



June 18, 2019

Memo To: Major E. Sarvis
Major S. Montgomery
From: B.J. Council, You & Five-O, LLC
Subject: Comparative Data Analysis 2018

We have received the final survey results of our pre/post-tests that we administered during presentations that were given during our first contract period. This will be our last survey analysis, unless Durham Police Department feels there is a specific demographic that we've never analyzed. We have determined through these pre/post results that participants do benefit from attending, thus there isn't a need to continue to collect data on the presentation because we now know it's beneficial.

The first results that were selected and analyzed were for 143 Beta study cases (surveys) in 2016. That report was sent last year. Of those 143 cases, 68 were from events sponsored by the Durham Police Department. We also compared 2016 data to our pilot surveys we started gathering after our inaugural presentation in June 2015. Participants displayed an 18.37% increase in their knowledge of their rights after participating in the program. Those individuals also realized a 3.81% increase in their comfort interacting with law enforcement officers after participating in the program.

The attached analysis is for 2018. The findings show basically the same as the first analysis. It continues to show participants displayed high "knowledge retention" about their rights after participating in the program. The findings show that males & females both had a high knowledge retention after participating in the program. Findings showed that there was a statistically significant relationship between "knowledge retention" and "comfortability interacting with police". This means that as participant's knowledge of their rights increased, so did their comfortability interacting with police.

The analysis for 2018 is attached for your review. Dr. M. Michaux Parker of Indiana East University created and analyzed the survey instrument. Dr. Parker if requested is more than willing to answer any questions you or others may have about the results.

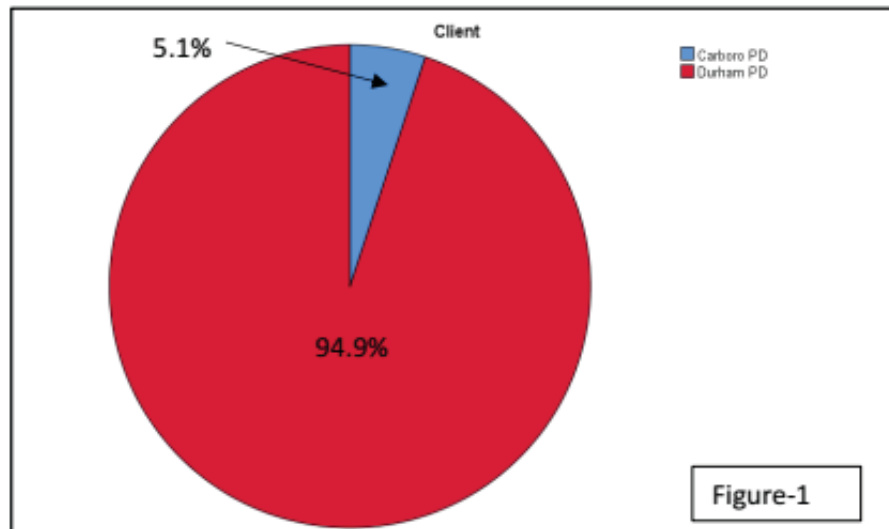
You & Five-O is very pleased with these statistics. Thank you for allowing You & Five-O to be a part of your community outreach programming.

The following analysis is for data provided in 2018. All statistical analyses were conducted at the 95% confidence level ($\alpha = .05$). The sample size was 189 cases. The study examined two outcome variables: 1) How well juveniles did juveniles understand their rights after completing the You & Five-O program and 2) How comfortable were the juveniles interacting with law enforcement after participating in the You & Five-O program. The study also included a Defiant Individualism Index (DII) designed to measure the juvenile's level of responsivity. In order to measure the juvenile's comfortability with law enforcement officers and DII, the study used two proprietary measures. Each scale was tested for validity and reliability.

