

THE EFFECT OF TEST-OPTIONAL POLICIES ON  
STUDENT ENROLLMENT  
DEMOGRAPHICS

by

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## ABSTRACT

This study attempts to examine test-optional admission policies and their effect on student enrollment demographics at a public research doctoral university in which test-optional policies were adopted in 2015. The researcher questioned whether adopting test-optional policies changed enrollment rates and test score submissions and how the effect of test-optional policies differed by gender, race/ethnicity and financial aid. With the examination of test-optional policies in the midst of a global pandemic, I aimed to contribute to the literature of college admissions and guided new and upcoming test-optional institutions. By utilizing a non-experimental, descriptive research design, the data of undergraduate first year enrollments of the university from 2010-2019 by traditional and test-optional admission policies were analyzed. Through descriptive statistics, the data were summarized for each research question, the means and percentages were calculated and shown in tables and graphs. Findings from the analysis indicated that adopting test optional policies had variety changes in student enrollment demographics. While the numbers of applicants, admitted and enrolled students increased, the percentage of enrolled students had a small decrease in total. It was also found that more than half of enrollees opted to not submitting their test scores after the adoption of test optional policies. Ultimately, more women and more Hispanic and African American students enrolled in the university. The numbers of Pell Grant recipients increased after adopting test optional policy. Since Covid-19 pandemic has had a remarkable effect on admissions and caused colleges and universities to go test-optional, diverse research topics are waiting to be discovered in this area.

## DEDICATION

I dedicate this thesis to my Mom & Dad, my sisters Elif, Zelis, Yeliz and Pinar and my brother Baris. They always encouraged me to study abroad and follow my dreams. Their endless support from thousands of miles away helped me complete this journey.

I love you all!

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## CHAPTER I: INTRODUCTION

### **Background of the Problem**

College admission process has always been a complex and controversial issue throughout the history of American higher education. Different admission models and policies have been administered since the establishment of universities in the United States, and despite some distinct requirements, these policies have been accepted by most universities across the country. However, the increase in the number of students and the demand for college education have made admissions competitive more than ever. Further, the relationship between race and access to higher education, and concerns with gender differences in college entry have caused questioning of the reliability of the criteria for admissions and their attributions to student' academic success.

Undergraduate admission procedures consist of divergent factors including high school GPA, class rank, course load and profile of the student, standardized test scores, interviews, extracurricular activities, letters of recommendation and other specific program requirements. Currently, the majority of American colleges and universities do require standardized test scores in college admissions as a measure of students' academic potential for some reasons. First reason is that they want to keep their potential applicants and the rankings in the U.S. News & World Report. Another reason is that since public institutions, in particular, are linked to making decisions by state and local governments for political purposes, they need to raise average test scores to keep academic standards high. Further, institutions do not pay anything to receive students' test scores, but they spend more time evaluating a holistic application than doing a one submitting test scores. The current public concern regarding these admission requirements is focusing on the use of standardized test

scores in college admissions. Although test scores give an idea about a student's academic potential, other varieties are needed to look at the mix of high schools, cities, regions, and states in which applicants come from (Schaeffer, 2012). Keeping campuses accessible to all applicants with distinct learning styles and backgrounds, and having more diverse schools by preserving academic standards cause administrators to look for alternative admission policies and practices.

The demographics of college enrollment are seen as a reflection of admission policies and practices. Research shows that the utility of financial aid in promoting college enrollments could not have been a solution due to inequities in college preparation because economic need is not the only barrier to college. Being a first-generation student with fewer resources, under-prepared teachers and a lack of college-preparation coursework cause inequities in college access for disadvantaged students. In order to bridge the gap between K-12 and higher education, there are some programs and policies designed. One example is dual enrollment which allows students earn college credits while they are still in high school. Another program is Upward Bound in TRIO program to increase college enrollment by serving low-income students to provide additional academic instruction, academic and financial counseling, tutoring and mentoring, and other diverse services (Goldrick-Rab, Carter, & Winkle- Wagner, 2007). Besides those, by thinking about academic, social and financial barriers to college preparation, the search for alternative admission policies such as affirmative action and open admissions that are assumed to promote enrollment of disadvantaged students were initiated.

### **Statement of the Problem**

Standardized testing programs have had a significant role for college admissions with the increase of high school graduates in the United States since the 1920s (Kinzie, Palmer, Hayek, Hossler, Jacob & Cummings, 2004). One of these nationwide programs has been the

Scholastic Aptitude Test (SAT) by the College Board and the first examination was applied in 1926 in order to identify student's character, habits and motivation (Gambino, 2013). In 1959, the American College Testing (ACT) was founded to help students in the college choice process and give information about students to colleges in order to place students in the right courses (About ACT, 2001). Both of the testing scores are valid to apply to most 4-year colleges and universities in the United States (Belasco, Rosinger & Hearn, 2015).

Although many institutions still have SAT or ACT exam scores as a requirement in admissions due to marketing and rankings, political pressure and cost concerns (Schaeffer, 2012), measuring the effectiveness and validity of these exams has become the focus of researchers (Belasco et al., 2015). The first discussion has been started with a recommendation about not considering SAT as an admission requirement by Richard Atikson, President of the University of California System. Atikson (2001) suggested that the University of California should have required standardized tests only for some specific subject areas rather than for all programs to measure aptitude or intelligence. Some studies have argued that the standardized testing programs do not have reliability to predict student's future college success (Crouse & Trusheim, 1988; Geiser & Studley, 2002; Rothstein, 2004) and do not measure creativity in fine or performing arts (Syverson, 2007). Further, it has been argued that the standardized tests create an environment against underrepresented student groups including racial and ethnic student populations (Blacks, Hispanics, Native Americans and Pasific Islanders), first generation and low-income students (Atikson, 2001). Some studies have found that these students are considered to have lower exam scores than other majority and affluent students due to the difficulties in getting resources including academic preparation courses and private tutors (Rosner, 2012; Zwick, 2004).

Within the framework of these opinions, SAT or similar standardized tests have started to lose their popularity (Belasco et al., 2015), and test-optional policy which reduces

the importance of standardized tests for the admission process to colleges and universities has emerged (Rubin & Canche, 2019). Although test-optional is the general name of this movement and allows all applicants to decide whether to submit their exam results or not, it includes other subsets such as test-flexible and test-blind admissions policies. While test-flexible policy offers students not to submit test scores as long as they meet specific requirements including a minimum high school GPA, ranking among the graduating high school class, involvement extracurricular activities and service experiences or students can submit another standardized test instead of SAT and ACT, test-blind policy does not consider SAT or ACT scores even if students submit it (Muniz, 2019). In 2005, the SAT and ACT were renewed and more than 70 colleges and universities have abolished their testing requirements at that time (Schaeffer, 2012).

With the deemphasizing test score in admissions, high school performance would be more important than ever. However, there have been some concerns regarding the effect of high school performance on the admission process. Some argued that test-optional policies may cause high school grades become more subjective since grades vary across schools and teachers and are influenced by the characteristics of students that teachers take in consideration during the evaluation; also wealthy parents may ask schools to make some modifications on them (Zwick, 2019). This situation increases the probability of institutions to admit less qualified or low-quality students, and also cause some transparency issues. As such, students with moderate test scores may not decide whether not submitting test scores would be their advantage (Zwick, 2019). Another discussion against test-optional policy was that using test scores along high school grades might be more efficient since standardized test scores give the chance to admissions personnel to compare students' GPAs to decide if their grades were influenced by school types and teachers.

The role of standardized tests in college choice, access and admission decisions makes them important despite the rise of test-optional policies. Since these tests are used as a predictor of persistence and graduation and also needed to declare applying for financial aid such as merit-based grants and scholarships, they are important for not only access to college but financial aid eligibility (Canche, 2018). Further, some colleges consider that they will lose their prestige and rankings with the absence of a test score requirement. Also, changing the admissions policy requires more energy and staff to complete the admissions process since institutions may take a huge number of applications. For these reasons, many schools could continue to keep test scores as a requirement in admissions besides marketing and rankings, political pressure and costs of the policy change.

The concerns above regarding test-optional policies which are expected to help students' access to college, increase campus diversity and promote college enrollment brings following questions up into the point: Who benefits from these policy changes? Is there a win-win situation between students and schools? This test optional movement might complicate the enrollment environment, make it more difficult to anticipate students' preferences and their enrollment decisions. Therefore, research projects focusing on students' college choices and, as a result, on college enrollment are required.

### **Purpose of the Study**

The role of test scores is the main subject of studies that focus on enrollments of postsecondary schools and the college preferences of high school graduates. The subject of this research, Montclair State University in New Jersey, adopted test-optional policy in 2015 by emphasizing that a holistic approach in admissions supports their mission regarding increasing socioeconomic and ethnic diversity both on campus and in the state and test-optional policy is reliable to ensure that admitted students are as talented as to succeed their programs and graduate.

Through this research, the principal purpose was to examine the effect of test-optional policies (TOPs) on student enrollment demographics and test score submissions at Montclair State University, and whether this effect differed by gender, race/ethnicity and financial aid distributions. More specifically, the study attempts to answer the following research questions:

- 1) How did the adoption of test-optional policies impact student enrollments?
- 2) How did the adoption of test-optional policies change SAT or ACT submissions?
- 3) Did the effect of adopting test-optional policies on student enrollments differ by gender?
- 4) Did the effect of adopting test optional policies on student enrollments differ by race/ethnicity?
- 5) Did the adoption of test optional policies change financial aid distributions?

### **Significance of the Study**

When we look at test-optional literature, it seems that most studies have been conducted on selective and/or liberal-arts colleges. There is fewer research on public and large higher education institutions. These studies shed light on the outcome of the test-optional policy at liberal-art colleges; however, their evaluations have a limited ability to give an idea to large, public, and more heterogeneous institutions. My research addresses this limitation with a nonexperimental and descriptive research approach to contribute the literature.

### **Delimitations**

The collected data focused on only a particular university and region within the United States. Another limitation is that since Montclair State University has implemented test-optional admission policy since 2015, there were only 5 academic years data available regarding this change.

## CHAPTER II: LITERATURE REVIEW

### **History of College Admissions in the United States**

With the change in student demographics, public policy, institutional practices and marketing techniques; college admission procedures have differed as well as the college choice process. Although there have been some improvements such as the Civil Rights Act of 1964, these changes have placed low-income and first-generation students at a comparative disadvantage to their more affluent classmates, and access issues have continued to be a problem (Schemude, 2011). Today, it is still on the agenda whether colleges and universities are able to help resolve these given the potential impact of these changes on postsecondary equity, access and success.

