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An Examination of How Teacher Tenure and Job Satisfaction Affect Student Achievement

Robert Farris

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An Examination of How Teacher Tenure and
Job Satisfaction Affect Student Achievement

by
Robert T. Farris

An Applied Dissertation Submitted to the
Abraham S. Fischler College of Education
and School of Criminal Justice in Partial
Fulfillment of the Requirements for the
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Approval Page

This applied dissertation was submitted by Robert T. Farris under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and School of Criminal Justice and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

Ashley Russom, EdD
Committee Chair

Shery Bennett, EdD
Committee Member

Kimberly Durham, PsyD
Dean

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Abstract

An Examination of How Teacher Tenure and Job Satisfaction Affect Student Achievement. Robert T. Farris, 2021. Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education and School of Criminal Justice. Keywords: tenure, job satisfaction, job retention, student achievement, teacher evaluation, student measure

This applied dissertation was designed to examine the correlation between teacher job satisfaction, job retention, tenure and its effect on student achievement and the adjusted cohort graduation rate. This study involved the use of a sequential exploratory qualitative design as a pragmatic philosophical approach to examining the correlation. The researcher utilized three distinct datasets: The OECD Teaching and Learning International Survey (TALIS) 2018; The National Center for Educational Statistics, Adjusted Cohort Graduation Rate; and the Ohio Department of Education, Ohio Teacher Evaluation System.

An analysis of the data revealed that statistically significant themes emerged among the datasets for the job satisfaction and job retention of teachers. The most successful themes involved hierarchy of needs characteristics such as: equitable compensation, employment contract length, coworker relationships, working environment, self-efficacy, and self-actualization. Obviously, these findings raise questions about the dynamic and credibility of the hierarchy of needs for teachers and their correlation in motivating students to achieve the adjusted cohort graduation rate.

As, current research provided little to no evidence to suggest the correlation between teacher job satisfaction, job retention, tenure and how it affects student achievement. Characteristic variables, which have frequently been used to define high value teachers, such as value-added models (VAMs) purport to be able to identify a teacher's effect on students' test scores. Even though VAMs evaluate a teachers' contribution in any given year by comparing current test scores of students to the previous year, value-added modeling completely dismisses the correlation of the hierarchy of needs for teachers to student achievement and the adjusted cohort graduation rate.

Table of Contents

	Page
Chapter 1: Introduction	1
Statement of the Problem.....	2
Research Problem	6
Setting of the Study.....	13
Researcher’s Role	13
Purpose of the Study	13
Definition of Terms.....	14
Chapter 2: Literature Review	16
Introduction.....	16
Theoretical Framework.....	16
Tenure	17
Implications of Tenure.....	21
Termination.....	22
Job Satisfaction	26
Job Retention	32
Job Stress and Teacher Efficacy	36
Factors Causing Teacher Shortage.....	38
Tenure Today	42
Teacher Evaluation Systems	44
Student Achievement	45
Graduation Rate	48
Research Questions.....	50
Chapter 3: Methodology	51
Participants.....	51
Instruments.....	52
Procedures.....	53
Chapter 4: Results	59
Introduction.....	59
Demographic Characteristics	59
Data Analysis	60
Summary of Results.....	72
Chapter 5: Discussion	74
Introduction.....	74
Summary of Findings.....	74
Interpretation of Findings	76
Context of Findings.....	77
Implications of the Findings	78
Limitations of the Study.....	79
Future Research Directions.....	80

References.....	81
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Tables

1	Comparison of Teachers in the United States Versus TALIS 2018 Participants	60
2	County Priority Ratings of Themes for Inclusion in TALIS 2018 ISCED Level 2	61
3	Measures New to TALIS 2018.....	62
4	Regression Analysis of Different Variables in Relation to Job Satisfaction/Retention and The Desire to Move to Other Schools	64
5	Approximate Range of Employees’ Payment According to the K-12 System Per Annum	65
6	United States Teachers’ Instructional Time Versus Total Working Hours Compared to Other Countries	65
7	TALIS 2018 Survey Teachers’ Job Satisfaction and Happiness	66
8	Public High School 2012–13 ACGR in The United States Versus the State of Ohio	67
9	Ohio’s ACGR Per School Year	67
10	Identified Professional Development Areas in The United States Versus TALIS 2018	68
11	OTES Impression, Performance, and Their Overall Satisfaction.....	72
12	OTES Components and Job Satisfaction.....	72

Figures

1	Adjusted Cohort Graduation Rate School Year 2017–2018.....	3
2	Title I Funding Percentages Per Grade Level for School Year 2015–2016	5
3	Teachers’ Retention in the State of Ohio Compared to the Average in the United States	63
4	Average Salary Per Annum for Teachers in Different Regions	69
5	2017–18 Adjusted Cohort Graduation Rate According to Race/Ethnicity and Race for High School Students in Public Schools.....	70
6	Number of Dropouts in Public Schools in Ohio.....	70

Chapter 1: Introduction

The role of leadership in education and great performing teachers play a key role in student achievement. Additionally, matriculation and classroom advancement of students was one of the strongest metrics of student achievement. There were more than 3.5 million full-time and part-time public-school teachers, educating more than 49.1 million students in the fall of 2017 (McFarland et al., 2017). Learning institutions have the primary role of educating children and raising their achievements; however, they face numerous challenges in the process (National Center for Education Statistics [NCES], 2020). The primary function of NCES primary function is data collection in relation to education within the United States; as well as collating, analyzing, and reporting completed statistics on the learning condition within the United States.

The aim of this dissertation was to identify the perception of teachers in public schools regarding their tenure process and the effect of these perceptions on their job satisfaction, retention level, and the student's academic performance. In this study, the relationship of the tenure system as it related to teacher performance was evaluated. More specifically, the researcher determined how many public-school teachers perceived job satisfaction before tenure in correlation to how many public-school teachers perceived job satisfaction after tenure. In addition, the researcher sought to determine if teacher job satisfaction in relation to tenure had any effect on students' performance, according to the adjusted cohort graduation rate (ACGR). The ACGR was the mean that was arrived at by dividing the total quantity of students attaining the regular high school diploma required for graduation in four years by the number of students in the graduating class (see NCES, 2020).

Statement of the Problem

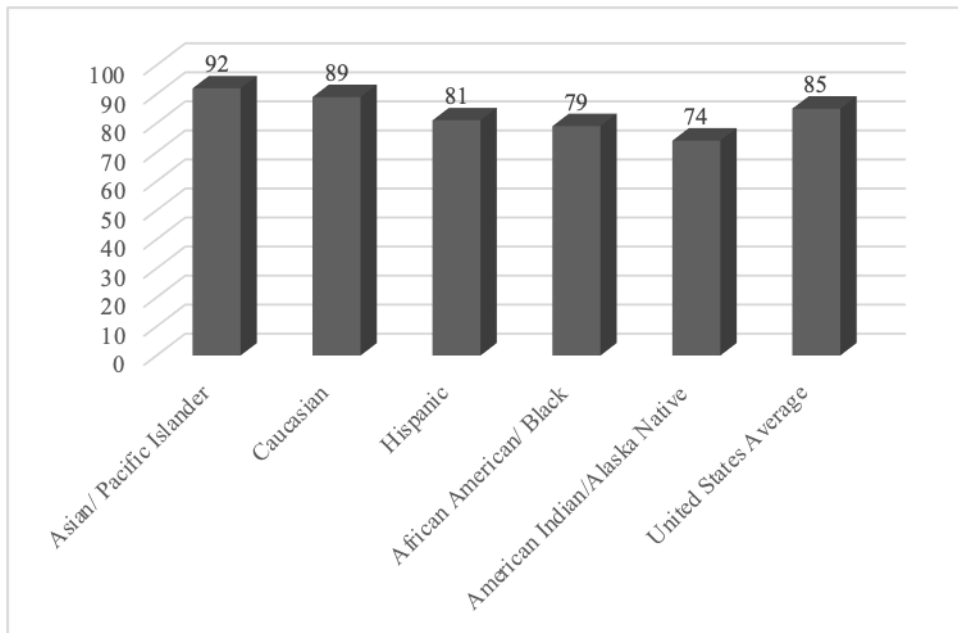
The problem area addressed in this research was the effect of teacher tenure and job satisfaction and the effects it had on students in Ohio District public schools. Even though there are numerous academic researchers conducted on the effectiveness of public-school teacher evaluations on promotions, tenure, job satisfaction, and retention, there was a deficiency of research on how this affect student achievement and the role of teacher happiness in adjusting cohort graduation rates in public schools. While concurrently receiving contradictory and conflicting reports from peer-reviewed research about the effectiveness of public-school teacher evaluations, it became apparent that more research was necessary into its correlation with student achievement.

The essential problem area with student achievement was the student achievement gap. If public teachers are not happy, valued, or appreciated, then students do not achieve. An achievement gap happens when standardized test scores or educational attainment was greater for one demographic than for another demographic, with the distinction between the two demographics' conclusions being statistically substantial.

According to the NCES, state departments of education compute the ACGR by recognizing first-time ninth graders within a specific school year, adjusting for loss and gain within the four-year period on the rate of on-time graduation for earning a high school diploma. In the 2017–2018 school year, the ACGR for public high school students across the United States was 85%. The graduation rate for American Indian/Alaska Native students was recorded at 74%, African American/Black students at 79%, Hispanic students at 81%, Caucasian students at 89%, and Asian/Pacific Island students at 92%, respectively (NCES, 2020). Figure 1 displays the data.

Figure 1

Adjusted Cohort Graduation Rate School Year 2017–2018



Having improvements in the education sector as one of the priorities for the Obama administration, efforts were made to turn around low performing public schools. The United States Department of Education created the School Improvement Grant competition and Race to the Top. These federal programs were established to make available funding to states and local public-school districts that designed inventive strategies to increase student achievement. The administration also funded the Title I School Improvement Grant program with billions of dollars to assist the lowest of the struggling school districts with closing the student achievement gap amongst dissimilar demographic groups, improving overall student academic performance, and raising the graduation rate (Hines et al., 2020).

The achievement gap was one of the most prolific researched subjects in education, policy, intervention, and performance. The primary reason behind the research

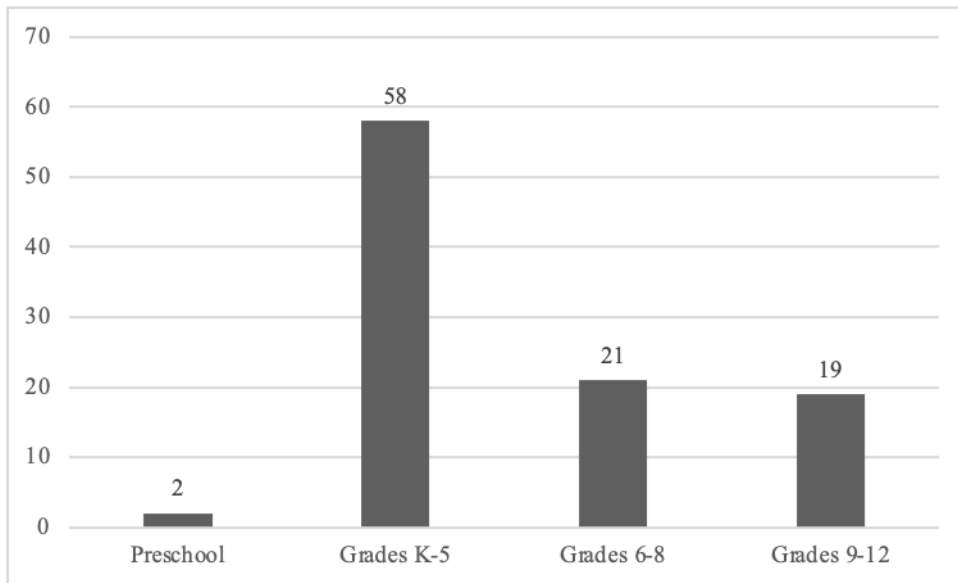
was the approaches for achievement do not affect the racial groups equally. As previously stated, many public-school teachers who are employed in low income and high unemployment schools have a harder time finding job satisfaction. These low performing schools within low-income neighborhoods with high unemployment are labeled as Title I schools. A Title I school was defined by Title I Part A of the Elementary and Secondary Education Act as an educational institution that meets the federal aid programs guidelines for funding, and at least 40% of the student population must be from low-income homes according to the federal poverty guidelines (Hirn et al., 2018).

Title I was one of (if not) the oldest funding program of the Department of Education, with a resolution of guaranteeing that all children have an equal, fair, and substantial opportunity to obtain a high-quality education and achieve, at minimum, proficiency on standardized state academic achievement standards and state academic assessments (ESSA, 2015). In the 2015–2016 fiscal school year, more than 50,000 public schools within the United States used Title I funding to ensure supplementary academic support and education opportunities to assist low achieving students learn the curriculum and meet state standards in essential academic subjects across all grade levels (Snyder et al., 2019). Figure 2 presents the funding percentages per grade levels.

Given the low performance of Title I schools, there was an ongoing public debate about the possibility of shutting down Title I schools and enrolling students in non-Title I schools that would improve their performance and achievement. The logic behind the proposal to close Title I schools was that the students' low performance was subject to their school environment, thus placing them in higher performing schools would improve their performance. However, this high-risk logic failed to take into consideration the

Figure 2

Title I Funding Percentages Per Grade Level for School Year 2015–2016



public-school teachers' impact on achievement or the cognitive well-being of the student (Sunderman et al., 2017).

The logic of shuttering low achieving schools and transferring low achieving students to a higher performing school also excluded any consideration for racial and other trajectories (Davis-Kean & Jager, 2014). Trajectories such as economic inequality, racial inequality, and household adult education attainment among others, which are essential to student achievement, are all excluded from this school of thought. According to research, the greatest trajectory that affects student achievement was high resource communities (Hung, et al., 2020).

