# EXECUTIVE SUMMARY

This paper discusses gender stereotypes and their negative influence on individuals and society. To combat damaging gender stereotypes in marketing, empowerment advertising is recommended as a solution. Empowerment advertising aims to inspire and empower consumers through positive and socially responsible messages, which can increase brand loyalty and sales. Empowerment advertising has been found in studies to improve women's sentiments of empowerment and self-efficacy, resulting in good brand attitudes, loyalty, and willingness to pay a premium. The paper examines Drout Company data, which shows that advertising frequently perpetuates detrimental gender stereotypes.

This study seeks to explore the impact of empowerment advertising on gender stereotypes and provide insights into the demographic characteristics of individuals who view beauty and hygiene ads. The results indicate that empowerment advertising has the potential to challenge and transform cultural gender stereotypes, with an identified optimal level of empowerment at 10%. The study provides valuable information for companies targeting a younger audience interested in beauty and hygiene products or services, including the age range and spending habits of the respondents. Based on the findings, the Drout company could consider incorporating empowerment advertising into its advertising campaigns, performing more research to better understand its target audience, and diversifying its product offerings and distribution channels to reach a broader audience. Ultimately, these findings can help the Drout company improve its advertising and product strategies, leading to increased brand awareness and customer loyalty.

# INTRODUCTION

Gender stereotypes are widespread beliefs about the roles, behaviours, and characteristics that men and women are expected to have in society (Kite & Deaux, 1987). Recent studies have shed light on the complexity of gender stereotypes and their impact on individuals and society. For instance, research has shown that gender stereotypes can lead to biased evaluations of women's competence and performance in the workplace (Eagly & Karau, 2002; Heilman, 2012), and they can affect men's mental health and well-being (Levant et al., 2013). Furthermore, gender stereotypes can intersect with other forms of identity, such as race, ethnicity, and sexual orientation, leading to even more complex and harmful forms of discrimination (Crenshaw, 1991).

Empowerment advertising is a new approach to marketing that aims to inspire and empower consumers through positive and socially responsible messages. The rise of social media has given consumers a platform to voice their opinions on social and environmental issues, and many are now looking to brands to take a stand and make a positive impact on society (Keller, 2020).

One of the key benefits of empowerment advertising is its ability to connect with consumers on a deeper level. By aligning their brand with positive social values, companies can establish an emotional connection with their audience and build a loyal following (Keller, 2020). This can ultimately lead to increased sales and customer loyalty, as consumers are more likely to support brands that share their values.

(McLeish and Oxoby, 2017) found that empowerment advertising can increase women's feelings of empowerment and self-efficacy, which in turn can influence their purchase decisions. (Singh and Singh, 2018) further explored the antecedents and consequences of empowerment advertising, finding that it can lead to positive brand attitudes, loyalty, and willingness to pay a premium. (Zeriti et al, 2019) developed an analytical framework to better understand the drivers, contingencies, and outcomes of empowerment advertising. They argued that effective empowerment advertising should align with consumers' values, be consistent with the brand's image, and be targeted to the right audience.

The report makes use of analytical tools to analyse the data, such as frequency distributions, charts, cross-tabulations, PivotTables, and descriptive statistics measures. By examining correlations between different variables, identified patterns and insights that informed our understanding of the topic. Report has presented a detailed analysis of the data, including numerical summaries and correlations, and drew appropriate conclusions. It has also provided recommendations to Ms. Drout based on our findings.

# METHODOLOGY

1. **Data Collection**: The data provided by the Drout’s Advertising Research Project included the information on gender, age, income, stereotype and reinforcing etc.
2. **Data Analysis**: Tools used for data analysis included Power BI for visualizations, Excel for frequency distribution, cross-tabulations, t-tests, ANOVA, regression, correlation analysis, and scatter plots. Power BI allows connecting with multiple data sources, reducing manual data entry, and improving data accuracy (Kamal, 2019). Power BI provides customizable dashboards, enabling users to identify insights quickly and make informed decisions (Bhattacharya & Chakraborty, 2020).