Before World War II, higher education institutions had their own admission requirements, application forms and deadlines, and a criteria for a college might not have been valid for others. (Kinzie et al., 2004). With the increase in the numbers of college students, the necessity of setting a standard for admission requirements and professionalization of admission offices emerged. In this regard, the College Board, established in 1900 to provide students a successful transition to postsecondary education, had an important role to administer college entrance examinations from 1900 to 1948 (Bowles, 1967). With the presence of standardized testing, the College Board has been more coordinated with higher education institutions, and entrance examinations have affected both students and families (Kinzie et al., 2004).

In 1970, universities' undergraduate student populations reached 8 million, and another movement called "open admission" came out. Open admission policy means that the only requirement for admission is having a high school diploma or GED certificate (Nelson,



2013.) It is aimed with this policy to reduce barriers to higher education for some groups of students, including those from lower income or underrepresented backgrounds (Nelson, 2013.) At the same time, two-year colleges adopted an “open door” policy which is disparate from open admission policy and means to admit all high school graduates and other qualified students (Carnegie Commission on Higher Education, 1970).

In the 1990s and beyond, the change in the student population continued to grow and diversify, and students applied to more colleges and universities than in the past (Kinzie et al., 2004). Despite a predictable 26 percent increase in the high school graduates between 1996 and 2008, colleges focused on admission marketing, so that many private colleges utilized early admission and early decision admission strategies to increase the numbers of wealthy and academically qualified students (Kinzie et al., 2004).

Today’s admission procedures to a higher education institution involves divergent factors including high school GPA, class rank, course load and profile of the student, formulaic admissions which evaluate standardized tests with GPA and class rank in order to be more objective, standardized test scores, interviews, extracurricular activities, letters of recommendation and affirmative action that offers students from historically underrepresented groups the opportunity to obtain admission to an institution based primarily on the person’s race.

### **Admission Models and Policies at Higher Education Institutions**

Admission decision-making process distincts in terms of eligibility and selection. There are four admission models which affect an institution’s decision regarding the admission of students and these models are based on diverse perspectives (Perfetto, 1999). *Eligibility-based admission models* are nonselective models which means judgments are made not with respect to other applicants, but with respect to objective criteria (Perfetto, 1999). They are based on two perspectives including entitlement and open access.

The performance, student capacity to benefit and student capacity to contribute admissions models are selective models. They are those in which prospective students are evaluated with respect to each other (Perfetto,1999). The *performance admission model* includes the meritocracy and character perspectives. While the *student capacity to benefit admission model* is composed of the enhancement and mobilization, the *student capacity to contribute admission* model involves the investment, environmental and fiduciary perspectives (Perfetto, 1999).

These models at higher education institutions are based on three admission policies consisting of holistic, index composite and test-optional. As holistic and index composite policies are the principles of the student capacity to benefit models, test-optional policies are the guide of the student capacity to contribute models (Schmude, 2011)

### **1) Holistic Admission Policies**

Holistic admission policies emphasize to consider all application materials in the student's file during the admission decision process (Rigol, 2004). In an holistic admissions practice, admissions office personnel review all of materials including high school transcripts, standardized test scores, letters of recommendations from school counselors and teachers, jobs held during high school, and extracurricular activities by reading and evaluating not only numbers but the contents (Schmude, 2011). This policy provides officials a better understanding of the candidates seeking admission to their schools. On the other hand, there are some costs of this policy. Reading and evaluating the student's entire admission file takes more time, and requires more trained admissions staff. Despite these disadvantages, holistic admission policies have been used efficiently to deemphasize the importance of standardized test scores as well as high school grades before test optional policies were implemented.

## **2) Index Composite Admission Policies**

Index composite admission policies have been utilized to estimate candidates' future academic success in the school that they apply. Within this policy, a candidate's high school grade point average and standardized test score are utilized to assign the applicant a rank within an index (Schmude, 2011). Admission officials use this rank and the cut score of the institution to decide whether the applicant will be admitted to the school. As it is seen, index composite policies seem more likely to focus on numbers; however, evaluation of the student's file includes both the student's rank and course work. According to Hossler and Kalsbeek (2009), this policy has a variety of benefits: Index composite admission policies are more reliable in terms of estimating student's college success, evaluation and decision making process are achieved in a shorter time, and put less financial strain on the institution. However, some disadvantages of index composite admission policies are needed to be considered. Being officials unfamiliar with applicants to reduce the probability of bias and not involving the characteristics of students in the decision making process might complicate implementing these policies (Rigol, 2004).

## **3) Test-optional Admission Policies**

Test optional policies have been alternatives to holistic and index composite admission policies since the early 1980s. These policies require admission officials take consideration of students' academic and social needs along with the institutional goal of increasing the number of students from diverse backgrounds (Rigol, 2004). Some of the reasons that colleges and universities choose to adopt test optional policies are increasing campus diversity and considering that high school grades and courses are the best predictor of college success. Even though test optional policies have those common purposes above, the implementation of them may vary by institution. While some schools require students to choose the test-optional admission policy to submit graded papers, attend on-campus

interviews and assessments, some may not require additional information from students choosing the test optional policy (Schmude, 2011).

Test optional admission policies are based on the ethic of critique which emphasizes the importance of social changes in order to obtain access opportunities. According to Starrat (1984), the ethic of critique suggests educators to arrange policies in higher education and campus environments for the benefit of students with a perspective of minimizing inequities based on race, gender and social class. By abolishing the use of standardized tests in the admission process, officials might help to equalize the admission process for students from underrepresented populations, who are considered not to perform as well on tests as Whites do (Schmude, 2011). The point here is that test-optional policies allow students to make college choices based on the outcome of SAT/ACT scores (Pennant, 2018). This situation allows the disadvantaged to become the advantaged and have opportunities to access higher education when test-optional admission policies are offered.

Overall, it is not possible to say which admission policies are better or more appropriate since every institution is unique at all. Therefore, institutions must consider what is in the best interest of the potential applicants and whether the students can thrive and graduate from their institutions. They also need to coordinate these concerns with institutional goals and values to determine which admission model is right for their institutions (Rigol, 2004).

### **History of Standardized Admissions Tests in the United States**

As the difference in quality between the curricula of high schools which causes difficulties in transition to higher education, the College Entrance Exam Board was created by the College Board in 1900 in order to eliminate the advantage of socioeconomic status on college admissions (Ali & Ali ,2010). Following this, the first standardized testing for all school subjects, Scholastic Aptitude Test (SAT), was made in 1926 (Gambino, 2013).

In 1946, after the Second World War, an Army General Classification Test was developed by a commission appointed by President Harry Truman and the test was taken by 10 million men with an IQ below 115 who want to be successful in college (Lemann, 2004). With the emphasis on the critical assessment of the classroom curriculum, Graduate Record Exam (GRE) was required for graduate students at Columbia, Harvard, Princeton and Yale in 1949, and acceptance of standardized testing throughout the United States occurred (Montgomery, 2020).

The primary standardized tests for undergraduate admissions in the United States are the Scholastic Aptitude Test (SAT) and American College Testing (ACT). These entrance exams are required or recommended for admission to nearly all of the nation's 4-year colleges and universities as well as in the admissions process at many 2-year colleges.

### **The Scholastic Aptitude Test (SAT)**

The first nationwide examination programs have been Scholastic Aptitude Test (SAT) by the College Board and the first examination was applied in 1926 in order to identify student's character, habits and motivation (Gambino, 2013). The SAT administered in order to eliminate the existing system, in which each university had its own examination, to provide feedback to high schools about their curricula and the appropriate level of instruction and to expand the options of student applicants (Atikson, 2001). While SAT had been an achievement test which aimed to reach students from diverse backgrounds at the beginning, then in the 1930s, it was changed as an aptitude test with a purpose of declining the advantage of affluent students in the admission process (Atikson, 2001).

SAT has been changed over time, and implemented in two parts. While, one of these parts -SAT I- which is the earliest version of SAT included questions so as to measure students' verbal and mathematical reasoning abilities, SAT II –currently known as SAT Subjects- were designed to measure knowledge, and the ability to apply that knowledge in

specific subject areas including U.S. history, literature, mathematics etc. (Perez, 2002). The last version of SAT consists of three sections: Math, Evidence-Based Reading and Writing, and an optional Essay section because some colleges may require students to complete the SAT Essay (The Princeton Review, 2020).

### **American College Testing (ACT)**

American College Testing (ACT) is a non profit organization aiming to introduce ideas of inclusion, cooperation and measurement of achievement rather than aptitude (ACT,2019). In 1959, American College Testing (ACT) administered its first test by building a thought of a new school trend on college admissions testing, and 75,000 students took the test (ACT, 2019). It was created by Everett Franklin Lindquist, professor at the University of Iowa. He claimed that the ACT Assessment tests were curriculum based which means that the questions on the ACT are directly related to what is learned in high school courses in English, mathematics, and science, and it was not an aptitude or an IQ test (Perez, 2002). According to Ferguson (2004), the ACT is an achievement test which states that students should be examined on the basis of achievement, and the test should be related to specific subjects that are taught in the high schools. The demographics showed that almost 1.8 million 2019 graduates -%52 percent of all graduating classes- around the U.S. took the ACT during high school (ACT, 2019).

### **Theoretical Framework**

The theoretical framework of this research was conducted on college choice and access theories, and sociological, psychological and economic aspects of these theories since students take consideration in standardized test scores when they create their college choice sets. College choice and access theories are also important to highlight the perspectives of the students and higher education institutions involved in test-optional policies. As the literature

suggests, the conceptual framework of this study comprises history of college admissions and standardized tests.

Admissions requirements might vary from one school to another, however, standardized tests have been the main focus of admissions. Students are likely to do their desirable colleges list by looking at the average test scores reported by colleges and comparing them to their scores. In this process, they aim to find colleges they want to attend because there might be an option like not going to college. Further, standardized tests are considered as an important factor in the college choice process because students need a high score to not only have an admission from selective universities but apply for financial aid. For this purpose, they take multiple exams to improve their scores, participate in expensive preparation courses and even spend more time on exams than they spend for high school work. At this point, offering a test-optional policy would be a good reason for some students to put that college to the list and remove a barrier as they prepare their college choice options.

College choice factors that affect students' access to postsecondary education have been investigated for many years. The literature showed that these investigations have mostly focused on exploring the role of socioeconomic levels, and the barriers and challenges to enroll in higher education institutions for underrepresented students. According to Begerson (2009a), there is a misconception that every student who is in the college choice process has access to college; so, college choice and college access are required to clarify. College choice is about deciding whether and where to go to college, however, it does not mean every student has the opportunity to get an admission, and then enroll in a college (Begerson, 2009a).