Furthermore, data from the 1997 cohort of the National Longitudinal Survey of Labor Market Experience for Youth examined the urban school achievement gap and found that approximately 75% of the achievement gap could be described by the elevated

concentration of underprivileged students in the public school. The research further attributed 36% of the achievement gap in the family's background, and 25% of the achievement gap resting on the family itself being of lower income. This stresses the need to improve the socioeconomic status of students, which will in turn improve the socioeconomic status of the school's neighborhood and public teacher job satisfaction (Sandy & Duncan, 2010).

Research Problem

There were several challenges that needed to be addressed when understanding this problem area and the association between public school teacher job satisfaction and student achievement. One area explored marginally within educational research was ethical sensitivity training for professional development for public school teachers (Glatt Yochai, 2019). The implications of increasing developmentally applicable and culturally sensitive procedures for families and its effect on parental involvements was discussed by Ross (2016) while Levine and Levine (2014) expressed concern over the incorrect usage and reliance on hard date student achievement numbers and standardized test scores. Clark and Shi (2020) explained that understanding ethnic gaps in high school graduation within the correlation of income and gender classifications could lead to more definitive interventions. The student achievement gap had been a persistent issue as it was based on social inequality along ethnic and poverty lines where minority students from low-income families have historically performed worse than any other racial group (Zhao, 2016).

Although all this research was relative to the student achievement gap, the researchers did not consider the contribution to understanding the schools' role in

addressing achievement in respect to public school teacher quality of life. Different aspects of public-school teacher quality of life influence student achievement growth (Desimone et al. 2012). Research conducted by Cohen-Vogel et al. (2019) showed that public school teachers are under pressure to score high on standardized state tests as both their compensation and the school funding from Title I are attached to test performance. This majorly applies to lower performing schools or schools that are at risk of closing or losing their Title I funding (Cohen-Vogel et al., 2019).

Background and Justification

Factors leading to teachers' achievement of job satisfaction within their occupation and the school they taught at may have distorted efforts. One was the achievement of tenure, which could have adversely affected teachers' performance in that they overworked themselves early in their career only to be demotivated by weak incentive after attaining tenure resulting in a lower work quality as observed in students' performance. The tenure model promoted the fast attainment of competent aptitudes needed to advance in one's career. Once tenure was accomplished and subsequent job security gained, teachers tend to relax in their comfort zone without facing any possibility of job loss as a teacher. Resultantly, after attainment of tenure, teachers are more likely to be demotivated to exert extra effort in teaching thus poor delivery in class leading to poor performance of students. Gümüş et al. (2012) painted the role of the tenure as a protector of poor performing teachers who enjoy the luxury of job security due to having achieved the tenure.

Neumann (2009) explored the relationship tenure had on the personal meaning and careers of teachers from different fields of study. The exploration exposed the

struggle teachers have in finding enough time to pursue the careers they loved post-tenure. The author also exposed the post-tenure workload many teachers gain once achieved that does not support scholarly learning.

In a research study of job satisfaction done by the Center for Extension and Continuing Education, Manthe (1976) suggested the implementation of rank and tenure to provide teachers with job recognition and career advancement. Job satisfaction and job dissatisfaction regarding teachers as it relates to tenure was also suggested for further research (Manthe, 1976).

While tenure does not guarantee a teacher lifetime employment, it does make it a difficult and costly process to fire teachers. In the recent years, there have been efforts within the field of political science to encourage scholars to become active within their field of study. According to Gavin (2017), there had been a clear shift within the field to master methodological tools at the expense of knowledge in the area studied to achieve tenure.

The Colorado Senate Bill 10-191 passed in 2013 reflects an overall change in perception toward the teacher evaluation system. The legislation proposed a series of changes, which include yearly teacher and principal evaluations. Student achievement would become a substantial part (50%) of the teacher evaluations, while two-thirds of principal evaluations based on the demonstrated effectiveness of their teachers and school growth. Three years of teacher evaluations determined if a teacher received tenure. Teachers would need to maintain their effectiveness through the evaluations for two more years. Additionally, all hiring is to be done by mutual consent for teacher placement and hiring. Mutual consent is a practice, which allows the administration and teacher to agree

on which school location is a good match that aligns with the teachers' qualifications, effectiveness, and experience. SB 10-191 established regulations for administration of a statewide system to evaluate the effectiveness of instructional licensed personnel employed at public school districts within the state of Colorado (Engdahl, 2010).

Tennessee teacher law Senate Bill 1528 passed in 2011 amended the qualifications for teacher tenure by requiring a teacher to preserve a required performance effectiveness level on teacher evaluations to achieve and maintain tenure status. The amendment specifically focused on poor performers; any teacher who receives a below expectations status for two consecutive years after receiving tenure will be put on a probationary status. The legislation formed a basis upon which the Tennessee Teacher Tenure Principal Perception Survey was created where principals championed the new tenure regulation as experiencing a net constructive impact on the capacity to evaluate and retain high performing public-school teachers (Lomascolo & Angelle, 2019).

Florida lawmakers passed the "Student Success Act," Senate Bill 736 in 2011, which introduced broad educational reforms within the state. The new law created a teacher evaluation system centered on value added modeling with mandatory performance compensation for public school teachers, along with eliminating long-term employment contracts. SB 736 required districts to rate public school teachers and administrators annually with student performance on the '*Florida Comprehensive Assessment Test*,' the state's standardized test, being half of their score. SB 736 also eliminated tenure within the Florida public school system requiring teachers to be rehired on an annual basis and compensated solely based on performance instead on tenure with no additional pay for advanced degrees (Harrison & Cohen-Vogel, 2012).

In 2011, Michigan legislators passed policies that focused on changing teacher evaluations and collective bargaining restrictions, which included: State bills PA 100, PA 101, PA, 102, and PA 103. All these policies were to improve public school teacher performance and quality through the prescribed teacher evaluation system, which along with the rest of the states who passed the legislative teacher evaluation that tied student performance to teacher effectiveness. Following the passing of this new law, Michigan public school teacher tenure directly correlated to students' performance based on state approved models and increased teacher probation from four to five years creating hard to staff districts (Brunner et al., 2019).

Chitpin (2015) suggested the utilization of the objective knowledge growth framework as an evaluation tool to promote a complete interpretation of the evaluating tenure and promotion process. The quantitative knowledge growth framework draws from Karl Popper critical rationalism stating that both knowledge and truth itself are objective that require a deeper understanding than just an evaluation of scores for tenure and promotion. Rizvi (2015) stated that consideration for promotion and tenure are equally as important to institutions as they are to their teachers. For teachers, promotion, and tenure are ways to exercise the freedom of learning and teaching without fear of termination, while the institution finds in it a way to keep the best teachers without making a lifetime commitment to the wrong teachers.

Sugden (2011) explored the notion that teacher workload was intensifying causing teachers to increasingly leave the profession. The author suggested that administrators should address the teacher workload issues, by ensuring a balance in the workload thus encouraging them to remain in the profession. Meyer et al. (2019) offered a better

understanding of the public-school teacher labor market for the Central region states including Colorado, Missouri, Nebraska, and South Dakota.

In addition to the increasing research on public school teacher evaluations, job performance, tenure, and other issues, there was research done focusing on the effects of positive observations on teacher performance across five dimensions, and the assessment of the effects of negative perceptions in relationship with a teacher's performance on morale across six dimensions. The first assessment resulted in 50 plus % recommending the career, while the second assessment resulted in 46% recommending the career. These results found that positive perceptions of public-school teachers' performance do not necessarily affect the public attitude, but negative perceptions of teachers' performance affect the public's attitude towards teachers (Abner et al., 2020).

Research on public school teacher personal safety and well-being done focused the extent of the school's neighborhood effect on the teacher's work environment. The researchers found that public school in high income neighborhoods with low unemployment rates had more seasoned job tenured teachers versus public school teachers who were employed in low income or high unemployment rate neighborhoods (Linnansaari-Rajalin et al., 2015).

Some states like Oklahoma have an extremely tough time retaining and recruiting effective teachers, which had become a serious concern for the state. The Oklahoma State School Boards Association stated in 2016 that there was a vacancy for approximately 500 public school teachers statewide at the start of the 2015–2016 school year. Research noted that the reported difficulty in retaining public school teachers was caused by the low pay and high classroom size, as well as better paying employment opportunities in

other industries (Lazarev et al., 2017).

Over a decade ago, teacher evaluation reform was touted as the standard mechanism to improve K-12 educational achievement, teacher performance, and teacher effectiveness. Majority of states redesigned their teacher evaluation system because of this massive push in K-12 education nationwide. Cohen et al. (2020) suggested that these statewide teacher evaluation reforms have failed to achieve their purpose thus the need to abandon them.

The Obama administration sought a quick implementation of public-school teacher evaluations as a defining public policy issue in 2009. This caused many states to adopt the new system of public-school teacher performance evaluation directly aligned with student achievement. As a result, efforts to revamp the educational evaluation systems of tenure and compensation increased as it correlated to student performance for states to gain the incentives the administration presented. The efforts have largely backfired, causing public school teacher evaluations to become nuanced. While they have contributed in some improvement, the efforts have caused uneven progress without closing the achievement gap (Aldeman, 2017).

Deficiencies in the Evidence

A wealth of literature exists on the issue of public-school teacher job satisfaction and retention. Some researchers focused on specific factors leading public school teachers to leave their profession (Ponjuan et al., 2011; Russell, 2010); others propose ways to prevent it through support (Sass et al., 2011) or increased salaries based on performance (Morice & Murray, 2003); while others examine how and why effective teachers are in some schools (e.g., suburban districts) but not others (e.g., urban districts;

Jacob, 2007). However, none of the literature reviewed addressed a correlation and relationship between tenure and job retention.

Audience

The audience for this study was all public-school teachers, superintendents, and administrators. The results of this study will also be useful to others in different professions for the possibility of modeling a proactive program to increase the effectiveness of student achievement in relationship to public school teacher job satisfaction with promotion and tenure.

Setting of the Study

The researcher utilized pre-existing archival data in this study. The data were derived from The OECD Teaching and Learning International Survey (TALIS) 2018; The National Center for Educational Statistics, Adjusted Cohort Graduation Rate; and the Ohio Department of Education, Ohio Teacher Evaluation System. The setting for each survey was the utilization of web-based survey data collection tools posted online using each instrument's own proprietary means of survey methodology that made it easier for the surveys to be administered as participants were scattered across a vast geographical footprint. No other research setting could provide the broad capability, which ensures more accurate data collection results.

Researcher's Role

The researcher had no role in either of the organizations used as instruments or in their survey setting or data collection process.

Purpose of the Study

The purpose of this mixed methods study was to investigate the relationship that

promotion and tenure have on public school teacher job satisfaction. It sought to expand promotion and tenure research in academia and explore the effects it had on student achievement. During the past decade, public school teachers' performance evaluation systems have raised nationwide concern about its correlation to student performance and achievement of the ACGR. Utilizing national data from the NCES, the researcher examined ACGRs over the last five years in correlation with tenure-track teachers' job satisfaction data.

The researcher utilized preexisting aggregate data of test scores and teacher interviews collected between 2018 by The Organization for Economic Co-operation and Development (OCED) Teaching and Learning International Survey (TALIS), which enumerates teachers and school leaders on working conditions and learning environments at their schools to help countries facing diverse challenges get elaborate feedback for action by policymakers, researchers, and other collaborative partners as it relates to job satisfaction, teacher retention, and student achievement. While there was an overwhelming quantity of research about teacher promotion and tenure evaluation systems, the results of this study sought to extend anecdotal information into the understanding of the student achievement gap. Furthermore, it sought to provide a theoretical framework useful in future empirical studies designed to measure teacher happiness and student achievement.

Definition of Terms

Adjusted cohort graduation rate refers to the on-time graduate rate of a specified school year.

Job retention was the rate at which employees continue employment compared to

the number of employees hired (Mallol, 2003).

Tenure, as a term, was “defined as the contractual right to permanent and continuous employment status of a teacher in a public school, a professor in a college or university school system” (Brown, 1977). Once one reaches tenure, they gain “property rights” to employment and provides significant guarantees for due process when facing dismissal charges.

Title I classification was designated to a local teaching institution where at least 40% of the student body within the consideration of low income based on the federal poverty guidelines for federal funding.

Chapter 2: Literature Review

Introduction

To attain a comprehensive understanding of the progression of tenure, different topics including tenure definitions and its behavior, teacher perceptions of tenure, tenure and job retention, tenure, and job satisfaction, problems with retention, teacher attrition, teacher efficacy, and stress unique to public high-school teachers were explored. To promote effective job satisfaction and retention, one should understand all the effects of tenure and the effective models for job retention and satisfaction. This research did not include any new studies but utilized statistics from TALIS (OECD, 2018). TALIS enumerates teachers and school leaders on working conditions and learning environments at their educational institutions to help countries facing distinct challenges get elaborate feedback for action by policymakers, researchers, and other collaborative partners.

Theoretical Framework

The theoretical foundations of this research investigation were ingrained in national job satisfaction and student achievement theory. Currently, there was not one conventional job satisfaction concept; as versions evolve, and new versions are developed to clarify uncertain conflicting research findings. Regardless of the job satisfaction theory utilized, researchers normally agree that environmental conditions (e.g., interactions with leadership, position obligations, and total compensation) and personal attributes (e.g., individual intellectual and attitudinal attributes) are essential job satisfaction influencers for public school teachers (Koedel et al., 2017).

The theoretical framework focusing on the other aspect of this research, the student achievement side, was similarly complicated. With student measurements and

achievement differing by state, the researcher decided to focus on the ACGR as the cornerstone of student achievement, meaning that the data compared had basis on the student graduating on time with a high school diploma. A typical high school education prepares students to positively participate in society, nevertheless, approximately 1 in 5 high school students do not graduate within their four-year period because of individual, family, school, peer, and community issues (Zaff et al., 2017).

In this chapter, the researcher conducted a literature review to investigate the relationship between tenure and its effects on job satisfaction and student achievement. Issues pertaining to public school teacher quality, in comparison with promotion, tenure related issues, student growth measurements, and academic matriculation comparison to tenure were left out of this research, as the quality of the teacher does not form part of the scope of this study.