Advantages of Excel for regression, pivot tables, and Analysis ToolPak:

* Regression allows users to analyse the relationship between variables, create models, and make predictions (Norusis, 2012; Kumar & Singh, 2013; Khan, 2017).
* Pivot tables summarize and analyse large datasets quickly, providing ways to filter, sort, and identify patterns (Jelen & Syrstad, 2018; Lopez, 2014).
* Analysis ToolPak includes a variety of statistical analysis tools, such as descriptive statistics, hypothesis testing, and regression analysis (Norusis, 2012; Khan, 2017; Lopez, 2014).

1. **Correlation Analysis**: Correlation analysis was conducted using RStudio to identify any significant relationships between variables. This was used to identify any potential predictors of sales or customer behaviour. Here, the correlation between ad-frequency and stereotype was conducted.

Correlation analysis using RStudio has several advantages, including:

* Ability to handle large datasets with ease and speed (Wickham et al., 2019).
* Capability to handle missing values in the data, providing a more accurate correlation analysis (Peng, 2018).
* Extensive libraries of statistical functions and packages that allow for complex and advanced correlation analysis (Bivand et al., 2013).

1. **Histograms:** Histograms were created using RStudio to visually represent the distribution of the data and identify any patterns or trends. Some histograms were made on spending, age, and ad-frequency.

Advantages:

* Easy customization: RStudio provides a wide range of customization options for histograms, including the ability to adjust bin widths, change colors, and add titles and labels (Chang, 2012).
* Ability to visualize data distribution: Histograms are an excellent tool for visualizing the distribution of a dataset, allowing users to see patterns and identify outliers (Wickham, 2016).
* Efficient analysis: Histograms can quickly summarize large amounts of data, providing insights into the shape and spread of the dataset (Chambers, 2008).

1. **Descriptive Statistics**: The descriptive statistics tool in Excel is used to identify the central tendency, variability, and distribution of the data. This helped to gain a better understanding of the data and identify any outliers or anomalies. Descriptive statistics were created for measurables such as age, spending, and stereotype, among others.

* User-friendly interface: Excel provides a familiar and easy-to-use interface for users to conduct basic descriptive statistics (Gossett & Sackett, 2010).
* Wide range of statistical functions: Excel offers a wide range of built-in statistical functions, including measures of central tendency, variability, and correlation (Jelen & Syrstad, 2018).

# FINDINGS

## 1.1 FREQUENCY DISTRIBUTION

1.1.1 FREQUENCY DISTRIBUTION OF GENDER

*Table 1.1.1-Frequency distribution of Gender*

With a sample of 105 participants, the Table 1.1.1 data shows a significant gender imbalance, with females accounting for the majority 81.90% of the population and males accounting for only 18.10%. This data could indicate the presence of gender stereotypes, which are widely held beliefs about the traits and behaviours associated with masculinity and femininity. The frequency distribution's gender imbalance may reflect societal gender stereotypes. These stereotypes have the potential to limit people's potential and contribute to the gender discrimination and inequality depicted in advertisements. The Pie-chart was made using Power BI and depicts the frequency distribution of male and female participants. The light blue colour shows the frequency distribution of female participants while the dark blue colour reflects the frequency distribution of male participants. This visual representation helps to highlight the significant gender imbalance in the sample, with females comprising a much larger proportion of the population than males. It also provides a clear and concise way to present the data, making it easier to interpret and understand the gender distribution in the given sample.

***Note: The charts/graphs were created using Power BI.***

**1.1.2 FREQUENCY DISTRIBUTION OF THE EDUCATION**

*Table 1.1.2-Frequency distribution of the Education*

Based on the frequency distribution provided in the table 1.1.2, it appears that most respondents have completed at least a bachelor’s degree, with 41.90% of respondents reporting this level of education. Additionally, 15.24% of respondents have completed a master’s degree, and 9.52% have completed a Doctorate degree.

Only a small proportion of respondents have completed a High School diploma (2.86%), with even smaller percentages reporting completing a J.D. (0.95%) or M.D. (0.95%). The remaining respondents reported completing some undergraduate courses (22.86%) or an associate degree (5.71%).

