

Psychological Study of 21st Century Occupational Stressors
and their Impact on the Music Educator

Jennifer S. Horne
900 Edgemoor Road
Cherry Hill, NJ 08034

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Micah Jones, Director of the School of Music
Elizabeth Sokolowski, Division Head of Music Education

The University of the Arts
College of Performing Arts
School of Music

Master of Music in Music Education

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JENNIFER S. HORNE

Approved as to style and comment by:

ELIZABETH SOKOLOWSKI

Division Head Music Education

MICAH JONES

Director of the School of Music

JAMES SAVOIE

Dean of Graduate Studies Graduate Studies

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Jennifer S. Horne, MM in Music Education, University of the Arts
Research Project Supervisor: Elizabeth Sokolowski

Statement of Purpose

The purpose of this impact study is to identify occupational stressors encountered in the field of music education. This philosophical and empirical study will uncover the physiological, biological, and emotional implications of said stressors on the music educator. This investigation will survey music educators to guide the discovery of trends in occupational environment and stressors.

Rationale

The music educator in the 21st century has a multitude of responsibilities that previous educators did not have. Many of these responsibilities lie outside the realm of education, and can require additional training, practice, and time. The field of education is changing at an unprecedented pace, and educators feel pressured to catch up to the latest technology standards (which have led to new requirements for communication, grading, and teaching techniques), to comply with more rigid teacher evaluation methods, and to cope with the loss of instructional time due to standardized tests, in addition to other stressors. These chronic stressors can have a psychological impact on the music educator.

This study seeks to uncover if stress can upset the neurological balance that allows for a music educator to function in their work environment to their fullest potential. Evidence collected by survey will determine if there is a correlation between heightened stress in the work environment and each of the following factors: years of formal teaching experience, subject area (general music, choir, band, orchestra), age range of students, number of students, geographical location, school district economic classification, and extracurricular responsibilities.

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CHAPTER 1:

Introduction

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experience, subject area (general music, choir, band, orchestra), age range of students, number of students, geographical location, school district economic classification, and extracurricular responsibilities.

Expected Findings

The result of this study will inform the reader of the physiological, neurological, and psychological impact of stress on the body, and left untreated, how “moderate-level burnout can quickly intensify, and a variety of serious and dangerous physical and psychological disorders may ensue” (Hamann 31). It is expected to find an obvious correlation between common workplace stressors, and use this as a baseline for stressors in the analysis of the data collected through a survey. These natural stressors are indicative of the work of an educator, and a part of everyday work life (such as paperwork, evaluation, dissension between administration and educator, etc.). The intent of this study is to uncover the correlation between 21st century stressors that were not present in the 20th century, such as an increasing emphasis on standardized testing (and the loss of instructional time for music teachers are a result), the increasing emphasis on the implementation of technology in the classroom, increasingly more scrupulous teacher evaluation methods, the diminishing music budget, and specific groups of teachers grouped by age, experience, location, and subject matter covered.

This study seeks to inform the reader of the risk of burnout in music education as a result of chronic stress, and through psychological research uncover viable solutions to help combat stress for the current and future music educator.

CHAPTER 2:

Components of Stress

Eustress versus Distress

Stress at its best can propel teachers toward greater creativity, innovation, and overall educational success. At its worst, stress can greatly shorten our lifespan and lead to death left unchecked. According to the Centers for Disease Control, stress contributes to the leading causes of death, and can have lasting and toxic side effects (Leading Causes of Death 1). Long term and chronic stress can indeed kill, but fortunately for us, not all stress is bad.

Stress falls into one of two categories, and can have different physical, emotional, and psychological outcomes. Good stress, or eustress, is the positive form of stress, while bad stress, or distress is stress in the negative form (Hedden, 58). Each individual experiences eustress and distress at varying levels each day, having either temporary or lasting effects on the stressed. Stress, whether eustress or distress changes the chemistry of the body, sometimes detrimentally.

In the world of education, we are subjected to both eustress and distress multiple times within a single class period. An example of eustress might be a teacher taking advantage of a “teachable moment” and momentarily guiding the class in a different direction than what is dictated in the lesson plan for the period. The teacher, after identifying the potential change in direction of the lesson, uses the temporary jolt of adrenaline provided by the eustress induced state, and makes the decision to take the

lesson “off script” for the benefit of the students. The power of eustress can be harnessed for truly amazing and spontaneous outcomes, both inside and outside the classroom.

Teachers also experience the damaging effects of distress on a daily basis. Exposure to distress can raise the teacher’s risk for “depression, burnout and psychogenic disorders” (Aquinas 163). In a recent survey of 5,000 Chicago teachers, it was discovered that “...teachers showed that they suffered considerable stress due to discipline problems, violence, perceived bureaucratic obstacles, and goal-achievement discrepancies” (Heller 43). An environment in which more stressors (i.e. a school district in which serious student disciplinary issues frequently occur) are experienced on a continuous basis will lead to an elevated level of distress amongst faculty.

Moreover, “musicians are considered to be in one of the five most stressful occupations – alongside health technologists, waiters and waitresses, licensed practical nurses, and certain inspectors” (Heller 43). “In addition, occupations requiring high levels of public contact and low levels of control –such as teaching- rank highest in stress” (ibid 43). Music educators inherently have higher levels of public contact than educators of other subject matter due to multiple public performances each school year. Music educators can therefore be perceived as being in a career that incurs higher stress levels.

In a study conducted by Dr. Irvin Sam Schonfeld, a professor in the Department of Psychiatry at Columbia University and The City College of New York, Schonfeld tested a sampling of educators in the New York City and Los Angeles Public School systems to find correlations between distress and CES-D (Center for Epidemiologic Studies Depression Scale). His findings, published in the *Journal of Psychology* titled

“Psychological Distress in a Sample of Teachers” were incredibly significant in terms of identifying and comparing levels of depression and distress in education versus the general populous. Schonfeld found that distress is related to level of job strain, and “that the level of job strain (frequency of ongoing stressors) is more closely related to psychological distress and low morale than episodic stressors” (Schonfeld 321). This study found that teachers are significantly more depressed than the average community members. In addition to this, the study on New York City teachers found that 11% of their sample obtained CES-D scores of 24 or greater, which is the mean score of a sample of psychiatric patients (ibid 329). Overall, 32% of the sampled teachers obtained CES-D scores in the range of 16 or higher (ibid 329), more than a third of sampled teachers were clinically depressed.

In his study on teachers in Los Angeles, Schonfeld found “the mean CES-D score was 15.6...a value about twice the mean scores obtained in the community surveys...it is likely that a little less than half the Los Angeles sample obtained scores of 16 or greater” (ibid 324). A score of 16 or higher is “considered clinically significant because it is associated with the increased risk of clinical depression...or chronic disturbance” (ibid 324).

In addition to the CES-D scores, the study found that 13.4% of the New York City teacher sample indicated that they were “very satisfied with their jobs”. “This contrasts with the findings of Quinn and Staines (1979) who found that 46.7% of a large representative sample of American workers indicated that they were very satisfied with their jobs (ibid 324). It was also found that job strain (distress) was more closely related to performance on the CES-D and the Psychophysiologic Symptom Scale than any of the

other factors. The Strain Scale was significantly related to decreased job satisfaction and marginally related to decreased motivation to remain in the profession. In short, this study found that teachers with a higher level of distress ended up more depressed. They are closely linked together, which results in teacher burnout/exiting the field of education. (ibid 331).

It can also be assumed that the level of stress and depression one feels in the field can not be accurately measured, due to "...the casualties have left their jobs before the stress researcher arrives on the scene" (333), and can therefore "be expected that the present study has under-rather than overestimated the distress experienced by teachers" (ibid 333). "Evidence compiled by Harris, Kagay, and Leichenko (1986) indicates that teachers who leave the profession often cite the stressful nature of the job as a factor affecting their longevity" (ibid 334). It is clear from this study that the level of job related distress a teacher experiences is directly proportional to their level of depression, and that both are higher than the average populous in terms of workplace distress and depression.

Acute Stress versus Chronic Distress

Consider the "fight or flight" (acute stress response) instinct, which is a prehistoric response to adversity that is active unconsciously in the human psyche. This response is as a result of modern day triggers in lieu of potential deadly predators. Acute stress empowered our ancestors, by means of "increased heart rate and faster breathing" (Grohol) increasing adrenaline and inducing a state of temporary "superhuman strength" (Wise) that Scientific American describes as preparation of the body for "...sustained, vigorous action. The adrenal gland dumps cortisol and adrenaline into the blood stream.