Tenure

Tenure was quite often misunderstood and politicized as a strain on public education. However, its effects are both positive and negative as demonstrated by recent scholarly materials (Hill, 2009). Tenure affects not only teachers' performance, but also their perception towards teaching as a career especially before and after tenure. It was one of the only policies that impact the employee's efforts to achieve status, but it was a bad incentive as it focuses on the initial motivation instead of continued motivation, learning, and job growth.

The main intention of tenure during inception was to defend/ protect teachers who demonstrated astute acumen and skill from arbitrary and retaliatory termination. However, critics have highlighted their concern in the assessment approach of the tenure;

assessments are superficial and rarely display whether the teacher does or does not possess the correct acumen or prerequisite teaching skills. Loeb et al. (2015) discussed tenure reform in New York City that resulted in fewer teachers being promoted to tenure status, those who did not receive tenure were granted extended probationary periods as an opportunity to demonstrate the correct acumen and effectiveness needed to be granted tenure.

Legislators have taken critical measures inclined toward positive effects on student achievement, mainly utilizing state assessment results to weigh public school teaching personnel decisions. The two government programs designed specifically to tackle the student achievement issues are Teacher Incentive Fund and Race to the Top. Both programs urged states to combine teacher performance to compensation, contract renewal, and teacher tenure. Theoretically, the programs appear simple to implement; however, the implementation was complex and statistical in nature as there was no standardized measure for teacher performance (Goldhaber et al., 2012).

The effort by the legislators led to several public-school teacher strikes with the intention of gaining attention from policymakers on the decades of underfunding in the public educational system along racial lines. States like Maryland, where Baltimore City Public Schools are, had been in violation of their constitutional definition of adequate funding since the Jim Crow era where minority communities' paid taxes but were not a part of the education funding constituents. These strikes led to the Baltimore Teachers Union arguing for increased public school teacher salaries and district funding, which led to the agreement of a new union contract that included merit pay (Shiller & Caucus, 2020).

Several public-school teachers who were a part of the Baltimore Teachers Union did not agree with the merit pay addition and ended up creating their own movement to combat such. This led to the realization that some public teacher unions can negatively affect teacher well-being, job satisfaction, and retention. According to Han (2019), many public-school teachers join unions for job security and end up in situations where collective bargaining was never or rarely available and decreased teacher compensation occurs, which causes the weakening of teacher unions (Han, 2019).

Most public-school districts constantly face 10 common challenges on an ongoing basis affecting both students and teachers. The challenges are: (a) political, (b) state testing, (c) ethical issues, (d) district funding, (e) qualified teachers, (f) education diversity, (g) student demographics, (h) student disciplinary issues, (i) curriculum and instruction, and (j) student socioeconomic status. All these challenges affect public school teacher job satisfaction and retention as they relate to the overall well-being teaches and student performance (Trevino et al., 2008).

Kersten (2006) explained that public school teacher tenure authority resides directly with the states individually based on their state legislation causing each state's promotion and tenure process to vary from the others. The foundation of the legislation was the guaranteed right to employment until the teacher agrees to a new contract, retires, was terminated for cause, resigns, or dies. This requires public school districts boards of education to provide each teacher with fair due process and provide substantial evidence that the teacher was more than just a below average performer to be terminated.

In June 2014, the court case of *Vergara v. California* was a state court case that struck down public school teacher tenure and seniority laws as an infringement of the

California state's constitution. The *Vergara v. California* decision came at a time when several states were passing Race to the Top program legislation that weakened the concept of tenure while some tried to eliminate it (Kahlenberg, 2015). This was a lawsuit filed by public school students in California against the State of California, including some state officials, seeking to declare some provisions of the state education code unconstitutional. During the proceedings, the plaintiffs argued that the use of tenure seniority as a determinant for promotion, tenure, and termination for kindergarten to 12th grade public school teachers violated California constitution's promise that all citizens enjoy the "equal protection of the laws" (Superfine & Thompson, 2016). The *Vergara v. California* 2014 decision was groundbreaking because it reaffirmed the constitutional and fundamental right that every student could learn from effective public-school teachers and had the equitable right to succeed in a public-school environment. However, it was imperative to note that the decision did not state that tenured public-school teachers were not providing equitable education, rather it decided that the quality of the education the tenured teacher was teaching should meet the state constitutional standard (Paige et al., 2016).

Several parties appealed the court decision, and in 2016, the high court reversed the ruling. The high court based its reversal on the plaintiff's failure to establish that the confronted statutes violated equal protection, understandably because the plaintiffs never showed that the statutes caused certain groups of students to receive an inferior quality of education in comparison to the education received by other students. Irrespective of the court reversal, many believe this will lead to the employment, promotion, and tenure of ineffective teachers (Rowland, 2015).

Implications of Tenure

Tenured teachers are not subjected to job termination or any substantial reduction in employment status until they resign, retire, or the educational institution exercises its rights in confirmed cases of adequate reason, medical incapacity proven by a doctor, institutional financial pressures, or discontinuation of an instructional department.

Educational institutions extend tenure to approved and esteemed members of its teaching faculty. In a university setting these faculty are tenured track individuals who apply for such appointments upon employment and meet the minimum degree requirements.

Awarding a teacher tenure implies a commitment by the educational institution to the performance of the teacher. Henceforth, the teachers granted tenure create an equally loyal commitment to the educational institution, their colleagues, and the students they serve. Also, being awarded tenure carries an expectancy that those granted tenure are proficient in their disciplines and are capable of valuable contributions to the school district (Van Alstyne, 1971).

The implications of promotion and tenure are extremely competitive, and they are usually sink or swim environments. Either the public-school teachers have good and standardized testing performance, or they start sinking because their hard work and ability was tied directly to student achievement. Those who are sinking may feel unvalued and defeated when their students do not achieve well on standardized tests. However, this does not show the true value of public-school teachers as some teachers may be very capable individuals who are in a bad environment with stressors that prevent them from having the equal opportunity to swim like their peers (Knight, 2010).

Ceci et al. (2006) argued that tenure was one of the main components leading to academic freedom, including free thoughts, teaching controversial subjects, and challenging the status quo without fear of termination. Public school teacher tenure was a heavily debated topic and more often deeply politicized. The substantial political focus on public school teacher tenure was often viewed through a top-down lens applied by states, which ignores the potential of pre-service teachers. Pre-service teachers who are working towards a career in the classroom are sometimes scared away from the career because of the demands of tenure achievement, accountability, and the path towards progress (Thompson & Dentino, 2016).

One of the strongest implications of public-school teacher tenure was the documentary *Waiting for 'Superman'* (Guggenheim, 2010), a 2010 film that criticized the public education system and followed several students while they worked to be accepted into charter schools. Charter schools are public schools of preference; they compete for the same funding as public-school districts but do not have as many regulations compared with the district public schools. The documentary highlights different aspects and implications of public-school teacher tenure, it even examined the inability to fire a teacher who was tenured. The documentary exuded the theory that student achievement was not dictated by socioeconomic status, education of parents/guardians, or neighborhood class, but more so the ability of the educational institution they attend (Gerstl-Pepin, 2015).

Termination

In an educational institution, a tenured faculty member's termination was subjected to but not limited to incompetence, medical incapacity, and program

cancellation. Continuation of academic tenure requires maintenance of continued annual performance pursuant to district standards. Failure to achieve standards was a primary reason for disciplinary procedures. Dismissal for cause only happens after proper due process, investigation by the administration, recommendation hearings, and the board of education's decision based on the findings. Medical incapacity was the inability to perform one's duties and responsibilities as described in their contract based on their medical condition. When the discontinuance of a program, class, or specialty happens, administrators usually attempt to place the tenured faculty member in another program, class, or specialty. This may result in the tenured faculty member adapting to the new environment and/or may result in the faculty member leaving the institution as more than likely the status of tenure would not be transferred (Van Alstyne, 1971).

Terminating a public-school teacher who had achieved tenure was a tough process that requires due process. Under the law, tenured teachers who have taught continuously for a given duration and had their contracts automatically renewed annually essentially have tenure (Kurtz & Maurice, 2018). There must be a specific cause for termination, even though it will still go through a due process termination procedure. Any misstep by the board of education throughout this process may result in the nullification of the process and the need for a repeat process again. Teachers have a right to the due process, meaning they must have a hearing and go before the board of education or an impartial panel, and a counsel should represent them. Research shows that there are only a few reasons for termination of a tenured teacher, including inefficiency, insubordination, moral misconduct, medically, the elimination of their position, and sufficient cause (Gentry & Stokes, 2015).

Not all administrators are competent enough for adequate evaluation of teachers, especially since many of them have never set foot in the classroom. In some cases, teachers fired from the classroom proceed to become administrators in other districts implying the possible incompetence of some administrators in handling teachers. Resultantly, tenure came to protect teachers from both inside and outside environmental influences, involving but not restricted to angry parents, bad administrators, micromanaged school boards, and other teachers. To improve student achievement, teachers must make decisions, which some may not agree with. Tenure safeguards teachers who speak up as well as from intolerances, discrimination, and other forms of prejudice (Hyon, 2011).

As many criticize, tenure systems protect ineffective teachers, which, in turn, only make the students suffer with a lack of achievement gained. The process of removing an ineffective teacher was not simple and may take a long-drawn-out process to replace them with someone effective. While excuses do not solve the problem of ineffective teachers, the administration itself can sometimes become ineffective in properly hiring the right teachers for the job (Karp, 2020).

Problems Associated with Tenure

In the western states, a teacher usually starts with a probationary period of employment and can gain tenure after three years of effective performance. Unless they achieve tenure status, the teacher loses their chance to teach in the school system. Teaching was an art and not simply a practice; thus, most teachers need more time to hone their skills and learn their craft before being effective in class to a point of student achievement (Jacob, 2011).

It was a dream that every public-school teacher who meets the requirements for tenure will receive it. Not everyone can receive tenure. In, fact one of the reasons why some teachers do not get tenure was because they are not showing great standardized test scores or improving student achievement, which this may not be of any fault of their own. It was only possible to get tenure if the teacher was realistic about their ambitions, aptitudes, attitudes, school environment, and the requirements (Perlmutter, 2018).

Having tenure and more employment experience usually justifies the teacher receiving higher wages, and more job satisfaction but does not justify the teacher retaining their positions. Some public-school teachers still leave their position even with tenure due to factors including but not limited to low wages and benefits, not satisfied with job, management issues, environment, and advancement opportunities (Totenhagen, et al., 2016).

While the problem of removing poor performing teachers should rest on the administrators and not the law, there must be guidelines for administrators in the process (DeMitchell, 1995). According to the state Department of Education records, only 52 tenured teachers were terminated statewide because of bad performance and evaluations over the 10-year period of 2000–2010. With more than 20,000 teachers evaluated each year, the satisfactory evaluations were 98–99%. Many teacher evaluation systems fail to separate the effective from the ineffective teachers (ODE, 2013). The performances of tenured teachers are documented, but they have not been analyzed and collated into a performance report over the same period. Performance record of hired and tenured teachers during 2010–2011 was archived in Department of Education’s confidential records.

Proposals for Revising Tenure

The most important suggestion to improve student achievement, the tenure system, and effective teachers was to improve educational training for all teachers. Developing apprenticeship programs would allow new teachers to work under effective and tenured teachers thus learning their craft and increasing the quality of their work. Teacher evaluations need improvement from the current process done by the principals in a peer roundtable format. Specialized teachers, including those with special education certifications, deserve handling with a certain amount of respect as they are teaching in a tough and unfriendly environment. All administrators, including those ranked as assistant principal, must be professionally trained in the process of evaluating, assisting, and/or mentoring teachers. The administrators must also learn how to motivate teachers around outside influences, such as politicians who use the public education system to gain buy-in voters for their cause. Reform needs formulation for the betterment of the students not for political or monetary gain (Weiser, 2012).

Job Satisfaction

Wagner et al. (2013) studied occupational stress hazards for early childcare educators throughout a range of early childhood education environments. The educators answered questionnaires concerning apparent stress, their educational background, and work environment. The researchers attempted to address a gap of understudy within the literature and provide some current data involving the experiences of the working group. The findings indicated that early childhood educators who were married with an established support system and no children of their own were less stressed. Early childhood educators who employed problem-solving skills, felt secure in their job,

experienced higher job satisfaction, and reported feeling less stress. In a sharp contrast, the early childhood educators who participated in avoidance coping mechanisms while working full-time and expressed feelings of exhaustion and/or frustration more than their peers. The conclusion from this research drawn from the findings, in the framework of workplace interventions, decreasing perceived stress factors was beneficial toward increasing employment and retention of quality early childhood educators. The idea of job satisfaction was based on an individual's approach about work responsibilities and its connection to employee job motivation (Vroom, 1967). The basis of the job satisfaction and job dissatisfaction theory based on the study of accountants and engineers (Herzberg et al., 1959).

Herzberg et al.'s (1959) idea of job satisfaction established two distinct defining factors that influenced employee job satisfaction and dissatisfaction. The first defining factor are called, motivators, which identifies the characteristics that lead to job satisfaction. The second defining factor was called, hygiene, which leads to job dissatisfaction. Motivating defining factors of job satisfaction consists of recognition, achievement, enjoyment of work, and their interest in their duties. Hygiene defining factors of job dissatisfaction included low pay, no job security, bad working conditions, unfair policies, and negative leadership with peers and supervisors. This research referred to motivating defining factors, intrinsic and hygiene defining factors, and extrinsic factors (Herzberg et al., 1959).

The literature analysis done also focused on academic work dissatisfaction and educational management practices. Fredman and Doughney (2012) examined work perceptions by Australian academics with established emphasis within the context of the

global debate on the academic profession. A survey was analyzed in the context of academic work satisfaction, corporatized managerial practices, and neo-liberalism. The four factors analyzed as motivators of job satisfaction were: (a) leadership culture, (b) individual workloads, (c) rank or title, and (d) productivity. The researchers found job satisfaction among academics was decreasing with bad leadership being the defining important factor. The study also revealed that academics' job satisfaction increased along with productivity when they had direct control over their workloads and development.