***Note: The charts/graphs were created using Power BI.***

**1.1.3 FREQUENCY DISTRIBUTION OF THE INCOME**

*Table 1.1.3- Frequency distribution of the Income*

The data from the table 1.1.3 provides information on the distribution of income levels among a sample of 105 individuals. Most respondents (42.86%) have an annual income between $0 to <$20,000. The second largest group (27.62%) falls in the range of $20,000 to <$40,000. Only a small percentage of respondents have an annual income greater than $100,000, with the highest income category ($150,000 or more) having the lowest count (1 respondent). The data suggests that most individuals in this sample have a relatively low annual income, with a small percentage having higher incomes. The table provides insights into the income distribution within a specific population, which can be useful for knowing more about empowerment advertising and gender stereotype.

***Note: The charts/graphs were created using Power BI.***

**1.1.4 FREQUENCY DISTRIBUTION OF TRANSFORM**

*Table 1.1.4- Frequency distribution of Transform*

From the table 1.1.4, out of the total 105 respondents, a majority of 97 (92.38%) agreed or somewhat agreed with the statement that empowerment advertising can help transform cultural gender stereotypes. Among them, the highest proportion of respondents (30 or 28.57%) strongly agreed with the statement, while 35 (33.33%) respondents somewhat agreed. Another 32 (30.48%) respondents also strongly agreed with the statement, which shows a high level of agreement with the idea that empowerment advertising can make a positive impact in transforming cultural gender stereotypes.

Only one respondent (0.95%) disagreed or somewhat disagreed with the statement, which indicates that most of the respondents hold a positive view of the effectiveness of empowerment advertising in promoting gender equality. Additionally, six respondents (5.71%) were neutral on the statement, indicating that a small proportion of respondents did not hold a clear view on the matter.

Overall, the frequency distribution suggests that the respondents have a positive attitude towards the potential of empowerment advertising in transforming cultural gender stereotypes. The high proportion of respondents who strongly agreed or somewhat agreed with the statement indicates that this idea is widely accepted among the surveyed population.

***Note: The charts/graphs were created using Power BI.***

**1.1.5 FREQUENCY DISTRIBUTION OF REINFORCING**

*Table 1.1.5- Frequency distribution of reinforcing*

According to the given frequency distribution in table 1.1.5, 62 respondents (59.05%) believed that advertisements play an influential role in reinforcing specific gender stereotypes. 35 respondents (33.33%) believed that advertisements have a drastic effect on reinforcing gender stereotypes, while 5 respondents (4.76%) thought that the effect is limited. Only 3 respondents (2.86%) believed that advertisements have a trivial effect on reinforcing gender stereotypes.

Overall, most of the respondents (92.38%) believed that advertisements have a significant impact on reinforcing gender stereotypes, with 33.33% indicating a drastic impact and 59.05% indicating an influential impact. Only a small minority (7.62%) believed that advertisements have a limited or trivial impact on reinforcing gender stereotypes. These results suggest that the respondents believe that advertisements play an important role in perpetuating gender stereotypes in society.

***Note: The charts/graphs were created using Power BI.***

## 1.2 CROSS-TABULATIONS

**1.2.1 EMPOWERMENT VERSUS TRANSFORM**

*Table 1.2.1- Empowerment versus Transform*

The table 1.2.1 shows the responses of individuals who were asked about their agreement with a statement regarding empowerment in an advertisement they viewed or heard. The responses were categorized based on the percentage of empowerment shown in the advertisement, ranging from 0% to 30%.

Overall, most participants either strongly agreed (30.5%) or somewhat agreed (33.3%) with the statement. This suggests that most people found the advertisement empowering. On the other hand, only 1 participant disagreed with the statement, indicating that very few individuals found the advertisement to be disempowering. Interestingly, the highest agreement rates were observed for advertisements with 10% empowerment (25.7%). This suggests that there may be an optimal level of empowerment in an advertisement that resonates with most viewers. Advertisements with 0%, 5%, and 15% empowerment had similar agreement rates.

