K-Pop Data Analysis

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Test citation (Chai, 2024)

1 Executive Summary

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Disclaimer

The opinions and views expressed in this manuscript are those of the author, and do not necessarily state or reflect those of any institution or government entity.

2 Introduction

How the author got interested in K-Pop music (Korean popular music):

Tzuyu (Chou Tzu-Yu, 周子瑜)[1]

(a lot more content here)

Important: Write about the K-Pop scandal revealed in 2019 and later.

2.1 Read in the Idol School Dataset

Idol School (偶像學校) (2017)

Motivation: One of the contestants, Snowbaby (蔡瑞雪),[2] is originally from Taiwan.

```
library(readxl)
idol_school = read_excel("UNFINISHED_Idol_School_Dataset.xlsx",
                         sheet="Idol_School_Dataset")

columns_to_show = c("Chinese_Name", "English_Name",
                    "Vocal", "Dance", "Physical",
```

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[1] https://en.wikipedia.org/wiki/Tzuyu

[2] Snowbaby's YouTube channel: https://www.youtube.com/@snowbaby

```
                    "Overall", "Basic_Strength_Ranking")

# UNFINISHED: Prevent columns from truncating!

idol_school[1:10, columns_to_show]
```

```
## # A tibble: 10 x 7
##    Chinese_Name English_Name Vocal Dance Physical Overall Basic_Strength_Ranking
##    <chr>        <chr>        <dbl> <dbl>    <dbl>   <dbl>                  <dbl>
##  1 NATTY        NATTY          9.8  8         8.1    8.63                      1
##  2 劉怡伶       Tasha          8    9.5       8      8.5                       2
##  3 李采映       Lee Chae Yo~   8.5  8.5       7.5    8.17                      3
##  4 宋河英       Song Ha You~   8.6  5.9       9.8    8.1                       4
##  5 金恩書       Kim Eun Suh    6.3  6.9      10       7.73                     5
##  6 金明智       Kim Myong Ji   5.5  7.9       8.2    7.2                       6
##  7 張圭悧       Jang Gyuri     7.2  7.1       7      7.1                       7
##  8 朴宣         Park Sun       9.5  6.1       5.5    7.03                      8
##  9 李悠汀       Lee Yoo Jeo~   5.8  6.2       9      7                         9
## 10 金娜妍       Kim Na Yeon    8.3  6         6.4    6.9                      10
```

2.2 Idol School: Additional Resources

Students who were eliminated from the show:
https://www.ptt.cc/bbs/fromis_9/M.1555819461.A.C73.html

Someone else used random forests to predict the final ranking:
https://shavid.pixnet.net/blog/post/331691281

2.3 Read in the Produce 48 Dataset

Produce 48 dataset (2018)

```
produce_48_data = read_excel("UNFINISHED_Idol_School_Dataset.xlsx",
                             sheet="Produce_48_Dataset")

# UNFINISHED HERE
produce_48_data
```

```
## # A tibble: 20 x 9
##    Chinese_Name English_Name Date_of_Birth       First_Eval Second_Eval Country
##    <chr>        <chr>        <dttm>              <chr>      <chr>       <chr>
##  1 張員瑛       Jang Won You~ 2004-08-31 00:00:00 B          B           Korea
##  2 宮脇咲良     Miyawaki Sak~ 1998-03-19 00:00:00 A          A           Japan
##  3 曹柔理       Jo Yuri      2001-10-22 00:00:00 A          F           Korea
##  4 <NA>         <NA>         NA                  <NA>       <NA>        Korea
##  5 <NA>         <NA>         NA                  <NA>       <NA>        Korea
##  6 矢吹奈子     Yabuki Nako  2001-06-18 00:00:00 F          A           Japan
##  7 <NA>         <NA>         NA                  <NA>       <NA>        Korea
##  8 <NA>         <NA>         NA                  <NA>       <NA>        Korea
##  9 <NA>         <NA>         NA                  <NA>       <NA>        Japan
## 10 <NA>         <NA>         NA                  <NA>       <NA>        Korea
```

```
## 11 <NA>         <NA>         NA              <NA>         <NA>         Korea
## 12 <NA>         <NA>         NA              <NA>         <NA>         Korea
## 13 <NA>         <NA>         NA              <NA>         <NA>         Korea
## 14 <NA>         <NA>         NA              <NA>         <NA>         Korea
## 15 <NA>         <NA>         NA              <NA>         <NA>         <NA>
## 16 <NA>         <NA>         NA              <NA>         <NA>         <NA>
## 17 <NA>         <NA>         NA              <NA>         <NA>         <NA>
## 18 <NA>         <NA>         NA              <NA>         <NA>         <NA>
## 19 <NA>         <NA>         NA              <NA>         <NA>         <NA>
## 20 <NA>         <NA>         NA              <NA>         <NA>         <NA>
## # i 3 more variables: Final_Ranking <dbl>, Round_Eliminated <chr>,
## #   Special_Notes <lgl>
```