Wininger and Birkholz (2013) examined college instructors' utilization and apparent value of sources and instructional feedback. The sources of feedback include student ratings, curriculum specialist, responses from students, self-assessments, self-observation, and peer observations along with peer coaching. Results uncovered self-assessments were utilized as the highest used source for instructional feedback, and surveyed feedback from students was considered the most useful feedback. The researchers also reinforced job satisfaction correlation with basic psychological needs.

Jones (2013) studied the impact of fragmentation of academic work in Canada. Horizontal fragmentation refers to the segmentation of the profession into disciplinary populations accompanied by the increasing involvement of student populations and non-resident educational professionals actively involved in the academic profession, such as supporting instruction and student learning. At the same time, an increasing occurrence of vertical segmentation of academic work was occurring within academic institutions as more contract university teachers join employment while faculty unions protect the traditional tenure model. Jones found that full-time teachers have higher degrees of job satisfaction along with being well compensated, productive scholars in their field.

Abu Taleb (2013) examined job satisfaction levels of early childhood educators in correlation to work related elements and socioeconomic variables. Abu Taleb analyzed the age, marital state, educational attainment, environmental satisfaction, co-worker relationships, student's behavior, and parental involvement as defining factors affecting overall job satisfaction. Abu Taleb found an elevated concentration of satisfaction with the classroom environment and relationship with the school, but just an average satisfaction level with working conditions, parent participation, and children's social behaviors. Additionally, significant correlations can be found between the teachers' individual perceptions and job satisfaction. Suggestions made included a need to regulate working conditions in the private sector among early childhood educators in accordance with standing policies that encourage teachers' job satisfaction.

Pretsch et al. (2012) started with understanding the resilience concept, earlier disparaged as merely a reflection of the absence of neuroticism, basically the absence of negativity defined as: (a) anxiety, (b) self-doubt, (c) stress, and (d) etcetera. The researchers challenged this concept and attempted to provide evidenced based research to show that resilience could forecast a teacher's job satisfaction outside simply neuroticism. The researchers expected resilience not to play the same role in non-teaching employees given that it was a prerequisite for the teachers only. Teachers' completed assessments focused on levels of well-being, resilience, and neuroticism, with the characteristics of well-being, including general perception, stress, job satisfaction, and any physical illness. The results demonstrated resilience as a stronger indicator of well-being than neuroticism in teachers; however, in non-teaching employees, neuroticism was

a better predictor than resilience. It was worthwhile to note that specific occupational stressors for teachers could explain the results.

Van Maele and Van Houtte (2012) focused on determining trust levels of teachers and faculty members as it related to job satisfaction. Data analysis exposed a positive correlation between trust in teachers from students, parents, peers, principals, and job satisfaction, highlighting the social dimension found in teaching. The research concluded that after improving the quality of teachers' workplace social relationships would enhance job satisfaction.

Banerjee et al. (2017) examined the connection between public teacher job satisfaction and student achievement utilizing the Early Childhood Longitudinal Survey, which found that public school teacher job satisfaction had a positive correlation to the growth of student achievement between kindergarten and fifth grade. The researchers argued for educational reforms that emphasized improving teacher job satisfaction and school culture as it interactively affects student achievement.

Teacher job satisfaction was a crucial and affective understanding of working environments and as an essential predictor of teacher attrition. Teacher evaluation tools used to measure teacher quality have been a main source of public-school teacher stress in current years. There was an increasing body of research on the best approach to evaluation of public-school teachers while supporting growth and development as educators. The 2018 TALIS showed an optimistic connection among the perceptions of an encouraging teacher evaluation experience and public-school teachers' performance. Many teachers felt their evaluations led to constructive changes in their curriculum,

instruction when their primary evaluator was a fellow public teaching peer versus their principal (Ford et al., 2018).

Teachers' work environment and job satisfaction are crucial factors affecting job retention, attrition, and loyalty. Tentama and Pranungsari (2016) found that teacher job motivation was more of a factor influencing commitment to their field than teacher job satisfaction. Arifin (2015) indicated that teacher job satisfaction correlates positively and significantly to teacher competence, job motivation, teacher performance, and organizational culture. The connection between a public-school teacher's impression of self-efficacy, job satisfaction, autonomy, and student engagement positively correlated with student performance and prevented job burnout (Sokmen & Kilic, 2019).

Demir (2018) suggested that the organizational environment of the school and the district plays a stronger role in teacher retention than previously known. Demir further stated the role of organizational commitment was a facilitator between a constructive school environment and teacher job satisfaction. Van Dat (2016) agreed with this argument stating that public school teacher self-efficacy and job satisfaction was the outcome of a supportive school environment.

These studies concluded that a teacher basic quality of life had a tremendous effect on their job satisfaction and job retention. One of the most contributing factors was the teachers' working environment, which included: (a) their compensation, (b) their relationship with their coworkers, (c) their relationship with leadership, and (d) their apparent stress factors. The findings indicated that teachers who are valued, adequately compensated, and have a supportive work environment felt more secure, less stressed, and satisfied at their jobs.

These studies exposed a clear discovery that the educational work environment of schools was associated with teacher job dissatisfaction. The listed characteristics of teacher job dissatisfaction provides a basis for changing the educational work environment of schools to ensure more continuous career satisfaction for teachers. The research argued that high quality teachers need high quality educational work environments to adequately nurture student achievement.

Job Retention

Mehta and Hull (2013) examined the fundamental construct authenticity of a teacher's professional development profile, which measured a teacher's instructional procedure with technology within the classroom. Reactions from across the United States assessed to factor composition of the instruments' use on confirmatory and exploratory analysis. The researchers recommended preserving a five-factor resolution compared to the Minimum Average Partial test three-factor solution. In this study, both experimental factor and confirmatory factor analysis were revised to hypothesize factors composing of elements that did not cover or precisely measure professional development characteristics to be evaluated.

Eckert (2013) focused on the inequitable allocation of teacher in high needs areas. As the fiasco of teacher education curricula have lately become pivotal points in the argument of how to deliver a quality education to all students, educational reformers have responded to the fiasco by mandating standardized credentials for teachers in all subject matters with a real understanding of the meaning of these qualifications. Understanding that these standardized qualifications' measurements for new teachers in urban districts in

conditions of teacher efficacy and one-year retention does show that requirements do predict teacher self-efficacy to an extent but fail to predict teacher retention.

Johnson (2013) determined the proportions of the current problems facing deaf and hard of hearing students and proposed resolutions to improve the accessibility and effectiveness of special education programs. These solutions would instantaneously enhance teacher retention and instructional effectiveness of those who teach students with special needs. The efficient initial groundwork and ongoing support of teachers who educate students who are deaf and hard of hearing, along with other special needs, had always been a difficult and contentious undertaking. Adjustments in student demographics and educational environments mixed with a rapidly dwindling number and diversity of special needs educators who are prepared indicate that the field of special education was at a defining crossroad.

Devlin-Scherer and Sardone (2013) performed a study to examine the co-teaching form of career development available to faculty. The researchers examined team teaching to improve communication among teachers and students, to increase job retention and student achievement. The cooperation between two teachers that began with a training partnership, which expanded into co-teaching led to assessment of processes and outcomes of their instructional methods, curriculum development, retention, and co-writing.

A description of teacher retention formed a framework to nurture a discussion about the purposes and cost benefit analysis of investing in professional development for new teachers. Thomas and Goswami (2013) asserted that well-designed career development programs will support first- and second-year teachers to thrive in their new

educational environment. The researchers noted that school leadership should contemplate the length and regularity of such professional development programs, the requirements for satisfactory participation, how to establish comradery, along with the opportunities and impact for completing the program.

Chaden (2013) reflected on how tackling the critical role of teachers in an organization's retention efforts are enhanced by leveraging new recognition requirements concerning retention and student achievement. Understanding that all institutional approaches to improving student graduation rates must include teachers, as teachers deliver on the school districts' promise of educating the future. Teachers evaluate whether a student had exhibited adequate mastery of the subject at hand to advance to a next grade level.

Damasco and Hodges (2012) gauged perceptions of promotion and tenure procedures, processes, policies, and productivity requirements with the culture and climate as it relates to job satisfaction and job retention. For students, quality public school teachers mean the difference between a positive future and one that was potentially lacking. Ethical violations and teacher misconduct are the most likely reasons a tenured public-school teacher would receive an administrative contract non-renewal while teacher incompetence was the second most common cause of non-renewal of contract (Nixon et al., 2010). Frazier (2011) discussed the retention, promotion, and tenure issues faced by African American teachers. In his writing, Frazier highlighted the issues that teachers of color face with completely different world of issues relating to promotion and tenure compared with their non-minority peers.

Problems with Retention

Assessing tenure's effects on retention was a daunting task. Mafora (2013) stated that preserving quality public school teachers was a challenge for many school districts, particularly districts in rural areas. Mafora focused on determining factors that affected teacher retention along with teacher retention practices used by principals in addition to ascertaining the principals' opinions of their efficiency in overseeing teacher retention. Mafora also suggested rural schools have unique challenges, including their work environment, policies, procedures, and the overall socioeconomic factors of rural school districts, which tend to influence against teacher retention.

Ado (2013) examined the perceptions between teachers' expectations, their experiences, and the teachers' future career plans within the field. The literature details the match between circumstantial challenges and teacher anticipated experiences as they led to various career decisions. Bailes and Guthery (2020) explained the relationship between race and gender as its correlated with the possibility of advancement to school administrative leadership positions. Irrespective of having equal or comparable credentials of education and experience, constant research found that minority teachers, specifically those who are African American, more than likely will have a lengthier wait for promotion when compared with their non-minority peers. The findings also suggest that women teachers who even have more experience than their peers are less likely to be promoted to administrative positions.

Most minority public school teachers have displayed a perceived notion of perfectionism within their environment to achieve promotion and tenure. Jones (2016) broke down three aspects of perfectionism, which included: (a) personal high standards,

(b) self-order and discipline, (c) and ambition. Even though the three dimensions showcase flaws such as the gap between ambitions and abilities, the researcher suggested that dimensions of perfectionism can predict a teacher's commitment to their school or the educational career field. Yet, it does explain that fact that minority teachers will adopt and overlook difficulties and stay in chaotic environments just to maintain employment.

Job Stress and Teacher Efficacy

Collie et al. (2012) investigated the correlation between job satisfaction and perceived stress, workload, and sense of teaching efficacy. The authors investigated that the effects of a teacher's social emotional learning and the climate of their work environment within their school can influence three variable outcomes, such as job satisfaction, teacher stress, and self-efficacy. Along with job satisfaction and teaching self-efficacy, the researchers examined two distinct stress factors, student behavior and their workload. The defining factor from the four school climate factors examined within this study, a teachers' perception of students' self-motivation and behavior had the most influence.

According to Vesely et al. (2013), core considerations explaining teacher efficacy was summed up under the capabilities comprising emotional intelligence. The scholars' argument on this overlap in competence suggests that emotional intelligence preparation may also improve teachers' efficacy in the classroom and greatly decrease their stress and job dissatisfaction. This study on emotional intelligence showed promise in foreseeing instructive capabilities and positive life outcomes and contemplated the many stresses placed on teachers as well as the link to occupational stress, burnout, and decreased job satisfaction, irrespective of if the teacher was tenure track or not.

Research indicates that public school teacher efficacy shapes student achievement and was situationally specific to the student. Hammack and Ivey (2017) revealed that many public-school teachers have low teacher efficacy with significant differences as self-efficacy was based on different factors such as gender, ethnicity, classroom grade level, and whether the school was Title I or not.

Yoo (2016) discovered that public school teacher self-efficacy increased because of online career development as career development was a vital component to individual self-efficacy. Although researchers have recognized that the establishment of collaborative relationships of public-school teachers have been improving the quality of curriculum and instruction, teacher efficacy continues to be an overlooked topic in educational research. Exploring the correlation between teacher self-efficacy and the perceived collective self-efficacy of teachers demonstrated that school leadership was not a defining factor of overall teacher efficacy. The research revealed that an individual leadership capability was a more significant factor than collective leadership in improving teacher self-efficacy, validating the hypothesis of social cognitive theory between individual efficacy and collective efficacy (Ninkovic & Knežević Floric, 2018).

The four sources of public-school efficacy according to research are: (a) social persuasion, (b) physiological arousal, (c) vicarious experiences, and (d) mastery experience (Hoi et al., 2017). Enabling administrators to facilitate positive school cultures that cultivate learning environments create a greater sense of efficacy among teachers who turn perform better in their teaching profession. Stronger efficacy regarding the teacher's personal ability to teach unmotivated students gains more significance in a positively influencing school setting (Liaw, 2017).

Atalay (2019) concluded that prospective public-school teachers had mostly adequate teaching efficacy with diverging and converging learning styles, and not the less preferred learning styles of assimilating and accommodating learning styles. Zhu et al. (2018) explained that dimensions of emotional fatigue, depersonalization, and diminished personal achievement led to teacher lack of self-efficacy and burnout.

According to Seals et al. (2017), teachers identified external challenges, lack of resources, and organizational environment as factors that influenced their capability to focus on the needs of their diverse students. Garver et al. (2018) pointed to personal development significantly improving public school teachers' self-efficacy. Kasalak and Dagyar (2020) noted that teachers who view themselves as knowledgeable in their careers have higher self-efficacy, which reflects constructively on their job satisfaction. Teacher adaptability was emerging as a construct within educational research with its influence on teacher effectiveness with evidence that links it to public school teacher job satisfaction and student achievement (Loughland & Alonzo, 2018).

Factors Causing Teacher Shortage

Teacher Enrollment

The shortage of teachers had its roots in the media crisis of the past years that had caused a wave of attacks on teacher pay, unionization, and career security. This shortage was a very heated topic of discussion as administrators are currently filling classrooms with non-qualified or under-qualified teachers. Almost the majority of all middle school students who attend science classes, specifically the physical sciences, are educated by teachers who did not major in this respective field of study (Haag & Megowan, 2012).

Additionally, over a quarter of all middle school students in math classes are educated by teachers who did not specialize in the subject of mathematics. The most alarming was the incidences where a person was teaching students with special needs with no experience dealing with learners with special needs. Administrators are truly scrambling to fill seats and find someone who was interested in teaching these subjects.