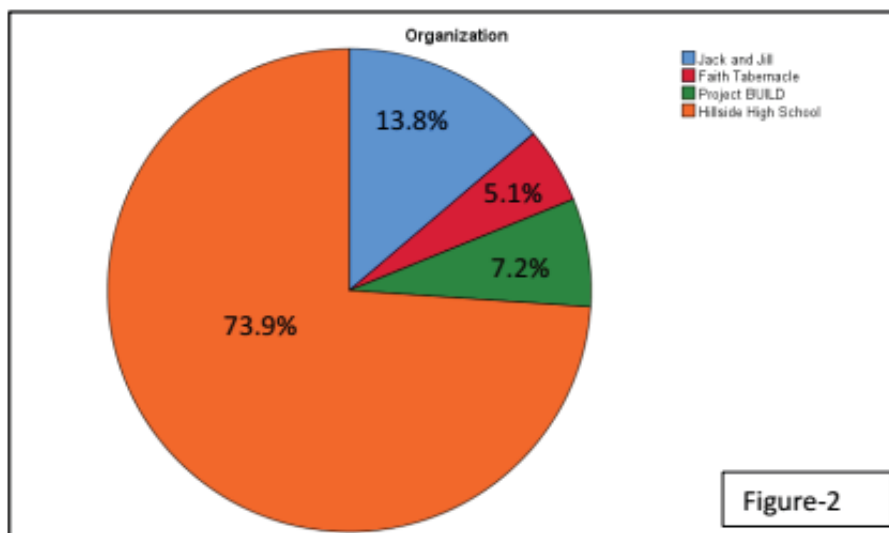
The Defiant Individualism Index produced a Cronbach's Alpha of .737 which surpassed the .700 threshold required to be considered reliable. Additionally, all of the items in the DII scale produced Eigen values greater than .400 which is the threshold for valid inclusion in a scale of this type. The police interaction scale was measured by 6 items and produced a Cronbach's Alpha of .840 which surpassed the .700 threshold required to be considered reliable. Each item in the police interaction scale also produced an Eigen value greater than .400 which suggested that each item was valid to be included in the scale.

| |
|------------------------|
| Study Variables |
|------------------------|

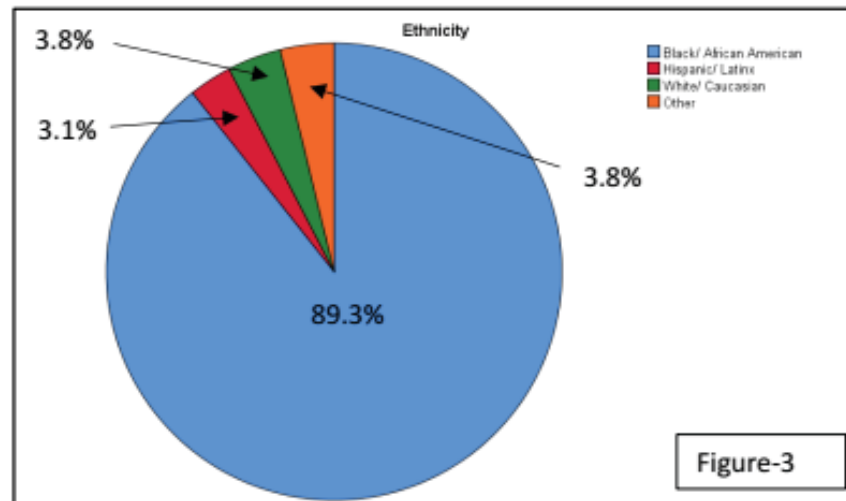
The data showed that the majority of the clients (94.9%, $n = 131$) in the 2018 sample were from the Durham Police Department. Carrboro Police Department only contributed a small number of clients (5.1%, $n = 7$). However, this variable had a large number of missing data (27%, $n = 51$) that were not calculated in this variable. It is possible that the missing data were from either Durham or Carrboro (See Figure-1).



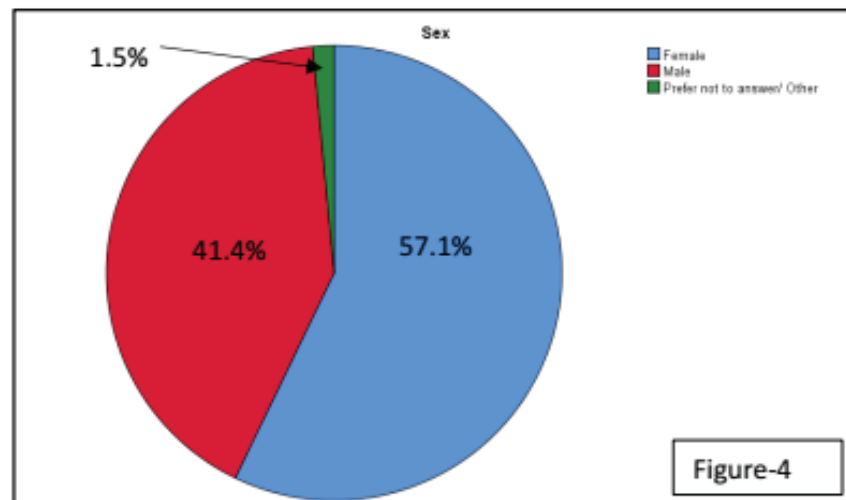
The data also showed that the largest proportion (73.9%, n=102) of the clients were affiliated with Hillside High school. The second largest proportion (13.8%, n=19) of clients were affiliated with Jack and Jill academy with the smallest group being affiliated with Faith Tabernacle (5.1%, n=7) (See Figure-2).



