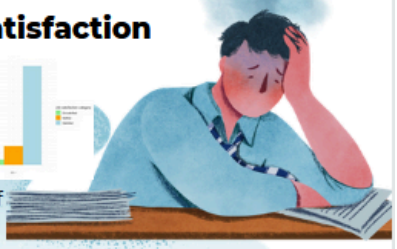
★ Approximately, 1 in 5 Canadians will experience a mental health problem or illness each year.

Perceived mental health



As we can see perceived mental health of canadian population was at peak in 2021, where 400,000 people reported issues.

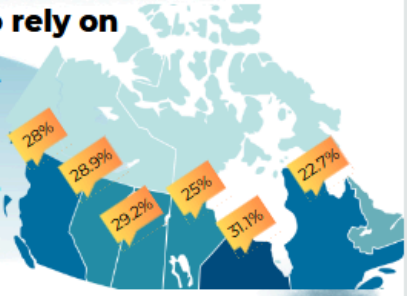
Job satisfaction



Lack of control over one's work, low levels of social support, and lack of opportunities for growth can contribute to job dissatisfaction and, in turn, mental health problems.

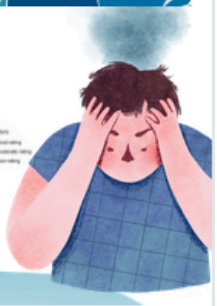
Someone to rely on

Top 3 provinces where majority of the population have few people or rarely have someone to rely on are Ontario with 31.1% Saskatchewan with 29.2% and Alberta with 28.8%

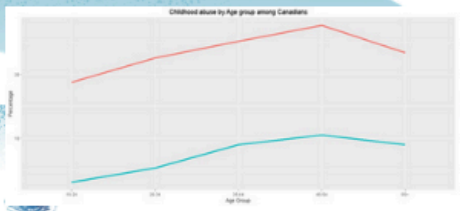


Immediate Surroundings

More than 1/3rd of the Canadian population rated local environment below their expectation.



Childhood Maltreatment



Individuals who experienced abuse as a child are three times more likely to develop mental health disorders than those who did not.

Need Help?

Call 2-1-1 or
Chat live on Canada.ca mental health webpage.

★ Statistics by Canadian mental health association.