

FINAL PROJECT PRESENTATION

ISQA 8600 – DATA TO DECISIONS

GROUP 1 - AKHIL KODALI, HEATHER DAVIS, SCOTT BUI

DECEMBER 7, 2021

INTRODUCTION

WHAT WE WERE LOOKING AT

AGE, GENDER IDENTITY, AND RACE TYPES OF FACILITIES

WHY WERE WE LOOKING INTO THESE DATA SET?

TO FIND CORRELATION IN DEMOGRAPHICS AND SERVICE DURATION
TIME

RESEARCH QUESTIONS AND IMPORTANCE

- IS THERE A CORRELATION BETWEEN DEMOGRAPHICS (AGE, GENDER IDENTITY, AND RACE) AND AVERAGE SERVICE VISIT DURATION TIME?
- WHAT DEMOGRAPHICS HAVE LONGER AVERAGE SERVICE VISIT DURATION TIME REQUIREMENTS THAN OTHERS?
- IMPORTANCE?
 - PLAN TARGETED STAFF SCHEDULE AND STAFF ALLOCATION
 - FURTHER RESEARCH
 - CONSIDERATION OF TARGET AND FOCUSED DIVERSITY AND INCLUSION AND CULTURAL STAFF TRAINING RESOURCES

DATA CLEANING CHOICES

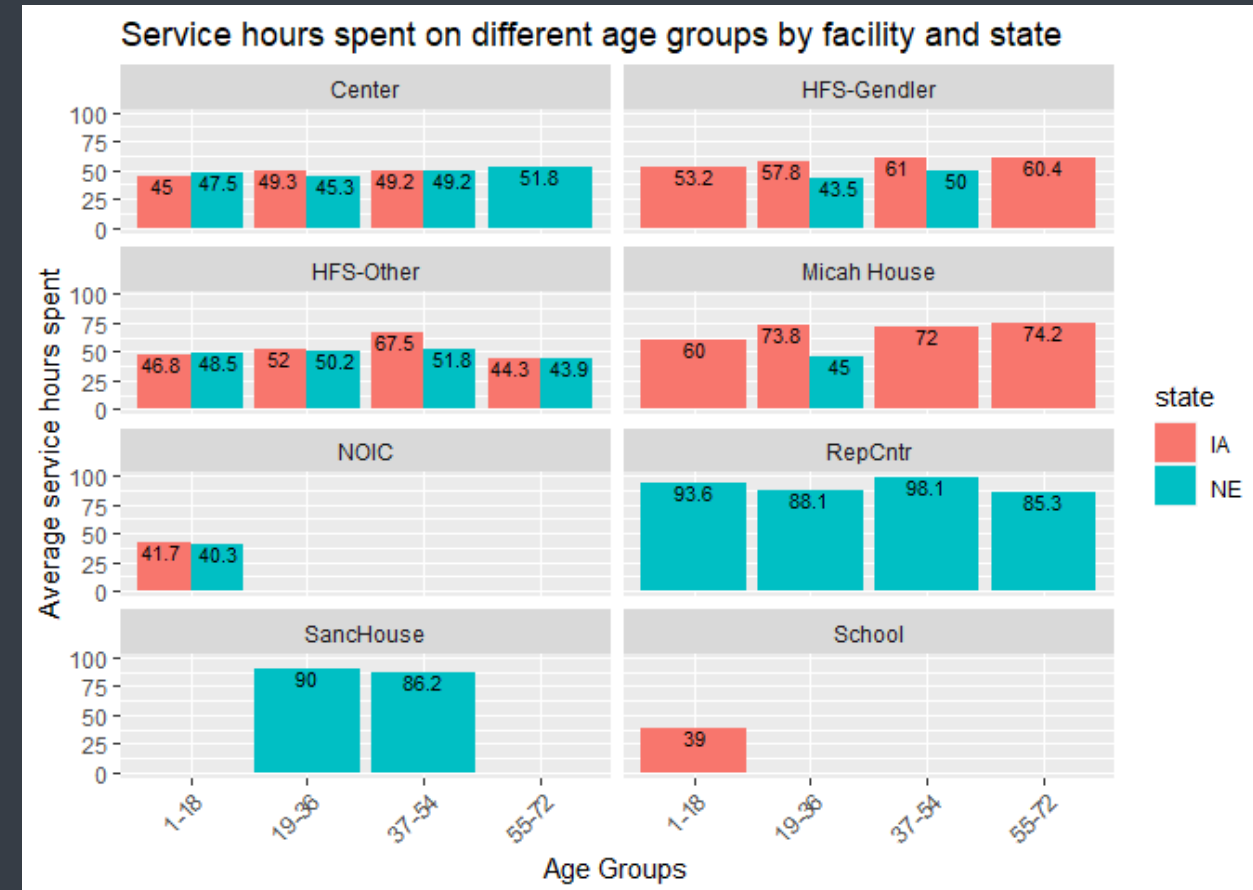
- PRIMARY DATA
 - HFS SERVICE DATA.CSV FILE
- SECONDARY DATA
 - SLA DATA COLUMNS 2021-08-25
- DATA REMEDIATION
 - REMOVE UNNEEDED COLUMNS
 - KEPT DATA APPROVED BY SUPERVISOR
 - FOCUSED STATES ON IOWA AND NEBRASKA DATA

