Huong (Valerie) Le

Data Driven Blog

**Is It Okay to Hit Woman If She Do Something Wrong?**

**(And if Education Level makes a difference)**

**Background**

My name is Phan Nguyen Huong Le. I am currently a third-year student studying Biomathematics and minoring in Psychology. Data Science is something correlated with my major, which is why I am taking this class. My focus is mainly on sciences, and my ultimate goal is to go to medical school. I strongly believe good coding skills would be a plus in my research and resume!

The data that we are going to look at is collected by Operation Fistula/ Demographic and Health Surveys (DHS) and published in Data.world. Specifically, they aim to visualize gender inequality; it is an effort to help realize UN Sustainable Development Goal 5: achieve gender inequality and empower all women and girls.

In this dataset, we will be looking at violence towards women and girls who are particularly vulnerable, who might me married, divorced, or never married, and see their opinions toward this problem [Whether they support violence or not].

I have my eyes on this data simply because I am a female who support other females. I encourage you to investigate this finding because as a decent human being, we should be support each other and should perpetually try to keep the world in peace, without crimes and violence.

**About the data:**

Data was taken from a survey of men and women in African, Asian, and South American countries, exploring the attitudes and perceived justifications given for committing acts of violence against women.

**Variables:**

The data explores different sociodemographic groups that the respondents belong to: including: Education Level, Marital status, Employment, and Age group.

Graphical user interface, text, application, email

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**Data Analysis:**

Regarding of the data, there are:

* 54.9% of male respondents, and 45.1% female respondents
* 23.9% people who are uneducated, 24.8% people who have primary education, 25.8% who have secondary education, and 25.6% of people who have higher education
* 34.1% people who are married, 33.9% people who are widowed/ separated. Divorced, and 32% people who have never married.

Chart, pie chart

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Chart, pie chart

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There is also no obvious pattern that the Survey Year affect the percentage of people who agrees that a husband is justified to hit women based on her behavior:

Chart

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Next, I am interested in determining the relationship between values and country, which will be illustrate by *barplot*. I first constructed a function *tapply* between this numerical value and categorical value and was able to find their means. According to the table, out of 71 countries surveyed, the top 5 countries that supports violence against women are: Afghanistan, Congo Democratic Republic, Timor- Leste, Chad, and Guinea. They are all developing and poor countries, which makes me interested in finding whether countries that are developing and in poverty correlate with the reason why their citizens think it is okay to hit or beat women.

Chart, shape

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*Gender-wise*, there seems to be more women who think husband is justified if there is a reasonable excuse for him to hit his wife than men. This is confirmed by using the same function as above, which resulted in the value of mean of 22.9 for female, and 15.9 for male, respectively.

The study also ask numerous different people with numerous different demographic questions. This including their age, education, employment, marital status, residence. By using the same function as above, there seems to be no obvious difference between the mean of them. In summary, there seems to be a fairly distributed question regarding of whether they agree it is okay to hit woman.

Chart, bar chart

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There are also different answers to those demographic questions.

* *Age-wise*, it seems like people who age are 15-24 have the highest mean, meaning they agree more often about violence against women. This follows by people who age are from 25-34, and 35-49. However, the mean difference is small. So, the question is, is the increasing in age, or as you get more mature, you would disagree with husband beating up his wife from some reason?
* *Marital Status-wise*, people who never married would less agree with violence against women, while married or living together people or widowed, divorced, separated people have a differentiable higher mean. Further research would dive into: Why are people who never married would against violence, while people with more experienced with marriage is indifferent towards violence?
* *Education-wise,* people who think violence is okay are mainly with no education, while people with higher education would less likely to agree. Would education make a difference in the way they think? Later, I will do some more research regarding of this question.
* *Employment-wise*, people who are employed for kind would agree more with violence against women, follow by people who employed for cash and unemployed. I also question myself whether education would make a difference in this group of people.
* *Resident-wise*, people who live in rural areas tend to agree more than urban people that it is okay for a husband to hit his wife.

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*Majority because agree that a husband is justified if he has more than one reasonable reason!*

*Chart, bar chart

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*\*\*\* There are more graphics and codes regarding of the overview of this dataset, which is omit from this paper due to the length of the paper\*\*\**

**Further Analysis**

To understand more about this dataset, I formed two hypotheses related to their gender and education levels:

Hypothesis one is formed and evaluated by using Z-test:

* H01: **Women** who are **uneducated** think it is okay when “A husband is justified in hitting or beating his wife it she argues with him” have the same average mean value as **men** who are **uneducated**.
* Ha1: **Women** who are **uneducated** think it is okay when “A husband is justified in hitting or beating his wife if she argues with him” have the higher average mean value as **men** who are **uneducated**.

Chart, shape, square

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* Result gives a p-value

of 0.000224, which means that we should reject our null hypothesis.

* It is TRUE that **Women** who are **uneducated** think it is okay when “A husband is justified in hitting or beating his wife if she argues with him” have the higher average mean value as **men** who are **uneducated**.
* ***Women tends to agree more than men that women should be beaten if they do something wrong!!***

Hypothesis 2 is formed and evaluated by Z-test:

* H02: Women who have higher education think it is okay if the husband hit his wife if she burns food has the same average mean compared to men who have higher education.
* Ha2: Women who have higher education think it is okay if the husband hit his wife it she burns food has higher average mean compared to men who have higher education

Chart, shape, bar chart, square

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* Result gives a p-value of 0.2314, which is much higher than 0.05, our critical value.
* We are unable to reject our null hypothesis
* Chart, histogram

  Description automatically generatedIt is TRUE that **Women** who have **higher education** think it is okay if the husband hit his wife if she burns food has the same average mean compared to **men** who have **higher education**.
* ***Education makes a difference in the way we perceived violence against women!***

**IN CONCLUSION:**

* Violence against women is unacceptable; women should be treated equally compared to men.
* Based on our further analysis, education seems to be the key to change people’s mindset towards violence against women in African, Asian, and South American countries.
* Further analysis regarding of this dataset could be done based on the areas people live in (rural/urban), their ages, marital status, …

**LINK FOR MY CODES:**

<file:///C:/Users/lpnhu/OneDrive/Documents/R/Data101_Assignments/Project1_data101.html>

**LINK TO THE DATASET:**

<https://data.world/makeovermonday/2020w10>