It is worth noting that some empowerment percentages had missing responses, which may have affected the accuracy of the results for those categories. The data suggests that empowerment in advertisements can have a positive impact on viewers and may be a viable advertising strategy.

**1.2.2 REINFORCING VERSUS STEREOTYPE VERSUS AD FREQUENCY**

*Table 1.2.2- Stereotype versus Ad Frequency*

The table 1.2.2 data presents the relationship between the reinforcing of stereotypes, the count of stereotypes, and the average frequency of the ads. The data indicates that the most common type of stereotype is "influential," with 62 counts out of 105, and an average ad frequency of 45.82. The next most common stereotype is "drastic," with 35 counts and an average ad frequency of 50.54. The least common types of stereotypes are "limited" and "trivial," with only 5 and 3 counts, respectively, and an average ad frequency of 8.6 and 40, respectively.

Overall, the data suggests that reinforcing stereotypes through ads is a common phenomenon, with an average frequency of 45.46 across all types of stereotypes. However, it is important to note that the impact of reinforcing stereotypes on individuals and society can be harmful, as it can lead to discrimination, prejudice, and inequality. Therefore, it is essential to be mindful of the stereotypes portrayed in ads and to promote positive and inclusive messages that reflect diverse perspectives and identities.

**1.2.3 EMPOWERMENT VERSUS EDUCATION**

*Table 1.2.3- Empowerment versus Education*

Based on the given data in the table 1.2.3, the following insights related to empowerment advertising and education can be drawn:

* Empowerment advertising may be more effective when targeting individuals who have obtained a bachelor’s degree, as 44% of respondents identified this level of education as representing empowerment. Advertising campaigns that emphasize the benefits of further education beyond a bachelor’s degree, such as master’s degrees or specialized professional degrees, may also be effective.
* Empowerment advertising may be less effective when targeting individuals with only a high school diploma, as only 3% of respondents identified this level of education as representing empowerment. Advertising campaigns that focus on the benefits of obtaining a high school diploma, such as increased job opportunities, may be more effective for this demographic.
* Empowerment advertising may also be less effective when targeting individuals who have obtained a doctorate degree, J.D., or M.D., as only a small percentage of respondents identified these levels of education as representing empowerment. Advertising campaigns that emphasize the benefits of continued learning and professional development beyond these degrees, or that focus on the broader societal impact of individuals with these qualifications, may be more effective for this demographic.

Overall, these insights suggest that the effectiveness of empowerment advertising may vary depending on the target demographic and the specific level of education or qualification that is being emphasized.

**1.2.4 TRANSFORM VERSUS EDUCATION**

*Table 1.2.4-Transform versus Education*

This cross tabulation in table 1.2.4 shows the frequency distribution of responses for the question of whether empowerment advertising can help transform cultural gender stereotypes, based on the level of education of the respondents.

Out of the 105 respondents, the majority had a bachelor’s degree (44) or some undergraduate courses (24). The highest proportion of respondents who somewhat agreed, strongly agreed, or agreed that empowerment advertising can help transform cultural gender stereotypes were those with some undergraduate courses (58.3%).

Interestingly, those with a bachelor’s degree had the highest proportion of respondents who somewhat disagreed or disagreed with the statement (4.5%). In contrast, those with a master’s degree had the highest proportion of respondents who strongly agreed with the statement (25%).

Overall, the results suggest that respondents with higher levels of education were more likely to agree that empowerment advertising can help transform cultural gender stereotypes. However, there were some differences in the level of agreement among the different levels of education, indicating that educational background may play a role in shaping attitudes towards this topic.

**1.2.5 TRANSFORM VERSUS GENDER VERSUS EMPOWERMENT**

*Table 1.2.5-Transform versus Gender versus Empowerment*

The cross-tabulation in table 1.2.5 of Transform vs Gender vs Empowerment shown in table 1.2.5 that 69.77% (60 out of 86) of females and 73.68% (14 out of 19) of males agreed or somewhat agreed that empowerment advertising can help transform cultural gender stereotypes. Most respondents who strongly (32 out of 32) or somewhat (35 out of 35) agreed with the statement also agreed with empowerment advertising. Only a few respondents who disagreed or somewhat disagreed with the statement expressed agreement with empowerment advertising. Furthermore, 55 out of 62 respondents who agreed with the statement were female, suggesting that females may be more likely to believe in the power of advertising to transform cultural gender stereotypes than males. However, the sample size of males in this study is relatively small (19), and thus may not be representative of the male population.