DATA LIMITATIONS

- GENDER IDENTITY COLUMN
 - DUPLICATE VALUE OF FEMALE AND WOMAN
 - MEN DIDN'T HAVE AN EQUIVALENT OF THE SAME PATTERN
 - CONTAINED HIGH COUNT OF NOT OBTAINED AND NOT AVAILABLE
 - DIFFICULTY IN SEEING THE MORE ACCURATE AND TRUE PICTURE OF THE DATA
- SIMPLE RACE COLUMN
 - VALUES DIDN'T ALIGN WITH NUMERIC CODES FROM SLA DOC
- **FACILITIES**
 - **LABELS WERE AMBIGUOUS**
- AGE GROUP
 - AGE GROUPS WERE GROUPED FOR EVEN DISTRIBUTION WITH FORMULA
 - IS THERE A AGE GROUPING USED BY CLIENT AND IF THIS WAS SOMETHING WORTH ADDING?

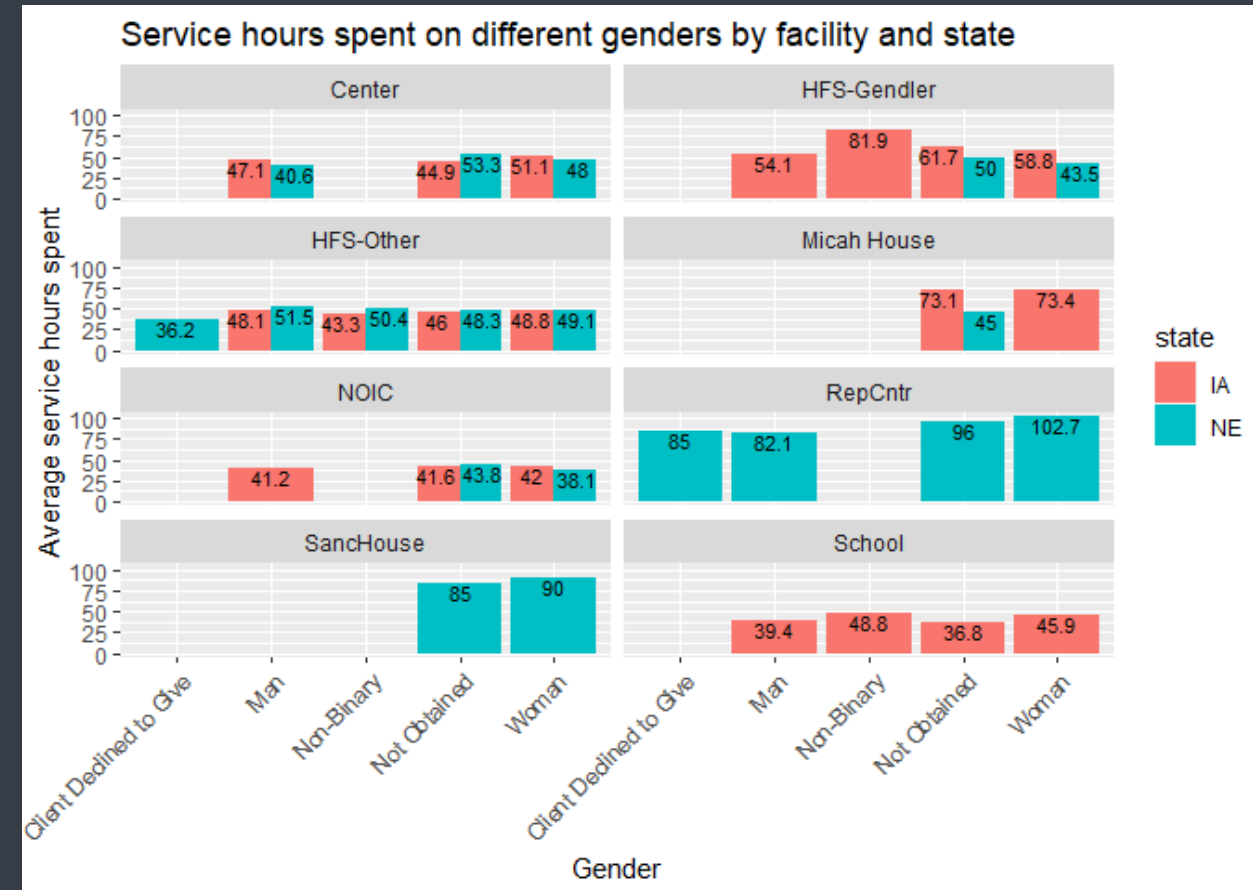
RESULTS AND INTERPRETATIONS: SERVICE HOURS SPENT ON DIFFERENT AGE GROUPS BY FACILITY AND STATE

