

Statistical analysis of



**healthcorps**<sup>®</sup>

Programs Efficiency



**HealthCorps University  
(HCU)**



**HealthCorps Living Labs  
(HCLL)**

## Data Collection Process:

NYC Version, 2014-2015



### HealthCorps Program Survey

*This is a survey about healthy eating, exercise, and life skills. The survey is anonymous so please DO NOT put your name anywhere on the survey.*

#### *Respondent Information*

1. What year were you born in?  
(A) 1992 (B) 1993 (C) 1994 (D) 1995 (E) 1996 (F) 1997 (G) 1998 (H) 1999 (I) 2000 (J) 2001
2. In what month were you born? Were you born between January and June? If yes, please provide your answer. If no, please leave blank and skip to question 3.  
(A) January (B) February (C) March (D) April (E) May (F) June
3. In what month were you born? Were you born between July and December? If yes, please provide your answer. If no, please leave blank and skip to question 4.

- 55 Question Survey is given to HC (Case) and Non-HC Students (Comparison).
- Survey is given twice to HC Students.
  - First in the beginning of the program cycle (Pre)
  - Second in the end of the program cycle (Post)

## Data Collected:



- Demographics
- HC Student
- HC programs involvement
- Nutrition behavior
- Exercise behavior
- Attitude/Intentions/Self-Esteem

- Survey collected from 20 different schools across United States
- Impact focus in two States
  - New York
  - California
- Survey collected from Fall 2014 to Spring 2015 (1 Fiscal Year)

## Raw Data Set

1	ID Nur	ID NUMBER		SPECIAL CODES		DATE		SurveyTracker Plus <sup>®</sup> Information/Data Sheet												Q6
2	6							11												2
3	6							2												2
4	6							2												1
5	6							2												2
6	6							2												2
7	6							2												2
8	6							2												2
9	6							2												2
10	6							2												2
11	6							2												2
12	6							2												2
13	6							2												2
14	6							2												2
15	6							2												2
16	6							2												2
17	6							2												2
18	6							2												2
19	6							2												2
20	6							2												2
21	6							2												2
22	6							2												2
23	6							2												2

## Data Set Keys

COLUMN	COLUMN TITLE	CODE
A	HC-ID Number	#
B	Case/Comparison	1 = Case 2 = Comparison
C	Pre/Post	1 = Pre 2 = Post
D	Month	
E	Day	
F	Year	
G-BI	Survey Q1-Q55	1 = A 2 = B 3 = C 4 = D 5 = E 6 = F 7 = G 8 = H I = 9 J = 10 No response/multiple answers selected = 11
K-L, AU-AX	Q5-6, Q41-44	2 answer options (A-B = 1-2)
AY-BF	Q45-52	3 answer options (A-C = 1-3)
J, AF-AQ, BG-BI	Q4, Q26-37, Q53-55	5 answer options (A-E = 1-5)
H-I	Q2-3	6 answer options (A-F = 1-6)
M-N, P-AA, AD, AT	Q7-8, Q10-21, Q24, Q40	7 answer options (A-G = 1-7)
AB-AC, AE, AR-AS	Q22-23, Q25, Q38-39	8 answer options (A-H = 1-8)
O	Q9	9 answer options (A-I = 1-9)
G	Q1	10 answer options (A-J = 1-10)

## Tools



Excel




MySQL®

 The MySQL logo, which includes a blue silhouette of a shark leaping upwards, positioned above the word "MySQL" in a blue and orange font.

## Data Cleaning

- ▶ Variables names changed on Dataset through R
- ▶ Post changed to variables
  - ▶ Dataset was saved as a cvs and then opened through Excel
- ▶ Manual entry of survey answers were used to replace numeric scantron values into String Characters to display best visualization of Survey Answers.
- ▶ Tableau offers a Re-Shaping add-on for Excel to convert Survey data into a easy to read dataset for Tableau on a separate sheet within the dataset file.

1	HC-ID Number	Case/Comparison	Pre/Post	Month	Day	Year	Q1. Birth:	Q2. Birth:	Q3. Birth:	Q4. Grade	Q5. Gend:	Q6. Hispai	Q7. Race	
2	61051		1	1	10	7	2014	1996	11	5	3	11	11	2
3	61052		1	1	10	7	2014	1997	11	2	4	1	2	3
4	61054		1	1	10	7	2014	1997	1	11	4	2	2	1

Day	Year	Q1. Birth:	Q2. Birth:	Q3. Birth:	Q4. Grade	Q5. Gend:	Q6. Hispai	Q7. Race	Questions	Response
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q8. Interaction with HC Cr Null
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q9. HealthCorps Program: Health Fair
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q10. 100% Juice Intake 1 to 3 times during the past 7 days
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q11. Fruits Intake 1 to 3 times during the past 7 days
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q12. Green Salad Intake 1 to 3 times during the past 7 days
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q13. Carrots Intake 4 to 6 times during the past 7 days
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q14. Other Vegetables Int 1 to 3 times during the past 7 days
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q15. Soda Intake 1 to 3 times during the past 7 days
10	7	2014	1996	Null	Novembe	Grade 11	Null	Null	Asian	Q16. Sport Drinks 1 to 3 times during the past 7 days