Blood pressure surges and the heart races, delivering oxygen and energy to the muscles.”

(ibid). The “fight or flight” instinct, or acute stress response, is also known to invoke “analgesia, or the inability to feel pain” (ibid). When a human is subjected to short-term acute stress, several chemicals are released into the bloodstream that particularly influences the hippocampus. The hippocampus is the area of the brain most responsible for spatial navigation and most notably, short-term and long-term memory.

One of the most important brain areas that mediates, and in turn is affected by, the stress response is the hippocampus. The hippocampus plays an important role in new learning and memory (Zola-Morgan and Squire 1990). This function is critical to the stress response, for example in assessing potential threat during a life-threatening situation, as occurs with exposure to a predator (Bremner 797-798).

Both acute and chronic stress is known to increase the level of cortisol and glucocorticoids in the body, and studies show that “...in normal human subjects ... glucocorticoids have direct effects on memory function” (ibid 798). Tests on both non-human and human subjects have proven that the “...administration of glucocorticoids [and]... cortisol resulted in impairments in verbal declarative memory function in healthy subjects” (ibid 798). It has been proven that there are physical changes that take place in the structure of the brain due to chronic stress. “...high levels of glucocorticoids seen in stress is associated with damage to the hippocampus...[and] with deficits in new learning” (ibid 798-799).

Stress Related Disease and Ailments

Not only does stress have the power to alter brain structure and upset the chemical balance in the body, it also can illicit such physiological reactions as “...tension

headaches...back pain” (Heller 43), “...heart disease and strokes...peptic ulcers...” (Aquinas 163), “...minor weight loss or gain, inability to get rid of colds...a rise in cholesterol level...severe and chronic fatigue, sleepless nights, migraine headaches, high blood pressure, rheumatoid arthritis, thyroid disease...etc.”, (Hamann 31-32), among many other unlisted ailments. “Stress may play an indirect role in the progression of disease. For example, an extreme preoccupation with work may result in acute individual distress, such as the unique Japanese phenomenon ‘Karoshi’ (death by overwork)” (Aquinas 163). Stress can lead to significant physical illnesses. In a study of 500 randomly sampled teachers in Texas, “25% had health problems such as hypertension, insomnia, depression, and gastrointestinal disorders” (Hinds 2).

The connection is clear, the higher the level of stress, the lower the ability to fight off disease and ailments. This has direct workplace implications in the form of teacher absenteeism. The physical manifestations of prolonged stress can become deadly, or in the best cases, life shortening.

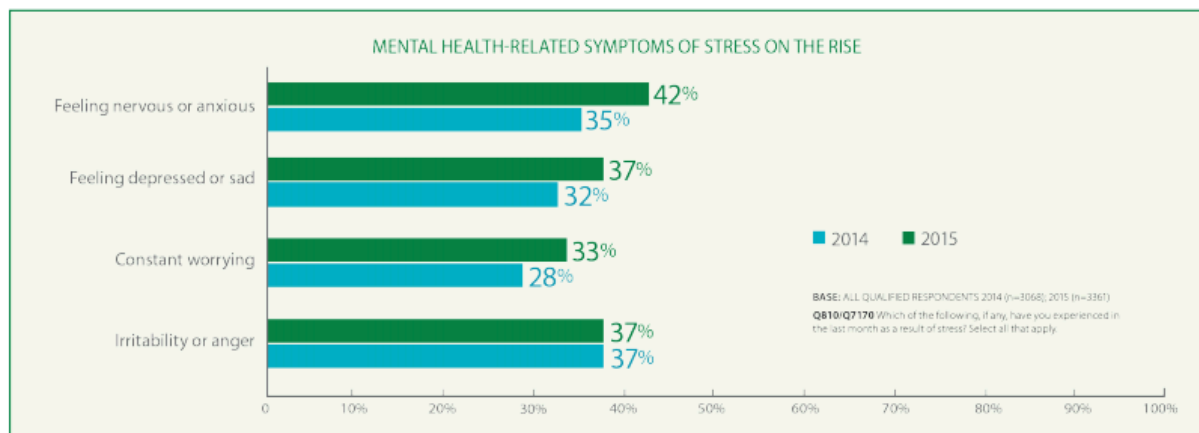
Impacts of Stress on Emotional and Mental Health

Stress and emotional/mental wellbeing are inextricably intertwined, as prolonged exposure to stress changes the chemistry in the brain allowing an individual to become more susceptible to depression and other mental/emotional disorders. Dipesh Chaudhury of the Mount Sinai School of Medicine shows in his research:

traumatic events appear to cause depression by derailing the brain’s so-called reward system, which normally causes pleasurable feelings whenever we engage in fun activities like spending time with friends. People who have suffered major stress often report that they no longer find pleasure in these things (DiSalvo 2).

Mental health-related symptoms of stress are on the rise, according to the 2016 study “Stress in America” conducted by The American Psychological Association. Symptoms of mental health disorders such as nervousness, anxiousness, depression, and irritability can be seen in figure 2.1 below as an increasing link to stress. These symptoms are clear indicators of mental illnesses such as anxiety disorder, depression, and anger management issues.

Figure 2.1: APA’s Stress in America Study, Mental Health-Related Symptoms of Stress



Prolonged exposure to stress on even the least emotionally susceptible educators can wreak havoc on their own mental wellbeing. Everyday stressors can affect educators, no matter how hard they try to compartmentalize their professional and personal lives. We are still human after all. Due to the nature of the job, music educators have an inherently more emotional bond with their students, as they may track their musical progress for more than a year, sometimes over their entire pre-college career (and for those that are really emotionally invested, through college and beyond). Music Educators

are akin to guidance counselors, because of the amount of contact we have with each individual student, it is easier for a child to open up and feel comfortable expressing himself or herself in front of the teacher. This is what we want in music, expression, and it translates into a child feeling more confident confiding in the music educator. If a student confides in the educator regarding a personal matter that involves a death, a form of abuse (drug/alcohol, physical, or sexual), or a disastrous event in their life, a teacher can develop what is known as “compassionate fatigue” (Kenardy & Le Brocque 2).

Compassion fatigue, also known as secondary traumatic stress is defined as:

the impact on the teacher or person caring for the young person can involve feeling physically and emotionally worn out, feeling overwhelmed by the young person’s trauma and reactions and experiencing traumatic stress of their own... such reactions are not a sign of weakness. Rather, they are the cost of caring for and helping others (ibid 2).

Secondary traumatic stress has obvious effects on the educator, both during work and most destructively, in their personal lives. This may result in the following consequences:

decreased concentration and attention, increased irritability or agitation with students, problems planning classroom activities, problems maintaining routines, feeling numbed or detached, intense feelings (intrusive thoughts or dreams about a student’s trauma that don’t reduce over time), symptoms that don’t improve after a couple of weeks (ibid).

Secondary traumatic stress, and first hand occupational stress is hazardous to mental health. It can lead to a number of mental illnesses, many of which require professional help for support. These include anxiety, depression, panic attacks, PTSD, eating disorders, excessive dependence on alcohol or drugs, etc. The mental consequences of occupational stressors are very real, and can lead to death by suicide (Hollon 1).

Professional Consequences

Unfortunately, the negative impact of stress on an educator doesn't end at the physical and mental decimation; it can ruin a workplace financially too. Teacher absenteeism, teacher ineffectiveness, and low morale can be directly attributed to the occupational stressors educators handle on a daily basis. "Burnout may well be a leading cause of teacher ineffectiveness and a primary reason for ending a teaching career" (Hamann 30).

As studied by the University of Michigan, "Problems caused by organizational distress are "participation problems, performance decrements, and compensation awards" (Aquinas 164). In terms of participation problems, "absenteeism, tardiness, strikes, work stoppages, and [high] turnover" (ibid 164) are highest associated costs of high stress levels in employees. For educators, this translates to lost prep or lunch times because of the need to cover another absent teacher's class, which can contribute to one's level of workplace stress.