In the ASHE-ERIC Higher Education Report, Paulsen (1990) reviewed the college choice process in three perspectives: Sociological, psychological and economic. The sociological perspective focuses on students' background characteristics and their impact on their college choice process. (Begerson, 2009a). These characteristics include race and ethnicity, family income, parent education, peer groups, school contexts, parental expectations, student and parent educational aspirations, academic achievement and high school curriculum. The psychological perspective is related to how the higher education climate is and how students perceive it. This perspective focuses on the relationship between student and institution. The study by Manski and Wise (1983) discussed institutional characteristics such as cost of tuition, room and board, curriculum, location, financial aid distributions are important factors of making a decision. From an economist's perspective, students see spending time on decision making and their college attendance decisions as investments for their future. (Jackson, 1978 as cited in Lee & Chatfield, 2011).

There have been other studies on college student decision making that used economic and sociological frameworks to evaluate factors influencing students' college choice behaviors. As the results of these studies, three college choice models have existed including economic, status attainment and combined models (Lee & Chatfield, 2011). While economic models are based on students' thoughts related to costs and benefits of choosing a college status attainment models are regarding a pragmatic process focusing students' future plans like what they want to do as an occupation, how they want to improve their educational backgrounds (Jackson, 1982). The third one is the combined models that examine the decision making process in three phases: Developing aspirations and evaluating alternatives; considering options; and then evaluation of the remaining options and final decision (Jackson, 1982).

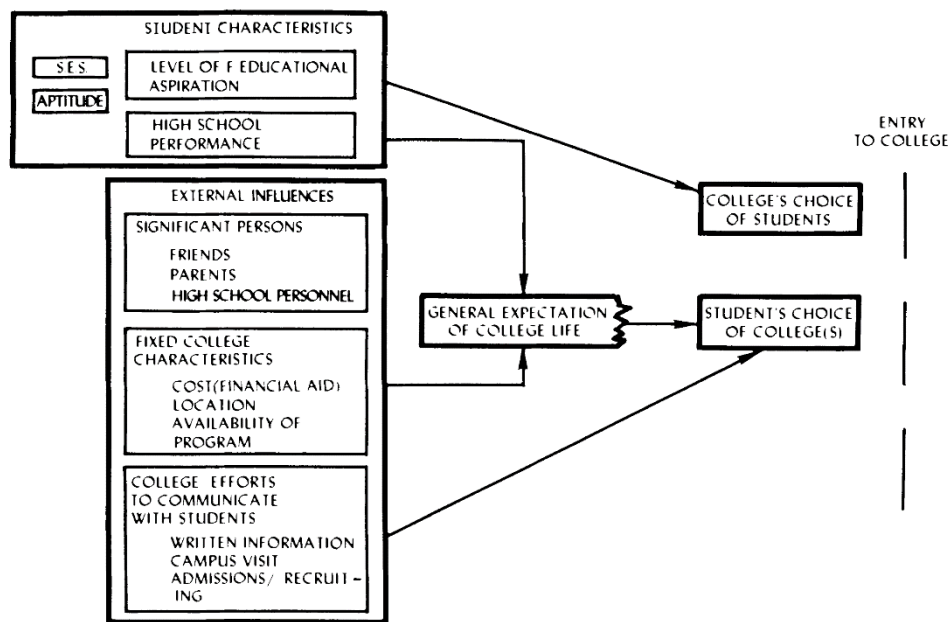


Since higher education has changed over time, making a decision to enroll in a college has become complex for students (Lee & Chatfield, 2011). As a result of research on college choice conducted for many years, there have been two distinct perspectives: First of them is based on how students develop a college choice set, and decide to which schools they apply thinking about admissions criteria as well as geography, and how they make their decisions to enroll (Hearn, 1984). Second perspective is focused on institutional aspects including cost, size, distance to home, the quality of offered programs and financial aid opportunities (Lee & Chatfield, 2011). Overall, research has revealed a comprehensive college choice model that involves student background characteristics, educational achievement, social environment, cost, organizational climate and characteristics and financial issues (Lee & Chatfield, 2011).

Chapman (1981) has developed a model of student college choice factors that shows important variables and their relationships guiding both future and current admissions practice. This model describes influences affecting only traditional age (18-21) prospective students. Chapman's model suggested that in order to have a better understanding of a student's college choice process, factors including background and current characteristics of the student, the student's family and the characteristics of the college should pay attention altogether.

**Figure 1**

*Influences on Student College Choice*



As it is seen in the Figure 1 (Chapman, 1981), the college choice process is affected by student characteristics and a variety of external influences in a combination. These external influences are divided into three categories: First of all, there are some important people such as friends, parents, and high school teachers or counselors that are a part of the decision making process. Another influence is permanent characteristics of a college that means it is hard to change such as the cost of college, financial aid, proposed programs and location. The third category is about how colleges welcome prospective students with their organizations, admissions policies and practices. The combination of student characteristics and external influences consist of a student's general expectation of college life which described as a freshman myth.

### *Student Characteristics*

In the Chapman's model, student characteristics that impact the college choice process include socioeconomic status, aptitude, level of educational aspiration and high school performance. *Socioeconomic status (SES)* and family income are important indicators in terms of students' college preference. Students from higher socioeconomic levels are more likely to attend four-year colleges and universities than students from middle or low socioeconomic levels. Further, family income makes students consider institutional and financial aid. According to Davis and Van Dusen report published in 1975, while upper income students tend to choose private universities, middle income students are more likely to prefer state universities, and lower income students are apt to choose community colleges or state universities with a lesser degree.

*Aptitude* is another factor that impacts students' high school achievement and performance in standardized tests which are used by colleges to describe their range of applicants (Chapman, 1981). This situation leads students to self-select the colleges according to criteria that they believe the colleges consider during the decision making process. Besides, when colleges publish the test scores and class rank of their entering class, applicants with low test scores or with poor high school records might be discouraged from applying to those colleges since students want to be with those who have similar aptitude as themselves. As a consequence of aptitude, *high school performance* is another factor which helps colleges admit or reject students. Also, Chapman (1980) claimed that students with good GPAs are supported more by their parents, friends and teachers, and they are more likely to have academic counseling.

*Level of educational aspirations and expectations* impacts students' future college plans. However, aspirations and expectations have different meanings. While expectations are related to perceptions of students such as their situations, life styles, occupations at some specific future, aspirations refer to their emotional aspects including desires, wishes and hopes about the future. Research found that there is a correlation between students expectations and aspirations, and their high school GPAs ( Erickson & Joiner, ). It means that students define their college ranges that they are going to apply according to their high school GPAs.

### *External Influences*

*Significant persons* for a student can be family members, counselors, teachers, other students and admission officers. There are three main roles of those people in terms of affecting college choice: Students may be influenced by people's opinions related to colleges and college life; these significant persons, particularly parents, may directly offer a college where the student should go to; and friends might have an impact on choosing the college where they plan to go (Chapman, 1981).

*Fixed college characteristics* consist of cost, financial aid, location and availability of programs. These characteristics have an impact on students' decisions since they define the institution and shape students' perceptions regarding the institution. Although some changes in these fixed characteristics of an institution may happen over time, it takes a long time to repute students', parents' and even counselors' thoughts.

The characteristics above have impacts on students` choice, and they are mostly hard to change. For this reason, colleges need to show *efforts to communicate with prospective students*. Some techniques that they can use for this purpose are using marketing approaches in admissions to attract students, providing written information about the college, visits by college admissions representatives to high schools, and campus visits by prospective students.

Overall, Chapman`s model addresses the student characteristics and external influences which work in an interactive way and affect students` college choice. Students who take consideration of these influences would apply to more than one institution to increase the chance of entering college. On the other hand, colleges need to review their recruitment strategy by thinking about those.

There have been other models before Chapman`s model that investigate the college choice process. According to another model that examines students` public versus private college enrollment decisions, the likelihood of a student`s enrollment in a public institution depends on gender, family income, ability, tuition and fee, distance from home, selectivity and financial aid opportunities. Another college choice model was developed by Notfi et al. (1978) which helps policymakers predict students` behavior towards changes in education systems as well as policy modifications. Overall, Chapman`s model proposes a more comprehensive perspective regarding the college choice process.

Reviewing the literature of research on college choice, Gilmore, Spire and Dolich (1981) found that the first and foremost influences of the decision making process are the student`s ability and socioeconomic status. Besides, findings from other research showed that underrepresented students tend to choose a college which is the closer one to home and they also consider college reputation, total cost of college education, availability of a specific program and financial aid (Kern, 2000).

## **Test Optional Movement**

Research working on standardized tests has discussed that the problem of standardized tests is the current images of them. According to Lewin (2006) SAT has been a symbol of privilege; therefore, wealthy students with a qualified college preparation have held the highest test scores. Besides, Zwick (2004) argues not only SAT but all traditional success measurement ways might count as wealthy tests due to inequities of the American education system. At this point, this situation is considered as a consequence of family income and its relationships with college preparation, academic advising and other factors such as special education needs. Murray (2006) have elaborated these issues with some examples: If a family is affluent, they grow their children in an environment that it is so easy to acquire information about tests, college preparation and choice. They can also enroll their children in Kaplan, Princeton Review or they can provide private tutors for test preparation, advising and coaching. Finally, if a family is rich, they can pay an expert to document that their child has a learning disability, and then the student takes the exam without a time limit. Overall, being at a high income level puts the student one step ahead of others.

In order to reduce the gap between rich and poor students, preferences of privilege that include needs to be eliminated, and then provided equal opportunity for all, not for some people (Golden, 2009). At this point, test optional movement has been an alternative to traditional policies. With this movement, it is expected that abolishing test scores in the admissions evaluation process provide benefits to low-income, first-generation, female, living in the rural areas, adult and nontraditional students, and reduce the importance of coaching, college preparation courses and private tutoring (Schaeffer, 2012). Some colleges including Bates, Lewiston, Maine went test optional thirty years ago because they thought that a student's success could not be measured with a single standardized test taking a few hours, and high school academic performance is the best predictor of student college success (Hiss, 2014).

While there were some colleges implementing test-optional policies, the first large discussion on admissions has been started with a recommendation about not considering SAT as an admission requirement by Richard Atikson, President of the University of California System. Atikson (2001) have suggested that the University of California should have required standardized tests only for some specific subject areas rather than for all programs to measure aptitude or intelligence. After debates on the policy change, a growing number of post secondary institutions in the United States have removed standardized testing as a requirement for admissions. While it has been more than 800 institutions have gone to test-optional policies since 2005 (McLaughlin, 2014); with the last updates, it was announced that over 1550 accredited 4-year colleges and universities will pursue ACT/SAT optional policies for Fall 2021 due to COVID-19 pandemic (FairTest, 2020).