Martin and Mulvihill (2016) discussed the apparent rising shortage of teachers in most public-school districts. Sutchter et al. (2019) highlighted the statistics of teacher shortage in public schools; the shortage in the year 2017–18 was approximately 112,000 teachers with an estimated 109,000 individuals uncertified to be teaching in their field during the 2017 school year. One of the most important issues challenging legislators was the staffing of classrooms with a quality and stable public-school teacher responsible enough to motivate student achievement. The recurrent issues of the public-school teacher shortage are a product of both the decline of pre-service teachers directly indicating a decline in the career field of teaching was a public school; and teacher attrition, meaning the rate at which teachers leave the field was notably high. Low public school teacher retention, high attrition rates, especially in low-income public school undermines the school environment and student achievement.

Podolsky et al. (2016) outlined five of the top factors that affect public school teacher attrition, including but not limited to: (a) compensation, (b) starting salaries, (c) cost of entry, (d) working conditions, and (e) management. Cowan et al. (2016) brought to light the systemic failure that was at the center of the national discussion on the teacher shortage; the shortage does not indicate historical examples of the source of and requirement for newly graduated public-school teachers. Based on a national level

statistic, only around half of new teaching graduating candidates get employment as public school teachers on an average basis. The situation was more devastating to minority teachers in low-income neighborhoods. Klimek (2019) indicated that the perception of stress, the environment, and other issues involved with teaching in a public school system does discourage graduating high school seniors and college graduates from contemplating the career.

Job Satisfaction

Teachers today experience low salaries, an increased amount of paperwork, state mandates, long hours, student/teacher ratio, lack of discipline with children, and unsupportive colleagues who are resistant to change (Weiser, 2012). Research had established the positive correlation between work engagement, teacher efficacy, and job satisfaction with a negative correlation to job burnout among new teachers (Hoigaard et al., 2012). Lee (2006) additionally expounded on the area of study by establishing job satisfaction to be tied to remunerative as well as non-remunerative incentives.

Approximately one-third or more of the 3.2 million teaching population within the United States could retire, leaving classrooms empty and deprived of their greatest asset, experienced educators. The lack of job satisfaction shows in the attrition rates among novice teachers that 1 in every 3 rookie teachers quit the profession within five years. This extreme loss of talent was a huge cost for many districts in recruiting and training expenses with the hidden cost being the effect the revolving door of new teachers have on the children (Keaton, 2012).

Recognizing the influence of leadership and leadership styles on job satisfaction and overall organizational success was important when hiring public school teachers. The

impact was so much that, Baptiste (2019) examined the role principals, and their leadership styles have on teachers and student achievement. The researcher explored literature in the education field and the correlation of leadership and the overall school environment. Exploring the commonalities that improve organizational effectiveness by focusing on two goals of teacher retention and job satisfaction, one cannot forget how influential principals are in determining these two factors (Bogler & Nir, 2015).

Master et al. (2018) exposed that while legislators and public-school leadership focus on recruiting and preserving high quality skilled teachers, the prerequisite of having high academic skills had a high likelihood that minority teachers will not be hired. In addition, the researchers verified the influence of the differences between the urban and rural public-school environment on student educational achievement (Wang et al., 2017).

Because of the continuous educational reforms proposed by legislation and public-school leadership principals, an intensified importance had been put on participative leadership as a method to improving teacher job retention and student achievement. On the contrary, this causes work stress intensified by the fact that public school teacher compensation assignment was made by their respective teacher evaluation systems. Although researchers have emphasized the relationship between public school teacher job satisfaction, retention, and student achievement, the capacity of comparative analysis in the educational field, exposing the connection between the impact of promotion and tenure on student achievement was limited (Benoliel & Barth, 2017).

Job Retention

One significant factor that affects both recruitment and retention of licensed teachers was the care environment. Although compensation continues to be a problem,

the care environment was a primary motivator for teachers in making employment decisions (Charles, 1998). Job retention was the rate at which employees continue employment compared with the number of employees hired (Mallol, 2003).

According to Mitchell et al. (2001), employees often depart for purposes unrelated to their jobs; on the contrary, employees additionally often stay at their jobs because of emotional attachments and their feeling of “fit,” both on the job and in their community. It was vitally effective to continue with retention strategies executed by organizations intending to preserve licensed teachers. After all, retaining staff was an important indicator of organizational effectiveness. A report by the Bureau of Labor Statistics estimated that the United States had an average employee turnover of more than 20% among registered nurses. Reports from educational organizations indicate a supportive workplace promotes satisfaction and retention of workers noted that the availability of teaching resources was one of the most critical issues facing organizations in the United States today.

Tenure Today

Today, the old challenge of navigating academia to gain tenure still drives the diverse talent pool to break down the barriers successfully. Most junior professors have a long-term strategic plan to achieve tenure through passion and dedication. Many times, these junior professors are guided by a support system that helps them gain tenure and secure career success (Hayes, 2012).

Even though the two different worlds still collide today, tenure track and non-tenure track, which both focus on increasing student learning, success, and completion, both different tracks work to increase student achievement. There was a divide between

the two faculties. As tenure track faculty focus more on increasing their subject knowledge in the rapidly growing world of academia, the non-tenure track faculty are usually too busy to focus on opportunities as they engage in teaching at numerous campuses or have employment outside of teaching. The smaller of the two tracks was of course tenure as they are needed to recognize the day-to-day reality of the institution, but non-tenure track teachers are the larger of the two populations (Kezar, 2012).

Job satisfaction survey data shows that it was vital to comprehend today's tenure track teachers. As institutions adjust the environment into a great work environment, they must understand the importance of attracting and retaining the best teachers. The best tenure track teachers can fit in leadership, uphold organizational culture, and undertake research that provides the university with grant funding. Without the opportunity to achieve these essentials for career growth and development, both pre-tenure and those who achieved tenure seem unsatisfied with their position (Benson & Trower, 2012).

In the K-12 educational systems, No Child Left Behind and Race to the Top have forced states to accept more authority over K-12 education, forcing the Common Core standard in some cases. The nation was full of cash strapped districts that lay off more teachers than needed, such as the local metropolitan district that laid off 250 at the end of the 2012 school year. Great teachers are feeling the wrath of districts being cash strapped as their careers are chopped down with the instant, swift stroke of a pen; even though teacher contracts are negotiable, they do not offer much relief (Cohen & Walsh, 2010).

Steinberg and Cox (2017) reported that public school leadership that were awarded more autonomy to oversee school operations while being assured greater district assistance showed evidence of improving school environments. Public school leadership

with this privilege were more likely to alter teacher career professional development, curriculum, and instructional strategies to focus more on student achievement than those with non-autonomous leadership.

Teacher Evaluation Systems

Downing (2016) pointed out the current practice where public-school teachers are generally evaluated based on the results of their teaching ability, essentially measured by how well their students achieve in the classroom, over their ability regarding how they go about accomplishing their job of teaching. In understanding the impact of teacher evaluation systems on public school teacher job satisfaction, the researcher evaluated the Ohio Teacher Evaluation System (OTES). Passed in 2009, Ohio House Bill 1, directed the Educator Standards Board under the supervision of the State Board of Education to recommend an evaluation model for review and adoption. This created the Ohio Teacher Evaluation System, designed to improve the performance of teachers and student achievement.

The OTES first implementation was during the 2013–14 school year. The OTES was a research-based evaluation system designed to be transparent, fair, and adaptable to the specific environment of the school district. Researchers learned that the OTES faces high levels of skepticism in its ability to improve teacher performance and student academic achievement (Kowalski & Dolph, 2015).

The challenge shifted to selecting the most suitable instruments and the best qualified personnel to assist with teacher evaluations, as some of those may not be adequately qualified. Ohio's system for evaluating public school teachers changed from an old framework of 50% teacher performance and 50% student achievement, such as

academic grade achievement. The new alternative framework took 50% teacher performance, 35% student achievement, and 15% alternative measures. The alternative framework focused on specific strengths and opportunities for improvement, as it relied on the two key evaluation issues, teacher performance and student academic growth (Bolyard, 2015).

Tuytens and Devos' (2017) findings suggest that principals believe in aligning public school teacher abilities to the performance expectations of student academic growth but with the use of multiple measures to adjust for the variables that best measure teacher performance including formative feedback for improvement. Often, results of evaluations come with little or no feedback or support for the public-school teacher to consider for improvement. Many of the teachers did not feel meaning or in command of their value-added model results and yet yearned for feedback regarding the scores. The lack of meaning and not receiving any feedback from leadership led to teachers feeling hopeless regarding future value-added model scores and public-school teachers not making meaningful changes based on the value-added model (Pressley et al., 2018). The success and or failure of public-school teacher evaluation systems essentially center on school leadership (Donaldson & Mavrogordato, 2018).

Student Achievement

Educational achievement gaps around the country observed show constant disparities in the measurement of the educational attainment and performance among the groups of students are the achievement gap between them. The subgroups divide the students into groups; particularly groups defined by their socioeconomic status, gender, and ethnicity or race. The educational achievement gap score basis was on a diversity of

metrics, including state standardized testing, grade point average, dropout rates, graduation rate, college enrollment, and college completion rates (Downey & Condon, 2016).

The Coleman Report, officially titled Equality of Educational Opportunity was a report authorized by the United States Department of Education, published July 1966. The Coleman Report reported that a combination of the student home, community, and school environment effect academic performance was the defining factor for achievement. The report by James Coleman and his colleagues, commissioned to serve evidence that school resources were the main culprit of low educational achievement of poor and minority children, was authorized by the Civil Rights Act of 1964. Instead, the Coleman Report discovered that disparities among public schools with median resources were not approximately as anticipated, as the impact of school resources on student achievement was moderate compared to the influence of the students' family environment (Jacobs, 2016).

Student educational achievement starts at an early age, as it was expected for early childhood education to support student literacy starting in preschool where children who participate usually have higher reading literacy than non-participants. The importance of motivating factors in promoting student academic achievements in primary school will highlight the self-esteem of students as they advance through the K-12 academic structure (Johansson & Myrberg, 2019). The undisputed fact that the objective of the Coleman Report, was in developing an educational system that provided equal opportunity to all groups, had yet to be obtained. Notwithstanding challenges with accountability systems with No Child Left Behind, the policy had been broadly

commended for uncovering the depth and breadth of educational disparities within the United States. As many states implement new educational accountability systems, there was an increasing fear that attention to the student achievement gaps in the performance of disadvantaged children had fallen behind the new public school teacher evaluation system initiatives that correlate teacher performance to student achievement (Hanushek, 2016).

With an increased focus on teacher quality in public school as an impetus to education improvement, one cannot deny the mental health factors that observe how dissimilar groupings of the school environment, student expectations, and student aspirations can influence student achievement and future goal of attending postsecondary education. Students with high goal aspirations and high expectations from their environment usually have a higher school achievement rate than their peers, especially students within a low aspirations and low expectations environment have (Khattab, 2015).

Blank's (2013) relative data on high school graduation rates indicated that many students are not well equipped in any of the STEM (science, technology, engineering, and mathematics) fields and the consistent achievement gap based on socioeconomic backgrounds of the students. Low academic achievement can lead to students having psychological issues that express themselves as depression or seeking attention, intertwining, and completely influenced by their socioeconomic status and family background (Park et al., 2018).

Academic research focusing on inequalities in public school education conducted regardless of the nature of the disadvantage includes: (a) low income, (b) bad family

background, or prior low academic status. These students have less access to quality educational opportunities to achieve academic success. Grouping these students together in a single school or school district, a low achieving school district almost guarantees they will have a lower access to essential resources and STEM opportunities, therefore widening the achievement gap between students of lower socioeconomic status (Smith et al., 2016).

Foster (2019) evaluated how grade level groups of public-school teachers contemplate the causes and strategies for improving student academic achievement and advancement. Foster found that public school teachers do not think they are responsible for low student achievement or advancement with instruction, but they more likely point to the student attributes such as behavior or even to external factors such as family background. This shows that public school teachers are not taking on the responsibility of student achievement or advancement, even though state evaluation systems are casually linking student achievement to their compensation. In a rapidly changing world, student achievement depends on the school's capacity to handle instructional needs to receive high scores on state standardized test (Mincu, 2015).

Graduation Rate

The ACGR was the number of students who matriculate on time and graduate from high school within a four-year range with a regular high school diploma, divided by the number of students in the cohort amended for the graduating students. The ACGR was first collected for the 2010–2011 school year and was a newly adopted graduation rate measurement. In, order to calculate the ACGR, the group was identified as the cohort of the first time ninth graders within a specific school year by adjusting this amount by

subtracting and adding any students who transfer into or out of the graduating class before the end of the year (Atwell et al., 2019).

With an understanding of the adjusted cohort graduation rate, the state of Michigan passed the Michigan Merit Curriculum as a statewide college-preparatory policy that began with the high school graduating class of 2011. The Michigan Merit Curriculum established a universal set of required credits to graduate while providing educators with a shared understanding of the student achievement metrics. Thus, providing a universal and common structured base for student achievement across all school districts within the state (Jacob et al., 2017).

While experiencing an ongoing high school graduation gap based on race, the state of Minnesota started accentuating the importance of contributing resources and opportunities to close this achievement gap in hopes of preparing young adults to be adequately prepared for success at the postsecondary whether that was college or career. Targeted mentoring and a supportive learning environment are the two resources that result in having students of color who participated in the program show an increase in retention and academic matriculation (García-Pérez & Johnson, 2017).

Loewenberg (2020) analyzed online credit recovery classes as a third option for students attending high school who failed a required class over the known options of either repeating the course the next school year or completing the course during summer school. High school students who failed a course could enroll in an online version of the class without delay and could quickly progress through required material earning the missing credit hours and improving their grade point average. Connecting more students

to opportunities by providing personalized learning experiences to a path to graduate and achieve a diploma was a lifeline credit recovery class offers to struggling students.

Many knowledgeable educators acknowledge that many students will not complete optional assignments, and its often those students who need additional support who will not seek assistance. Current research establishes that students who are struggling are less likely to seek assistance than others are which increases accountability pressures by public school teachers to employ strategies and practices to manipulate standardized test scores, student graduation rates, and other indicators that measure student success. These methods are described as “gaming,” where teachers act with their data reporting practices (Edwards & Mindrila, 2019).

