Tarang; Girls first - Bihar, India; Abraham R., Basole A., Kesar S., Down and out? The gendered impact of the Covid-19 pandemic on India's labour market, Economia Politica, 39, pp. 101-128, (2021); Andrew A., Krutikova S., Smarrelli G., Verma H., (2022); Annual status of education report (Rural), 2022, Provisional, (2023); Bandura A., Self-efficacy: towards a unifying theory of behavioural change, Psychological Review, 84, 3, pp. 191-215, (1977); Bandura A., Self-efficacy: The exercise of control, (1997); Bhagavatheeswaran L., Et al., The barriers and enablers to education among scheduled caste and scheduled tribe adolescent girls in northern Karnataka, South India: A qualitative study, International Journal of Educational Development, 49, pp. 262-270, (2016); Braun V., Clarke V., Using thematic analysis in psychology, Qualitative Research in Psychology, 3, 2, pp. 77-101, (2006); Braun V., Clarke V., Reflecting on reflexive thematic analysis, Qualitative Research in Sport, Exercise and Health, 11, 4, pp. 589-597, (2019); Braun V., Clarke V., One size fits all? What counts as quality practice in (reflexive) thematic analysis, Qualitative Research in Psychology, 18, 3, pp. 328-352, (2021); Chakravarti U., Gendering Caste Through a Feminist Lens, (2018); Chakravorty B., Bedi A., Skills training and employment outcomes in rural Bihar, The Indian Journal of Labour Economics, 62, 1, pp. 173-199, (2019); Chaudhary R., Verick S., Female labour force participation in India and beyond, ILO Asia-Pacific Working Paper Series, (2014); Darolia R., Wydick B., The economics of parenting, self-esteem and academic performance: theory and a test, Economica, 78, 310, pp. 215-239, (2011); (2017); Desai S., Pandey N., Gupta A.K., (2017); Dhanaraj S., Mahambare V., (2017); Edmonds E.V., Feigenberg B., Leight J., (2020); Fatima A., Sultana H., Tracing out the U-shape relationship between female labor force participation rate and economic development for Pakistan, International Journal of Social Economics, 36, 1-2, pp. 182-198, (2009); (2016); National Family Health Survey (NFHS-4) report, 2015-16. Ministry of Health & Family Welfare, International Institute for Population Sciences, (2017); Periodic Labour Force Survey (PLFS), Annual Report July 2018 – June 2019. Ministry of Statistics & Programme Implementation, National Statistics Office, (2020); Granovetter M., The strength of weak ties: A network theory revisited, American Journal of Sociology, 78, 6, pp. 1360-1380, (1973); Granovetter M., Getting a job: A study of contacts and careers, (1974); Jayachandran S., (2020); Jensen R.T., The (Perceived) returns to education and the demand for schooling, Quarterly Journal of Economics, 25, 2, pp. 515-548, (2010); (2017); Kumar P., Nuken A., Datta N., Vyas A., Impact of an empowerment and employability program for adolescent girls: Evidence from India, Journal of Youth Development, 16, 2-3, pp. 139-154, (2021); Mahambare V., Dhanaraj S., (2022); McKenzie D., (2017); Mehta S.K., (2018); Morrow V., Whose values? Young people's aspirations and experiences of schooling in Andhra Pradesh, India, Children and Society, 27, 4, pp. 258-269, (2013); Morton M.H., Bhattacharya S., Kumar P., A window of opportunity: A diagnostic of adolescent girls and young women's socio-economic empowerment in Jharkhand, India, (2018); Muralidharan T., Paul B., Basole A., (2021); Nanda P., Gautam A., Das P., (2017); Olmos-Vega F.M., Stalmeijer R.., Varpio L., Kahlke R., A practical guide to reflexivity in qualitative research: AMEE Guide No. 149, Medical Teacher, 3, pp. 241-251, (2023); (2017); Ramanaik S., Collumbien M., Prakash R., Howard-Merrill L., Thalinja R., Javalkar P., Murthy S., Cislaghi B., Beattie T., Isac S., Moses S., Heise L., Bhattacharjee P., Education, poverty and "purity" in the context of adolescent girls' secondary school retention and dropout: A qualitative study from Karnataka, southern India, PLoS One, 13, (2018); Rathi A., Tandon A., Khanna A., Chamberlain S., (2022); Roy S., Morton M., Bhattacharya S., Hidden human capital: Self-efficacy, aspirations and achievements of adolescent and young women in India, World development, 111, pp. 161-180, (2018); Sharma G., Wotipka C.M., Mothers' gendered aspirations for their children: A case study of Forbesganj, Bihar, Compare: A Journal of Comparative and International Education, 49, 3, pp. 358-374, (2019); Comprehensive life skills framework, (2017); School enrollment, secondary, female (% gross)—India. Sourced by license from UNESCO Institute for Statistics (UIS). UIS Bulk Data Download Service, (2023); Yunus R., Theorizing gendered childhoods and girls' schooling: poverty, patriarchy and girls' education in urban India, Childhood (Copenhagen, Denmark), 28, 2, pp. 279-293, (2021)

