Quantitative Analysis

Assignment Scenario: A research study was conducted in a New York public school district to understand what supports would benefit students who are applying for college. The goal of the program was to better support students throughout the process and to help ensure they are satisfied with their college admissions results. All high school seniors in the school participated in the four-month program, which started at the beginning of the school year. Students were randomly placed in four different groups:• The Control Group received the schools’ regular college counseling program, which included a monthly one-on-one meeting with the guidance counselor (4 total meetings).• Treatment Group 1 received bi-weekly one-on-one meetings with the guidance counselor (8 total meetings).• Treatment Group 2 received monthly one-on-one meetings with the guidance counselor (4 total meetings) plus a monthly group workshop with the guidance counselors focused on application preparation (4 workshop sessions).• Treatment Group 3 received monthly one-on-one meetings with the guidance counselor (4 total meetings) plus a packet of application prep materials. At the end of the four-month program, students were surveyed about their experience in the 4-month program and asked to disclose to how many colleges they applied. In May, students were surveyed again to assess if they were satisfied with the results of the college admissions process. Data, Variables, and Codebook: The data are organized such that each row corresponds to a student. Each student is observed only once in the data. Variable Name Description Scale/Coding female Gender of student 0 = Male1 = Female group the student participated in during the program 1 = Control2 = Treatment 13 = Treatment 24 = Treatment 3experience Experience in the 4-month program (survey) Likert, 1 (very bad experience) to 5 (very good experience) points number applied Number of schools to which a student applied Integer satisfaction with the college admissions process (survey) Likert, 1 (very unsatisfied) to 5 (very satisfied) points Downloadable Quantitative Analysis Assignment # 5 Dataset Requirements: For each of the following questions write a 1-2 paragraph response that includes:• The statistical test you will conduct to answer the question.• The statistical testing hypotheses for the test (in words and mathematical notation).• Evidence regarding whether the assumptions of the statistical test are met. Include any relevant statistics, figures, and tables.• The results of the statistical test selected. Include any relevant statistics, figures, and tables.• An interpretation of the results. Your document, narrative, and tables, should adhere to APA formatting (Times New Roman, size 12 font; double spaced pages, etc.). Your write up, excluding tables and figures, should be no longer than 3 double spaced pages (1 per question).Questions:1. Does students’ satisfaction with the college admissions process differ on average between male and female students?2. Does the average number of schools to which a student applied vary among the four program groups?3. Do students’ experiences in the 4-month program and the number of schools to which they applied predict their satisfaction with the college admissions?