Research Questions

The following research questions provided direction for this study:

1. How does the prospect of tenure and long-term contracts relate to teacher job satisfaction, and retention?
2. How do teacher promotion and evaluations affect student achievement and the adjusted cohort graduation rate?
3. How does a teacher promotion and evaluation system affect teacher performance and job satisfaction according to the Ohio Teacher Evaluation System?

Chapter 3: Methodology

Participants

This study did not require me to conduct any new research about tenure, job satisfaction, graduation rates, or student academic achievement. The researcher utilized archival data from TALIS – the OECD Teaching and Learning International Survey, the AGCR information from the NCES, and the latest student growth information from the Ohio Department of Education (ODE) Ohio Teachers Evaluation System (OTES). The primary role of NCES was to collect information related to education within the United States, along with collating, analyzing, and reporting completed indicators on the condition of education within the United States. The researcher utilized sequential exploratory qualitative design as a pragmatic philosophical approach to analyzing the TALIS study. The focus was on teachers as valued professionals, their working environment, job satisfaction, and their effects on student achievement and growth measures. The Teaching and Learning International Survey was a study conducted by OECD. TALIS was the only international survey that provides a voice to public school teachers and school leadership, the study itself relies on their expertise as professionals to self-survey accurately (OECD, 2018).

The researcher sought to understand if tenure had a positive or negative effect on student achievement, academic matriculation, and student growth measures. Given that absolute correctness on this issue was impossible, especially in dealing with such diverse leadership and ethical foundation backgrounds, it was understood that the research was also strongly based on fallibilism. The four core areas of this chapter are to: (a) define the research methodology of this study, (b) clarify the sample selection, (c) describe the

procedure used in collecting the information, and (d) provide a clarification of the statistical measures used to examine the information (see Morgan, 2007).

Instruments

The process of collecting data for this research study involved several instruments. An instrument was needed to evaluate and analyze teacher job satisfaction and its correlation to tenure. Another instrument was needed to evaluate teacher performance and its correlation to student achievement. While the final instrument was needed to evaluate student, achievement based on teacher job satisfaction, and their correlation to student achievement founded on the adjusted cohort graduation rate.

TALIS 2018 consisted of two volumes: (a) Teachers and School Leaders as Lifelong Learners and (b) Teachers and School Leaders as Valued Professionals. Both volumes were analyzed to evaluate teacher job satisfaction, compensation, and job retention, which was constructed through widespread examination of teachers on a large-scale survey first conducted in 2008. The TALIS 2018 survey was completed by over 260,000 teachers and 15,000 school leaders across K-12 grade levels in participating countries. The TALIS 2018 framework addressed many themes and characteristics related to the teaching profession and pedagogical practices. TALIS 2018 also touched on several characteristics and themes on the individual teachers which are discussed. The TALIS 2018 research team used the participants' responses to create a survey instrument to gauge job satisfaction, retention, attractiveness, and the overall level of fulfillment for full-time teachers empowering the researcher to test the validity and reliability of the data to be collected and evaluated (TALIS, 2018).

The OTEs was utilized to evaluate the effects of teacher performance and its effects on student achievement and how it correlates to student matriculation and state standardized test scores. Student achievement and growth was the academic growth a student achieves within a tested subject area and the students forward grade matriculation. While grade matriculation may be an issue for all demographics, the achievement gap was a greater difference for students raised in disadvantaged environments. Without supportive and nurturing teachers', the disadvantaged students from settings such as: (a) single parent, (b) poverty, (c) minority, etcetera, usually prevented the student from achieving.

The United States Department of Education started collecting the United States public high school student graduation rate data since the 2010–2011 school year. The ACGR was a collection of data from all 50 states and the District of Columbia, except for the Bureau of Indian Education Schools. State education department and agencies calculate the ACGR by identifying the “cohort” of the first-time ninth graders in a particular school year. The United States average ACGR for public high school students increased on the first eight years it had been collected, from 79% in the 2010–2011 school year to 85% in the 2017–2018 school year.

Procedures

Design

The reliability of these research instruments indicates that if results are steadily obtained, the validity will equate the measured results with the hypothesis being researched (Creswell, 2008). Since this study utilized multiple pre-existing datasets, the reliability and validity of TALIS 2018, NCES ACGR, and OTEs could not be directly

measured (Creswell, 2008) Yet each data set was validated during the next time the research collection cycle and not through regression analysis. The ACGR and OTES were both collected annually based on the national graduation rate and the state of Ohio student measurement numbers, while TALIS had been conducted on a five-year period each proven valid and reliable, which shows evidence of content validity (Creswell, 2008).

The sampling design of TALIS 2018 was unchanged from earlier cycles, in accordance with the OECD term of reference as a first stage random sample of 200 schools followed by a second stage random sample of 20 teachers within the selected schools. TALIS 2018 asked some defining educational qualification questions such as: How did you receive your first teaching qualification? In instances where the teaching participant did not have a teaching qualification, they were told to skip question five through six and continue question seven, which asked about the participants importance for choosing teaching as a career. (TALIS, 2018)

Because of the coronavirus pandemic, COVID-19, the 133rd General Assembly of Ohio made some temporary changes to the OTES. The temporary changes made to House Bill 197, House Bill 164, and House Bill 404 granted school districts flexibility around educator evaluation from the 2020 school year until the 2022 school year, this was considered OTES 2.0. The temporary changes prohibit the utilization of high-quality student data or any other student educational growth measures to measure student achievement attributable to a teacher for the previous mentioned school years.

Ohio's value-added system utilizes an innovative methodology Education Value-added Assessment System called the univariate response model (URM) was the model

approach for end of course, Ohio state test, and Ohio graduation test. The URM was a regression-based model, which measures the difference between the students' expected test scores for the subject and grade year versus their actual scores. The growth expectation was achieved when the student achieves the same amount of growth with the state average. The value-added model was utilized as the standardized foundation for comprehensive school improvement to raise the achievement of all students (Hershberg, 2005)

The TALIS and OTES data were examined against the ACGR for the state of Ohio from the 2015 school year to the 2019 school year to show the correlation between teacher job satisfaction and student achievement. The ACGR was used as an instrument over the averaged freshman graduation rate (AFGR) even though both measurements are the measurement of public-school students who achieve a regular high school diploma inside of their primary four years of starting high school in the ninth grade because of some key differences.

The first difference was that the ACGR only uses students who graduate high school on-time with a diploma within four years of enrolling in ninth grade and exclude those who achieve a general equivalency diploma or any other similar certification or equivalency; while the AFGR comprises any student, who graduates with a regular high school diploma during that school year. Another key distinction amongst the ACGR formula and the AFGR formula are: $ACGR = \text{ninth graders plus transfers in, minus transfers out}$; $AFGR = \text{eighth graders plus ninths graders, plus tenth graders divided by three}$ (McFarland, 2017).

Data Collection Procedures

The term “survey” was generally utilized for a research methodology designed to collect information from a particular demographic, or from a sub-sample of that demographic, and normally utilizes an interview or questionnaire design as the survey instrument (Robson, 1993). The underlying components of TALIS are: TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners, and TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals. TALIS volume 1 focused on how teachers applied their knowledge and acumen during instruction for best practices and continuous learning, while TALIS volume 2 focused on teacher jobs satisfaction, compensation, career advancement and development. The TALIS survey evaluates teacher experiences in several areas considered essential for early career success, including clarity of job expectations, their working environment, quality of life, job satisfaction, along with compensation, and benefits. The TALIS survey was essential to this dissertation research as the researcher made use of data already collected by TALIS.

The purpose of the surveys was to acquire personal information from participants, mainly about their careers, households, or social characteristics for the study (teachers, in this case). The use of sample surveys was an essential information collection tool used for collecting data from selected demographics. The use of these types of surveys was a widely approved useful tool when conducting social science methodology research (Rossi et al., 1983).

The use of surveys in research was a familiar concept in society to project trends and review issues. Researchers often use surveys to collect information for such things

as: (a) political polls, (b) consumer buying habits, and (c) any other reason where opinions or reviews are needed. The use of surveys had grown rapidly in social science and policy research, surpassing more established methods (Lehdonvirta et al., 2020). For decades, selected television viewers have participated in Neilson surveys, which are surveys designed to calculate approximately the audience of various television program for advertising and marketing purposes (Rossi et al., 1983). Such sample surveys consist of consistent methodologies intended to gather information by investigating methodically identified demographics. Social science researchers seldomly achieve resolutions without disaggregating demographics into various sub populations for defined results (Rossi et al., 1983).

O'Leary (2004) explained that there were distinctive advantages when using a questionnaire instead of an interview methodology. The first being that questionnaires were less costly and simpler to administer than a personal interview. Questionnaires tended to be group administered, and assured confidentiality to the participants. Robson (1993) suggested that mailed surveys were particularly efficient, even those that were electronically mailed, at providing information responses in a comparatively short timeframe at lower expense to the researcher. Today, the Internet allows researchers to send surveys through electronic mail and get rapid responses from participants. Considering this, the researcher chose three previously published descriptive research methodology survey instruments: (a) TALIS 2018, (b) NCES ACGR, (c) and the ODE, OTES, to evaluate the perceptions of selected teachers concerning the effects of tenure on their job satisfaction, retention, and student performance.

Data Analysis Procedures

The researcher utilized a mixed methods sequential exploratory design as a pragmatic philosophical approach to analyzing the data from the three data sets: TALIS, NES-ACGR, and OTES. The sequential exploratory mixed method research model was a methodology meant to blend qualitative and quantitative information collected and analyze the data in a series of phases (Creswell & Plano Clark, 2018). In the first series, the researcher defined the three data sets of qualitative data and then analyzed the data based on the qualitative content analysis method, which resulted in the researcher using descriptive analysis to explore the correlation between teacher job satisfaction, job retention and student achievement (Creswell, 2018).

The purpose of using a sequential exploratory mixed method design was to build a critical groundwork for answering the research questions with the quantitative data, which involves exploring necessary demographic and pre-existing variables to identify the larger impact of public-school teacher promotion and tenure influence on student achievement. The data was analyzed for influential themes that associate the premise of how promotion and tenure relate to student achievement and the ACGR. Once these themes were organized and identified, the survey categories were developed and identified to carefully review the information. Since this was a mixed method study, the researcher anticipated the multitude of data from the measuring of teacher promotion and tenure with student achievement. The multitudes and results are discussed further in Chapter 4.

Chapter 4: Results

Introduction

The researcher used secondary data extracted from TALIS, NES-ACGR, and OTEs. TALIS enumerates teachers and school leaders about their working conditions and learning environments at their educational institutions. The public high school four-year ACGR, which was the rate of public high school freshman who graduate on time with a regular diploma within four years of starting ninth grade for the first time from a cohort for the graduating class. The ODE OTEs framework was also used in the evaluation process.

The researcher utilized a mixed methods sequential exploratory design as a pragmatic philosophical approach to investigate the relationship that promotion and tenure have on public school teacher job satisfaction, seeking to expand promotion and tenure research in academia and explore the effects it had on student achievement by analyzing the data from the three data sets: (a) TALIS, (b) NCES ACGR, and (c) OTEs. The sequential exploratory mixed methods research model was a methodology meant to blend qualitative and quantitative information collected and analyze the data in a series of events. In this chapter, the analyzed results are reported, which will appear with little or no interpretation of the data major findings. Chapter 5 offers a discussion, interpretation, and limitations of the major findings results.

Demographic Characteristics

The average participant for the United States in TALIS 2018 was a female middle school teacher with a bachelor's degree or higher, with around 98% of all United States teachers having a bachelor's degree or higher as teaching was the first choice of

profession for two out of three participants in TALIS 2018. Around 90% of the teachers who participated in TALIS 2018 cited the opportunity to positively contribute to a child educational development and society overall as a major motivation to join the profession with 66 to 69% being female, as shown in Table 1.

Table 1

Comparison of Teachers in the United States Versus TALIS 2018 Participants

Teacher data	Percentage of sex	Age	Percentage completed bachelor's degree	Years of experience
United States	Female = 66%	43	98%	15
TALIS 2018	Female = 69 %	43	93%	17

Data Analysis

Research Question 1

How does the prospect of tenure and long-term contracts relate to teacher job satisfaction, and retention? Research question one used descriptive statistical analytical methods to categorize TALIS-2018 data into digestible categories to answer the research question. With every ISCED level, the same constraints for sample size and accuracy of estimates were determined. To allow for dependable evaluation and demonstrating, while allowing for some quantity of participant non-response, the minimum sample size was established at 20 teachers from each participating school. And a minimum sample size of 200 schools was to be drawn from the population of in-scope educational institutions. Therefore, the nominal international sample size was a minimum of 4,000 teachers for each ISCED level in which a country or economy participated (See Appendix A).

Table 1 shows that comprehensive data was available for all themes of TALIS-2018; themes and issues covered in TALIS 2018 include not only those addressed in previous research cycles but also new issues. TALIS 2018 addressed the following 11 themes and issues related to professional characteristics and pedagogical practices at educational institutional and individual levels.

Table 2

County Priority Ratings of Themes for Inclusion in TALIS 2018 ISCED Level 2

Theme	Average (OECD)	Average (in all countries)
School leadership	6.9	6.3
Teachers' instructional practices	6.7	9
Teachers' professional practices	6.7	6.7
Job satisfaction and teacher human resource measures	6.5	6.4
Profile of teachers' continuing learning and training	6.2	6.5
School climate and ethos	6.1	6.4
Attracting good students into teacher	5.5	5
Frequency of in-service education and training	5.3	5.3
Recognition, rewards, and evaluation of teachers	5.3	5.3
Motivations and early career experience of teachers	5.2	4.3
Satisfaction and effectiveness of in-service education and training	5.1	5.3
Teachers' working time	4.6	4.5
Education and qualifications of teachers	4.5	4
Initial teacher education and pathways into the profession	4.2	3.8
Teacher self-efficacy	4.2	4.8
Innovation	4.1	4.3
ICT in teaching	3.9	4
Adequacy of teacher supply, teacher shortages	3.7	3.2
Teacher attrition and turnover rates	2.9	2.8
Sociological composition of teachers	2.5	2.3

Note. Data retrieved from TALIS (2018).