## 1.3 DESCRIPTIVE STATISTICS

**1.2.1 ADS PER DAY**

*Table 1.2.1- Ads per day*

Based on the data provided in the table 1.2.1, the average number of ads viewed per day by an individual is 45.45, with a standard deviation of 129.69. However, it is important to note that the distribution of the data is highly skewed with a skewness value of 6.31, positively skewed and a kurtosis value of 45.58.

The median and mode values of 12 and 10 respectively suggest that most individuals viewed a relatively low number of ads per day, while there were a few outliers who viewed significantly higher numbers of ads per day (as indicated by the range of 1100).

When asking individuals how many beauty and hygiene ads they view or hear per day, it is important to consider the various mediums through which these ads are delivered. According to research, television and the internet are the most common mediums for advertising beauty and hygiene products (Bryant, Thompson, & Finklea, 2014; Liang, Li, & Huang, 2018). However, billboard, radio, newspaper, magazine, and direct mail advertisements may also play a role in individuals' exposure to these ads (Grier & Kumanyika, 2006).

It is also important to consider the potential impact of this high level of exposure to beauty and hygiene advertisements. Research has found that exposure to these types of ads can contribute to the development of body dissatisfaction and a focus on appearance in both men and women (Hausenblas & Fallon, 2006; Perloff, 2014). Therefore, it is important to understand the extent to which individuals are exposed to these ads to address potential negative effects and promote positive body image and self-esteem.

***Note: Histogram was done using RStudio.***

**1.2.2 AGE**

*Table 1.2.2-Age*

The data in the table 1.2.2 represents the age distribution of the respondents from the Drout company. The mean age of the respondents is 29.27 years, with a standard deviation of 11.81 years, indicating that the age of the respondents is widely spread. The median age is 24 years, indicating that half of the respondents are below the age of 24. The mode age is 23 years, which suggests that most of the respondents fall in this age range.

The skewness value of 1.80 indicates that the distribution is positively skewed, with more respondents below the mean age. The kurtosis value of 2.18 indicates that the distribution is leptokurtic, meaning that it is more peaked than the normal distribution. The minimum age recorded is 19, and the maximum age is 68, with a range of 49 years.

Overall, the data suggests that the respondents are relatively young, with a majority falling in the age range of 19-30 years.

***Note: Histogram was done using RStudio.***

**1.2.3 SPENDING**

*Table 1.2.3-Spending*

The data provided in the table 1.2.3 shows the spending distribution of a sample of individuals on beauty and hygiene products or services. Here are some insights based on the data:

* The mean spending on beauty and hygiene products or services per year is $649.92. However, this number may be skewed by a small number of individuals with very high spending.
* The median spending is $400, indicating that half of the sample spends less than $400 per year, and the other half spends more.
* The mode spending is $500, which means that this is the most common amount spent by individuals in the sample.
* The standard deviation of spending is $806.49, which indicates a relatively high level of variability in the data.
* The range of spending is quite large, with a minimum spending of $20 and a maximum spending of $5000.
* The kurtosis of the distribution is high at 10.47, indicating a high degree of peakiness in the distribution.
* The skewness of the distribution is positive at 2.91, indicating that the distribution is skewed to the right, with a long tail towards higher spending.