- PLOT RESULTS
 - DEPICTS OUR ANALYSIS OF AVERAGE SERVICE VISIT DURATION TIME BY AGE, FACILITY, AND STATE
- 37-54 AGE GROUP
 - HIGHER AVERAGE DURATION IN MOST LOCATIONS
- IOWA AND NEBRASKA COMPARISON
 - REGARDLESS OF AGE, IOWA REQUIRES MORE SERVICE TIME THAN NEBRASKA
- YOUNGER CLIENTS
 - NO SIGNIFICANT INCREASE IN AVERAGE DURATION OF SERVICE



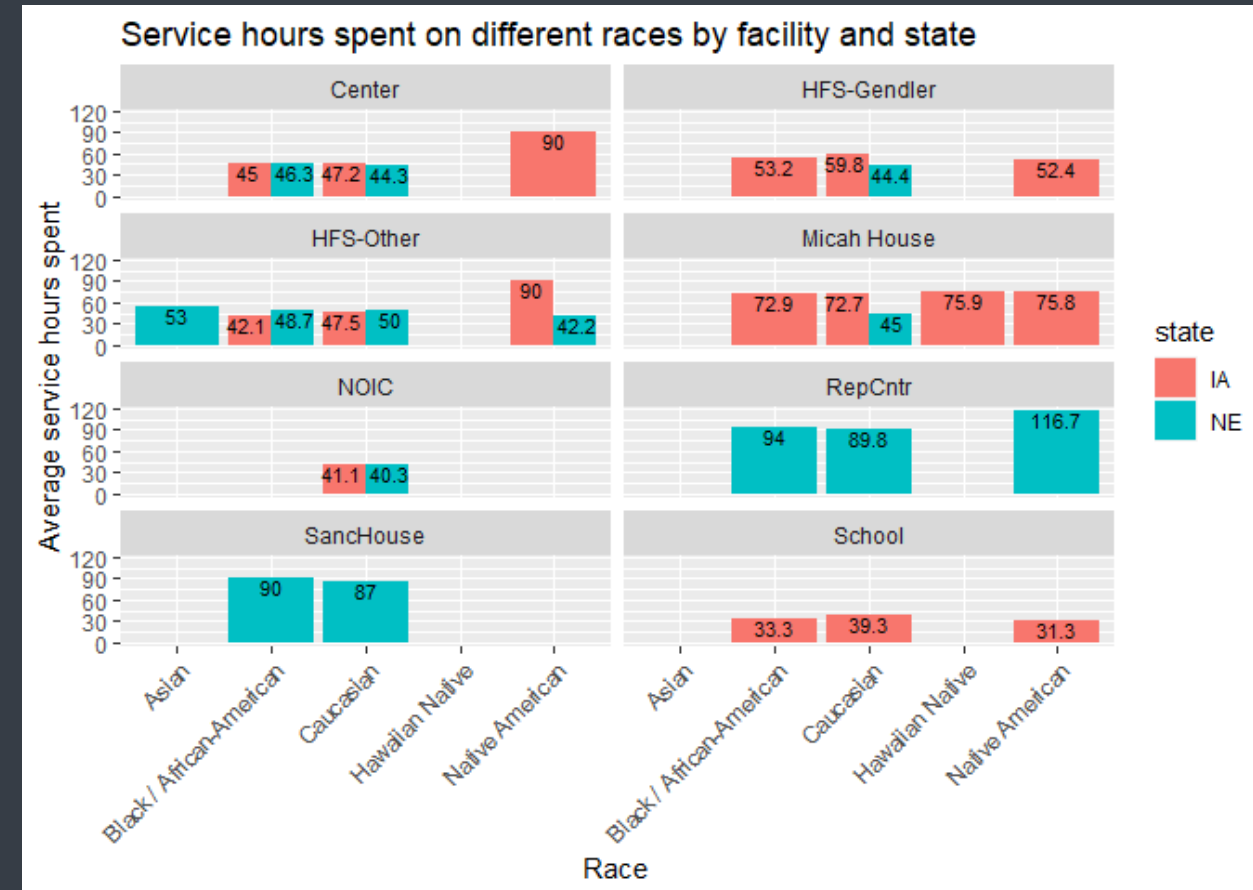
RESULTS AND INTERPRETATIONS: SERVICE HOURS SPENT ON DIFFERENT GENDER IDENTITIES BY FACILITY AND STATE