TALIS 2018 had system-wide teacher questionnaire (TQ) descriptive statistics (mean and variability) which were focused on the main variables of gender (TQ01), age

(TQ02), and highest level of formal education (TQ03), while putting less emphasis on the type of education the teacher achieved (TQ04), the year the teacher completed education (TQ05), and elements included in teacher education (TQ06). Given the high priority of “Attracting motivated candidates into teaching” TALIS 2018 included new measure that were not in previous cycles as displayed in Table 3.

Table 3

Measures New to TALIS 2018

Measure	Theme priority	TQ item	Type of response
Motivation to teach	2.1.1	TQ07a, b, c, d, e, f, g	4-point scale
Teaching as first choice career	2.1.1	TQ08	Yes/no
Qualification pathway	2.1.2	TQ04	7-option choice
Qualification elements and preparedness	2.1.2	TQ06d, e, f, g, h, I, j, k, l	Matrix: Yes/no & 4-point
Teacher generation	2.1.3	TQ05	Numeric year

It was found that retention of public-school teachers in Ohio increased as shown in Figure 3. Compared to the United States as a whole, a higher number of teachers were leaving more each academic year as compared to the general average in the United States. Although teacher job retention data does not include new teacher supply data, a decrease in new teacher supply may contribute to teacher retention issues.

To combat retention issues throughout public-school districts, the state of Ohio developed a Grow Your Own program which provides local school districts the opportunity to engage their community in learning about careers in the education field to cultivate interest and basically build a pipeline of potential teaching candidates. While defining the role of teacher leader to include mentoring teachers, by providing teacher development and assisting school leadership. (Grow Your Own, 2021)

Figure 3

Teachers' Retention in the State of Ohio Compared to the Average in the United States

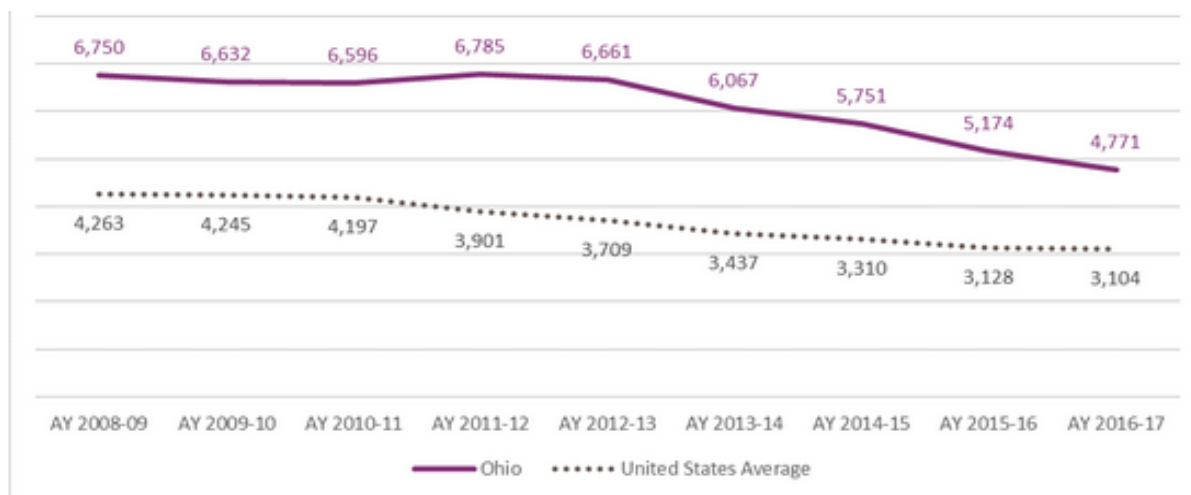


Table 4 shows some of the factors apart from salary, contract, and job security that contribute to teachers' retention. From the table, it can be deduced that there was a correlation between job satisfaction and professional development, cooperation of teachers, age, and years worked at the current school as an increase in job retention and satisfaction resulted from a .16 increase in the teachers' cooperation.

A regression analysis was a statistical process that was utilized to showcase the relationship between public high school teacher job satisfaction and retention with their reasoning or purpose for relocating to another school or school district. Table 4 list several explanatory variables including the professional development of teachers and the qualification status of their tenure or promotion.

Table 4

Regression Analysis of Different Variables in Relation to Job Satisfaction/Retention and The Desire to Move to Other Schools

Variable type	Variable	Satisfaction/retention	Desire to leave and move to another school
Working conditions	Professional development effectiveness	.115** S.E. = .011	-.061 S.E. = .055
	Cooperation of teachers	.16 S.E. = .016	-.242 S.E. = .075
Demographic of teachers	Science/math degree	-.004	-.018
	Age	.006 S.E. = .002	.014 S.E. = .013
	Female	.015 S.E. = .023	.105 S.E. = .098
Characteristics of the teacher's career	Qualification status and the years since then	-.006 S.E.= .002	-.016 S.E. = .014
	Years at current school	.006 S.E. = .002***	.018 S.E. = .011
	Permanency of the contract	-.017 S.E. = .046	-.031 S.E. = .2
The R ² =		.1	.05
Coefficient of determination			
N = Sample size		57, 681	57,380

Key: SE = standard error; *** = significant at 001

Research done by the Bureau of Labor Statistics deduced that using the median employment statistics, public high school staffs, teachers, and public elementary schools were paid a salary of approximately \$88,240 except the principals. It should be noted that payment of teachers, growth in the education system, and average salaries vary widely within the participants of TALIS 2018. The approximate range of compensation of employment with teaching in a public K-12 education system, as shown in Table 5.

Table 5

Approximate Range of Employees' Payment According to the K-12 System Per Annum

Title of the job	Salary range (in US Dollars)	Salary average (in US Dollars)
Teachers in high schools	31,000 – 66000	44,562
Elementary school teachers	28,000 - 63,000	42,111
Middle school teachers	27,000 – 57,000	38,536
Operations manager	33,000 – 81,000	52,104
Senior Business analyst	60,000 – 113,000	82,671
Senior Accountant	61,000 – 95,000	*Estimated
Senior education teachers	31,000 – 67,000	*Estimated

Teacher dissatisfaction with the lack of compensation according to TALIS 2018, showed that teachers were earning less than their counterparts in with the same academic qualification in the different fields. Teachers were less satisfied with the pay, and many professionals tend to shun away from joining the profession. Table 6 shows the curricular instructional time versus non instructional time the average teacher spent during the working week.

Table 6

United States Teachers' Instructional Time Versus Total Working Hours Compared to Other Countries

Country	Instructional time (hours)	Total working hours
United States	28	46
Chile	28	38
Alberta-Canada	27	47
Japan	18	56
Kazakhstan	15	49

The teachers' composite job satisfaction score, which made up the TALIS 2018. averages were composed of two subscales, teachers' job satisfaction with their work environment and the teachers' job satisfaction with their profession. The participants in

TALIS 2018 were also asked if they felt their profession of teacher was valued by society as shown in Table 7.

Table 7

TALIS 2018 Survey Teachers' Job Satisfaction and Happiness

Measure	TALIS averages	United States teachers' averages
Job satisfaction	90%	90%
Society's value of the teaching profession	32%	36%

Research Question 2

How does teacher promotion and evaluations affect student achievement and the Adjusted Cohort Graduation Rate? Research question two examined the relationship between teacher promotion, teacher evaluations, and the ACGR. Teachers' promotion was a candid step to motivate them and allow them to grow within their career path. Promotions are given depending on the performance of the teacher both in teaching and through personal and career development. Tenure and promotion are candid career advancement tools that motivate teachers to achieve growth in the level of education, for instance, a promotion from attaining an advanced degree.

In terms of the ACGR for the state of Ohio public schools and the averaged adjusted cohort graduation for the United States during the 2012–2013 school year, they averaged about the same with the state of Ohio having an ACGR of 82%, while the Unites States average ACGR was 81% as shown in Table 8.

Table 8*Public High School 2012–13 ACGR in The United States Versus the State of Ohio*

Location	Adjusted cohort graduation rate
United States	81
Ohio	82

With all public high schools within the state of Ohio reported their ACGR data from the 2014–15 school year until the 2018–19 academic school year, the state of Ohio averaged around an 82.5% ACGR for all five academic school years, respectively. Among all those five academic school years 2016-17 had the highest ACGR at 84.2%, with the 2014–15 academic school having the lowest ACGR. This growth can be attributed to the state of Ohio implementation of policies from Every Student Succeeds Act which was a 2015 rework of the No Child Left Behind Act under the Obama Administration. The policy changes from the changes in administration affected the adjusted cohort graduation rate, as shown in Table 9.

Table 9*Ohio's ACGR Per School Year*

School Year	Adjusted cohort graduation rate
2014-15	80.7
2015-16	83.5
2016-17	84.2
2017-18	82.1
2018-19	82

As shown in Table 10 TALIS 2018 identified professional development areas that served the purpose of supporting the professional development and growth of teachers throughout their career. More than 90% of participants attended at least one professional development activity within the last 12 months prior to the survey. More than 70% of

participants attended courses and seminars, while only 44% of teachers participated in training based on peer learning and networking.

Table 10

Identified Professional Development Areas in The United States Versus TALIS 2018

Professional development area	United States	TALIS average
Information and communication technology skills for teaching	10	20
Teaching students with special needs	9	24
Approaches to individualized learning	7	15
Teaching cross-curricular skills	6	16
Teaching in a multicultural or multilingual setting	6	16
Student behavior and classroom management	5	16
Analysis and use of student assessments	5	13
Communicating with people from different cultures or countries	5	13
Student assessment practices	5	14
School management and administration	4	9
Teacher-parent/guardian cooperation	4	13
Knowledge of the curriculum	3	11
Pedagogical competencies in teaching my subject field(s)	3	13
Knowledge and understanding of my subject field(s)	2	12

As shown in Figure 4, it can be seen how different teachers' salary was in average. Salaries of teachers from different areas in Ohio, including in rural areas, urban areas, suburban areas, small towns, and the state average was taken. The result indicated that an average teacher in Ohio earned almost \$60,000. Those teachers in the suburbs earned more than any other teachers averaging (\$70,955). Teachers in the rural area earned less, with an average of \$55,190 per annum. This clearly indicates why there was

higher variability in the satisfaction levels by the teachers. Similarly, mostly the disadvantaged students are from the rural areas, and the teachers there earn less than the others in urban and suburban areas and therefore, explaining why teachers in the schools that were disadvantaged were more dissatisfied. When the teachers compare themselves with the others, those with less salary become demotivated.

Figure 4

Average Salary Per Annum for Teachers in Different Regions

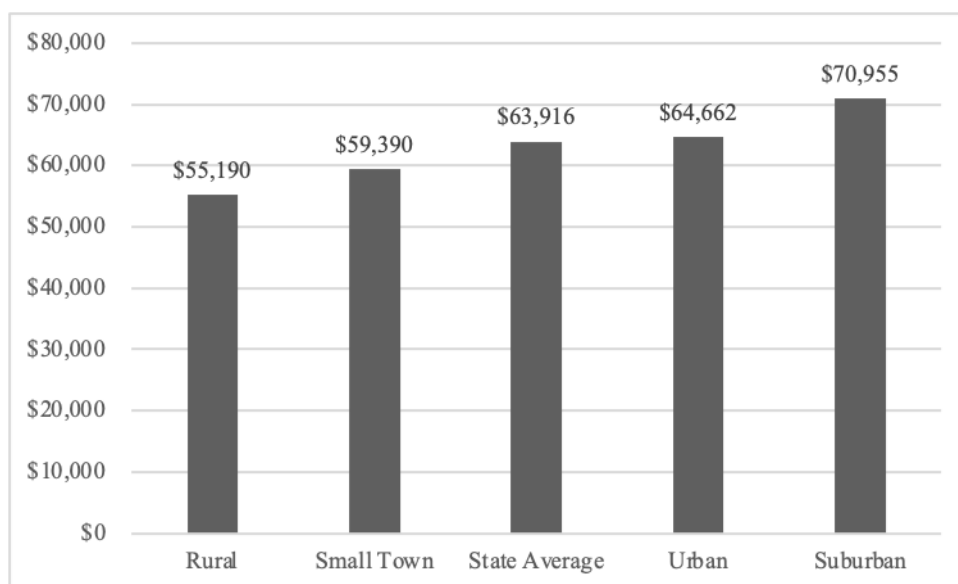


Figure 5 shows that for the 2017-18 school year the total United States average adjusted cohort graduation rate for all 50 states including the District of Columbia had an average number of public high school students throughout the United States who graduated among their adjusted cohort was 85% regardless of race and ethnicity. Even though American Indian/Alaskan Native had the lowest ACGR and African Students had the second lowest ACGR, their graduate rate is still higher than previous 2016-17 school year.