In a study conducted by the Center for American Progress, it was found that on any given school day in Camden New Jersey, up to 40% of their teaching staff was absent (Miller 1). Interestingly in this study, which uses data collected by the U.S. Department of Education, 36% of teachers nationally on average were absent more than 10 days during the 2009-2010 school year (Miller 2). School districts, especially in lower income areas such as Camden, (ibid 2) have a hard time finding substitutes for teachers due to low daily pay or stressful work environments (Miller et al. 6). When a substitute is found, it is very costly to the school district, and on average, school districts in the United States spend a combined \$4 billion dollars annually on coverage for teacher absenteeism

(Miller 4). If a substitute cannot be found, administrators are forced to find emergency coverage for the classes of the absent teacher. These classes may be covered by administrators themselves on occasion, but mostly are covered by teachers on their prep or lunch (ibid 24), which in turn leads to the school district losing money by having to pay the employee for their lost prep/lunch time. This also inherently puts more stress on the educator that is required by their administrator to lose their prep/lunch time, thereby raising their absentee rate. If the school district is in violation of prep/lunch time mandates by the teacher's union, this could potentially become a factor in determining the grounds of a teacher strike. Incredibly detrimental financially for the school district, a teacher strike can more importantly be destructive to the continuity of the students' education and contribute to a disruption in the schedules of parents (Ehrenberg 1). If proper childcare cannot be arranged on such short notice, the parent is forced to stay home with the child, thereby unintentionally increasing the parents' own workplace's cost for absenteeism by nearly \$3 billion dollars annually (Shellenback 3).

According to the study on organizational stress by the University of Michigan, performance decrements are the "cost resulting from poor quality or low quality of production, grievances, and unscheduled machine downtime and repair" (Aquinas 164). In the world of education, this translates into a number of consequences. In many states, it is mandated that poor quality teaching or performance in the field of education result in the need for a mentor to help guide the teacher in corrective action, such as the TeachNJ CAP (Corrective Action Plan) that is a requirement for teachers of any level of experience "rated ineffective or partially effective on their last annual summative evaluation" (New Jersey Department of Education 1).

Organizational (occupational) stress may stay with the employee even after their work obligations are finished for the day. This may manifest itself into a mental preoccupation regarding anything including unfinished work, upcoming duties for the next workday, or even a negative interaction with a coworker or boss. “Accidents, both on and off the job, are another behavioural form of distress that can sometimes be traced to work-related stressors. For example, an unresolved problem at work may continue to preoccupy or distract an employee driving home and result in the employee having an automobile accident” (Aquinas 164).

Stress and the Music Educator

The music educator has an incredible amount of responsibilities that almost always extend outside of work hours and the realms of the non-music educator’s responsibilities (think band competitions, music department trips to Disney, All State Band/Orchestra/Choir, community outreach concerts, etc.). “Working additional hours is one of the causes of music teacher burnout and excessive stress, suggesting that additional study is needed to understand the relationship between excessive time demands and attrition/migration” (Hancock 140). A music educator takes on many different roles, or wears many different hats, which can take up a considerable amount of time beyond the school day to wear efficiently and effectively. As depicted in an image on John Bogenschutz’s famously satirical website, Tone Deaf Comics, a comic entitled “The Many Hats of a Band Director” shows a band director struggling to literally balance several hats stacked on his head at once, each with a description of a band director’s duties, including:

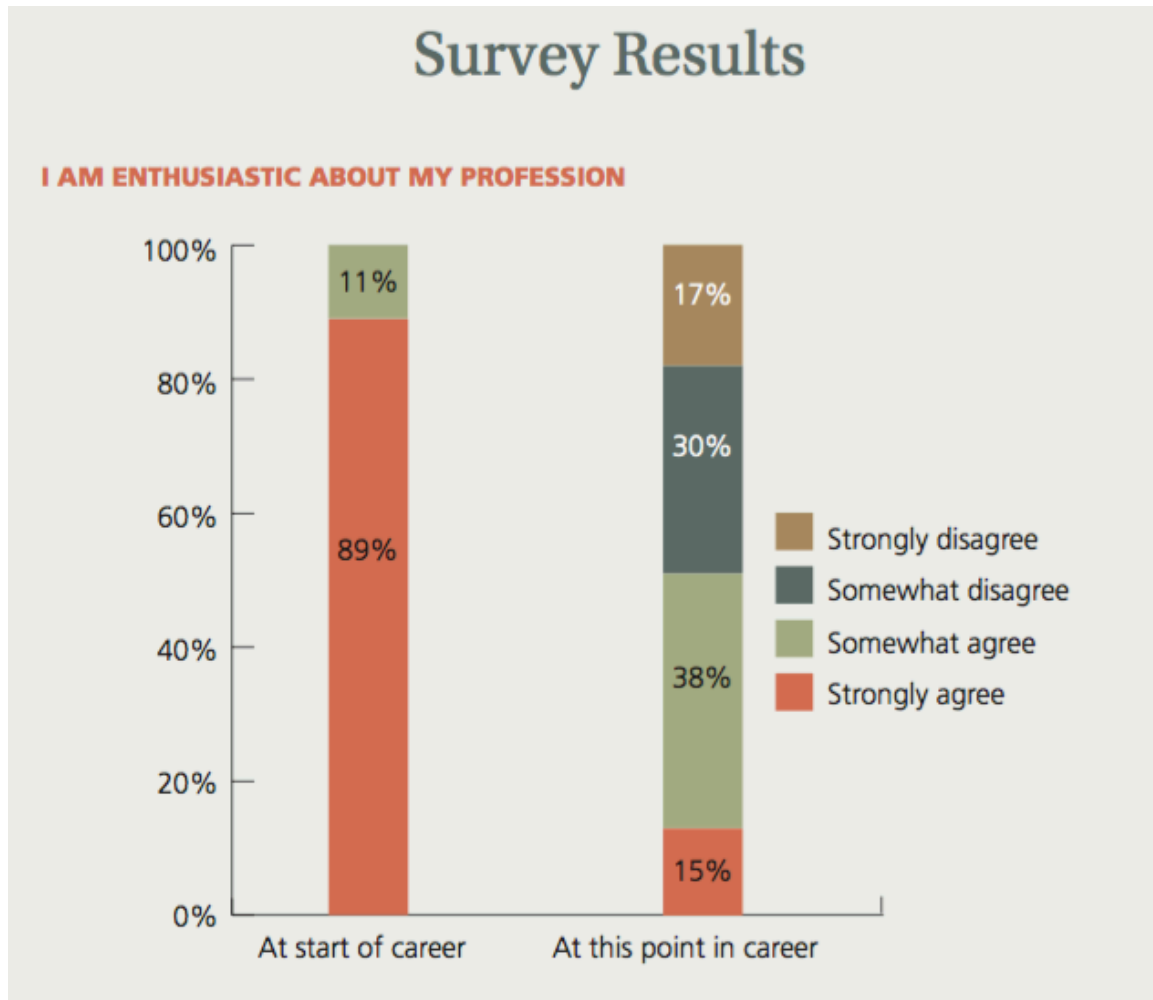
teacher, conductor, mentor, recruiter, fundraiser, custodian, musician, coordinator, administrator, motivator, entertainer, role model, diplomat, technician, repairman, leader, babysitter, facilitator, publicist, cheerleader, designer, treasurer, salesman, travel agent, colleague, arranger, manager, dietician, librarian, driver, mediator, historian, inventory manager, counselor, nurse, mechanic, therapist, and friend [with the caption ‘use cautiously’]) (The Many Hats of a Band Director).

Refer to Appendix A for the image described above. As any music educator would tell you, this list of “hats” we wear on a daily basis is absolutely accurate, and may even require some additions. Any or all of these can contribute to the overall stress level of the music educator. “When teachers are under considerable stress, their performance may deteriorate significantly, reducing their ability to plan creatively, manage classrooms effectively, and implement educational techniques successfully” (Heston 320).

Because of the perceived increase in workplace stress in the field of education in recent years, the American Federation of Teachers, one of the largest unions representing educators in the United States, released a study entitled “Quality of Worklife Survey” in May of 2015. In this 80-question survey taken by over 30,000 participants presently in the field of education, 98% of respondents teach in public schools (47% in urban, 37% in suburban, and 16% in rural placements) (Quality of Worklife, 1). It is to be noted that the survey results did not provide a breakdown by subject area taught, other than 80% of the respondents were teachers or special education teachers, 9% counselor, nurses, psychologists, social workers, and librarians, and 12% other positions in schools. It is unclear as to what percent of the 80% of teachers/special education teachers contains responses from music educators. 42% of respondents in this survey have been teaching for 10 years or less (ibid). As seen in Figure 2.2, when asked to compare their level of enthusiasm for their profession, at the start of their career and at this point in their career

a significant number of respondents (89%) said they strongly agreed, versus a staggeringly low 15% of respondents strongly agreeing at this point in their career.