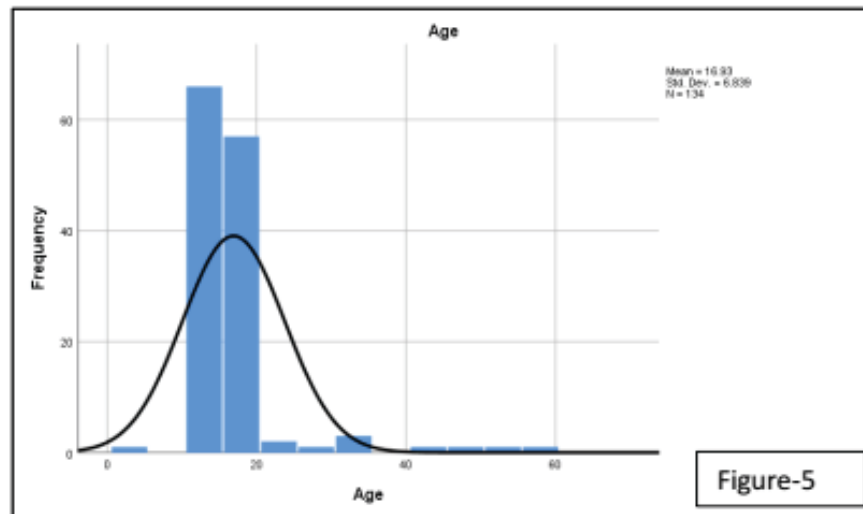
The largest proportion (89.3%, n= 117) of the clients were African-American. The remaining ethnicity categories all contained approximately 3% of the clients (See Figure-3).



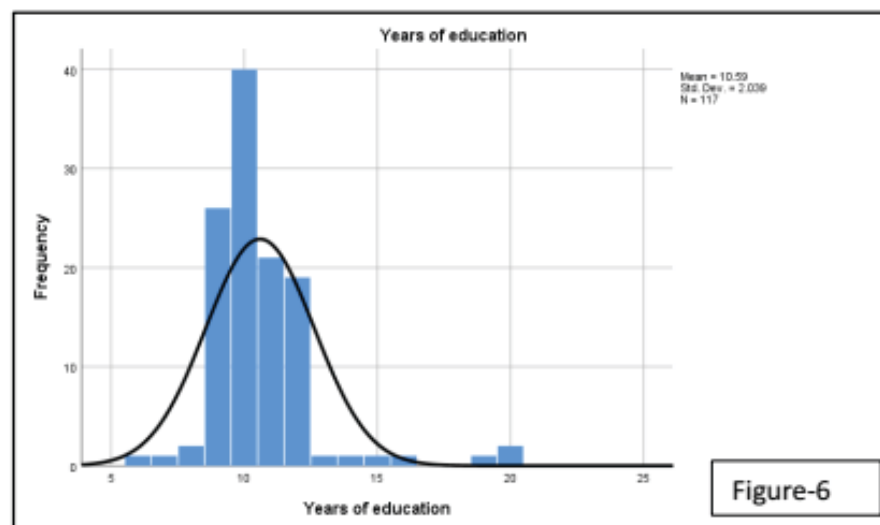
The proportion of male (57.1%, $n=76$) and female (41.4%, $n=55$) clients were almost evenly split. Only a small proportion (1.5%, $n= 2$) of clients preferred not to answer this question (See Figure-4).