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    "EID"
> year_counts <- table(data$Year)
> print(year_counts)

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025
 246 1277 1467 1530 1675 1916 2167 2389 2419 2663 2241    8
> library(ggplot2)
Error in library(ggplot2) : there is no package called 'ggplot2'
>
> # Convert the table to a data frame
> year_data <- as.data.frame(year_counts)
> colnames(year_data) <- c("Year", "Count")  # Rename columns if necessary
>
> # Create the bar plot
> ggplot(year_data, aes(x = Year, y = Count)) +
+   geom_bar(stat="identity", fill="skyblue", color="black") +
+   labs(title="Occurrences of Each Year", x="Year", y="Count") +
+   theme_minimal()
```

```
Error in ggplot(year_data, aes(x = Year, y = Count)) :
  could not find function "ggplot"
> # Barplot of year counts
> barplot(year_counts, col="skyblue", xlab="Year", ylab="Count", main="Year Occurrences", border=
"black")
> install.packages("tidyverse")
Warning in install.packages("tidyverse") :
  'lib = "C:/Program Files/R/R-4.4.1/library"' is not writable
--- Please select a CRAN mirror for use in this session ---
also installing the dependencies 'fastmap', 'colorspace', 'sys', 'bit', 'ps', 'base64enc', 'sass'
, 'digest', 'cachem', 'farver', 'labeling', 'munsell', 'RColorBrewer', 'viridisLite', 'rappdirs',
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downloaded 511 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/haven_2.5.4.zip'
Content type 'application/zip' length 772766 bytes (754 KB)
downloaded 754 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/hms_1.1.3.zip'
Content type 'application/zip' length 105581 bytes (103 KB)
downloaded 103 KB
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trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/httr_1.4.7.zip'
Content type 'application/zip' length 495282 bytes (483 KB)
downloaded 483 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/jsonlite_1.8.9.zip'
Content type 'application/zip' length 1107267 bytes (1.1 MB)
downloaded 1.1 MB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/lubridate_1.9.3.zip'
Content type 'application/zip' length 986806 bytes (963 KB)
downloaded 963 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/magrittr_2.0.3.zip'
Content type 'application/zip' length 229303 bytes (223 KB)
downloaded 223 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/modelr_0.1.11.zip'
Content type 'application/zip' length 202912 bytes (198 KB)
downloaded 198 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/pillar_1.9.0.zip'
Content type 'application/zip' length 663096 bytes (647 KB)
downloaded 647 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/purrr_1.0.2.zip'
Content type 'application/zip' length 510133 bytes (498 KB)
downloaded 498 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/ragg_1.3.3.zip'
Content type 'application/zip' length 1966540 bytes (1.9 MB)
downloaded 1.9 MB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/readr_2.1.5.zip'
Content type 'application/zip' length 1205684 bytes (1.1 MB)
downloaded 1.1 MB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/readxl_1.4.3.zip'
Content type 'application/zip' length 1204025 bytes (1.1 MB)
downloaded 1.1 MB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/reprex_2.1.1.zip'
Content type 'application/zip' length 504927 bytes (493 KB)
downloaded 493 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/rlang_1.1.4.zip'
Content type 'application/zip' length 1618908 bytes (1.5 MB)
downloaded 1.5 MB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/rstudioapi_0.17.0.zip'
Content type 'application/zip' length 342278 bytes (334 KB)
downloaded 334 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/rvest_1.0.4.zip'
Content type 'application/zip' length 308635 bytes (301 KB)
downloaded 301 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/stringr_1.5.1.zip'
Content type 'application/zip' length 323572 bytes (315 KB)
downloaded 315 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/tibble_3.2.1.zip'
Content type 'application/zip' length 695426 bytes (679 KB)
downloaded 679 KB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/tidyr_1.3.1.zip'
Content type 'application/zip' length 1269828 bytes (1.2 MB)
downloaded 1.2 MB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/xml2_1.3.6.zip'
Content type 'application/zip' length 1613688 bytes (1.5 MB)
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downloaded 1.5 MB

trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/tidyverse_2.0.0.zip'
Content type 'application/zip' length 431251 bytes (421 KB)
downloaded 421 KB