Figure 2.2: AFT Survey results regarding teacher enthusiasm



Source: "Quality of Worklife Survey". *AFT (American Federation of Teachers)*. May, 2015. Web. 2 January 2016.
<<http://www.aft.org/sites/default/files/worklifesurveyresults2015.pdf>>

The AFT study also uncovered that 73% of all respondents often found their work stressful 24% found their work sometimes stressful, and 3% found their work rarely stressful (ibid 3). It is significant to note that not one respondent in the study of over 30,000 respondents reported their work to be never stressful. Of the 73% of respondents often finding their work stressful, they noted they were more likely to “leave work physically and emotionally exhausted” (ibid 3), and to “have increased the amount of time they spend on work outside their job”(ibid). This is significant, as a good work/life balance is key to avoiding stress related physical and mental problems.

The issue of stress in the educational workplace can be viewed as contributing to the overarching issue of attrition and migration rates of educators. Attrition, or the act of leaving the educational field, is being studied as an epidemic as of recent years. Several studies have tracked the rates of attrition versus migration of educators across the United States, and many have interpreted the data collected to reveal a trend in rising rates of attrition (Hancock, Hancock & Madsen, Jones). Using data collected by the National Center for Education Statistics (Department of Education) in the Schools and Staffing Survey (SASS), it has been determined by looking at data collected since 1989, that “the music education profession faces a monumental challenge; a chronic shortage of qualified and competent teachers to staff positions in U.S. schools” (Hancock 130). It is evident through the data that 20% of all new teachers leave the classroom in the first 3 years of teaching, while 50% quit teaching after 5 years (Hancock & Madsen 19). According to the same study, it is determined that “some 11,000 music teachers leave the profession annually while only 5,000 music teachers per year replace them. The end result is a deficit of 6,000 music teachers each year” (Jones 1).

There are several reasons teachers choose to leave the field. The SASS and TFS reported the following as leading explanations for this exodus: (1) retirement (13%), (2) staffing actions (20%), (3) family/personal reasons (40%) including pregnancy, child rearing, health problems and family moves, (4) the pursuit of other opportunities (27%) and (5) job dissatisfaction (29%). While the first three responses are common to all professions, job dissatisfaction and the pursuit of other opportunities account for more turnover in education than does retirement; more than half of all departures cite work environment as reasons for leaving their positions. Reasons for job dissatisfaction included poor salary, poor administrative support, student discipline problems, lack of faculty influence and autonomy, poor student motivation, inadequate time to prepare, poor undergraduate preparation, intrusions on teaching time, and too-large class sizes (Siebert 9-10).

Carl Hancock suggests that "...consideration of teachers' financial compensation is the key to understanding teacher retention" (132), and that:

music education researchers have investigated many factors that may influence a teacher's decision to leave the profession, including isolating work conditions (Sindberg & Lipscomb, 2005), varying mentoring practices (Conway, 2003), job dissatisfaction (Heston, Dedrick, Raschke, & Whitehead, 1996), role conflict (Scheib, 2003), deficient administration support (Kruger, 2000), job stress (Gordon-Hedden, 2005), and professional burnout (Hamann, Daugherty & Mills, 1987) (132).

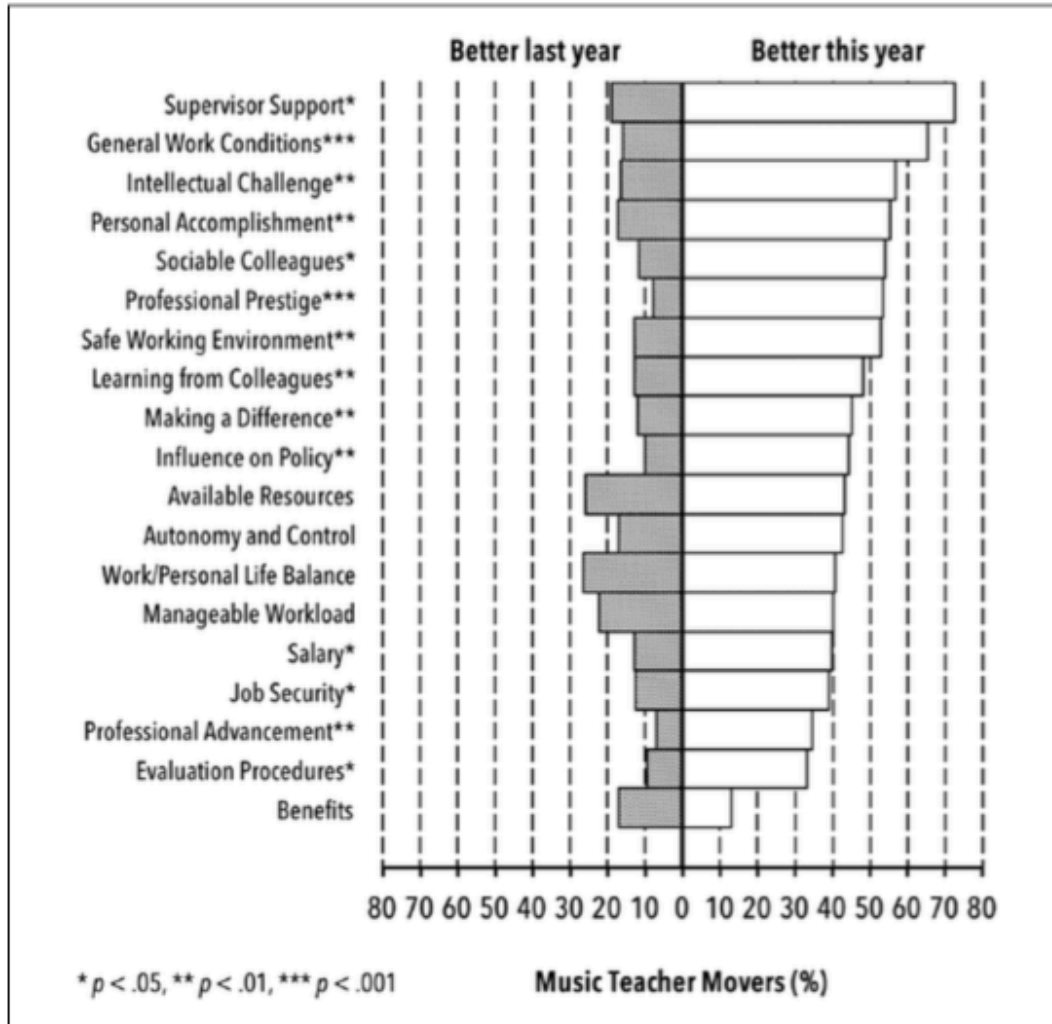
Interestingly, the data shows that female teachers experience a higher level of attrition than their male counterparts. It has been suggested that "it is likely that personal issues, such as falling behind in salary steps when taking time off for childbirth and childrearing, keep female teachers' salaries lower than those of their male counterparts" (Hancock 139), and that the process of reevaluating the career choice of teaching due to lower levels of compensation is directly correlated to a high attrition rate (ibid). These studies have cited the various reasons as to why teachers decide to transfer or exit the field entirely, however there is some evidence that suggests that by simply changing the location in which one teaches can result in an improvement in the overall stress level as defined by the individual educator (Hancock 434).

Other investigations have demonstrated the influence of school characteristics and workplace conditions on teacher attrition, and have revealed several complex relationships. Urban schools, for example, may face difficulties attracting teachers while simultaneously losing them to schools in suburban and rural communities (Hancock 131).

Overall, surveyed teachers that have moved to a different teaching environment report mostly a positive correlation in terms most of the questioned aspects of the job versus their former position (refer to Figure 2.3). Surveyed teachers that left the field entirely saw a significant increase in their work/personal life balance and level of workload, among many other aspects of their current non-teaching job versus their former teaching position (refer to Figure 2.4). (Hancock 426-427).