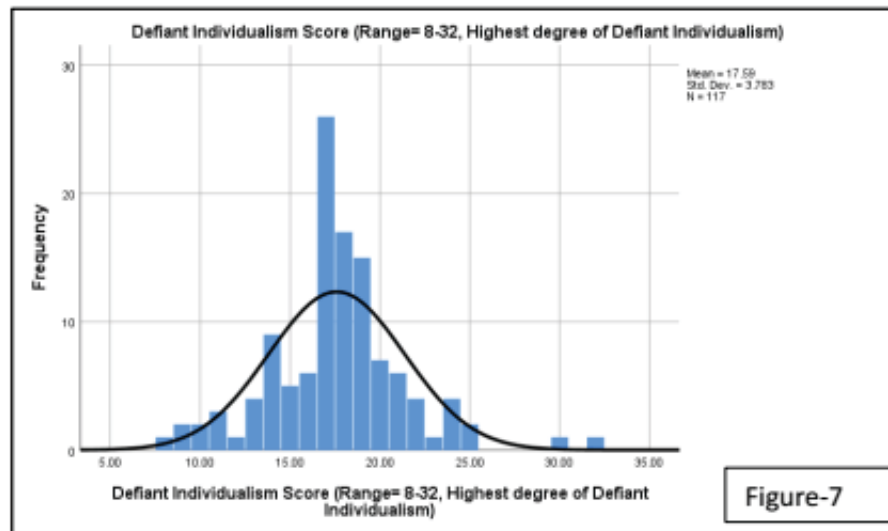
The average age of the clients in the sample was 16.9 years of age. This variable was not skewed ($Md= 15.5$) but there was a relatively high amount of variation in the ages of the clients in this sample ($Sd= 6.839$) (See Figure-5).



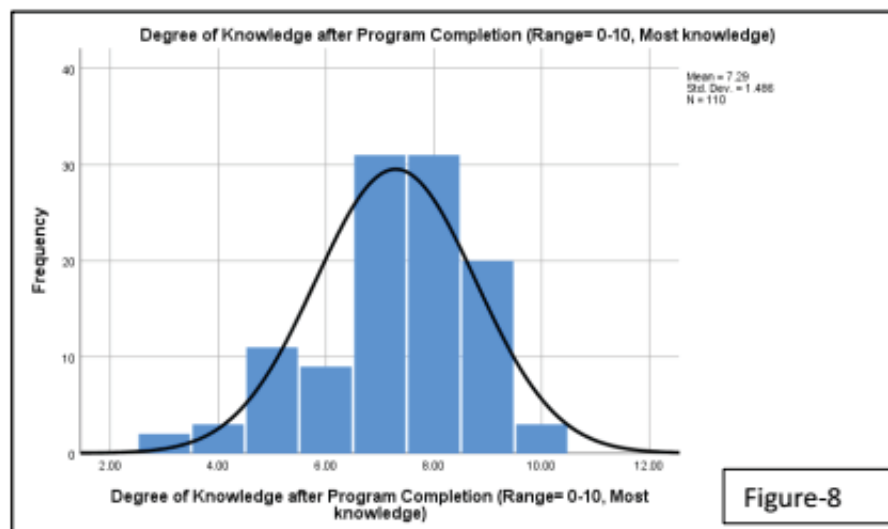
Most clients were in high school ($\bar{X} = 10.5$ years of education). With respect to years of education, the sample was not skewed ($Md = 10$) and was much more similar to one another ($Sd = 2.039$) (See Figure-6).



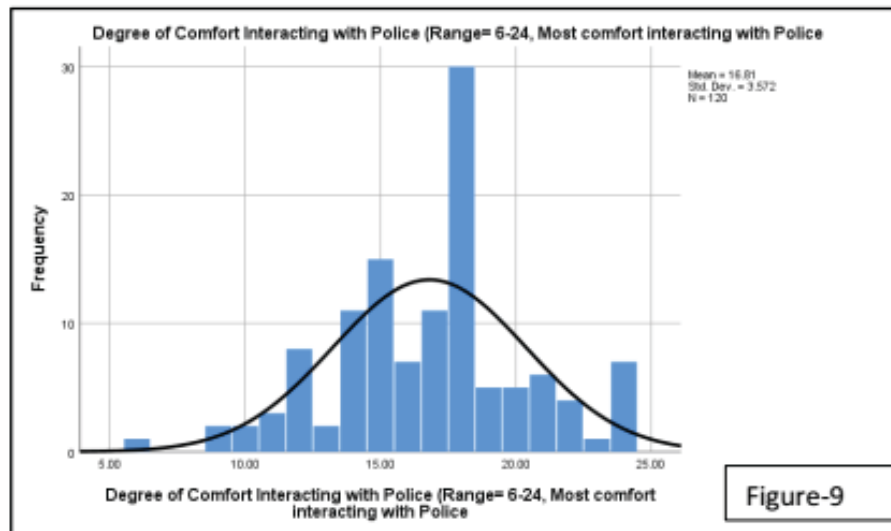
The range of Defiant individualism was from 8, having low Defiant Individualism to 32 having the highest degree of Defiant Individualism. The level of Defiant individualism in the sample was moderate ($\bar{X} = 17.5$, $Md = 17$). There was also a relatively low amount of variation among the clients in the sample ($Sd = 3.783$). Based on the findings, it appeared as though the clients in the study would have only been moderately resistant to the program (See Figure-7).