package 'fastmap' successfully unpacked and MD5 sums checked
package 'colorspace' successfully unpacked and MD5 sums checked
package 'sys' successfully unpacked and MD5 sums checked
package 'bit' successfully unpacked and MD5 sums checked
package 'ps' successfully unpacked and MD5 sums checked
package 'base64enc' successfully unpacked and MD5 sums checked
package 'sass' successfully unpacked and MD5 sums checked
package 'digest' successfully unpacked and MD5 sums checked
package 'cachem' successfully unpacked and MD5 sums checked
package 'farver' successfully unpacked and MD5 sums checked
package 'labeling' successfully unpacked and MD5 sums checked
package 'munsell' successfully unpacked and MD5 sums checked
package 'RColorBrewer' successfully unpacked and MD5 sums checked
package 'viridisLite' successfully unpacked and MD5 sums checked
package 'rappdirs' successfully unpacked and MD5 sums checked
package 'rematch' successfully unpacked and MD5 sums checked
package 'askpass' successfully unpacked and MD5 sums checked
package 'bit64' successfully unpacked and MD5 sums checked
package 'prettyunits' successfully unpacked and MD5 sums checked
package 'processx' successfully unpacked and MD5 sums checked
package 'evaluate' successfully unpacked and MD5 sums checked
package 'highr' successfully unpacked and MD5 sums checked
package 'xfun' successfully unpacked and MD5 sums checked
package 'yaml' successfully unpacked and MD5 sums checked
package 'bslib' successfully unpacked and MD5 sums checked
package 'fontawesome' successfully unpacked and MD5 sums checked
package 'htmltools' successfully unpacked and MD5 sums checked
package 'jquerylib' successfully unpacked and MD5 sums checked
package 'tinytex' successfully unpacked and MD5 sums checked
package 'backports' successfully unpacked and MD5 sums checked
package 'generics' successfully unpacked and MD5 sums checked
package 'glue' successfully unpacked and MD5 sums checked
package 'lifecycle' successfully unpacked and MD5 sums checked
package 'memoise' successfully unpacked and MD5 sums checked
package 'blob' successfully unpacked and MD5 sums checked
package 'DBI' successfully unpacked and MD5 sums checked
package 'R6' successfully unpacked and MD5 sums checked
package 'tidyselect' successfully unpacked and MD5 sums checked
package 'vctrs' successfully unpacked and MD5 sums checked
package 'withr' successfully unpacked and MD5 sums checked
package 'data.table' successfully unpacked and MD5 sums checked
package 'gtable' successfully unpacked and MD5 sums checked
package 'isoband' successfully unpacked and MD5 sums checked
package 'scales' successfully unpacked and MD5 sums checked
package 'gargle' successfully unpacked and MD5 sums checked
package 'uuid' successfully unpacked and MD5 sums checked
package 'cellranger' successfully unpacked and MD5 sums checked
package 'curl' successfully unpacked and MD5 sums checked
package 'ids' successfully unpacked and MD5 sums checked
package 'rematch2' successfully unpacked and MD5 sums checked
package 'cpp11' successfully unpacked and MD5 sums checked
package 'pkgconfig' successfully unpacked and MD5 sums checked
package 'mime' successfully unpacked and MD5 sums checked
package 'openssl' successfully unpacked and MD5 sums checked
package 'timechange' successfully unpacked and MD5 sums checked
package 'fansi' successfully unpacked and MD5 sums checked
package 'utf8' successfully unpacked and MD5 sums checked
package 'systemfonts' successfully unpacked and MD5 sums checked
package 'textshaping' successfully unpacked and MD5 sums checked
package 'clipr' successfully unpacked and MD5 sums checked
package 'crayon' successfully unpacked and MD5 sums checked
package 'vroom' successfully unpacked and MD5 sums checked
package 'tzdb' successfully unpacked and MD5 sums checked