Test-optional movement reduces the importance of standardized tests for the admission process to colleges and universities (Rubin & Canche, 2019). Although test-optional is the general name of this movement and allows all applicants to decide whether to

submit their test scores or not, it includes other subsets such as test-flexible and test-blind admissions policies. While test-flexible policy offers students to submit a SAT subject test or another assessment instead of SAT and ACT scores (Baker & Rosinger, 2020) as long as they meet specific requirements including a minimum high school GPA, ranking among the graduating high school class, involvement extracurricular activities and service experiences, test-blind policy does not consider SAT or ACT scores even if students submit it (Muniz, 2019). These alternative admission policies and practices are considered as a tool which increase applications from a more diverse range of students, and mostly focus on traditionally underrepresented groups in American Higher Education including first-generation students, members of racial minorities, low-income students, and students with a learning disability. (Syverson, Franks & Hiss, 2018).

Researchers have examined costs and benefits of test optional policy, and more importantly the question of who it really benefits and whether this policy does what is intended. The biggest expected benefit to students is providing college access to those who are good standing in high school, but have a lack of college preparation courses, counseling and are not as wealthy as to take exams again and again. Besides, there are two potential benefits of the test optional policy for institutions. One of these benefits is that institutions might become attractive to other talented applicants who do not actually consider to apply before the policy change, and institutions might enroll highly qualified students among those (Robinson & Monks, 2005). Secondly, since test optional policies are expected of students with low test scores to not submit, institutions can report a higher reported average SAT, and this makes them appear more selective (Robinson & Monks, 2005).



On the other hand, costs of test optional are needed to consider from both the student and institution's perspectives. Students might feel uncomfortable with not submitting test scores because they do not know how enrollment administrators evaluate their other academic credentials in their portfolio. From an institution's perspective, particularly in the first year of the adopting test option policy, it is important how admissions officers perceive students who do not submit test scores (Robinson & Monks, 2005).

Reviewing test optional studies, Hiss (2001) examined test optional policy at Bates College after seventeen years from adoption and found that they had two times more applicants compared with 1983. This increase is in not only White applicants but a variety of diverse student populations including immigrants, minorities - minority enrollments increased from 4 to 9 percent-, students with a second language, learning-disabled students and athletes. After thirteen years, the study of 123,000 students at 33 private and public colleges by conducting Hiss and Franks (2014) showed that there was no significant difference in terms of college GPA and graduation rates between test-submitters and non-submitters. Further, Franks and Hiss' analysis (2014) revealed that those non-submitters were more likely than submitters to be first-generation college enrollees, minority students, Pell Grant recipients, and women. In 2015, Belasco, Rosinger and Hearn found that test optional policies did not increase the number of Pell Grant recipients- mostly low income students and Black, Hispanic or Native American students-, at liberal art colleges, however they increased a college's selectivity owing to more applicants and higher SAT average scores.

### **Diversity and Equity Implications of Test-Optional Policies**

The issue regarding racial and socioeconomic diversity in higher education and the access of underrepresented and low-income students make people concerned about the overestimated role of standardized tests in the admissions process. Those consider that test optional policies allow colleges and universities to increase the gender, racial, ethnic and

socioeconomic diversity on campuses (Epstein, 2009). McLaughlin (2014) found in his study on Smith College which is a private women's institution that women are more likely to apply to Smith College after the adoption of test-optional policy, however, it differs by race/ethnicity. According to this, while White women are more likely to apply than Black women, there is no significantly different effect for Latino and Asian applicants. Besides, at King's College study, Schmude (2011) found that there has been an increase in the number of Non-whites attending King's College after the adoption of policy.

On the other hand, researchers obtained different results from public universities. In the study on George Mason University (GMU), Rubin and Gonzalez Canche (2019) concluded that test-flexible policy has had a statistically insignificant influence in increasing the racial and socioeconomic diversity of GMU's student body. From the enrollment view; Belasco, Rosiner and Hearn (2015) stated that test-optional colleges enrolled a lower proportion of Pell recipients and underrepresented minorities, on average, than test-requiring institutions between 1993 and 2009.

Many four-year colleges and universities have had debates about the validity, equity, and educational impact of standardized admissions tests. The issues in these debates including academic preparation, racial and economic gaps are the issues related to equity. Since there are differences between students' conditions in terms of accessibility of resources, taking test courses, not having appropriate information about college admissions, and quality of some of U.S. high schools, some certain students might be inhibited from being able to obtain a specific goal score on the SAT/ACT (Montgomery, 2020). According to Rooney and Schaeffer (1998, as cited in Pennant, 2018), due to the test requirements for admissions, students - disproportionately minority and lower-income- could not be able to attend competitive institutions even if they had high GPA scores and were engaged in extracurricular activities and community leadership.

Although the benefits of test optional policies might vary from one institution to another, it is obvious that there would be a change in the composition of student bodies. (Espenshade & Young-Chung, 2011). One example, if the marketing process is managed well, the number of applicants is likely to increase. Adopting test optional policy in admissions leads low-income, minority, first-generation, rural, female and nontraditional students who are considered to have modest test scores to get motivated to apply. Further, this policy might be beneficial to K-12 Education. According to Schaeffer (2011), students spend more energy and time to increase their test scores rather than work on school courses, and high schools organize their curriculum for the exam rather than meaningful learning due to exam pressure. In this case, abolishing standardized tests scores in college admissions would assist in building the bridge between K-12 and postsecondary education.

Overall, the reasons for a school adopting test optional policies have benefits more than costs. According to Zwick (2004), no matter their size or selectivity, postsecondary institutions with test optional policy have had important benefits: They have increased their student diversity, more talented candidates, positive feedback from other stakeholders including alumni, counselors, and the society. Without test scores, a holistic review of other admissions requirements such as high school grades, class ranks, teacher-graded papers, student portfolios and extracurricular activities have helped institutions to have an objective admissions process.

### **Test-Optional Admissions Policies at Montclair State University**

In 2015, Montclair State University became the first public university in New Jersey that adopted test-optional admissions policies. According to this implementation, students are not required to submit SAT and ACT scores, but if they opt to submit, the scores will be taken into consideration (The Magazine of Montclair State University, 2014). The idea behind their decision was that standardized tests (SAT or ACT) were the exams they accepted

before the policy change) are less likely to predict students' college success than high school performances. University administrators concluded that a holistic approach in admissions helps them focus on students' actual achievements in high school such as GPAs and courses that are taken (The Magazine of Montclair State University, 2014).

The office of undergraduate admissions at Montclair State University emphasizes that test-optional policy ensures that admitted students are talented enough to succeed in their academic programs. At the end of the first year of the adoption, their data showed that the average GPA increased to 3.26 and 45 percent of Class of 2019 took at least one Advanced Placement course in high school (The Magazine of Montclair State University, 2016). Administrators also agree that test-optional policy supports their mission regarding increasing socioeconomic and ethnic diversity both on campus and in New Jersey.

After adopting test optional policy in undergraduate admissions, the university is expected students to complete a minimum of 16 units of college preparation coursework including English, mathematics consisting of algebra, geometry and algebra II, social sciences and laboratory science. Besides they look for some advanced courses such as mathematics beyond algebra II, laboratory science beyond chemistry, a third or fourth year of foreign language advanced placement courses and honors courses. They also require strong letters of recommendation from teachers and counselors, a well-written essay, extra-curricular engagement and leadership in organizations community services, athletics, artistic activities and part-time employment. The point is here that university administrators aim to de-emphasize the importance of test scores; however, students are welcome to submit their test scores, if they would like to. In this case, scores will also be considered in the decision-making process.

## **Test Optional Policies during the Covid-19 Pandemic**

Like all of other organizations, there have been a variety of changes in education since the global Covid-19 pandemic started to spread dramatically across the United States, so higher education institutions have also faced a set of challenges (Maloney & Kim, 2020). In the short term, colleges and universities have reacted differently depending on the situation of their region including closing colleges and campuses, moving classes to online and courses to pass-fail grades, freezing to hire the faculty, delaying graduations, imposing travel restrictions and some colleges have cancelled their summer internships and study abroad programs (The Chronicle of Higher Education, 2020).

During the summer of 2020, we have heard plenty of scenarios regarding Fall 2020. On the one hand, institutions were expecting to go back to normal; on the other hand, some of those were planning a totally remote education (Maloney & Kim, 2020). Other ideas responding to Covid-19 were a late start to fall like in October or early November, moving fall to spring that means January 2021 would be the start of fall semester, not spring and offering a gap year to students. Further, some colleges and universities planned to have only first year and graduate students on campus by recognizing the importance of first year experience for transition to college and retention, and supporting research continuum (Maloney & Kim, 2020).

We have been struggling with this pandemic for a year; so this might be adequate time to see its results in higher education. First of all, Covid-19 gave the chance to institutions to face existing inequities related to access and opportunity in the education system (Replogle, 2020). There is a variety of research how coronavirus impacts higher education. According to the data of 2019, there were 1,095,299 enrolled international students in the U.S. colleges and universities which compromise 5.5% of the total U.S. college students (Bustamante, 2020). However, with the travel restrictions to the U.S. and

financial impediments due to pandemic, the international student population might be having permanent damage. Mok, Xiong, Ke and Cheung (2021)`s study on international student mobility showed that 84% of 2739 respondents had no interest in studying abroad after the pandemic. They also found that students going to continue their degrees tend to choose Asian regions and countries rather than the United States and United Kingdom.

The concern for college admissions have led institutions to rethink about the process and make some changes such as waiving application fees and deposits to enroll, accepting unofficial, self reported transcripts and extending deadlines, (Jaschik, 2020). Further, because of the cancellations of the SAT and ACT exams in March and April 2020 by the College Board, and then the closures or limited spaces at test centers, some colleges and universities had to chose going to temporary or permanent test optional policy in admissions ot not even consider (test-blind) standardized test scores for the coming years (Jaschik, 2020a).

According to the last update of Fairtest (December 18, 2020), the center that provides the list of test-optional colleges and universities, more than 1600 accredited, 4-year colleges and universities are administering ACT/SAT-optional testing policies for Fall 2021 admissions. However, there is a continuing demand for taking exams because financial aid programs, at least some institutional scholarships, still require test scores (Jaschik & Replogle, 2020).

Over 500 of those colleges and universities signed a statement which guarantees they truly do not require test scores for the 2021 admissions cycle (Recco, 2020). Last updates show that some colleges including Cornell, Columbia, Harvard Universities, University of Pennsylvania University of Virginia, Boston College and Rice University are going to extend their test-optional policies for one or two years after the 2021 cycle (Jaschik, 2021). With this policy change, while some universities increased their applications, others had a decline in 2021 admissions. For instance; Harvard University has a 42%, University of Virginia has a 15% and University of California has a 16% rise in their applications, but State University of

New York saw a 20 percent total decline across their campuses (Jaschik, 2021a). In terms of diversity influences, the University of California, in which test-blind policy implemented this year, has a 48% increase in the number of African American applicants at both Berkeley and Los Angeles (UCLA) campuses, and there has been 33% and 36% rises by Hispanic applicants at UCLA and Berkeley, respectively.