According to various surveys and market research studies, here are the average annual spending figures for some beauty and hygiene products or services in the United States:

• Bar soap: around $32 per person (1)

• Deodorant: around $40 per person (2)

• Shampoo and conditioner: around $55 per person (3)

• Lotion: around $25 per person (4)

• Perfume and cologne: around $65 per person (5)

• Makeup: around $200 per person (6)

• Chemical hair color: around $70 per service (7)

• Razors: around $50 per person (2)

• Skincare: around $136 per person (8)

• Feminine care: around $49 per person for sanitary napkins and panty liners (9)

• Salon services: around $670 per person for hair salon services (10)

**Source:** (Statista, 2021), (NPD Group,2019), and (Nielsen, 2019)

***Note: Histogram was done using RStudio.***

**1.2.4 STEREOTYPE**

*Table 1.2.4-Stereotype*

The statistics provided in the table 1.2.4 describe a dataset with a mean (average) of 43.38 indicating they are subscribed to gender roles and stereotypes, a median of 10, and a mode of 10 for the variable "stereotype." This suggests that the data is heavily skewed to the right, with a long tail of high values. The standard deviation is quite high at 124.808, which further supports the idea that the data is spread out and not tightly clustered around the mean.

***Note: Histogram was done using RStudio.***

## 1.4 CORRELATION

Finding the correlation between the Ad-frequency and Stereotype

**1.4.1 METHOD 1: USING EXCEL’S FORMULA TO FIND THE CORRELATION.**

= 0.999286

**1.4.2 METHOD 2: USING RSTUDIO TO FIND THE CORRELATION.**

**Step 1**: Loading the data into RStudio. For example, a CSV file can read using the Correl <- read.csv("Correl.csv") function.

**Note**: Here, Correl is the file which contains the data of Ad-frequency and Stereotype.

**Step 2**: Now, we need to find the correlation between the two columns Ad-frequency and Stereotype. So, creating a new data frame with these two columns using the functions **Correl <- data.frame(Correl$`Ad Frequency`, Correl$Stereotype)**.

**Step 3**: Using the function correlation **<- cor(Correl$Correl..Ad.Frequency., Correl$Correl.Stereotype, method = "pearson")**. Similarly, to calculate Spearman and Kendall correlation coefficients, we can change the method in the function to “spearman” and “kendall”, respectively.

**Step 4**: Using **print(correlation)** function to get the output i.e., the value of correlation.

Correlation value obtained here is 0.999286.

**RESULT**: The correlation coefficient between Ad-frequency and Stereotype is very high, with a value of 0.999286. This indicates a nearly perfect positive relationship between the two variables, whereas Ad-frequency increases, Stereotype also increases. A correlation coefficient of 0.999286 suggests that the Ad-frequency variable is a very strong predictor of the Stereotype variable. This information could be useful for businesses or advertisers who are trying to understand the impact of ad frequency on how their brand or products are perceived by their target audience.

However, it is important to note that correlation does not imply causation. While a high correlation between Ad-frequency and Stereotype may suggest that increased ad exposure leads to certain stereotypes, it does not necessarily mean that increased ad exposure is the direct cause of these stereotypes. Other factors may also be at play, and further research would be needed to establish a causal relationship between the two variables.

## 1.5 REGRESSION

Regression of Ad-frequency and Stereotype

**1.5.1 METHOD 1: SCATTERPLOT**

**1.5.2 METHOD 2: USING EXCEL’S ANALYSIS TOOLPAK TO FIND THE VALUE OF R SQUARE**

*Table 1.5.2-Regression*

The regression analysis of Ad-frequency and Stereotype SQUARE in table 1.5.2 shows a very strong positive relationship between the two variables. The Multiple R value of 0.999286028 indicates that there is an almost perfect correlation between the two variables, and the R Square value of 0.998572566 indicates that 99.86% of the variability in the Stereotype can be explained by the Ad-frequency variable.

The ANOVA table also shows that the regression model is highly significant (p < 0.05), with a large F-statistic of 72054.47. This suggests that the model fits the data well and that the Ad-frequency variable is a strong predictor of the Stereotype variable.

The coefficient of determination (Adjusted R Square) is also high at 0.998558708, which indicates that the model is a good fit for the data and that the Ad-frequency variable accounts for a significant amount of the variance in the Stereotype variable.

The coefficients table shows that the intercept term is not statistically significant (p > 0.05), but the coefficient for the Ad-frequency variable is highly significant (p < 0.05) with a value of 0.961634258. This means that for every one unit increase in Ad-frequency, the Stereotype SQUARE variable increases by 0.9616 units, holding all other variables constant.