- PLOT RESULTS
 - DEPICTION OF AVERAGE SERVICE VISIT DURATION TIME BY GENDER IDENTITY, FACILITY, AND STATE
- MEN AND WOMEN COMPARISON
 - NO LESS THAN 10 POINT VARIATION ON MOST FACILITY
 - REPORTING CENTER SHOWS OVER TWENTY POINT VARIATION
- HFS-GENDLER
 - TWENTY POINT DIFFERENCE IN NON-BINARY AND WOMEN
 - A GREATER DIFFERENCE IN NON-BINARY AND MEN
- NON-BINARY CLIENTS
 - NO SIGNIFICANT DIFFERENCES IN OTHER FACILITIES EXCEPT HFS-GENDLER AND NOT IDENTIFIED AT EVERY LOCATION



RESULTS AND INTERPRETATIONS: SERVICE HOURS SPEND ON DIFFERENT RACES BY FACILITY AND STATE

- PLOT RESULTS
 - DEPICTION OF AVERAGE SERVICE VISIT DURATION TIME BY RACE, FACILITY, AND STATE
- NATIVE AMERICANS
 - RECEIVE MOST AVERAGE HOURS OF SERVICE ENCOUNTERS BY HIGH MARGINS MOST REGARDS TO CENTER, HFS-OTHER AND REPORTING CENTERS
 - IOWA RECEIVES OVER DOUBLE AVERAGE AMOUNT OF SERVICE ENCOUNTER HOURS THAN NEBRASKA NATIVE AMERICANS
- CAUCASIANS
 - IOWA AND NEBRASKA'S MICAH HOUSE OBSERVES STRONG DIFFERENCES WITH CAUCASIAN NUMBERS
- ASIANS
 - ONLY REPRESENTED AT HFS-OTHER LOCATIONS WITH SLIGHTLY GREATER AVERAGE THAN OTHER RACES EXCEPT FOR NATIVE AMERICANS



POTENTIAL DECISIONS/IMPACTS OF FINDINGS

- VARIANCE
 - VERY LITTLE VARIANCE IN AVERAGE SERVICE HOURS BY AGE
 - MOST VARIANCE IN AVERAGE SERVICE DURATION IS BETWEEN FACILITY TYPES
 - SCHOOLS DEPICT THE SHORTEST DURATION
 - REPORTING CENTERS LEAD WITH THE HIGHEST DURATION
 - SANCTUARY COMES SECOND TO REPORTING CENTERS OF HIGH DURATION
 - OBSERVATION ALSO CALLS A TREND OF HIGHER AVERAGE DURATION SERVICE ENCOUNTER HOURS FOR NATIVE AMERICAN CLIENTS AT CENTER, HFS-OTHER, AND REPORTING CENTER FACILITY TYPES
- SUGGESTION IN DECISIONS
 - PERFORM FURTHER RESEARCH IN UNDERLYING CIRCUMSTANCES WHERE FACILITIES MAY REQUIRE LONGER AVERAGE DURATION SERVICE ENCOUNTERS
 - INVESTIGATE IF REPORTING CENTERS AND SANCTUARY HOUSE MIGHT NEED MORE RESOURCES
 - PLAN STAFF ALLOCATION AND SCHEDULES DIFFERENTLY AT THOSE LOCATIONS
 - CONSIDER ALLOCATING NATIVE AMERICAN CULTURAL TRAINING TO THOSE LOCATIONS IS APPROPRIATE

QUESTIONS