In terms of admissions patterns, EAB, a firm working with colleges and using research, technology and consulting to address challenges within the education industry, had a research on test optional admission policies during the pandemic, and found that 42,000 students in total applied to 57 test-optional institutions, and only 45 percent of those students opted to send a test score (Hoover, 2020). Their other demographic findings showed that there has been an important difference in test submission rates by race, gender and income (Hoover, 2020): Women were less likely than men to send test scores, Black and Hispanic students were less likely than Whites to submit a test score, and low-income students are more likely than wealthy students to choose not sending test scores.

Overall, the global pandemic took colleges and universities into a chaos and made them to overthink how they can secure the college admissions process and fill their class of 2025. They had to make many changes including campus visiting with limited persons or virtual visitations, information and Q&A sessions, but the most important change has been not requiring standardized test scores for admissions. This change was a new concept for not only students and parents but admissions personnel. However, now -after one year from the beginning of COVID-19 pandemic-, test-optional policies have started to be a national movement because of a growing number of colleges waving standardized tests as a requirement. From the data we could reach so far, it is seen that adopting test optional policies during the pandemic have not influenced colleges and universities- particularly institutions at Northeast, Mid-Atlantic and Midwest regions (Jaschik, 2021a)- to the same

extent. For these reasons, future research planning to conduct on the effect of Covid-19 pandemic should be more comprehensive and detailed considering the characteristics of regions.

### **Gaps in the Literature**

As it is seen in the literature, various test-optional policy studies determine whether test-optional policy changes student demographics at liberal arts colleges and private colleges. That is, those are mostly related to consequences of the adopting test optional policy on campus. For instance, while Schmude (2011) evaluated the effect of test-optional policy on the composition of the student body at King's College which is a liberal arts college, Morgan (2016) estimated matriculation with a focus on financial aid and test optional policy with the data from a small liberal arts school in the northeastern region of the United States. However, there are a few or less studies regarding public higher education institutions. As an example, Rubin and Gonzalez Canche (2019) examined test-flexible admissions policies and student enrollment demographics at George Mason, a public research university. Although this situation is related to the low number of public universities that adopt a test-optional policy, more studies are significant for the feasibility and applicability of this policy.

With the proposed study, conducting the research on student enrollment demographics and test submissions would be particularly important in terms of approaching the subject from both key stakeholders' - students and higher education institutions- perspective . Further, more than 1,600 accredited 4-year colleges and universities are currently with ACT/SAT optional testing policies for 2021 admissions due to Covid-19 pandemic (Fair Test, 2020). Therefore, it seems that test-optional policy would be on the agenda of both private and public institutions for a long time.



## CHAPTER III: METHODOLOGY

### **Research Design**

Since the purpose was to explore the effect of tests - optional policies on student enrollment demographics at Montclair State University, I chose quantitative research methods for this study. Quantitative research methods are based on the collection and analysis of numerical data to describe situations, explain the relationship between variables and sometimes make causality (Mertler, 2016). Nonexperimental and experimental research designs are two approaches in quantitative research. While nonexperimental research designs include a plenty of techniques in which there is no direct interaction with subjects and making any change in any variables; in experimental research, a group of techniques is used to establish distinct treatments and conditions, and researchers study the effect on these techniques on participants (Mertler, 2016). In this research, I conducted a nonexperimental, descriptive research design. Descriptive research designs are used to describe, and then interpret the past or present status of participants, conditions and phenomena without any manipulation (Mertler, 2016). A nonexperimental and descriptive research design was the most proper design for the study because I questioned in this study if there has been a change in enrollment rates, test submissions and student enrollment demographics after offering test-optional admission policies at Montclair State University.

In the research, the independent variable was admissions policy. Montclair State University has used traditional admissions policies until 2014, and then test-optional admissions policies were adopted in 2015. Therefore, I determined to examine the last ten years of the institution by dividing into two periods: 2010-2014 as traditional admissions and 2015-2019 as test-optional admissions. The dependent variables were defined as enrollment

rates, test submissions and the change in student enrollment demographics in terms of gender, race/ethnicity and financial distributions.

The following research questions were used to conduct the study:

- 1) How did the adoption of test-optional policies impact student enrollments?
- 2) How did the adoption of test-optional policies change SAT or ACT submissions?
- 3) Did the effect of adopting test-optional policies on student enrollments differ by gender?
- 4) Did the effect of adopting test optional policies on student enrollments differ by race/ethnicity?
- 5) Did the adoption of test optional policies change financial aid distributions?

### **Research Site**

The research site of this study was Montclair State University, founded in 1907. Montclair State University is a public research university located in Montclair, New Jersey. It is the second largest university in New Jersey, and 76% of its applicants secure admission. Today, Montclair serves about 17,000 undergraduate students from across the country and around the world.

For many years, Montclair State University had a traditional application process. They required a student's high school GPA, letters of recommendation, a well-written essay, a commitment to extracurricular engagement and standardized test scores. In Fall 2015, Montclair State became the first public university in New Jersey adopting test-optional admission policy. Since there are not so many studies on admissions policy changes in public universities, this change at Montclair State presents an opportunity to evaluate the effect of test-optional policy on student enrollment demographics in a diversity context.

## **Participants**

The target population of this study was those undergraduate students who enrolled as freshmen in Montclair State University from Fall 2010 through Fall 2019. The population was considered to be two groups as matriculants between 2010 and 2014 through traditional admissions policies, and matriculants between 2015 and 2019 through test-optional admissions policies.

## **Data Collection**

The primary data for the research was collected from the Integrated Postsecondary Education Data System (IPEDS), and Information Technology Division of Montclair State University . The Integrated Postsecondary Education Data System (IPEDS) was established as the core postsecondary education data collection program in the National Center for Educational Statistics (NCES). It is a system of surveys designed to collect data from all postsecondary education institutions and educational organizations. The system collects institution-level data in such areas as admissions, enrollments, program completions, faculty, staff, finances, and other student demographics. The Information Technology Division at Montclair State provides admissions, enrollments, graduation, retention reports and other numeric data related to the institution.

## **Data Analysis and Interpretation**

The quantitative data were analyzed by using descriptive statistics methods through Statistical Package for the Social Sciences 26.0 statistical package program called SPSS 26.0. SPSS is used to analyze and understand data, solve complex research problems with advanced statistical procedures including regression analysis (IBM, 2017). It also includes procedures to account for missing data that could negatively impact the validity of research results. ( IBM SPSS Statistics Editions, 2017).

In this study, a quantitative, nonexperimental, descriptive research design was used in which the data from traditional admissions period and test-optional admissions period were

compared. In considering the data analysis in the study, I determined that descriptive statistics are more relevant to the study. Descriptive statistics are used to explain data in a simple, concise manner and include means, medians, modes, frequency counts, percentages, ranges, and standard deviations. In the research, descriptive statistics was used to summarize the data by using tables and graphs and comparing means and percentages, and then interpret the findings to determine whether or not an impact of the use of test-optional admission policy existed on student enrollment demographics at Montclair State University.

### **Ethical Considerations**

In this research, postsecondary institutional data occurred through the Integrated Postsecondary Education Data System (IPEDS) by using institutional names, but not participant names. Since all college/university data gathered was publicly available on IPEDS and the National Center for Education Statistics (NCES)'s websites and the research did not involve human subjects, but it drew only quantitative data for colleges and universities in the United States, it did not require review by the institutional review board.

## CHAPTER IV: RESULTS

Over the years, a growing number of colleges and universities that believe high school performance is the best predictor of future college success has started to not consider admissions tests as a criteria. I focused on one of those institutions in which test-optional policies were adopted in 2015. This chapter reviews the data analysis and the results of the study. The findings of the study were based on data at IPEDS reported by Montclair State University and common data set retrieved from the Information Technology Division of the university for all of the research questions. The purpose of this descriptive nonexperimental study was to examine the effect of test-optional admission policies on student enrollments and demographics (gender, race, and financial aid) by before and after test-optional admissions policies at Montclair State University. Data were extracted to assess changes in the number of applicants, admittees, enrollees by gender, race/ethnicity and financial assistance, and test submissions after adopting the policy. By simply looking at descriptive statistics such as total numbers of applicants, admitted and enrolled students, test submitters gender differences, Whites and Non-whites, and financial aid recipients, the means, and percentages of each, it was aimed to determine whether the policy change had an impact on student enrollment demographics.

The sample of this research was all first-year undergraduate students who enrolled at Montclair State University for the fall semesters from 2010-2019. The data of 2010-2014 belonged to the academic years implementing traditional admission policy, and the data of 2015-2019 comprised test optional years. In the research, the independent variable was admissions policy. The dependent variables were defined as enrollment rates, test

submissions and the change in student enrollment demographics in terms of gender, race/ethnicity and financial assistance.

The characteristics of the data were important to have a better understanding regarding my analysis. In the data set reported to IPEDs and existing at the Information Technology Division of the university, *undergraduates* are defined in two categories as degree/certificate and non-degree/non-certificate seekings. The category of degree/certificate seeking consists of first-time , transfer-in and continuing/returning students. In my research, only first- time students were counted. In terms of race demographics there have been 9 different race/ethnicity categories including nonresident alien, Hispanic/Latino, American Indian/ Alaska Native, Asian, Black or African American, Native Hawaiian or other Pasific Islander, White, two or more races and race/ethnicity unknown. I analyzed my data for each category, and then I created two new categories as Non-whites including 8 categories and Whites to determine the change in terms of increasing campus diversity.

Another variable of my study was financial aid. Financial aid was categorized as grants or scholarships from the federal government, state/local government, or the institution and loans to study. In this study, I compared the number of Pell Grant and student loan recipients. For all categories I was able to reach the data regarding Fall 2010 through Fall 2019, however financial aid data of Fall 2019 was not reported until I completed data collection and analysis.

**Research Question 1:** How did the adoption of test-optional policies impact student enrollments at Montclair State University over time?

In order to determine how adopting test optional policies influenced enrollment rates, I extracted the numbers of applied, admitted and enrolled students of each academic year. Table 1 illustrates the summary of data, the means of applicants, admittees and enrollees by traditional and test-optional admissions and percentages of admitted and enrolled students.