Figure 5

2017–18 Adjusted Cohort Graduation Rate According to Race/Ethnicity and Race for High School Students in Public Schools

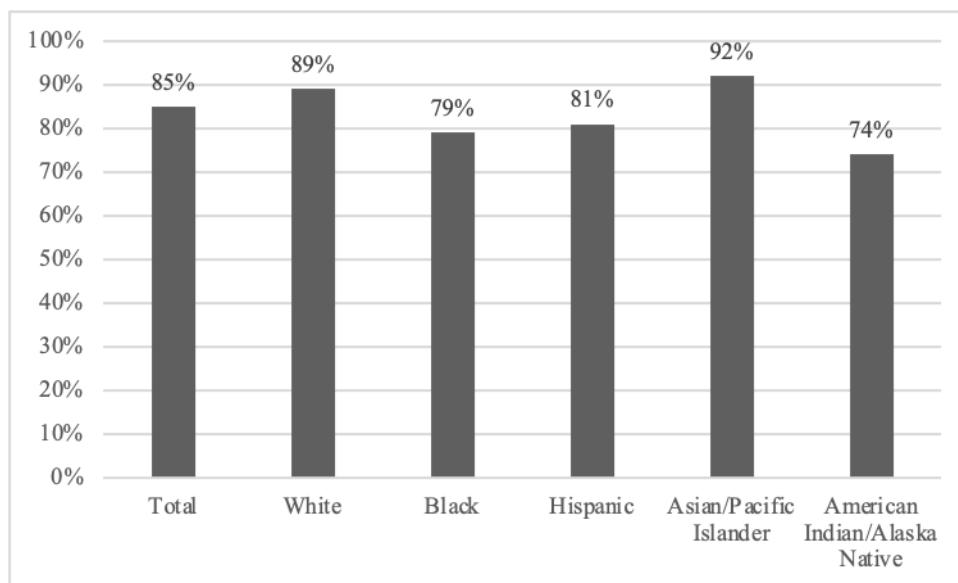
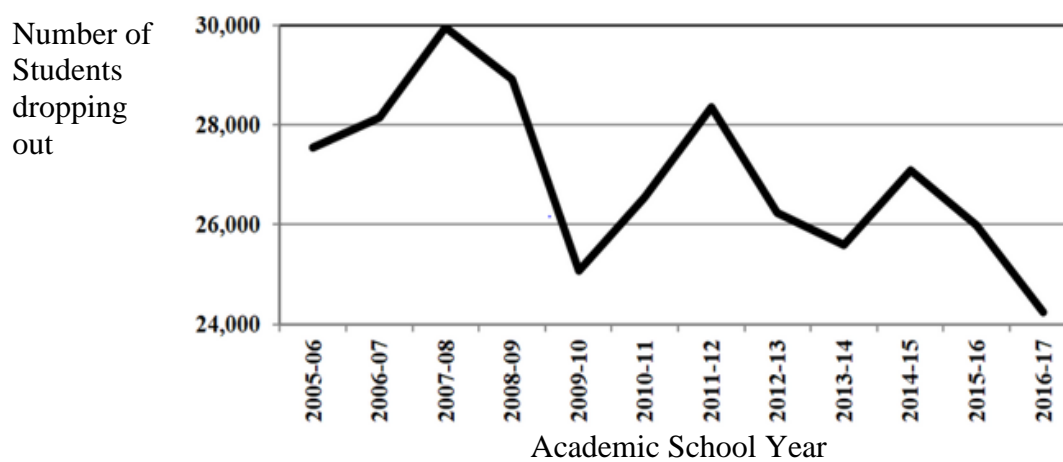


Figure 6 shows a trend of the dropout students for a dozen years, from 2005–06 academic year to the 2016–17 academic year. The dropout rate decreased from around 27,500 dropouts in the year 2005-06 to around 24,000 dropouts in the year 2016–17.

Figure 6

Number of Dropouts in Public Schools in Ohio



Research Question 3

How does the teacher promotion and evaluation system affect teacher performance and job satisfaction according to the OTES? Research question three considered the effects of the OTES.

The ODE stated that the OTES combined teacher performance and student growth measures to form a summative rating for the teacher annually as either ineffective, developing, skilled, or accomplished. Both frameworks, OTES 1.0 and OTES 2.0, included 50% of the teachers rating of their performance. While OTES 1.0 used student growth measures for the other 50%, OTES 2.0 used student growth measures for only 35% and added alternative components for the remaining 15% (OTES, 2020).

Beginning in the fall of 2018 the ODE reviewed 181 Ohio districts during the Educator Evaluation Process Review. Of the 181 school districts reviewed 58 were rural, 51 were small town, 36 were suburban, 10 were urban, and 12 were Joint Vocational School Districts, and 14 were Education Service Centers from the 2017–18 school year. The noteworthy findings for teacher evaluation systems changed drastically with the impact of the Coronavirus Covid-19 pandemic which resulted in the OTES 2.0 alternative framework.

Table 11 shows the job satisfaction of teachers in respect to different aspect they would like to enjoy. Statistically, there was no significant differences in the correlation between the different sub-scores of the satisfaction and even the overall satisfaction.

Table 11*OTES Impression, Performance, and Their Overall Satisfaction*

Measure	Supervision	Responsibility	Recognition	Security	Overall satisfaction
OTES impression	.21	.12	-.07	-.15	.14
OTES performance	-.1	.01	.15	.08	.01

Further analysis was done to see exactly which components of OTES played an important role in the satisfaction of the teachers. Similarly, the results showed no significant relationship between the components. Table 12 shows the aspect of satisfaction by the teachers in Ohio and its relationship to job performance. There was no significant difference between the sub scores, job satisfaction and the OTES performance as in Table 12.

Table 12*OTES Components and Job Satisfaction*

OTES components	Supervision	Responsibility	Recognition	Security	Overall satisfaction
Pre-conference	0	.02	-.22	-.08	-.13
Post-conference	0	-.01	-.1	-.01	.19
Student growth	0	-.14	-.06	-.06	.03

Summary of Results

The statistical analysis results from this study described how TALIS 2018 covered the theme of teacher job satisfaction and retention through frequently nominated indicators such as: (a) overall job satisfaction, (b) teacher perception of the value of their profession, (c) teacher perception of national and local education policies, (d) satisfaction

with compensation, (e) satisfaction with their working environment, and (f) teacher opinion about educational policies (TALIS, 2018).

However, statically significant predictors emerged when answering Research Question Three. As, the results also showed that the state of Ohio's ACGR, which calculates how many students are successfully finishing public high school a diploma within four or five years. Ever since 2010, the four- and five-year graduation rates have veered higher. The four-year graduation rate achieved a high of 83.4% for the 2016 graduation cohort and the five-year 85.6% for the 2015 graduating class. The state of Ohio graduation rate exhibited consistent improvement since the state began reporting four-year and five-year cohort graduation rates (ODE, 2018). Chapter Five contains an extensive explanation of these major findings, implications of the results, and recommendations for future studies.

Chapter 5: Discussion

Introduction

This final chapter provides a discussion of how public-school teacher long term contracts and tenure directly affected student achievement and the adjusted cohort graduation rate. The results from the descriptive and inferential analyses in this study provided useful information about the current compensation breakdown of tenure and long-term contracts for teachers, explained how compensation variables affect teacher job satisfaction, and how that job satisfaction correlates to the student achievement between 2013 to 2018.

In this chapter, a discussion of the results from this investigation of the research are provided along with a proposal for some alternatives to improve the ACGR by focusing on teacher tenure and long-term contracts to improve student achievement. The researcher also identifies implications for the future research into the correlation of teacher tenure and student achievement, exposing the limitations that arose from research, and gives a thorough conclusion on how to improve the ACGR.

Summary of Findings

Based on TALIS' study literature results, 82% of its teachers obtained permanent contracts. Out of this figure, 6% of the teachers were stationed for a fixed contract, which lasted more than a year. 12% of the number were set on a contract of a year or less. This was followed by good tenure through the efficient and quality setting provided to them. From the description, it was also evident that these teachers who were provided with quality services such as good offices, a comfortable working environment in school, and other infrastructure proved to be the most satisfying (Cheung & Lucas, 2016). A tenure

that emerged from the good-looking offices given to teachers also boosted the performance and enhanced content delivery.

Short-term contracts have become a risky element for the newly graduated young professionals attracted to joining the teaching profession. The younger generation seems to hold back their passions and shy away from the teaching profession, considering the elements of insufficient pay alongside other benefits (Cheung & Lucas, 2016). Eventually, such a generation becomes dissatisfied with the setting of the teaching occupation as compensation increases are much slower per annum as compared to other profession, with a growth rate of 3-10%.

Part timing stands out as a crucial strategy in enhancing the willingness and eagerness of teachers to join the profession. Staying in that profession as they explore the world and pursue other interesting careers and still teach part-time, the report revealed that teachers working part-time worked an average almost 32 hours per week. Out of these 32 hours, 17 hours are utilized in teaching, which consists of 55% of their time. This was found to be normal almost among all teachers in the profession revealing 53% in general educational instructional time spent. The prevalence and dominance in part-time employment contracts should therefore encouraged (TALIS, 2018).

OTES also enhances student performance since the evaluation process includes informal evaluation, both internally and informally, along with alternative evaluation methods as with OTES 2.0. Based on Ohio's Department of Education 2014 records, an alternative structure disclosed that teachers' performance and students' performance accrued majority of the formative assessment, a procedure done formally alongside

summative evaluation that was involved in advertising and usually accompanied by numerous external promotion components (Liang & Akiba, 2017).

Interpretation of Findings

According to these results, this was a positive increase from 2013 to 2018 in the ACGR for the state of Ohio. This implied that the students' performance was progressive, and teachers' promotion facilitated this. The report unveiled how the graduation rates among students were defined by student growth measures and matriculation through state exams and the instructions' intensity. The instructions given were also determined by the teachers' activeness, highlighting teachers' active involvement and participation through the promotions they were subjected to. These rules emerged as a form of motivation, thus improving participation. Since students revealed high performances based on the content delivery of teachers, they are more likely to pass their exams freely and end up graduating in large numbers.

The promotion of teachers serves as a vital element of motivation. On the other hand, the ODE website revealed that the system for evaluating teachers, also known as OTES, presented educators and teachers with an extensive and detailed view of their actual progress through performance. Through such presentations, teachers were also provided with a deeper insight and focus on specific strengths and opportunities for improvement (ODE, 2014).

Robinson et al. (2007) revealed that positive outcomes projecting improvements in students' performance were highly associated with the active participation of teachers alongside the promotion of the same teachers to enhanced positions. Robinson et al. highlighted a higher significance of .84 that emerged as an average effect size based on a

study on 17 effect sizes. These figures were calculated from the other six studies (Robinson et al., 2007). The significance exhibited that the involvement of leaders and educators in the process of participation mainly revolved around developments and staff growth. Such analysis, therefore, justifies the need for and importance of consideration and implementation of promotion, appointment, dismissal, and recruitment as the primary source for growing student participation.

Context of Findings

Based on the evaluation process by Ohio's Department of Education (2015), three essential things were determined with a growth plan of 44 professionals and 230 minutes of observation done by trained evaluators. All the corresponding evaluators were expected to assess and re-calibrate in two years. Numerous data sources were utilized in the evaluation process of teachers. Evidence was given by these numerous sources, which gave information based on an improvement plan, observations, professional growth. This reveals the essence of the evaluation system as a facilitator of teacher performance through giving the information above.

The purpose of this study was to investigate the relationship between teacher tenure, compensation and benefits, its effect on student achievement, and the adjusted cohort graduation rate as a foundation to understanding the value of teacher quality of life on student achievement. The results of the findings confirmed the correlation and showed that there was enough of an understanding to form a foundation that high quality teachers working in high quality environments produce higher achieving students. The findings were consistent with the theory that improving teachers' value as a profession will more than likely lower the student achievement gap.

Implications of the Findings

From the literature, those in the education field took intricate steps in determining how to enhance both the teachers' welfares, students, and the management for such ideas, including the government. The Teachers and School Leaders as Lifelong Learners report from TALIS 2018, emphasized how the importance of teachers of high value was universally recognized therefore meeting the teacher's hierarchy of needs was essential to student growth and achievement. Apart from that, their performance was also inspected, showing great concern for the theme of education. However, the report revealed that understanding how the same teachers are keenly considered through employee satisfaction in an overall working setting was not investigated deeply. (TALIS, 2018)

According to OECD report, Teaching for the Future: Effective Classroom Practices to Transform Education (OECD, 2011), the profession of teaching was more dynamic and challenging that it had previously ever been. Policymakers expect school leaders to hold teachers responsible for continuously adapting, developing, and innovating their teaching practices to meet the needs of the educational environment. Because teachers are the most vital school influence for student achievement, but many times lack the necessary resources and opportunities to nurture the accomplishment of these objectives, the policymakers are essentially setting teachers of for failure. The data demonstrated a direct relationship between TALIS survey participant salary and their job satisfaction with compensation and benefits. Participants' job satisfaction with compensation and benefits increases as their salary increased.

Limitations of the Study

The researcher used pre-existing publicly available secondary aggregated data that constantly evolve from multiple sources as instruments. The researcher assumed the validity and reliability of the data. The study was also limited by the perception of teachers and school leaders who self-surveyed their tenure, compensation and benefits, job satisfaction, working environment, and other surveyed characteristics.

As with any study as large as TALIS 2018, there are limitations. TALIS 2018 data estimates are subjected to two different types of errors: sampling and non-sampling errors. Non-sampling errors illustrate variations in the estimations that may be caused by population coverage constraints, nonresponse bias, and reporting procedures, processing, data collection, as well as measurement errors. An example of a non-sampling error was non-participation from many rural school districts resulting in biased data. Sampling errors arose in TALIS 2018 when a portion of a population was utilized to represent the population as a whole and was used to estimate statistics. An example of a sampling error was when the same population would likely produce somewhat different statistical estimates, resulting in sampling variance.

TALIS 2018 used the balanced repeated replication (BRR) method to balance repeated replicated errors. This technique of producing standard errors uses information from the sample design to create more accurate standard errors than would be produced using approaches that assume simple random sampling. BRR estimations of variance are fashioned from orthogonally weighted subsamples and can provide more accurate estimates from complex samples than any other method of balancing variables. (Cavin et al, 1990).

Future Research Directions

Future research in the educational field correlating teacher compensation and benefits to student achievement and the ACGR is needed to further investigate the possibilities of closing the student achievement gap. There was a plethora of research on educational reforms that emphasize improving teacher job satisfaction and school culture as it interactively affects student achievement, but the research was lacking the simple reality of applying Maslow's hierarchy of needs to the teaching profession. Applying Maslow's hierarchy of needs to improve the quality of life of teachers directly improves student achievement, which will focus the research more on the teachers need to be and feel valued in their profession.

Hale et al. (2019) examined how applying Maslow's hierarchy of needs as a framework for medical professionals can mitigate burnout and provide a foundational support for overall wellness. This framework can be applied to any profession, but like the medical profession where wellbeing directly affects their patients, a teacher's wellbeing directly affects student wellbeing and achievement.

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