package 'progress' successfully unpacked and MD5 sums checked
```

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package 'callr' successfully unpacked and MD5 sums checked
package 'fs' successfully unpacked and MD5 sums checked
package 'knitr' successfully unpacked and MD5 sums checked
package 'rmarkdown' successfully unpacked and MD5 sums checked
package 'selectr' successfully unpacked and MD5 sums checked
package 'stringi' successfully unpacked and MD5 sums checked
package 'broom' successfully unpacked and MD5 sums checked
package 'conflicted' successfully unpacked and MD5 sums checked
package 'cli' successfully unpacked and MD5 sums checked
package 'dbplyr' successfully unpacked and MD5 sums checked
package 'dplyr' successfully unpacked and MD5 sums checked
package 'dtplyr' successfully unpacked and MD5 sums checked
package 'forcats' successfully unpacked and MD5 sums checked
package 'ggplot2' successfully unpacked and MD5 sums checked
package 'googledrive' successfully unpacked and MD5 sums checked
package 'googlesheets4' successfully unpacked and MD5 sums checked
package 'haven' successfully unpacked and MD5 sums checked
package 'hms' successfully unpacked and MD5 sums checked
package 'httr' successfully unpacked and MD5 sums checked
package 'jsonlite' successfully unpacked and MD5 sums checked
package 'lubridate' successfully unpacked and MD5 sums checked
package 'magrittr' successfully unpacked and MD5 sums checked
package 'modelr' successfully unpacked and MD5 sums checked
package 'pillar' successfully unpacked and MD5 sums checked
package 'purrr' successfully unpacked and MD5 sums checked
package 'ragg' successfully unpacked and MD5 sums checked
package 'readr' successfully unpacked and MD5 sums checked
package 'readxl' successfully unpacked and MD5 sums checked
package 'reprex' successfully unpacked and MD5 sums checked
package 'rlang' successfully unpacked and MD5 sums checked
package 'rstudioapi' successfully unpacked and MD5 sums checked
package 'rvest' successfully unpacked and MD5 sums checked
package 'stringr' successfully unpacked and MD5 sums checked
package 'tibble' successfully unpacked and MD5 sums checked
package 'tidyr' successfully unpacked and MD5 sums checked
package 'xml2' successfully unpacked and MD5 sums checked
package 'tidyverse' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
        C:\Users\ashishpundir\AppData\Local\Temp\RtmpG0wuHh\downloaded_packages
> install.packages("ggplot2")
Installing package into 'C:/Users/ashishpundir/AppData/Local/R/win-library/4.4'
(as 'lib' is unspecified)
trying URL 'https://cloud.r-project.org/bin/windows/contrib/4.4/ggplot2_3.5.1.zip'
Content type 'application/zip' length 5009017 bytes (4.8 MB)
downloaded 4.8 MB

package 'ggplot2' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
        C:\Users\ashishpundir\AppData\Local\Temp\RtmpG0wuHh\downloaded_packages
> pak::pak("tidyverse/ggplot2")
Error in loadNamespace(x) : there is no package called 'pak'
> pak::pak("tidyverse/ggplot2")
Error in loadNamespace(x) : there is no package called 'pak'
> colnames(data)
 [1] "Authors"                    "Author.full.names"           "Author.s..ID"
     "Title"
 [5] "Year"                       "Source.title"                "Volume"
     "Issue"
 [9] "Art..No."                   "Page.start"                  "Page.end"
     "Page.count"
[13] "Cited.by"                   "DOI"                         "Link"
     "Affiliations"
[17] "Authors.with.affiliations"  "Abstract"                    "Author.Keywords"
     "Index.Keywords"
[21] "Molecular.Sequence.Numbers" "Chemicals.CAS"               "Tradenames"
     "Manufacturers"
[25] "Funding.Details"            "Funding.Texts"               "References"
     "Correspondence.Address"
```