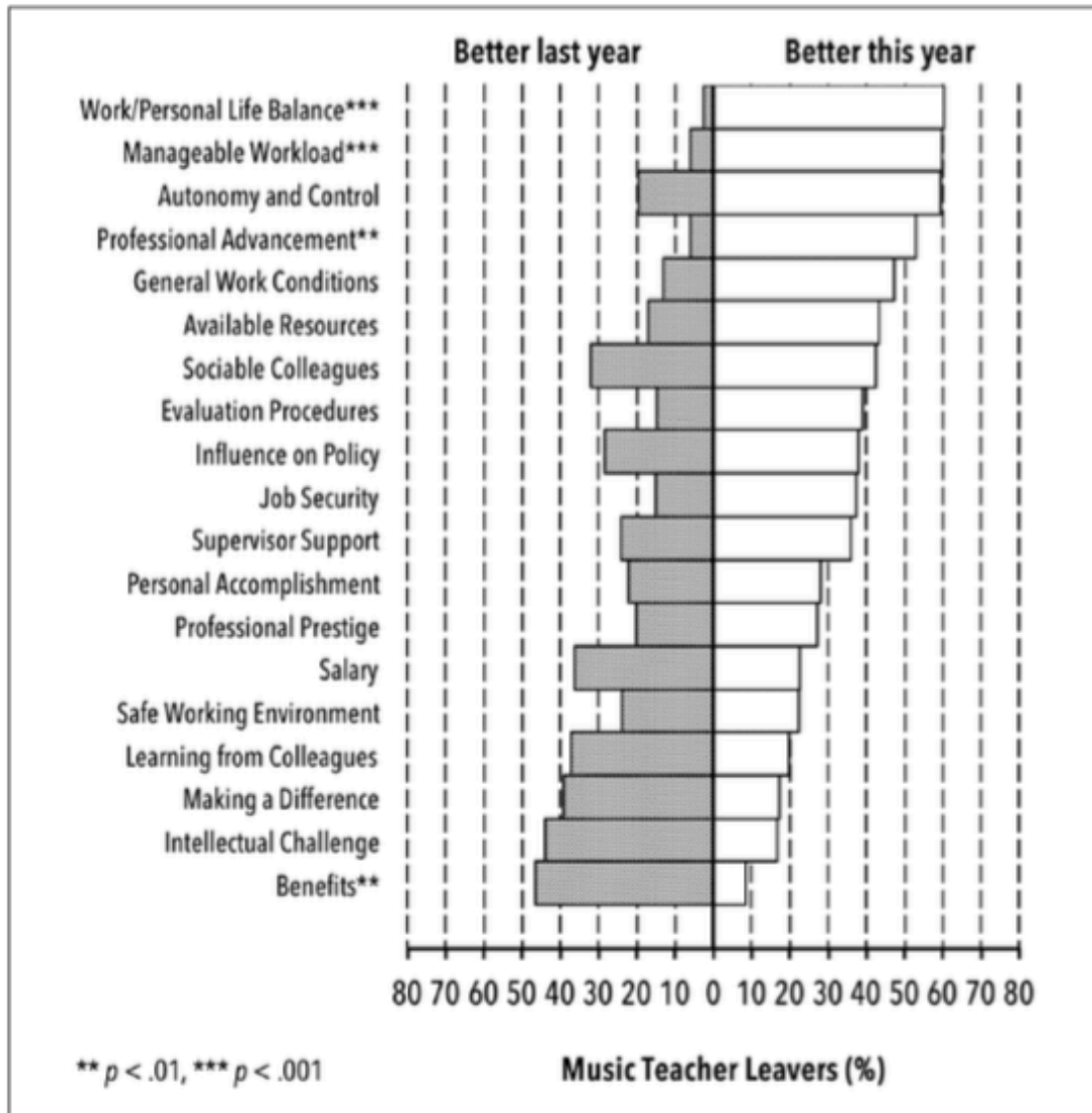
There is evidence to support that teachers leave the field for a variety of reasons, both environmental and non-environmental. The environmental factors that increase stress are significant, and need to be addressed to help prevent the field of Music Education from disappearing completely and permanently from schools. The next chapter will outline a survey-based study I conducted to determine the specific ways in which music teachers are stressed, and how they cope with said stressors. Special attention will be given to those stressors deemed as 21st century stressors not present in the 20th century to the degree in which they are currently present. The intention is to identify these trends, and propose possible solutions to counteract the stressors, to help support both veteran and new teachers alike in their teaching experiences.

Figure 2.3: Transferred Music Teachers' Comparisons of the Working Conditions Experienced in Their Current and Former Teaching Positions



Hancock, Carl B. "Is the Grass Greener? Current and Former Music Teachers' Perceptions a Year After Moving to a Different School or Leaving the Classroom". *Journal of Research in Music Education*. 63(4) 421-438. 2016. Web. April 2016.

Figure 2.4: Former Music Teachers' Comparisons of the Working Conditions Experienced in Their Current and Former Positions



Hancock, Carl B. "Is the Grass Greener? Current and Former Music Teachers' Perceptions a Year After Moving to a Different School or Leaving the Classroom". *Journal of Research in Music Education*. 63(4) 421-438. 2016. Web. April 2016.

CHAPTER 3:

Method of Study and Overview of Data

Purpose

The Purpose of this study is to identify stressors encountered in the field of music education and discover trends in stressors in terms of age, gender, years of experience, geographical location, type of teaching position, and to prove through data coping mechanisms that can help reduce stress. Using the data collected by survey, the goal is to find evidence of indicators that can serve as a warning to help develop a timely action plan to avoid teacher attrition due to occupational stressors.

Study Design and Deployment

This study was driven by the author's personal experiences in the field of music education, teaching in multiple Public School environments in two states over a period of 6 years. Noting rising levels of stress in herself and her colleagues, the author designed this study to determine whether stress due to 21st century components of teaching was an isolated situation, or indicative of a movement in the field of education across the United States.

The survey was deployed using Google Forms to collect data from current and former music teachers. The survey was intended to reach as many music educators across the United States as possible, in varying teaching situations and stages in their careers.

The Google Forms survey was posted on Facebook in two major Music Education Forums/Groups, “Music Teachers”, a closed group with over 16,000 members from a variety of geographical locations, and the “NJMEA (New Jersey Music Educators Association)” group, another closed group with approximately 1,900 members that are current and former music educators in the state of New Jersey. The survey was also shared through music educators’ status updates on Facebook, as well as through email.

The survey was open for responses between January 2nd, and January 4th of 2016, and collected a total of 347 responses from music educators in the United States. It was closed shortly after it was open due to the overwhelming number of results. It is to be noted that music educators from Canada, France, the United Kingdom, and Germany requested to be a part of the study, however their responses were not recorded due to the nature of their educational systems being too much of a variable for this study.

The survey was split into three sections (refer to Appendix B for the full text of the survey). The first section contained general background questions to obtain a basic understanding of the educator and their current position. The second section of the survey included questions regarding the respondents’ current (or most recent) educational appointment, and more specific questions regarding their job description including grade levels taught, and subject matter. This section also included questions regarding level of support from administrators, fellow colleagues, and the community in which the educators work. The third and final section of the survey included questions on personal stress level (on a work day and non-work day) and various questions regarding stressors encountered in the workplace, including specific and personal questions about 21st century stressors and coping mechanisms the educator uses to help reduce their stress.

The order of the questions in the survey was intentional, the author did not want the questions in the last section regarding personal stress levels to deter the educator from taking the survey altogether. It was also intentional to incorporate a Likert type rating scale (McLeod 1) that did not have a middle option, forcing the respondents to take a non-neutral stance on the questions regarding stress level.

Overview of Data

The following tables represent the data collected from the aforementioned survey. The data shown is of respondents within the United States.

Age

Participants ranged in age from 21 to 65 and over, with the most number of respondents in the 26-30 age bracket, and the least number of respondents in the 65+ age bracket. Refer to Table 3.1 below for the full breakdown of age bracket.

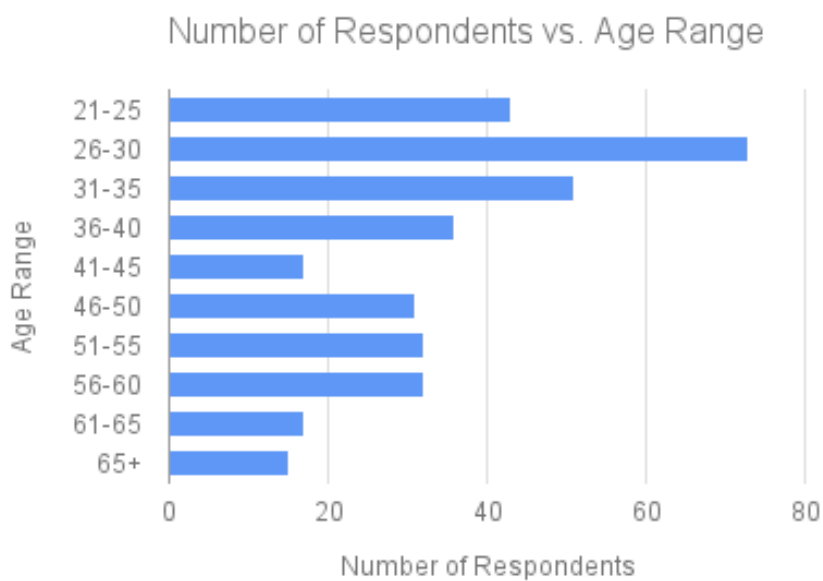
Table 3.1 Age Range

Age Range	Number of Respondents	Percent of Respondents
21-25	43	12.3
26-30	73	21.0
31-35	51	14.7
36-40	36	10.4
41-45	17	4.9
46-50	31	8.9

51-55	32	9.2
56-60	32	9.2
61-65	17	4.9
65+	15	4.3

The highest numbers of respondents were the youngest in age, which correlates with the age group of the author. The author's circle of influence aligns primarily with the younger age brackets, therefore it is to be expected that the majority of respondents were younger than 40 years of age. Collected responses from the survey produced the least amount of respondents in the highest age bracket of "65+". Refer to graph 3.1 below for further breakdown of the data.