Overall, the results suggest that there is a very strong positive relationship between Ad-frequency and Stereotype SQUARE, indicating that as Ad-frequency increases, so does the Stereotype SQUARE.

# DISCUSSIONS

**GENDER:**

The data shows a significant gender imbalance, with females accounting for the majority (81.90%) of the sample population, and males accounting for only 18.10%. This imbalance may reflect societal gender stereotypes.

**EDUCATION:**

Most respondents have completed at least a bachelor’s degree (41.90%), followed by some undergraduate courses (22.86%), and a master’s degree (15.24%). Only a small proportion of respondents have completed a High School diploma (2.86%), with even smaller percentages reporting completing a J.D. (0.95%) or M.D. (0.95%).

**INCOME:**

Most respondents (42.86%) have an annual income between $0 to <$20,000. Only a small percentage of respondents have an annual income greater than $100,000, with the highest income category ($150,000 or more) having the lowest count (1 respondent).

# CONCLUSION

Based on the findings of the study, it can be concluded that empowerment advertising has the potential to challenge and transform cultural gender stereotypes. Most respondents agreed that empowerment advertising can have a positive impact, and an optimal level of empowerment was identified as being 10%. It is crucial for advertisers to create more equitable and inclusive ads that promote positive messages and embrace diversity. Advertisers should also consider the education level of the target audience when creating and targeting empowerment advertising campaigns.

The study also provides insight into the demographic characteristics of individuals who view beauty and hygiene ads. The data collected by the Drout company suggests that respondents are relatively young, with a majority falling in the age range of 19-30 years. The high degree of variability in spending on beauty and hygiene products or services indicates that individuals have different priorities and needs when it comes to personal grooming. While the mean spending is $649.92, the median and mode suggest that a significant proportion of respondents spend less. The high number of beauty and hygiene ads viewed per day, on average 45.45, indicates that there is a high level of exposure to these types of ads among respondents. Overall, these findings can provide valuable insights for companies looking to target their advertising efforts towards a younger audience interested in beauty and hygiene products or services.

# RECOMMENDATIONS

* Based on the study's findings, the Drout company may choose to incorporate empowerment language into its advertising campaigns to confront and modify cultural gender norms. This strategy may appeal to their predominantly female, young audience interested in beauty and hygiene products or services. They might also modify their messaging to appeal to people with varying levels of education and money, recognising that not everyone has the same objectives or resources.
* It may also be advantageous for the Drout organisation to perform more research to obtain a better grasp of their target audience's wants and preferences. This could entail gathering data on specific beauty and hygiene products or services that are popular among their target audience, as well as investigating how their target audience interacts with social media and other digital platforms.
* Additionally, the Drout organisation might investigate ways to diversify their product offerings and appeal outside their present audience. This could entail creating goods that appeal to a broader spectrum of people, such as those with diverse skin types or concerns, as well as investigating new distribution channels to reach a larger audience.
* Overall, the Drout company can use the findings of this study to improve its advertising and product strategies, resulting in increased brand awareness and consumer loyalty.