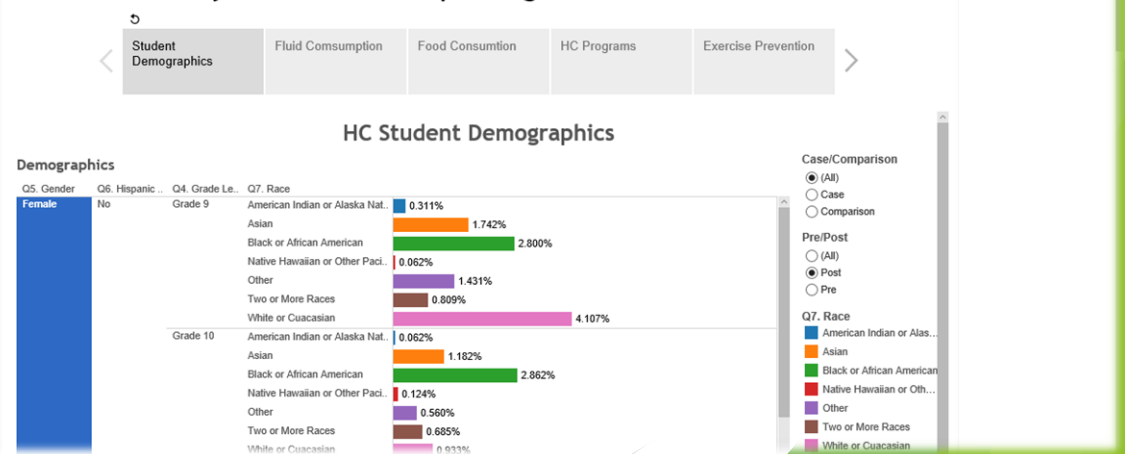
Previous Dimensions: 61x8,181

New Dimensions: 15x392,689

## Tableau Live Preview of Data

[Click here](#)

### Statistical Analysis of HealthCorps Programs Efficece.



## Analytical Questions:

- ▶ Has HC Curriculum influenced positive behavior changes? pre + post program?
- ▶ How do the behaviors of students who receive the HC Curriculum differ from those who do not?
- ▶ Does HC Programming outside the classroom impact the larger student body?
- ▶ What race and gender of students are mostly effected?
  - ▶ How has the program effect males and females?

## Suggestions & Findings

- ▶ Fluid Consumption: Healthy vs. Non Healthy
  - ▶ More Water is being consumed by both Males and Females than Juice, Sport Drinks, Soda or Sweetened Ice Tea.
    - ▶ 100% Juice Intake has decreased within Females that are currently enrolled into HC curriculum. (Based on pre curriculum vs post curriculum)
      - ▶ 1 to 4 times a day - decreased
      - ▶ 1 to 6 times during the last week - increased
        - ▶ Females are consuming less 100% juice on a daily basis
    - ▶ Water Intake has also decreased in Females that are currently enrolled into HC curriculum( Pre vs. Post)
      - ▶ 1 to 4 times a day-decreased
      - ▶ 1 to 6 times during the last week - increased
        - ▶ Females are consuming less water from Pre curriculum to post curriculum
    - ▶ 100% Juice intake as decreased on a daily basis in Males (Same as females in pre vs. post)
    - ▶ Water intake in males have decreased in 1,3 and 4 times a day but had increased in 2 times a day and 1-6 times a week.
    - ▶ Sport Drinks have increased within Males consuming 1 sport drink 1 time a day. (could this be based on sports?)
    - ▶ Soda, Sweetened Ice Tea Consumption has decreased in both male and females Post curriculum.

## Suggestions & Findings

- ▶ **Food Consumption: Healthy vs. Non Healthy**
  - ▶ Fruit intake, green salad intake and other vegetable intake has increased in females on all around.
    - ▶ 7.937% of females do not eat carrots in the last 7 days (high)
    - ▶ Carrot intake has decreased in females
  - ▶ Fruit intake and other vegetable intake has increased in males all around.
    - ▶ 7.017% of males did not eat carrots in the last 7 days (high)
    - ▶ Carrot intake and green salad intake had decreased in males.
      - ▶ Green salad intake has decreased in a daily basic and is consumed more from a 1 - 6 times during the last 7 days.
  - ▶ All Fried and sweetened food has decreased in both males and females post curriculum.
    - ▶ Less fried and sweetened foods are consumed on a daily basic and trend shows students are consuming more fried and sweetened food during the last 7 days.

## Suggestions & Findings

- ▶ **Effects of HealthCorps Program on the Student Body**
  - ▶ HC Students have increased their participation in HC programs post curriculum.
    - ▶ From pre to post. Both males and females have increased participation in HealthCorps In-class programs and HC health fair.
  - ▶ A great deal of non-HC students have started to participate in HC classroom.
    - ▶ Both males and females have increased participation in HealthCorps In-Class Programs as well as Health Fair and after school activity.
  - ▶ There has been a decrease in participation in outside programming post curriculum with HC and Non-HC students
- ▶ **HC Programs Affect on Student Exercise Prevention**
  - ▶ Programs have effected Students in a positive way toward their confidence level in exercising post program.
  - ▶ Major factors effecting students from exercising
    - ▶ Very Often Lack of Self Discipline has increased post curriculum
    - ▶ No exercising buddy- increased
    - ▶ Don't enjoy exercising - increased
    - ▶ Lack of skills - increased
    - ▶ Lack of convenient- increased.
  - ▶ Suggestions: An added program that can help students learn to exercise on their own. Fun exercising activity that doesn't involve going to the gym or being in a group.