Graph 3.1: Number of Respondents vs. Age Range



Gender

In terms of gender, the respondents were overwhelmingly female by more than a 2 to 1 margin as compared to male respondents, with one respondent that chose “other” and one respondent that chose “prefer not to answer” as their response to the question. Refer to Table 3.2 below for the full breakdown. This aligns with the Department of Education’s NCES (National Center for Education Statistics) data from their 2011 -2012 SASS survey which characterized 76% of polled educators as women (U.S. Department of Education 1).

Table 3.2 Gender

Gender	Number of Respondents	Percent of Respondents
Male	103	29.7
Female	242	69.7
Other	1	0.3
Prefer not to Answer	1	0.3

Location

Geographically speaking, the most respondents listed New Jersey, Pennsylvania, and New York most often in terms of the location of their majority of their teaching experience. The State of New Jersey accounts for 22.8% of all respondents, at 79 individual responses. The State of Pennsylvania came in second, with 22.2% of all respondents, and 77 individual responses. Overall, 38 individual U.S. States were represented in the response data. It is not surprising that New Jersey is the most frequent state listed, given that the survey was posted on the NJMEA (New Jersey Music Educators Association) Facebook page. The full list of data can be seen in Appendix C.

Type of Educational Institution

The majority of respondents reported working in public schools, at 86% as compared to private or charter schools. Table 3.3 has the full breakdown below. The results of this are not surprising, as the majority of jobs in music education are in fact in public schools.

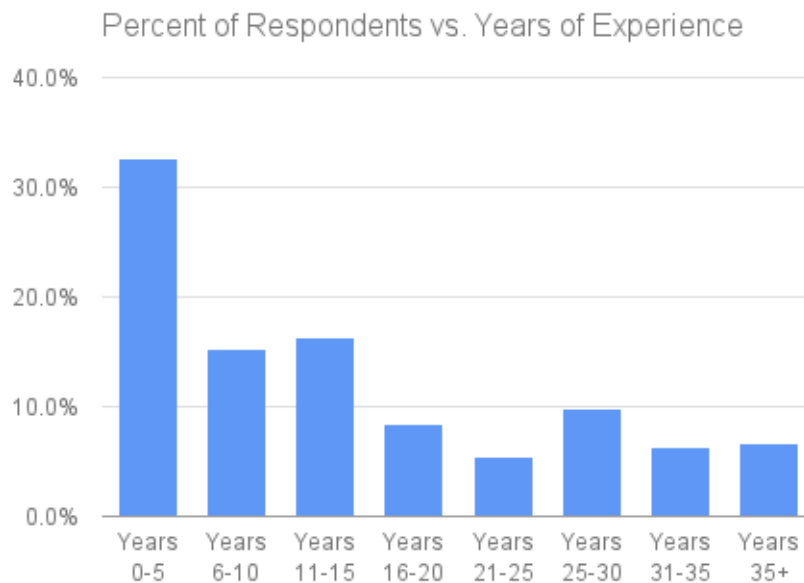
Table 3.3: Type of Educational Institution

Type of School	Number of Respondents	Percent of Respondents
Public	299	86.2
Private	36	10.4
Charter	12	3.5

Teaching Experience

As seen in Graph 3.2: Percentage of Respondents vs. Years of Teaching Experience, the majority of respondents involved in this study reported to be in their first 5 years of teaching, which accounted for 32.6% of all respondents. This is significant, given that studies referred to in Chapter 2 have suggested that nearly 50% of all teachers drop out of the field within their first 5 years of teaching. A large sampling of data from this grouping of respondents will be of significance in terms of determining whether an increased level of stress contributes to the attrition of teachers with 5 or less years of experience.

Graph 3.2: Percentage of Respondents vs. Years of Teaching Experience



62.2% of all respondents reported to have between 0 and 14 years of teaching experience, as compared to 37.8% of respondents that reported between 15 to 35+ years of experience. It is reasonable to assume that there is a positive correlation between presumed retirement age (beginning at 25 years of teaching for some) and a lower percentage of respondents in years of experience brackets at or beyond 25 years. The percentage of respondents that fall in the years of experience brackets of 25 years and beyond is 22.8%. Refer to Appendix D: Years of Completed Teaching Experience for a table of collected data referring to years of teaching experience.

Employment Status

In reference to current employment status, the majority of respondents (89.3%) reported their current employment status in the field of music education as active. A smaller minority of 26 respondents (7.5%) reported to be retired from the field, and an even smaller minority of 11 respondents (3.2%) reported to have resigned from the field of education, but have not retired. Special attention will be given to those that resigned from the field, as correlations are likely to be drawn from the data that can be potentially used as an attrition predictor for future active teachers. See Table 3.4: Current Employment Status in the Field of Music Education for further clarification.

Table 3.4: Current Employment Status in the Field of Music Education

<u>Employment Status</u>	<u>Number of Respondents</u>	<u>Percentage of Respondents</u>
Active	310	89.3%
Resigned from the field of Education (not retired)	11	3.2%
Retired	26	7.5%

Grade Level Taught

Looking at the data received regarding grades taught, the highest number of respondents claimed to teach 5th grade, while the least respondents reported teaching Pre-Kindergarten. One reason for the increase in responses between 4th and 6th grade may be the increased amount of teachers needed to begin instrumentalists, which usually starts around grade 4 or grade 5. Table 3.5: Grade Level Taught includes the breakdown of all grade levels.

Table 3.5: Grade Level Taught

<u>Grade Level</u>	<u>Number of Respondents</u>
Pre-K	20
Kindergarten	137
1	155
2	157
3	167

4	190
5	198
6	176
7	155
8	157
9	108
10	108
11	108
12	108

Type of Classes Taught

Determining the type of classes taught by each individual is key to identifying which type of specific music position may lead to heightened level of stress. Assuming stress plays a role in educator attrition, one can then suggest to future educators areas of the field that inherently are more stressful than others, and begin to offer positive coping mechanisms to help eliminate part or all of workplace stress. The data in Table 3.6: Type of Classes Taught reveals the number of respondents to each type of class taught. Further in this chapter the average levels of stress for each type of class taught will be revealed and conclusions will be drawn as to which type of class correlates with both lower and higher levels of stress.

Table 3.6: Type of Classes Taught

<u>Type of Class Taught</u>	<u>Number of Respondents</u>
Elementary General Music	168
Elementary Chorus	108
Elementary Band	66
Elementary Orchestra	41

Middle School Band	67
Middle School Orchestra	41
Middle School Chorus	60
High School Band	47
High School Orchestra	36
High School Chorus	39
Itinerant Instrumental Lessons	46
Marching Band	40
Music Technology	20
Drumline	21
Music Appreciation	32
Music Theory	37
Musical Theatre	33
Select Band (Auditioned Group)	16
Select Choir (Auditioned Group)	33
Select Orchestra (Auditioned Group)	27
Guitar	34
Handbells	11

