

# The Frequency of Internet Usage Relative to Age, Education, Income

## POPULATION SURVEYORS

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# Project Overview: Frequency of Internet Usage

## Overview

- What question is our data answering?
  - ***Does the frequency of internet use vary by age, income, and education?***
- What is our group's hypothesis?
  - ***The frequency of internet use decreases with age, is not dependent on income, and increases with education.***
- What is the impact of our analysis?
  - ***Knowing the demographics of internet users is important for organizations looking to target people of different age, income or education levels with their relevant messaging.***

# Project Approach: Frequency of Internet Use

## Overview

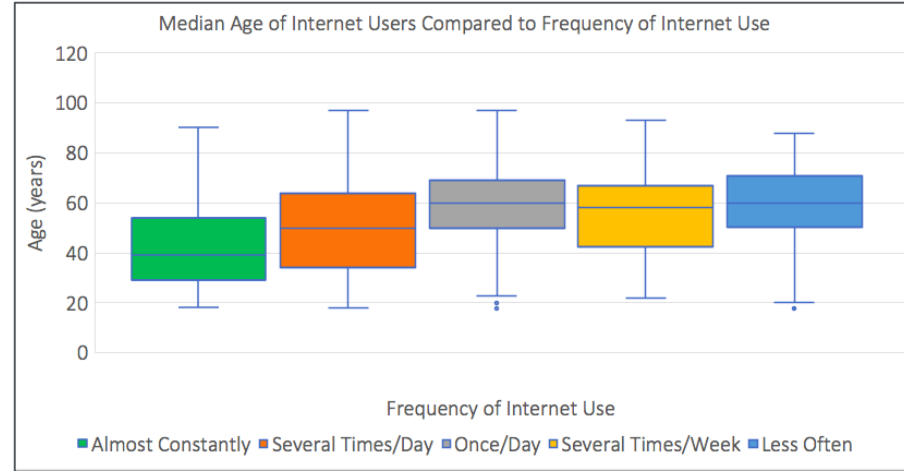
- What is your process for evaluating the data?
  - Reviewed the questionnaire and the resulting data **to ascertain relationships between survey questions and understand data sources.**
  - Developed **initial hypotheses** to explore using **statistical methods.**
  - Cleaned data to exclude users who responded **'Don't Know'** and those who **'Refused'** to answer. These responses cannot be treated as useful data for the analysis.
  - Performed **initial statistical analysis** and **visualized results.** Then depending on shape of distribution, adjusted analysis accordingly.
  - Selected best presentations that **addressed the hypothesis.**

# Analysis: Internet Use by Age

## Median age of internet users varies with frequency of internet use

- Individuals who use the internet **'Almost constantly'** (green bar) have a median age of  **$39 \pm 16$**  years, placing the minimum median age at 23 and the maximum at 55.
- Those who use the internet **'Once a day'** (grey bar) have a median age of  **$60 \pm 17$  years**, placing the minimum median age for this group at 43 and the maximum at 77.
- These data suggest those who use the internet almost constantly, on average, tend to be younger than those who use it once/day.
- There is a 24% probability that a user who accesses the internet **'Almost Constantly'** is under 30 years old. The probability decreases to 5% as internet use becomes **'Once a day'**

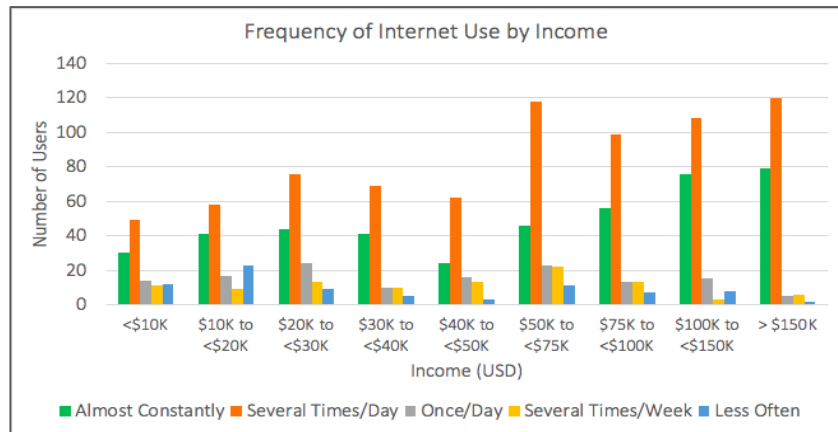
\* Note: Those who responded to the survey varied in age from 18 to 97 years old.



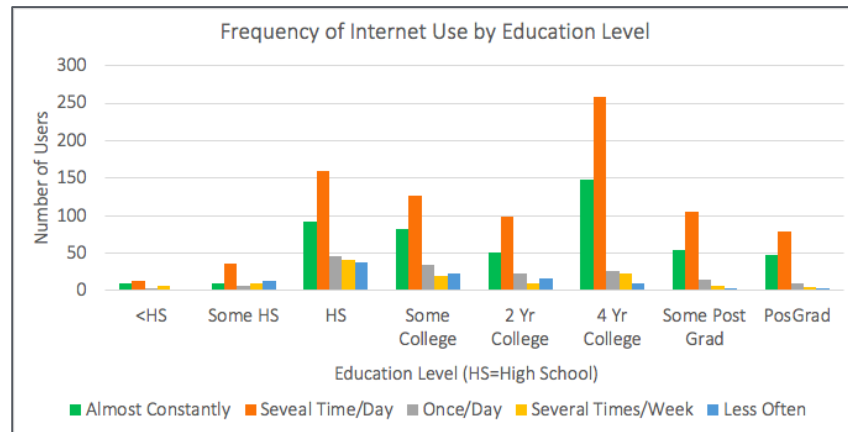
	Frequency of Internet Use	
	Almost Constantly	Once/day
z-score	-0.7044	-1.6688
Probability of user under 30 years old	24%	5%

# Analysis: Internet Use by Income & Education

Neither income or education level had a significant impact on the frequency of internet use



- Irrespective of income level, users most often access the internet several times/day (orange bars).
- 41% of the users who used the internet several times/day have an income <\$50K USD while 59% had an income >\$50K suggesting that frequency of daily internet use increases with income.



- Irrespective of education attained, users most often access the internet several times/day (orange bars).
- Survey responders were skewed to users who attended or were college graduates so no further insights could be gleaned about the relationship of education to the frequency of internet use.

# Summary

**Hypothesis evaluation:** The frequency of internet use decreases with age, is not dependent on income, and increases with education. Understanding internet usage by demographics is important for organizations to know how to target their online messaging.

## Summary of Findings:

- The frequency of internet use decreases with age and is slightly higher for those with income >\$50,000. The data were inconclusive with respect to education level. Specifically,
  - Individuals who use the internet almost constantly have a median age of  $39 \pm 16$  years, and are likely to be younger than those who use it less frequently.
  - Irrespective of income or education, users most frequently accessed the internet several times/day.
    - The frequency of use marginally increases (~18%) for those with an income >\$50K as compared to those with lower incomes.

**Data Source:** Pew Research Center - Internet & Technology, *Jan. 3-10, 2018 - Core Trends Survey*; 07/06/18 accessed; survey sample size = 2,002 respondents.

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<http://www.pewinternet.org/dataset/jan-3-10-2018-core-trends-survey/>