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[29] "Editors"                      "Publisher"                    "Sponsors"
     "Conference.name"
[33] "Conference.date"              "Conference.location"          "Conference.code"
     "ISSN"
[37] "ISBN"                         "CODEN"                        "PubMed.ID"
     "Language.of.Original.Document"
[41] "Abbreviated.Source.Title"     "Document.Type"                "Publication.Stage"
     "Open.Access"
[45] "Source"                       "EID"
> # Count the number of occurrences of each value in the Cited.by column
> cited_by_counts <- table(data$Cited.by)
>
> # Sort the table in descending order to get the most frequent values
> sorted_cited_by <- sort(cited_by_counts, decreasing = TRUE)
>
> # Display the top 5 most frequent values
> top_5_cited_by <- head(sorted_cited_by, 5)
>
> # Print the top 5
> print(top_5_cited_by)

   0    1    2    3    4
6609 2579 1626 1167  859
> # Create a data frame with "Authors" and "Cited.by"
> author_cited_data <- data.frame(Authors = data$Authors, Cited.by = data$Cited.by)
>
> # Count occurrences of each combination of "Authors" and "Cited.by"
> author_cited_count <- aggregate(Cited.by ~ Authors, data = author_cited_data, FUN = sum)
>
> # Sort the results by the citation count in descending order
> sorted_author_cited <- author_cited_count[order(-author_cited_count$Cited.by), ]
>
> # Display the top 5 rows
> top_5_author_cited <- head(sorted_author_cited, 5)
>
> # Print the table
> print(top_5_author_cited)
                                                                       Authors Cite
d.by
14763                                                                Sarker I.H.
2071
11831 Najafabadi M.M.; Villanustre F.; Khoshgoftaar T.M.; Seliya N.; Wald R.; Muharemagic E.
1777
639                                               Allen T.D.; Golden T.D.; Shockley K.M.
 909
5020                                                Erevelles S.; Fukawa N.; Swayne L.
 901
2264                                                Bos F.; Wolfs R.; Ahmed Z.; Salet T.
 832
> # If it's not already a data frame, convert to one
> top_5_author_cited_df <- as.data.frame(top_5_author_cited)
>
> # Print the final table
> print(top_5_author_cited_df)
                                                                       Authors Cite
d.by
14763                                                                Sarker I.H.
2071
11831 Najafabadi M.M.; Villanustre F.; Khoshgoftaar T.M.; Seliya N.; Wald R.; Muharemagic E.
1777
639                                               Allen T.D.; Golden T.D.; Shockley K.M.
 909
5020                                                Erevelles S.; Fukawa N.; Swayne L.
 901
2264                                                Bos F.; Wolfs R.; Ahmed Z.; Salet T.
 832
> # Create a barplot for the top 5 authors and their citation counts
> barplot(top_5_author_cited_df$Cited.by,
+         names.arg = top_5_author_cited_df$Authors,
+         col = "lightblue",
```

```
+          xlab = "Authors",
+          ylab = "Citation Count",
+          main = "Top 5 Authors by Citation Count",
+          las = 2,          # Rotate x-axis labels for better readability
+          cex.names = 0.8 # Adjust label size
+ )
> library(ggplot2)
>
> # Create a bar plot using ggplot2
> ggplot(top_5_author_cited_df, aes(x = reorder(Authors, -Cited.by), y = Cited.by)) +
+   geom_bar(stat = "identity", fill = "skyblue", color = "black") +
+   labs(title = "Top 5 Authors by Citation Count", x = "Authors", y = "Citation Count") +
+   theme_minimal() +
+   theme(axis.text.x = element_text(angle = 45, hjust = 1)) # Rotate x-axis labels for readabili
ty
Error in UseMethod("depth") :
  no applicable method for 'depth' applied to an object of class "NULL"
> > # Create a data frame with "Year" and "Language.of.Original.Document"
> language_year_data <- data.frame(Year = data$Year, Language = data$Language.of.Original.Documen
t)
>
> # Count occurrences of each language per year
> language_year_counts <- table(language_year_data)
>
> # Convert to a data frame for easier manipulation
> language_year_df <- as.data.frame(language_year_counts)
>
> # Rename columns for clarity
> colnames(language_year_df) <- c("Year", "Language", "Count")
>
> # View the first few rows of the resulting data frame
> head(language_year_df)
  Year  Language Count
1 2014 Afrikaans     1
2 2015 Afrikaans     1
3 2016 Afrikaans     0
4 2017 Afrikaans     0
5 2018 Afrikaans     2
6 2019 Afrikaans     0
> # Count occurrences of each language
> language_counts <- table(data$Language.of.Original.Document)
>
> # Convert to a data frame for easier manipulation
> language_counts_df <- as.data.frame(language_counts)
>
> # Rename columns for clarity
> colnames(language_counts_df) <- c("Language", "Count")
>
> # View the first few rows of the resulting data frame
> print(language_counts_df)
     Language Count
1   Afrikaans     7
2      Arabic     5
3     Bosnian     7
4   Bulgarian    10
5     catalan     1
6     Chinese   182
7    Croatian    35
8       Czech    11
9       Dutch     6
10    English 18795
11   Estonian     2
12     French    54
13     German    61
14      Greek     1
15     Hebrew     1
16  Hungarian     6
17 Indonesian     3
18    Italian    49
19   Japanese    13
```

```
20       Korean    11
21 Lithuanian     2
22        Malay     3
23  Norwegian     3
24      Persian     4
25       Polish    14
26 Portuguese   104
27   Romanian     3
28     Russian   200
29       Slovak     3
30  Slovenian    11
31      Spanish   345
32         Thai     2
33      Turkish    16
34   Ukrainian    26
35   undefined     2
> library(ggplot2)
>
> # Create the bar plot using ggplot2
> ggplot(language_counts_df, aes(x = reorder(Language, -Count), y = Count)) +
+   geom_bar(stat = "identity", fill = "skyblue", color = "black") +
+   labs(title = "Document Count by Language", x = "Language", y = "Count") +
+   theme_minimal() +
+   theme(axis.text.x = element_text(angle = 45, hjust = 1)) # Rotate x-axis labels for readabili
ty
>
```