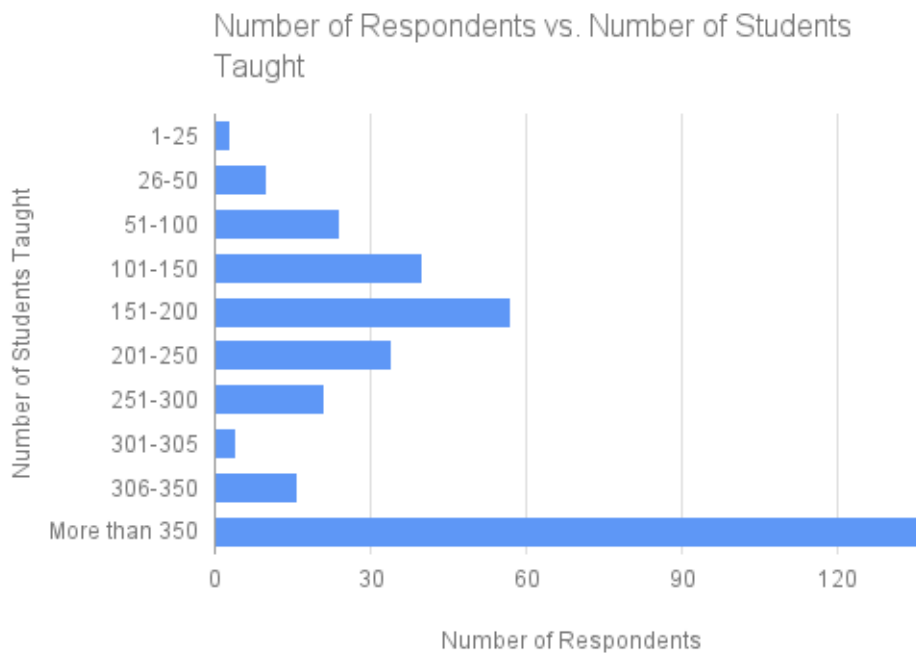
Number of Students

It is easy to assume there is a positive correlation between increased number of students taught annually and higher average stress levels, but the data collected in this survey provides a different narrative, one that has to do more with type of job description the respondent has and their stress level, rather than number of students taught. Table 3.7: Number of Students Taught reveals the approximated student class size of each respondent. The majority of respondents reach approximately more than 350 students annually, at 137 respondents.

Table 3.7: Number of Students Taught

<u>Number of Students Taught</u>	<u>Number of Respondents</u>
1-25	3
26-50	10
51-100	24
101-150	40
151-200	57
201-250	34
251-300	21
301-305	4
306-350	16
More than 350	137

Graph 3.3: Number of Respondents vs. Number of Students Taught



Perceived Level of Support

The survey asked the respondents to answer three Likert scale questions regarding their perceived level of support by administrators, other teachers/colleagues in the building, and by the community. Refer to Appendix B: Questionnaire/Survey to view the questions in their original form. This data is important when finding indicators of current or future attrition in respondents. Table 3.8: Perceived Level of Support shows the average of all respondents responses on a 4 point scale to each of the questions. Table 3.9: Average Perceived Level of Support by Gender breaks down the levels further by gender.

Table 3.8: Perceived Level of Support

<u>Perceived Level of Support</u>	<u>Average Perceived Support</u>
Administrators	3
Colleagues	2.85
Community	2.97

Table 3.9: Average Perceived Level of Support by Gender

<u>Gender</u>	<u>Admin Support</u>	<u>Colleague Support</u>	<u>Community Support</u>	<u>Average Support</u>
Female	3.00	2.81	2.94	2.92
Male	3.02	2.93	3.04	3.00

Perceived Stress During and Outside of School Hours

The data in this section of the survey reveals the perceived stress level of the respondents both during school hours and on a non-work day. This data plays an integral role in uncovering correlations between heightened stress levels and the impact of 21st century components of education. The averages below are part of the most important data collected in the survey. See Table 3.10: Perceived Stress Averages for a further breakdown of the collected data.

Table 3.10: Perceived Stress Averages

<u>Gender</u>	<u>Age Bracket</u>	<u>Average Stress Level on a Work Day</u>	<u>Average Stress Level on a non-work Day</u>
Female	21-25	2.68	1.97
Male	21-25	2.5	1.86
Female	26-30	3.02	1.94
Male	26-30	2.85	1.7
Female	31-35	2.97	1.9
Male	31-35	2.63	1.84
Female	36-40	2.76	1.86
Male	36-40	2.8	2.06
Female	41-45	2.7	1.9
Male	41-45	2.29	1.71
Female	46-50	2.72	1.8
Male	46-50	2.83	1.67
Female	51-55	3.18	1.81
Male	51-55	3.11	1.78
Female	56-60	2.6	1.64
Male	56-60	2.75	1.5

Female	61-65	2.85	1.77
Male	61-65	2	1.75
Female	65+	2.9	1.7
Male	65+	2.4	1.4
Female Average	ALL	2.86	1.85
Male Average	ALL	2.68	1.79

Educational Stressors Contributing to Overall Stress Level

In this section of the survey, respondents were asked to select all of the contributing stressors they experience in the workplace, both 21st century components and non-21st century components. All respondents selected at least one of the stressors, and the majority of respondents selected multiple stressors as indicators of their overall stress level. Most of the listed stressors are unique to music educators, however some listed stressors such as “too much paperwork” can be a contributing stressor for educators outside the realm of music education. Table E.1: Type of Contributing Stressor and Number of Respondents (Refer to Appendix E) shows the raw data taken from the survey, with number of respondents, percentage of total stressor responses, and percentage of respondents. Table E.2: Type of Contributing Stressor as Compared to Employment Status (Refer to Appendix E) displays the percentage of respondents that selected each individual stressor, and is categorized by employment status (active, resigned, retired).

21st Century Stressors

Several questions were asked in the final section of the survey in relation to four main targeted 21st century stressors. Standardized testing, decreasing music department budget, teacher evaluation methods, and technology requirements. In terms of Standardized Testing, music teachers require a degree of autonomy that is not shared with their non-music counterparts. Because of the nature of some music positions, a flexible lesson schedule is required of the teacher to create. If one is restricted by a fixed building schedule due to school-wide standardized testing (and furthermore restricted in terms of acceptable volume during testing), it is safe to assume that there will be a degree of heightened stress that results from the implementation of standardized testing. The potential of lost instructional time due to the nature of the standardized testing schedules may have an impact on concert preparation.

A decreased music department budget results in less effective rehearsals, slower learning, degrading quality of instruments, gaps in curriculum, and overall low feeling of departmental worth and support. Reduced music budgets can result in student attrition in the music program, leading to a further reduced music budget. As a result, it may play a role in heightened stress levels in educators and result in higher teacher attrition rates.

Each U.S. State has their own mandate (or lack thereof) in regards to teacher evaluation. Some allow districts to individually decide on a method of Teacher Evaluation (such as the Danielson, Marzano, Marshall, and Stronge methods), and some enforce one method statewide (Veir 5). It is clear that sweeping policy changes are made frequently in the world of education, and the process of change is not easy on educators,

especially those that have been in the field for many years. As a result, teacher evaluation may play a role in heightened stress levels in educators, contributing to higher teacher attrition.

Finally, the last main component of this study on 21st century stressors deals with the requirement for increased use of technology in the classroom, both by the educator and the student. When utilized properly, technology can be an invaluable tool for any educator. Technology increasingly has become the means by which younger generations learn both in school and on their own, and can lead a child to a state of self-perpetuated learning. However, if used improperly, the technology can lead to a child developing serious physical, psychological, and academic issues due to cyber-bullying (Kowalski, 518). Given the rise in cyber-bullying, it becomes the educator's responsibility to teach their students the proper uses of technology, and to police the use of technology in the classroom as to prevent cyber-bullying or the discovery of inappropriate content. This can be a difficult task, especially for those educators that lack the technological experience. It becomes increasingly more difficult and potentially stressful when a district mandates the use of technology in the classroom, tying this into teacher evaluation. As a result, the increased requirements for technology use in the classroom may play a role in heightened stress levels in educators, contributing to higher teacher attrition.

Table 3.11: 21st Century Stressor with Most Contribution to Overall Stress

Stressor	Number of Respondents	Percent of Respondents
Decreased Music Department Funding	91	26.2%
Teacher Evaluation	115	33.1%
Standardized Testing	103	29.7%
Technology Requirements	38	11.0%

Table 3.12: Perceived Level of Stress Caused by 21st Century Stressors

Stressor	Average Level of Stress
Decreased Music Department Funding	2.49
Teacher Evaluation	2.62
Standardized Testing	2.41
Technology Requirements	1.77

Coping Mechanisms

The last question asked on the survey was to garner an understanding of what coping mechanisms respondents used to combat occupational stressors. The respondents were instructed to select all that apply. The data shown in Table 3.13: Coping Mechanism Frequency incorporates the number of respondents that selected each coping mechanism, the percent of respondents that selected each item, and the percent of each individual item as compared to the others.