3 Tentative Placeholders

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3.1 Test for Non-English Characters

CJK = Chinese, Japanese, Korean

Chinese example

RStudio 有辦法打中文嗎？

```r
print(" 大家好，很高興能認識你們！")
```

```
## [1] "大家好，很高興能認識你們！"
```

Japanese example

思い出にするにはまだ早すぎる

```r
print(" みやわき さくら")
```

```
## [1] "みやわき さくら"
```

```r
print(" 宮脇 咲良")
```

```
## [1] "宮脇 咲良"
```

This template does not support Korean characters yet.

3.2 R Markdown Narrative

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.
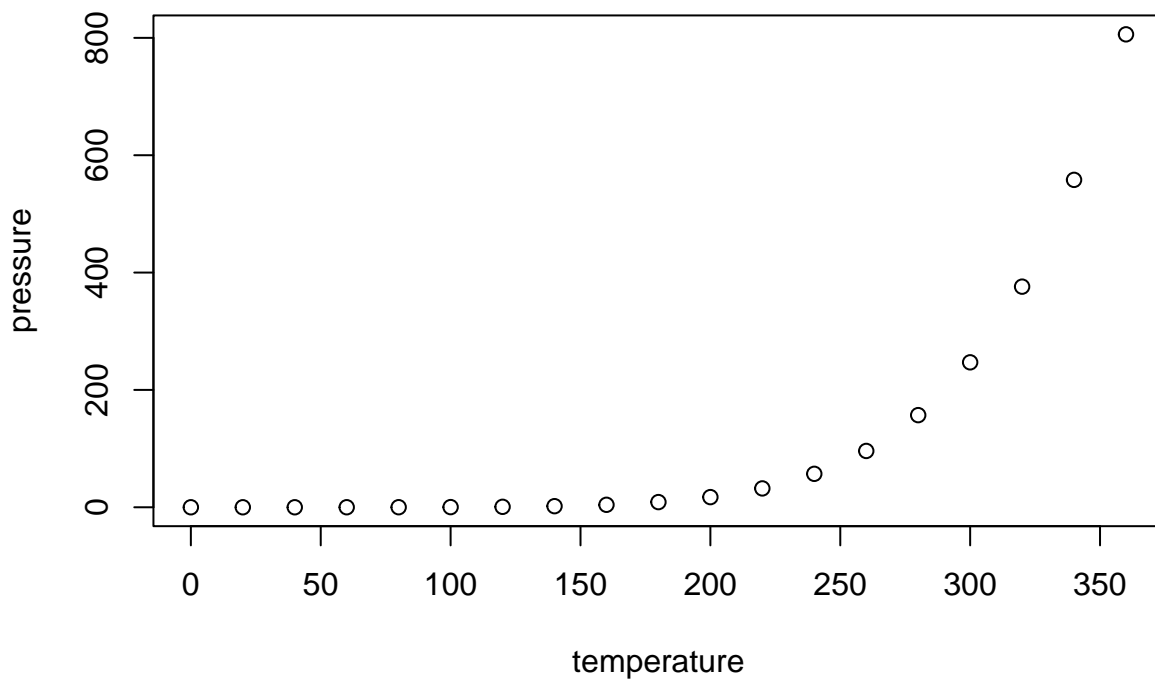
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```r
summary(cars)
```

```
##      speed           dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```

3.3 Including Plots

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

Acknowledgments

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References

Chai, C. P. (2024). Statistical analysis of high school and college entrance exam scores in Taiwan with online data. *Preprint on ResearchGate.* http://dx.doi.org/10.13140/RG.2.2.29468.91520/1.