# **Data Analysis Report**

Analysis on Gender Parity in Hiring, Wages and Promotion

Report prepared for Black Saber Software by Research and Developing Insight (RADI)

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<pre>## Warning in system("timedatectl", intern = TRUE): running command 'tim</pre>	edate	ectl
## had status 1		

# General comments (you can delete this section)

You can delete this section, and if you want to check what it said, just open a template from the package again. You don't have to use this particular template, but you DO need to write you report in RMarkdown and include a cover page.

The cover page must have:

- A title and subtitle
- "Report prepared for Black Saber Software by" your company name
- Date (assessment submission date is fine)

You can change the colour of this cover to any colour you would like by replacing 6C3082 in the YAML above (line 11) to another hex code. You could use this tool to help you: https://htmlcolorcodes.com/color-picker/

# **Executive summary**

Guidelines for the executive summary:

- No more than two pages
- $\bullet \ \ Language \ is \ appropriate \ for \ a \ non-technical \ audience$
- Bullet points are used where appropriate
- $\bullet \ \ A \ small \ number \ of \ key \ visualizations \ and/or \ tables \ are \ included$
- $\bullet \ \ All \ three \ research \ questions \ are \ addressed$

## **Technical report**

This part of the report is much more comprehensive than the executive summary. The audience is statistics/data-minded people, but you should NOT include code or unformatted R output here.

#### Introduction

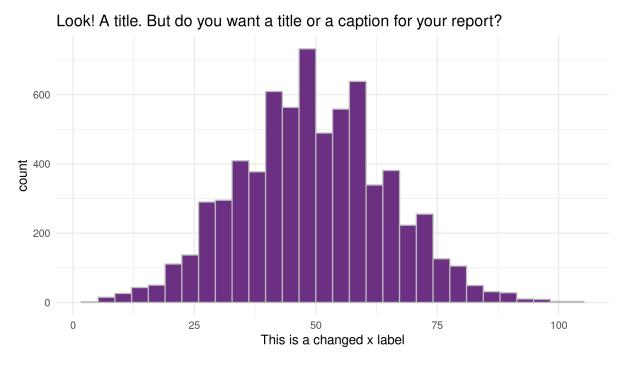
Provide a brief introduction to your report and outline what the report will cover. This section is valuable for setting scope and expectations.

#### Research questions

Use bullet points to to describe the research questions you are going to address. Write in full sentences.

## Informative title for section addressing a research question

For each research question, you will want to briefly describe any data manipulation, show some exploratory plots/summary tables, report on any methods you use (i.e. models you fit) and the conclusions you draw from these



## Informative title for section addressing a research question

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#### Discussion

In this section you will summarize your findings across all the research questions and discuss the strengths and limitations of your work. It doesn't have to be long, but keep in mind that often people will just skim the intro and the discussion of a document like this, so make sure it is useful as a semi-standalone section (doesn't have to be completely standalone like the executive summary).

## Strengths and limitations

### Consultant information

#### Consultant profile

Complete this section with a brief bio for each member of your group. If you are completing the project individually, you only need to complete one for yourself. In that case, change the title of this section to "Consultant profile" instead. Examples below. This section is only marked for completeness, clarity and professionalism, not "truth" so you can write it as if we're a few years in the future. Put your current degree in as completed and/or add your first choice grad school program, whatever you like. What skills related skills would you most like to highlight? What job title do you want?

**Statsy McStatsstats**. Statsy is a senior consultant with Eminence Analytics. She specializes in data visualization. Statsy earned her Bachelor of Science, Specialist in Statistics Methods and Practice, from the University of Toronto in 2023.

**Datana Scatterplot**. Datana is a junior consultant with Eminence Analytics. They specialize in reproducible analysis and statistical communication. Datana earned their Bachelor of Science, Majoring in Computer Science and Statistics from the University of Toronto in 2024.

Ryan Jo Wong. Ryan is a junior consultant with Research and Developing Insight (RADI). He specializes in data wrangling and visualizations, and statistical analysis. Ryan earned an Honours Bachelor of Science, Majoring in Statistics and Minoring in Computer Science and Mathematics from the University of Toronto in 2022.

#### Code of ethical conduct

This section should be fairly short, no more than half a page. Assume a general audience, much like your executive summary.

- Make at least three relevant statements about your company's approach to ethical statistical consulting. These should be appropriately in line with professional conduct advice like the (Statistical Society of Canada Code of Conduct)[https://ssc.ca/sites/default/files/data/Members/public/Accreditation/ethics\_e.pdf] or the (Ethical Guidelines for Statistical Practice from the American Statistical Society)[https://www.amstat.org/ASA/Your-Career/Ethical-Guidelines-for-Statistical-Practice.aspx]. For example, "the customer is always right" ISN'T the type of thing an ethical statistical consultant would include.
- Be very careful not to just copy and paste from these other documents! Put things in your own words.

Here at Research and Developing Insight (RADI), we believe that it is essential to uphold high standards in our statistical practices and be responsible when delivering statistical insight to our clients and stakeholders. Thus, we adhere strongly to the Statistical Society of Canada's (SSC) Code of Ethical Statistical Practice. With regards to society, our mission is to provide objective, unbiased information with the goal of improving public knowledge and avoiding misleading information in our reports. We hold fast to the privacy laws and standards set forth by the SSC as it pertains to the collection, storage, and publication of data and findings. With our employers and clients, it is important that we remain constantly aware of any potential conflicts between our ethical practices and the interests of the client, and to refrain from any misleading summaries or findings from our data in reports. It is our utmost priority to avoid disclosing any confidential and/or sensitive information acquired without the explicit consent from our employers and clients. Our duty is to remain professional in keeping good statistical practices and standards by only taking on projects that are within the skill set and capacity of our team. In addition, we refuse to partake in projects where the outcomes or findings in our statistical reports dictate the financial gains and rewards for our services.

Final advice: KNIT EARLY AND OFTEN!