Over a quarter of a million children in the United States are placed in the foster care system each year. Using the 2021 National Data Archive on Child Abuse and Neglect (NDAACAN) with 105 variables and 631,893 observations, the child’s background, gender, race, age, length of stay in the foster care system, family structure, removal and discharge reasons were analyzed. In addition, whether the child was disabled was also considered. With the thought in mind of Every Child Deserves to Belong, the research goal is to minimize the length of stay of children in foster care and to minimize the number of children in foster care. To this end, this research investigates (1) why children from unmarried couples have the shortest length of stay in foster care; (2) how a child’s transition to independence is affected by the presence of a clinical disability; (3) how a child’s transition to independence varies by race; (4) what combinations of the child’s race and the family structure from which the child was removed result in longer lengths of stay; and (5) how does a number of runaways vary by family structure from which the child was removed.

METHODS

R Packages: The following packages were used to wrangle the data, perform tests and create visuals: tidyverse, ggplot2, dplyr, statr, ggpubr, broom, multcomp, car, rstatix, MASS, complete.

Data Wrangling was used to filter the levels of categorical variables, clear missing values from quantitative variables, reorder levels of categorical variables, and create subsets for each analysis. Transformations suggested by the Box-Cox function were created for the Multiple Linear Regression and Two-way ANOVA.

Multiple Linear Regression was used to predict the length of stay for a child in foster care based on the reason of removal from the caretaker’s home.

T-test was used to create the confidence intervals for significant predictors of the Multiple Linear Regression.

Chi-Square was used to determine whether there was a significant relationship between a child’s caretaker family structure and the race of the child. In addition, Chi-Squared analysis was used to determine whether there is a significant relationship between a child’s caretaker family structure and the reason for discharge from foster care.

Simple Linear Regression and Stratified Scatterplots were used to compare the relationship between the length of stay in foster care and the age at which the child entered foster care over the variables gender and race. “facet_wrap” splits the graph into individual scatterplots for each identified race. Color separated the regression lines into male and female.

ONE WAY ANOVA was used to determine whether the race of the child predicts the length of child’s stay in foster care.

TWO WAY ANOVA was used to see if there is an interaction effect on length of stay in the foster care system by child’s caretaker family structure and whether a child had a clinical disability.

Box-Cox Transformation was used to obtain homogeneity and normality for two-way ANOVA and Multiple Linear Regression.

RESULTS

In order to reduce the length of a child’s stay in foster care, we need to:

- Increase awareness about children from married couples having a low rate of adoption, and research why married couples have a low adoption rate;
- Educate children about the support that the foster care system offers to reduce runaways;
- Assist children with disabilities by providing them with resources about educational or vocational goals early on for a faster transition to independence;
- Provide children of Pacific Islander, Asian, and Multiple Race descents with information about foster care assistance and help before their children are taken to possibly prevent their children from being removed.

CONCLUSIONS