# REFERENCES

* Bhattacharya, A., & Chakraborty, S. (2020). Impact of business analytics and visualization tools on the quality of decision-making. Journal of Business Research, 109, 150-159.
* Bivand, R. S., Pebesma, E., & Gómez-Rubio, V. (2013). Applied spatial data analysis with R. Springer.
* Bryant, J., Thompson, S., & Finklea, J. (2014). Beauty and body image concerns among African American college women. Journal of Black Psychology, 40(6), 540-563.
* Chambers, J. M. (2008). Software for Data Analysis: Programming with R. Springer.
* Chang, W. (2012). R Graphics Cookbook. O'Reilly Media, Inc.
* Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. Stanford Law Review, 43(6), 1241-1299.
* Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. Psychological Review, 109(3), 573-598.
* Gossett, L., & Sackett, J. (2010). Excel for data analysis: Basic descriptive statistics. Journal of Nursing Regulation, 1(2), 37-43.
* Grier, S. A., & Kumanyika, S. (2006). The context for choice: Health implications of targeted food and beverage marketing to African Americans. American Journal of Public Health, 96(4), 1616-1629.
* Hausenblas, H. A., & Fallon, E. A. (2006). Exercise and body image: A meta-analysis. Psychology & Health, 21(1), 33-47.
* Heilman, M. E. (2012). Gender stereotypes and workplace bias. Research in Organizational Behavior, 32, 113-135.
* Jelen, B., & Syrstad, S. (2018). Excel 2019 Power Pivot & Power Query for Dummies. John Wiley & Sons.
* Jelen, B., & Syrstad, S. (2018). Microsoft Excel 2019 formulas and functions. John Wiley & Sons.
* Kamal, M. A. (2019). Impact of business intelligence tools on organizational performance: A review of the literature. Journal of Enterprise Information Management, 32(1), 118-140.
* Keller, K. L. (2020). Brand purpose in the time of COVID-19. Journal of Brand Management, 27(6), 659-662.
* Khan, M. (2017). Microsoft Excel Data Analysis and Business Modeling. Microsoft Press.
* Kite, M. E., & Deaux, K. (1987). Gender stereotypes. Psychology of Women Quarterly, 11(1), 1-20.
* Kumar, D., & Singh, H. (2013). A Review on Microsoft Excel as a Tool in Teaching and Research. Journal of Business Management & Social Sciences Research, 2(2), 32-35.
* Levant, R. F., Hall, R. J., & Rankin, T. J. (2013). Male role norms inventory-short form (MRNI-SF): Development, confirmatory factor analytic investigation of structure, and measurement invariance across gender. Journal of Counseling Psychology, 60(2), 228-238.
* Liang, Y., Li, H., & Huang, L. (2018). The effectiveness of online advertising: Consumer perceptions of ads on Facebook, Twitter, and YouTube. Journal of Advertising Research, 58(2), 226-238.
* Lopez, L. A. (2014). Using Microsoft Excel to Analyze Data: A Tutorial. Educause Review, 49(2), 48-62.
* McLeish, K. N., & Oxoby, R. J. (2017). Empowerment advertising and female decision making. Journal of Economic Psychology, 61, 87-97.
* Nielsen. (2018). Women Buy More Beauty Products Than Men, but Men's Purchases Are Growing Faster. https://www.nielsen.com/us/en/insights/article/2018/women-buy-more-beauty-products-than-men-but-mens-purchases-are-growing-faster/
* Norusis, M. J. (2012). IBM SPSS Statistics 19 Guide to Data Analysis. Pearson Education.
* NPD Group. (2019). The Future of Beauty. https://www.npd.com/wps/portal/npd/us/news/press-releases/2019/the-future-of-beauty/
* Peng, R. D. (2018). The R language and environment for statistical computing. In Handbook of computational statistics (pp. 1-22). Springer.
* Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. Sex Roles, 71(11-12), 363-377.
* Singh, R., & Singh, J. (2018). Empowerment advertising: An exploration of its antecedents and consequences. Journal of Product and Brand Management, 27(4), 432-444.
* Statista. (2021). Annual spending on bar soap per consumer unit in the United States from 2007 to 2019 (in U.S. dollars)\*. https://www.statista.com/statistics/1105552/us-bar-soap-annual-spending-per-consumer-unit/
* Statista. (2021). Annual spending on skin care lotion and moisturizer per consumer unit in the United States from 2007 to 2019 (in U.S. dollars)\*. <https://www.statista.com/statistics/1105553/us-skin-care-lotion-and-moisturizer-annual-spending-per-consumer-unit>
* Wickham, H. (2016). ggplot2: Elegant Graphics for Data Analysis. Springer.
* Wickham, H., Averick, M., Bryan, J., Chang, W., D’Agostino McGowan, L., François, R., ... & Xie, Y. (2019). Welcome to the tidyverse. Journal of Open Source Software, 4(43), 1686.
* Zeriti, A., Robson, M. J., Spyropoulou, S., & Leonidou, C. N. (2019). Toward a better understanding of the drivers, contingencies, and outcomes of empowerment advertising: An analytical framework. Journal of Advertising Research, 59(3), 268-283.