From 2010-2014, the average number of applied students was 12574, the average number of admitted students was 7404, and the average number of enrolled students was 2526. From 2010-2014, percentages of admitted and enrolled students were 58.9 and 34.1, respectively. From 2015-2019, the average number of applied students was 12913, the average number of admitted students was 9151, and the average number of enrolled students was 3086. From 2015-2019, percentages of admitted students accounted for 70.9% and enrolled students accounted for 33.7%. Overall; after adopting test optional there was an increase in the number of applied, admitted and enrolled students, as well as the percentage of admitted students with a 12% in total, however, a .5% decrease occurred for enrolled students.

**Table 1**

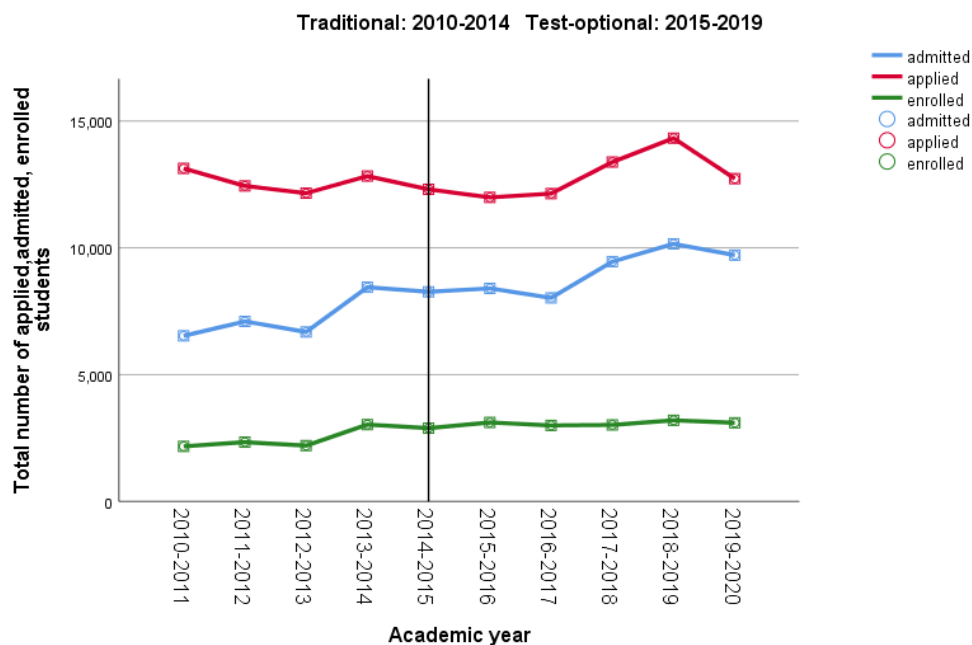
*Totals and Percentages of Applicants, Admittees and Enrollees*

	Academic Year	Applied	Admitted	% of Admitted	Enrolled	% of Enrolled
Traditional	2010-2011	13133	6531	49.7	2171	33.2
	2011-2012	12442	7098	57	2338	32.9
	2012-2013	12156	6682	55	2202	33
	2013-2014	12831	8447	65.8	3030	35.9
	2014-2015	12308	8266	67.2	2889	35
	Average traditional	12574	7404	58.9	2526	34.1
Test-optional	2015-2016	11990	8401	70.1	3115	37.1
	2016-2017	12139	8027	66.1	2997	37.3
	2017-2018	13384	9457	70.7	3004	31.8
	2018-2019	14324	10157	70.9	3199	31.5
	2019-2020	12729	9713	76.3	3072	31.6
	Average test-optional	12913	9151	70.9	3077	33.6

Figure 2 shows how applications, admissions and enrollments changed year by year. In general, it was seen that there was no gradual change in any of the categories. From 2015-2016, the number of applied students gradually increased and had a peak number in 2018, however, a decrease occurred after that year. The number admitted students was likely to have a positive correlation with the number of applicants; but in 2016-2017, while the number of admitted students increased, the number of applied students was less than the number of previous years. Finally, the numbers of enrollments illustrate that there was not an important change among academic years as well as after adopting test-optional policies.

**Figure 2**

*Graphed Total Applicants, Admittees and Enrollees*



**Research Question 2:** How did the adoption of test-optional policies change SAT or ACT submissions to Montclair State University?

To answer the second research question, I extracted total enrollments and test submissions belonging each academic year. From 2010-2014, the mean of enrollments was 2526 and the mean of test submissions was 2441. From 2015-2019, the mean of enrollments



was 3077 and the mean of test submissions was 1345. Before the adoption of test-optional policy, the percentage of test score submissions within total enrollment was 96.6, and then there has been a 52.9 % decrease and it accounted for %43.7 in the years with test-optional admissions (See Table 2 below).

**Table 2**

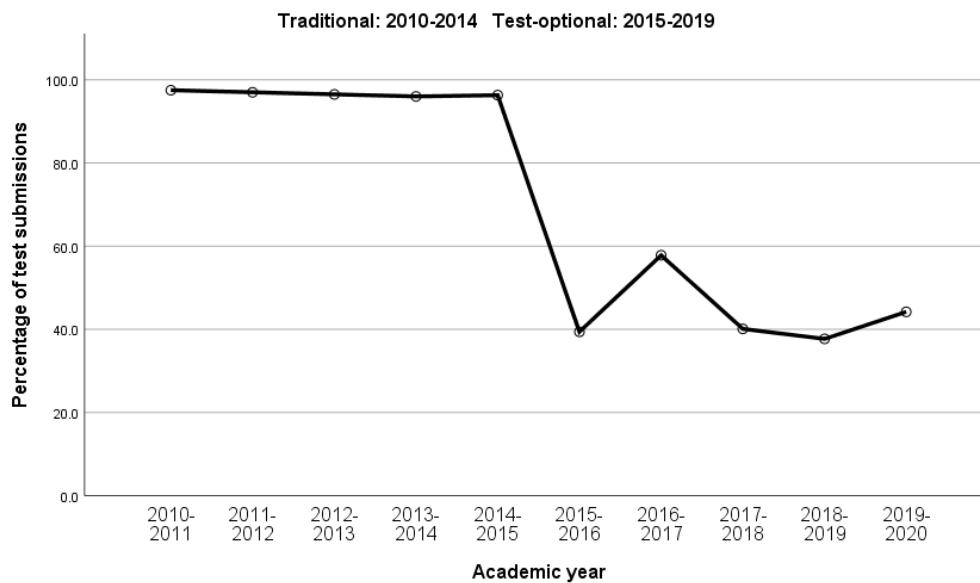
*Test Submissions and Percentages of SAT/ACT Submitters*

	Academic year	Enrollment	Test submissions	% within enrollment
Traditional	2010-2011	2171	2117	97.5
	2011-2012	2338	2269	97
	2012-2013	2202	2125	96.5
	2013-2014	3030	2910	96
	2014-2015	2889	2782	96.3
	Average traditional	2526	2441	96.6
Test-optional	2015-2016	3115	1227	39.4
	2016-2017	2997	1734	57.8
	2017-2018	3004	1205	40.1
	2018-2019	3199	1205	37.7
	2019-2020	3072	1357	44.2
	Average test-optional	3077	1345	43.7

Figure 3 below shows how test score submissions changed after adopting test optional policy. In the first test optional year, test submissions had a sharp decrease and accounted for 39.4%. The most percentage of test submissions was 57.8 and the least percentage of test submissions was 37.7 during the test-optional years. Overall, students were likely to not submit their test scores after the university adopted test optional policies.

**Figure 3**

*Graphed Percentages of Test Submissions*



**Research Question 3:** Did the effect of adopting test-optional policies on student enrollments differ by gender?

Another purpose was to examine whether the effect of test-optional policy differed by gender. Literature suggests that test-optional policies aim to increase women's access to higher education. Table 3 illustrates the numbers of man and woman enrollments, the percentages of those within total enrollment. From 2010-2014, 963 males and 1563 females enrolled at Montclair State University on average. Males accounted for 38.1% and females accounted for 61.9%. From 2015-2019, the mean of enrolled men was 1127 and the mean of enrolled women 1943. There was a 1.5% decrease in men enrollment and occurred for 36.6 and women enrollment accounted for 63.4%. Overall, both male and female enrollments increased, however, there was no significant increase in female enrollment at the university after implementing test-optional policy.

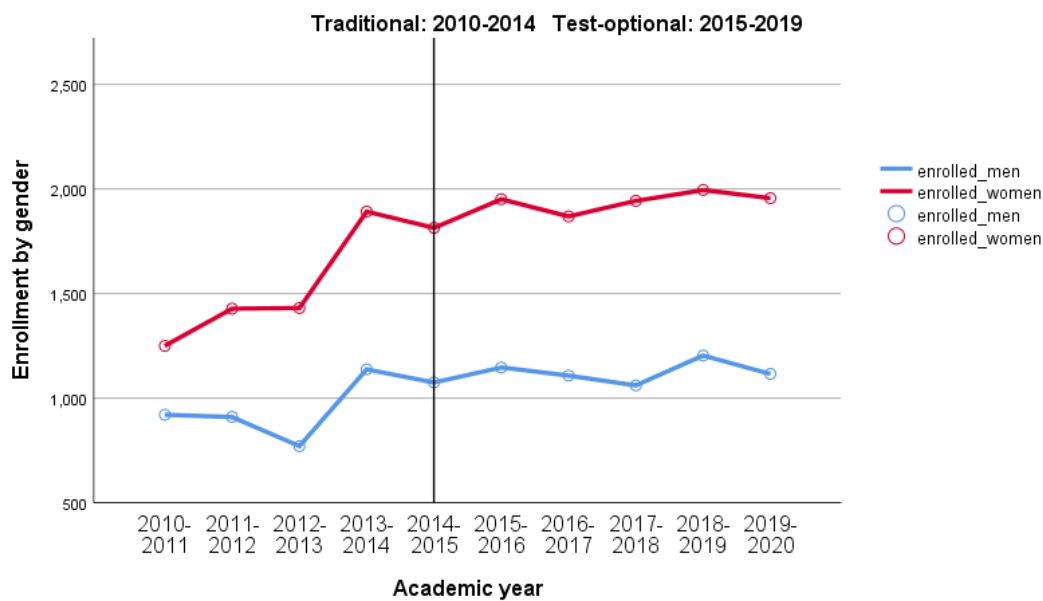
**Table 3***Total Enrollments and Percentages of Enrollees by Gender*

	Academic year	Total	Gender		% within total enrollment	
			Man	Woman	Man	Woman
Traditional	2010-2011	2171	921	1250	42.4	57.6
	2011-2012	2338	910	1428	38.9	61.1
	2012-2013	2202	771	1431	35	65
	2013-2014	3030	1138	1892	37.5	62.5
	2014-2015	2889	1075	1814	37.2	62.8
	Average traditional	2526	963	1563	38.1	61.9
Test-optional	2015-2016	3115	1147	1951	36.8	63.2
	2016-2017	2997	1108	1869	37	63
	2017-2018	3004	1061	1943	35.3	64.7
	2018-2019	3199	1204	1995	37.6	62.4
	2019-2020	3072	1116	1956	36.3	63.7
	Average test-optional	3077	1127	1943	36.6	63.4

Below is the figure that shows how male and female enrollments changed in 10 years. As it is seen in figure 4, male and female enrollments had opposite directions; as such, each of academic years that woman enrollments increased, man enrollments decreased. Although total enrollment increased after implementing test optional policies, the percentages of women enrollments had no significant change in total.

