Package 'rGhanaCensus'

January 13, 2022

Title 2021 Ghana Population and Housing Census Results as Data Frames

Version 0.1.0

Description Datasets from the 2021 Ghana Population and Housing Census Results. Users can access results as 'tidyverse' and 'sf'-Ready Data Frames. The data in this package is scraped from pdf reports released by the Ghana Statistical Service website <https://census2021.statsghana.gov.gh/> . The package currently only contains datasets from the literacy and education reports. Namely, school attendance data for respondents aged 3 years and above.

License MIT + file LICENSE

Encoding UTF-8

RoxygenNote 7.1.2

Maintainer Ama Owusu-Darko <aowusuda@asu.edu>

Depends R (>= 3.5.0)

LazyData true

Suggests dplyr, knitr, magrittr, rmarkdown, sf, tmap

VignetteBuilder knitr

URL https://github.com/ktemadarko/rGhanaCensus

BugReports https://github.com/ktemadarko/rGhanaCensus/issues

NeedsCompilation no

Author Ama Owusu-Darko [cre, aut]

Repository CRAN

Date/Publication 2022-01-13 20:02:43 UTC

R topics documented:

Ghana_2021_school_attendance
Ghana School Attendance Indicator data

Description

The Ghana_2021_school_attendance dataset contains school attendance indicators for respondents in the 16 regions of Ghana surveyed in the 2021 Ghana Population and Housing Census.

- Details -Age range of survey respondents in this data set 3 years and above.

Usage

Ghana_2021_school_attendance

Format

A data frame with 64 rows and 10 variables:

- Region
    - A factor with 16 levels with the names of the regions in Ghana
- Gender
    - A factor with 2 levels
- Locality
    - A factor with 2 levels describing with the respondents surveyed lived in an urban or rural area
- Currently_Attending_School
    - numeric column with the raw count values of survey respondents aged 3 years and above currently attending school
- Percent_Currently_Attending_School
    - A numeric column with the derived percentage of
    - ((Currently_Attending_School)/Sum_of_Respondents_(3_years_and_above))*100 to two decimal places
- Never_Attended_School
    - -A numeric column with the raw count values of survey respondents aged 3 years and above who have never attended school
- Percent_Never_Attended_School
    - A numeric column with the derived percentage of
    - ((Never_Attended_School)/Sum_of_Respondents_(3_years_and_above))*100 to two decimal places
- Dropped_out_of_School
    - A numeric column with the raw count values of survey respondents aged 3 years and above who were in school but dropped out

- Percent_Dropped_out_of_School
  - A numeric column with the derived percentage of
  - ((Dropped_out_of_School)/Sum_of_Respondents_(3_years_and_above))*100 to two decimal places
- Sum_of_Respondents_(3_years_and_above)
  - A numeric column with the raw sum values in each row.
  - That is sum of (Currently_Attending_School, Never_Attended_School, Dropped_out_of_School) in each row

Source

- School attendance data
- Scraped from Ghana Statistical Service published 2021 Ghana Population and Housing Census Results Volume 3D Literacy and Education PDF Reports

https://statsghana.gov.gh/gssmain/fileUpload/pressrelease/2021%20PHC%20General%20Report%20Vol%203D_Literacy%20and%20Education.pdf

- Ghana regional administrative boundaries geometry data
- Downloaded from Humanitarian data exchange website on 7th January, 2022

https://data.humdata.org/dataset/ghana-administrative-boundaries

---

Ghana_2021_school_attendance_geometry
Ghana School Attendance Indicator data plus geometry

Description

The Ghana_2021_school_attendance_geometry dataset contains school attendance indicators for respondents in the 16 regions of Ghana surveyed in the 2021 Ghana Population and Housing Census plus Ghana regional administrative boundaries.

- Details Age range of survey respondents in this data set 3 years and above.

Usage

Ghana_2021_school_attendance_geometry

Format

A data frame with 64 rows and 10 variables:

- Region
  - A factor with 16 levels with the names of the regions in Ghana
- Gender

- – A factor with 2 levels
- Locality
  - – A factor with 2 levels describing with the respondents surveyed lived in an urban or rural area
- Currently_Attending_School
  - – numeric column with the raw count values of survey respondents aged 3 years and above currently attending school
- Percent_Currently_Attending_School
  - – A numeric column with the derived percentage of
  - – ((Currently_Attending_School)/Sum_of_Respondents_(3_years_and_above))*100 to two decimal places
- Never_Attended_School
  - – -A numeric column with the raw count values of survey respondents aged 3 years and above who have never attended school
- Percent_Never_Attended_School
  - – A numeric column with the derived percentage of
  - – ((Never_Attended_School)/Sum_of_Respondents_(3_years_and_above))*100 to two decimal places
- Dropped_out_of_School
  - – A numeric column with the raw count values of survey respondents aged 3 years and above who were in school but dropped out
- Percent_Dropped_out_of_School
  - – A numeric column with the derived percentage of
  - – ((Dropped_out_of_School)/Sum_of_Respondents_(3_years_and_above))*100 to two decimal places
- Sum_of_Respondents_(3_years_and_above)
  - – A numeric column with the raw sum values in each row.
  - – That is sum of (Currently_Attending_School, Never_Attended_School, Dropped_out_of_School) in each row

Source

- School attendance data
- Scraped from Ghana Statistical Service published 2021 Ghana Population and Housing Census Results Volume 3D Literacy and Education PDF Reports

https://statsghana.gov.gh/gssmain/fileUpload/pressrelease/2021%20PHC%20General%20Report%20Vol%203D_Literacy%20and%20Education.pdf

- Ghana regional administrative boundaries geometry data
- Downloaded from Humanitarian data exchange website on 7th January, 2022

https://data.humdata.org/dataset/ghana-administrative-boundaries

Examples

```
## Not run:

#Example

#Create a interactive map with the package tmap that displays the
#regional distribution of percentage of students 3 years or older who have dropped out of school.

#Load required packages
library(sf)
library(tmap)
library(dplyr)
library(magrittr)

#Load geometry data
data("Ghana_2021_school_attendance_geometry", package = "rGhanaCensus")


#Convert to sf data frame and assign a name
#In this example, "Ghana_edu_sf" will be the name of the sf data frame created.

Ghana_edu_sf<- sf::st_as_sf(Ghana_2021_school_attendance_geometry)


#Use tmap to create interactive map
tmap_mode("plot")

Ghana_edu_sf %>%
                dplyr::filter(Locality=="Urban") %>%
                tm_shape()+
                tm_polygons(id="Region", col="Percent_Dropped_out_of_School")+
                tm_text(text="Percent_Dropped_out_of_School")+
                tm_facets(by="Gender")

## End(Not run)
```

Index