The data showed that after completing the program, the clients had a high degree of awareness when it comes to their rights ($\bar{X} = 7.2$, $Md = 7$). The awareness scale ranged from 0, having the least awareness of citizen's rights to 10, having the highest degree of awareness of citizen's rights. This was the most consistent variable in the study (See Figure-8).



The degree of comfort in dealing with the police after completing the program was high ($\bar{X} = 16.8$, $Md = 17$). Scale for police interaction ranged from 6, having low comfortability interacting with the police to 24, having the most comfortability in dealing with the police. The juveniles were fairly consistent in their scoring on this variable ($Sd = 3.572$) (See Figure-9).



Next, the researcher tested the data to determine if there were any variations in program impact for defend types of participants. The researcher computed a Means Analysis and determined that there were no statistically significant differences in Defiant Individualism score ($t = -.733, p = .465$), Degree of Rights Knowledge ($t = -.056, p = .965$) and Degree of comfort dealing with law enforcement ($t = .368, p = .714$) between youthful participants and older participants (See Table-1).

Table-1 Means Analysis (Youth)

| | | \bar{X} | Sd | p | d |
|-------------------------|-----------|-----------|-------|------|------|
| Defiant Individualism | Non-Youth | 16.57 | 3.735 | .465 | .287 |
| | Youth | 17.65 | 3.793 | | |
| Rights Knowledge | Non-Youth | 7.25 | 1.500 | .956 | .026 |
| | Youth | 7.29 | 1.492 | | |
| LEO Interaction Comfort | Non-Youth | 17.33 | 4.033 | .714 | .144 |
| | Youth | 16.78 | 3.564 | | |

Table-2 displays the results of a Means Analysis that tested for variations in program impact between males and females. There were no statistically significant differences in Defiant Individualism score ($t = -1.591, p = .130$), Degree of Rights Knowledge ($t = -.264, p = .792$) and

Degree of comfort dealing with law enforcement ($t = -.318$, $p = .751$) between male and female participants (See Table-2).

| Table-2 | | Means Analysis (Sex) | | | |
|-------------------------|--------|----------------------|-------|------|------|
| | | \bar{X} | Sd | p | d |
| Defiant Individualism | Female | 17.03 | 3.010 | .130 | .292 |
| | Male | 18.156 | 4.509 | | |
| Rights Knowledge | Female | 7.26 | 1.363 | .792 | .055 |
| | Male | 7.34 | 1.521 | | |
| LEO Interaction Comfort | Female | 16.63 | 3.385 | .751 | .058 |
| | Male | 16.84 | 3.806 | | |

Finally, the researcher examined a Bivariate Correlation of the study variables in order to determine if there were any relationships between the variables. Table-3 shows that there was a statistically significant relationship between the degree of rights knowledge and comfortability interacting with the police ($r = .264$, $p = .006$). This finding suggested that as the participants increased their awareness of their rights, they also increased their comfortability interacting with the police. There were four other statistically significant relationships in the data that were age or education-related and were not remarkable (See Table-3).

| Table-3 | | Pearson's Correlation | | | | | |
|---------|---------------------|-----------------------|--------|-------|---------|--------|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Rights Knowledge | 1 | .264** | -.158 | .124 | .136 | .086 |
| 2 | Interaction Comfort | | 1 | .170 | -.192* | .030 | .101 |
| 3 | DII Score | | | 1 | -.243** | -.219* | .137 |
| 4 | Participant Age | | | | 1 | .823** | .054 |
| 5 | Education | | | | | 1 | .012 |
| 6 | Participant Sex | | | | | | 1 |

* $p \leq .05$, ** $p \leq .01$