**Figure 4**

*Graphed Male and Female Enrollments*



**Research Question 4:** Did the effect of adopting test optional policies on student enrollments differ by race/ethnicity?

Test -optional policies are considered to increase campus diversity. As literature suggests, White students are more likely to attend college education since they have more academic preparation opportunities such as tutoring, college counseling, taking exams as many times as they want. To determine whether adopting test optional policies at Montclair State University differed by gender and helped Non-whites enrollments increase, I extracted the enrollment data according to race/ethnicity. Table 4 shows the numbers, the means and the percentages of enrollments by traditional and test-optional policies in 9 different race/ethnicity categories. The most and the least increase occurred for Hispanic and American Indian/Alaska Native enrollments respectively. From 2010-2014, the mean of Hispanic enrollments was 565 and accounted for 22.4% in total enrollment. From 2015-2019, Hispanic enrollees were 918 on average and accounted for 29.8% with a 7.4 increase in total. The average number of American Indian/Alaska Native was 1 from 2010-2014 and occurred

for 0.03% in total. 3 American Indian/Alaska Native students on average enrolled in the university from 2015-2019 and the percentage in total was 0.1. Further; based on data results, African Americans were the second population increasing their enrollments. On average, the number of African American enrollments increased from 225 to 449, and increased the portion from 8.9 % to 14.6 % in total.

From 2010-2014, the average number of Whites was 1232 and accounted for 48.8% in total enrollment. However, Whites were the population having the biggest decrease in enrollment. From 2015-2019, the mean of White students' enrollments was 1073 and accounted for 34.9% in total with a 13.9% decrease. Based on data results, other race/ ethnic groups had small changes in enrollment: While the number of Asians increased from 5.4% to 6.4%, the numbers of non-residents decreased from 1.4% to .8%, Native Hawaiians decreased from .2% to .0 % , two/more races decreased from %3.9 to 3% and unknown groups decreased from 8.3% to 4.8% .

**Table 4**

*Total Numbers of Enrollees by Race/Ethnicity from 2010-2020*

	Academic year	Race/ Ethnicity								
		Non-resident	Hispanic	Am. Indian/Alaska Nat.	Asian	African American	Native Hawaiian	White	Two/more Race	Race/ Eth. Unknown
Traditional	2010-2011	37	430	0	128	185	5	1079	66	241
	2011-2012	30	508	0	113	216	5	1189	94	183
	2012-2013	21	487	1	113	201	2	1179	124	74
	2013-2014	43	684	2	174	293	4	1437	114	279
	2014-2015	40	716	2	160	328	7	1275	91	270
	Average traditional	34	565	1	138	225	5	1232	98	209

	% within enrollment	1.4	22.4	0.03	5.4	8.9	0.2	48.8	3.9	8.3
Test-optional	2015-2016	31	865	1	179	391	8	1259	82	282
	2016-2017	21	850	2	186	426	8	469	75	161
	2017-2018	18	879	4	196	502	7	1185	103	110
	2018-2019	29	1044	5	208	483	6	1185	86	122
	2019-2020	30	950	4	215	442	8	1269	116	67
	Average test-optional % within enrollment	26	918	3	197	449	7	1073	92	148
		0.8	29.8	0.1	6.4	14.6	0.0	34.9	3.0	4.8

Micceri`s study (2009) found that requiring test scores in the admission process might be an obstacle for females in all ethnic groups and underrepresented minorities in any ethnic group, and Whites and males are more likely to be advantaged. Table 4.1. illustrates total enrollments of Whites and Non-whites (non-resident alien, Hispanic, American Indian/Alaska Native, Asian, African American, Native Hawaiian, two/more races, race/ethnicity unknown) and percentages in total enrollment by admission policies. From 2010-2014, the number of Whites was 6159 and accounted for 48.8%, and the number of Non-whites was 6471 with a 51.2 percent in total. From 2015-2019, the number of Whites was 5367 and the number of Non-whites was 9208. Whites accounted for 36.8% and Non-whites accounted for 63.2%. Overall, Non-whites enrollment had a remarkable increase after the adoption of test optional policies.

**Table 4.1.***The Means and Percentages of Whites and Non-whites by Admission Policy*

	Whites (M)	Non-whites (M)	Total (M)
Traditional	1232	1294	2526
% within enrollment	48.8	51.2	100
Test-optional	1073	1842	2915
% within enrollment	36.8	63.2	100

Figure 5 and Table 4.2. illustrates and supports each other how Whites and Non-whites enrollments changed within 10 years. As it is seen in the figure and table below, enrollment percentages of White students fluctuated from year to year and had the least percent in 2016. The percentage of Non-whites significantly increased and accounted the most percent in 2016. Overall, despite the fluctuations, Non-white enrollments showed an increase after adopting test optional policies.

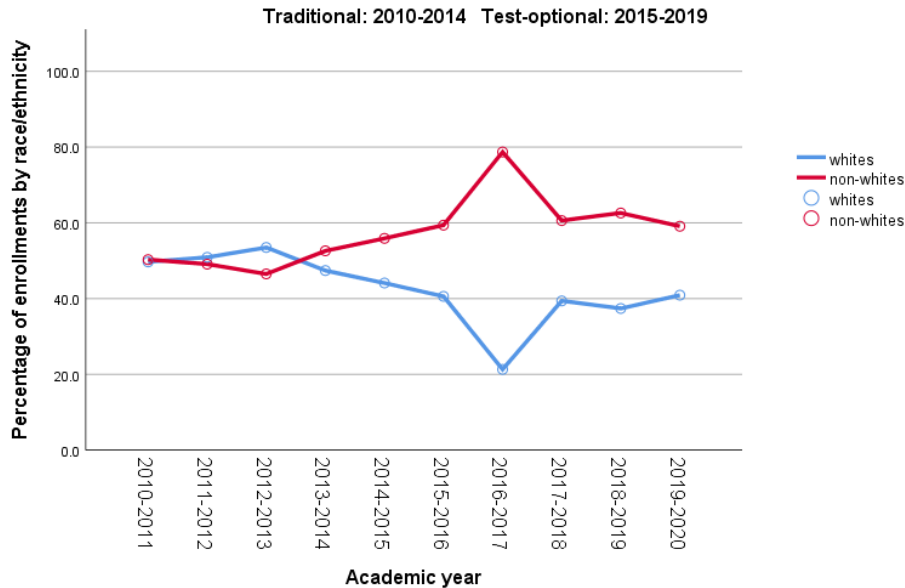
**Table 4.2.***Totals, Means and Percentages of White and Non-white Enrollees by Year*

	Academic year	Total	Whites	Non-whites	% of Whites	% of Non-whites
Traditional	2010-2011	2171	1079	1092	49.7	50.3
	2011-2012	2338	1189	1149	50.9	49.1
	2012-2013	2202	1179	1023	53.5	46.5
	2013-2014	3030	1437	1593	47.4	52.6
	2014-2015	2889	1275	1614	44.1	55.9
	Average traditional	2526	1232	1294	48.8	51.2
Test-optional	2015-2016	3104	1259	1845	40.6	59.4
	2016-2017	2198	469	1729	21.3	78.7
	2017-2018	3004	1185	1819	39.4	60.6
	2018-2019	3168	1185	1983	37.4	62.6

2019-2020	3101	1269	1832	40.9	59.1
Average	2915	1073	1842	36.8	63.2
test-optional					

**Figure 5**

*Graphed Percentages of White and Non-white Enrollments*



**Research Question 5:** Did the adoption of test optional policies change financial aid distributions?

Financial aid is another important factor that influences students` college choice. As literature suggests, non-submitters who do not send their test scores to the institution are more likely to be first generation, minorities, Pell recipients, women and students with learning differences. Table 5 shows the total numbers, the means and the percentages of Pell Grants and federal student loans recipients. From 2010-2014, while Pell recipients 5055 on average and accounted for 40% in total, loan recipients occurred 7822 with a 61.9% in total. After adopting the test optional policy, the means of Pell Grant and student loan recipients were 5817 and 7361, respectively. Pell recipients had an increase and became 47.2% of total, however, student loan recipients were 59.8% of total with a small decrease.



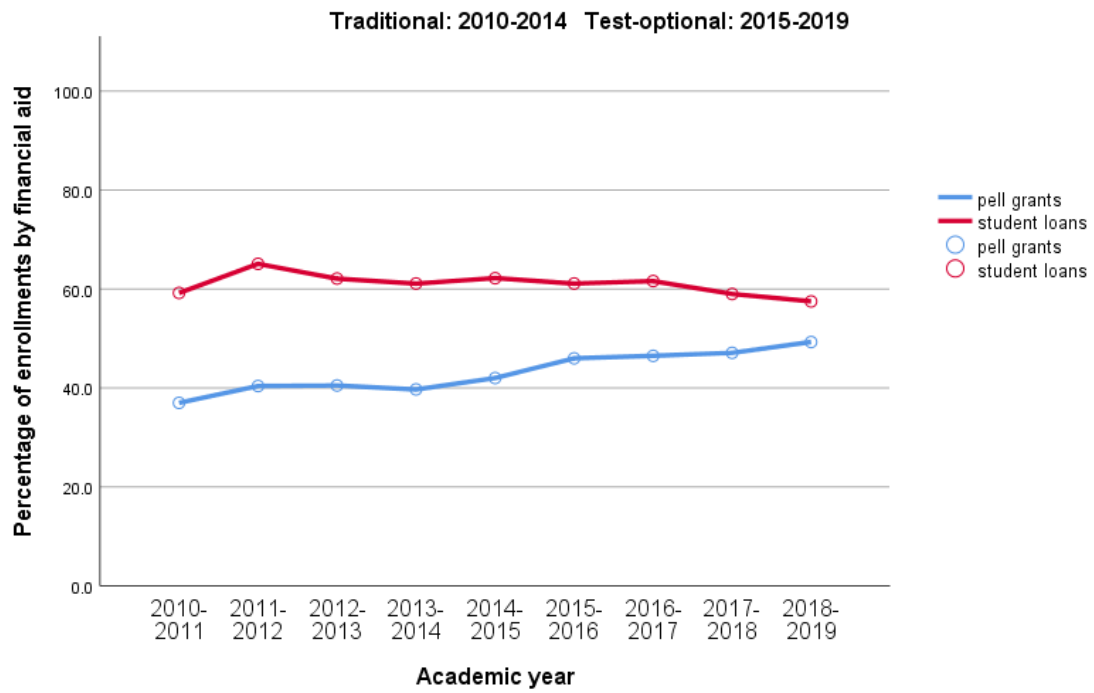
**Table 5***Totals, Means and Percentages of Pell Grant and Student Loan Recipients*

	Academic Year	Total	Pell Grants	Federal student loans	% of Pell Grants within total	% of Loans within total
Traditional	2010-2011	2171	803	1286	37	59.2
	2011-2012	2338	945	1521	40.4	65.1
	2012-2013	2202	892	1368	40.5	62.1
	2013-2014	3030	1202	1851	39.7	61.1
	2014-2015	2889	1213	1796	42	62.2
	Average traditional	2526	1011	1564	40	61.9
Test-optional	2015-2016	3115	1432	1902	46	61.1
	2016-2017	2997	1394	1845	46.5	61.6
	2017-2018	3004	1414	1773	47.1	59
	2018-2019	3199	1577	1841	49.3	57.5
	2019-2020	-	-	-	-	-
	Average test-optional	3078	1454	1840	47.2	59.8

In order to see how percentages of Pell Grant and student loans recipients changed, I drew a line chart. The chart (Figure 6) below shows that the number of Pell Grants recipients gradually increased, and the number of student loan recipients started to decrease after the 2011-2012 academic year. Since the data from 2019-2020 was not available, it was not examined. Overall, the number of Pell Grant recipients had a remarkable increase after implementing test-optional policies. However, there was no data regarding whether or not non-submitters received Pell Grants, the results could not be interpreted in terms of the relationship between financial aid and not submitting test scores.

**Figure 6**

*Graphed Percentages of Pell Grant and Student Loan Recipients*



## CHAPTER V: DISCUSSION

### Conclusions

There are a variety of factors that influence students' college choice. Both the financial and moral burdens brought by the standardized college tests prompted students to search for schools with alternative admission requirements or different policies. As literature suggests, offering test- optional policies is based on the idea that students not having opportunity to attend college preparatory courses, coaching or tutoring support, and financial means to take exams more than one time have merit to compete on equal terms with others in terms of access to higher education. Therefore, previous research focused on the probability of test-optional policies to increase diversity of both the application pools and campuses by emphasizing those difficulties that students face with.

As a contribution to the literature, I examined the effect of test-optional policies on student enrollment demographics at a public research university. I utilized a nonexperimental descriptive design to summarize the means and percentages of enrollments by gender, race/ethnicity and financial aid by comparing before and after test-optional policies. Before my analysis, I expected that adopting test-optional policy would influence students' application decisions and increase enrollments of the university. I also assumed this impact would be on the behalf of females, minorities and students with the need of financial assistance. Overall, the results of this study indicated that there was an increase in the number of applications, admissions and enrollments and test score submissions decreased by more than fifty percent after implementing test-optional policies. However, the fact that the percentages of enrolled students decreased from 34.1% to 33.6 showed that there are other factors that influenced students' enrollment decisions.

Reducing test submissions was an expected result of test-optional admission policies. The findings of my analysis showed that nearly half of enrolled students opted to not submit their test scores. As I found that 1 out of every 3 admitted students ( 33.6 %) enrolled at Montclair State University, however I could not reach the data of the rest of admitted students regarding whether they submitted test scores or not. Therefore, it was not possible to comment on test submissions of both all applicants and admitted students.

It was expected that a change in the enrollments would be on the behalf of female students with adopting test-optional. My analysis indicated that more women have enrolled at the university since 2015. The average number of women enrollments increased from 1563 to 1943 and an increase occurred for 1.5% in total. On the other hand, the data of non-submitters by gender was not available. Therefore, we do not know whether female students in this increase submitted tests scores or not.

In my fourth research question, I investigated how adopting test-optional policies differed by race and ethnicity. The data reported by the university on their websites and IPEDS consisted of nine different categories regarding race and ethnicity of their student population. Based on my findings, test-optional policy affected those groups in different ways. Before test-optional policy, the biggest portions in the undergraduate population belonged to Whites (48.8%), Hispanics (22.41%) and African Americans (8.9%). After implementing the policy, while Whites had a decline and occurred for 34.4%, Hispanics and African Americans increased their percentages and occurred for 29.8% and 14.6%, respectively. Besides, other ethnic groups had small changes in both positive and negative ways. Overall, more Non-white students enrolled at the university after adoption of the test-optional policy. These results showed that test-optional policies might have had a positive impact on campus diversity, however, the data of test submissions by race and ethnicity was

not available, it is hard to interpret this as a change of the implementing test-optional policies.

My theoretical framework offered cost and financial aid as fixed college characteristics in external influences that affect students' college choice. Therefore, students decide by thinking of their probability of receiving financial aid. Standardized test scores are taken in consideration to decide who would be financial aid recipients. My analysis showed that Pell Grant recipients had a remarkable increase, but student loan recipients had a quite small decrease in total. As literature suggested, non-submitters who do not send their test scores to the institution are more likely to be first generation, minorities, Pell recipients, women and students with learning differences. However, the point here was that I did not have the data regarding whether these Pell Grant recipients submitted their test scores or not. Therefore, there may be a correlation between the increase in non-submissions and Pell recipients in this study, but it was not possible to be sure that they did not submit their test scores and they had financial aid.

My research was a look at the enrollment demographics to a public research university. I started my research in the midst of Covid-19 pandemic, so this has been a limitation to reach out to individuals and collect data regarding their test-submissions, genders, races and ethnicities, and college affordability. Some information was discovered in this study and revealed that test-optional policies have a positive impact on enrollment demographics such a large public university. That was one of my expectations to see whether test-optional policies are appropriate for larger institutions rather than small liberal-arts colleges. Findings like these are still valuable to have a general understanding of how test-optional policies work, but there is absolutely more to be studied and detailed. Thousands of students and admission officials have experienced test-optional policies for a year in the middle of Covid-19 pandemic. Therefore, this area, admissions policies and practices,

particularly test-optional, test-flexible and test-blind policies, have numerous new research topics waiting to be discovered.

### **Implications for Future Research**

By using the Theory of College Choice to frame the theoretical background of this study, I attempt to evaluate enrollments as an outcome of the college choice process. While student characteristics are important for college's choice of students, admissions also have influences on students' college choice as a way of communication with students. Although college choice is more about whether or not students apply to colleges and universities, test-optional policy can enable students to focus on these test-optional schools during the application process and, as a result, the likelihood of enrolling in a test-optional school may increase. Further, financial aid is a fixed college characteristic in the theory of college choice, and students need their test-scores to apply for merit-based grants and scholarships. At this point, they may hesitate to apply test-optional schools or not submit their test scores, Therefore, the Theory of College Choice can provide a helpful framework for future research to understand students' application behaviors, and also give an idea to higher education institutions to determine whether test-optional policy compatible to them.

There might be other frameworks that can be congruent to the purpose of test-optional policies. For instance, based on the claim that standardized tests are not reliable to measure students' ability and their future academic performance, Sociocultural Theory emphasizing that people differ by their cognitive development and their interests can be helpful for research will be conducting on persistence and graduation patterns. Furthermore, the Theory of Multiple Intelligences pointing that individuals have various abilities and they have multiple intelligences can be the framework of research since test-optional policies are against measuring students' ability with an 2-3 hours exam including questions regarding only linguistic and logical-mathematical skills.

Unfortunately, there have been so many changes in the higher education systems in this year. The pandemic has forced schools to make some changes in the way they could help students through application seasons. Based on the last updates by Fairtest, over 1330 accredited 4-year colleges and universities announced that they are going to be test-optional for Fall 2022 admissions. This number includes most of those institutions that implemented test-optional policies for Fall 2021 cycle, as well. For this reason, their data would be so valuable for test-optional research in a few years.

For further research directly related to my study, researchers may want to work with specific individuals, not accredited data or all undergraduate students to examine the points that this study has missed. In other words, research should conduct on this question: “ Do demographics of non-submitters change on the behalf of women, underrepresented students including minorities, first generations, low-income students and students with learning disabilities?”. Furthermore, the perspectives of the institutions regarding test-optional admissions are also important. With a different research approach, admissions officers and directors should be involved in future research, and their opinions and experiences should be examined, especially regarding admissions during the pandemic. Also, new research may want to focus on only one aspect of students such as gender, race\ethnicity or financial need.

Beyond this study, nearly all institutions have contributed in this test-optional movement due to Covid-19 Pandemic. I believe that the pandemic has caused a new chapter start on college admissions. Therefore, future research should take Covid-19 at the center and ask those questions: How do Covid-19 affect college admissions? What happened to international admissions? Do institutions stop requiring test scores from international students, as well? What have the costs and benefits of test-optional policies been to new test-optional institutions? Furthermore, the only persons affected by Covid-19 during the college admissions process have not been students. For this reason, I believe that parents, the

directors college preparation courses and persons who have financial benefits in any ways from standardized test scores also should be participants in some research to explore the impact of test-optional policies on the public.

Finally, there should conduct research beyond enrollment such as persistence and graduation with more details including drop outs, stop outs, transfers between institutions to have a better understanding of the effects of test-optional policies. Some studies have argued that the standardized testing programs do not have reliability to predict a student's future college success ( Geiser & Studley, 2002) and high school academic performance is the best predictor of student college success (Hiss, 2014). Therefore, the relationship between non-submitters' high school GPAs and college academic performance should also be examined.

### **Implications for Practice**

One of the most important implications emerged for practise is regarding the reported data of the university. Based on my analysis, there was an increase in the number of enrollments after implementing test-optional policies and more than half of students did not submit their test scores. Also, as expected from the tes-optional policy, more women and more Non-White students enrolled at the university and the percentage of Pell Grant recipients increased. However, the lack of data regarding whether women, Non-Whites and Pell Grant recipients in this increase did submit their tests prevent us from seeing whether test-optional policy has achieved its goal. Therefore, considering that an average of 2500 first-year students enroll each year, it is recommended to analyze and report more detailed data on the test submissions of these students by the university.

Due to Covid-19 pandemic, most colleges and universities offered test-optional policies for Fall 2021 and 2022. Although we have not been in a normal time, sharing the data of these schools can be a source of encouragement for other colleges and universities. Further, home-schooling students and international students are still required to submit test



scores at test-optional institutions. In terms of equity implications of test-optional movement, holistic evaluation approach should be available for those students, as well.

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