Table 3.13: Coping Mechanism Frequency

<u>Type of Coping Mechanism</u>	<u>Number of Respondents</u>	<u>Percent of Total Respondents</u>	<u>Percent of Coping Mechanisms</u>
Watching TV/Netflix	225	64.84%	13.56%
Sleep	187	53.89%	11.27%
Junk/Comfort Food	177	51.01%	10.67%
Play musical instrument/sing	165	47.55%	9.95%
Listen to music	150	43.23%	9.04%
Engage with friends	134	38.62%	8.08%
Reading	131	37.75%	7.90%
Exercise	127	36.60%	7.66%
Alcohol	110	31.70%	6.63%
Prayer	88	25.36%	5.30%
Shopping	72	20.75%	4.34%
Massage	48	13.83%	2.89%
Journal	28	8.07%	1.69%
Smoking	11	3.17%	0.66%
Prefer not to answer	6	1.73%	0.36%

CHAPTER 4:

Findings

In this chapter, the author will uncover findings from the data collected by way of the survey mentioned in Chapter 3. Further correlations and conclusions will be drawn from this data to be used to form recommendations for currently active and future teachers to help decrease stressors in the field of Music Education and to help prevent teacher attrition. The data will be presented by means of two defining characteristics, employment status and by years of experience.

Employment Status

Three main categories of employment status were used in data collection: active teacher, resigned teacher, and retired teacher. From the lens of employment status, the data can be further broken down to compare levels of stress among other points of data. Table 4.1: Employment Status, Average Perceived Stress Levels, and Pearson's correlation coefficient compares the three components of employment status, their average perceived levels of stress both at work and on a non-work day, and the Pearson's product moment correlation coefficient (Pearson's r), which displays the magnitude of correlation between the levels of stress. The PPMCC or Pearson's r , determines the magnitude of correlation between two tests or data sets (Hildegard 210-218).

Formula 4.1: Pearson's r correlation coefficient formula

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Table 4.1 shows that respondents that identified themselves as resigned or retired from the field had a slightly higher average of perceived stress level at work, at an increase of 0.12 and 0.13 (approximately 4%) over active teachers. Since the survey question asked respondents to use a Likert rating scale from 1-4, 1 representing “no stress” (essentially a value of 0), the data can be calculated over 3 levels of stress rather than 4. The calculation for percentage increase was determined by the following formula:

Formula 4.2: Percentage increase of stress between two sets of data

$$\frac{(\bar{A} - \bar{B})}{n_{\text{stress levels}}} * 100 = \% \text{ Increase}$$

A= first set of data, B= second set of data, n= number of stress levels in question

By comparing the data between average perceived level of stress at work and at home for each individual respondent claiming to be an active teacher, a positive Pearson's r correlation coefficient was calculated at a value of +0.32. The strongest correlation between perceived level of stress at home and at work belonged to the resigned respondents, at a value of +0.37. The weakest yet still positive correlation between levels of stress was calculated from the data of retired teachers, at a value of +0.28. Due to the magnitude of the Pearson's r correlation coefficient for resigned

respondents being higher than active or retired respondents, one can conclude that a significant positive correlation can be seen in respondents' perceived levels of stress at work and at home. As a consequence of this correlation, those respondents with elevated perceived levels of stress at work also have elevated perceived stress levels at home.

Table 4.1: Employment Status, Average Perceived Stress Levels, and Pearson's correlation coefficient

<u>Current Employment Status</u>	<u>Number of Respondents</u>	<u>Average Perceived Level of Stress at Work</u>	<u>Average Perceived Level of Stress at Home</u>	<u>Averaged Perceived Stress Level</u>	<u>Pearson's <i>r</i> Coefficient</u>
Active	310	2.79	1.84	2.32	+0.32
Resigned	11	2.91	2	2.46	+0.37
Retired	26	2.92	1.65	2.29	+0.28

The largest difference in perceived level of stress at work versus perceived level of stress at home is exhibited in the data from the respondents that reported to be retired from the field of music education. Their perceived level of stress at home was the lowest (a difference of 0.35, or 11.67% change) when compared to respondents with a current employment status of active or resigned. While retired respondents reported the highest average of perceived stress at work, their overall average level of stress is lowest when compared to active and resigned respondents, at an average of 2.29 as compared to 2.32 for active and 2.46 for resigned respondents.

Many variables could have contributed to respondents' decision to resign from the field of music education, and the justification was not outright present in the collected data. However, the elevated stress levels reported by resigned respondents led to a further investigation of contributing stressors as seen in the next breakdown of data.

When comparing average perceived stress level at work and perceived level of support, the average of the data collected from multiple survey questions was calculated. Table 4.2: Averages of Perceived Levels of Support below indicates the averages of the data collected broken down by employment status and average responses for perceived support from administration, colleagues, and community.

Table 4.2: Averages of Perceived Levels of Support

<u>Employment Status</u>	<u>Average Perceived Level of Support from Administration</u>	<u>Average Perceived Level of Support from Colleagues</u>	<u>Average Perceived Level of Support from Community</u>	<u>Average of all Perceived Levels of Support</u>
Active	3.04	2.83	2.96	2.94
Resigned	2.55	2.9	2.63	2.69
Retired	2.7	3	3.15	2.95

Resigned respondents had a significantly lower average of perceived level of support (2.69) as compared to their active (2.94) and retired (2.95) counterparts. The

significantly higher average of active respondents (+8.67% increase over resigned respondents) was nearly identical to retired respondents (+8.33% increase over resigned respondents).

Upon further investigation, a significant negative correlation can be seen in respondents' perceived level of support (averaged from responses for administration, colleagues, and community support levels by respondent) and perceived level of average stress on a workday, determined by the value of Pearson's r correlation coefficient. Most significant is the negative correlation for that of resigned teachers, at a Pearson's r correlation coefficient of -0.71. The average level of perceived stress at work reported by resigned teachers is extremely high in those who also reported a low level of overall support from administration, colleagues, and community. See Table 4.3: Perceived Levels of Support and Stress on a Workday and Pearson's r correlation coefficient.

Table 4.3: Perceived Levels of Support and Stress on a Workday and Pearson's r correlation coefficient

<u>Employment Status</u>	<u>Average Level of Perceived Stress at Work</u>	<u>Average Perceived Level of Support</u>	<u>Pearson's r correlation coefficient</u>
Active	2.79	2.94	-0.24
Resigned	2.91	2.69	-0.71
Retired	2.92	2.95	-0.27

In teachers that resigned, there is a strong correlation between increased stress levels with perception of lack of support ($N=11$, $r = -0.71$). This is less apparent in the groups of active ($N=310$, $r = -0.24$) and retired ($N=26$, $r = -0.27$). Lack of support can be considered as less of an indicator to increased stress levels in these groups as compared to those that have resigned from the field. The strong correlation between heightened stress level and perceived lack of support inspired comparison of data between the specific listing of stressors respondents chose, categorized by employment status.

The survey requested all respondents to list applicable contributing stressors that they encountered in their teaching position. The list included a mix of 21st century stressors (later detailed in a separate section of the survey) and common non-21st century specific workplace stressors. Appendix E: Contributing Stressors includes two tables: Table E.1: Type of Contributing Stressor and Number of Respondents, which breaks down each stressor by number of overall respondents, percent of total stressor responses, and percent of respondents, and Table E.2: Type of Contributing Stressor as Compared to Employment Status, which breaks down each stressor by percent of active, resigned, and retired teachers. Appendix E: Contributing Stressors also includes Chart E.1: Employment Status vs. Percentage of Respondents to Type of Stressor, a graphical representation of the data in histogram form for side by side comparison.

At first glance using data exhibited in Table E.1 of Appendix E, the highest number of total respondents ($N=181$, or 52.16% of all respondents) listed “not enough money in the music budget” as a contributing stressor. When broken down further by current employment status, “not enough money in the music budget” was the most often stressor chosen by active teachers ($N=158$, 50.97% of active respondents). This

contributing factor had the highest number of total respondents of any contributing stressor, however “lack of support from admin/teachers/parents” had the highest percentage of respondents categorized by employment status.

72.73% of all resigned respondents picked “lack of support from admin/teachers/parents” as one of their contributing stressors. Given the aforementioned calculated Pearson’s r correlation coefficient proving a strong negative correlation between heightened stress and low level of support, there is significant evidence that proves that the resigned respondents from this survey find a lack of support stressful, which strongly correlates with their reported heightened level of stress.

The conclusion drawn from these comparisons led to a further investigation of the perceived lack of support from administration, colleagues, and the community as a potential indicator for active teacher future attrition. A comparison was drawn between the subgroup of respondents reporting to be active teachers that also selected “lack of support from admin/teachers/parents” as a contributing stressor and their perceived level of stress at work. This was compared to the subgroup of active respondents that did not select “lack of support from admin/teachers/parents as a contributing stressor. The findings for this comparison can be seen below in Table 4.4: Active Respondent Subgroups’ average level of stress vs. selection of “lack of support” as stressor.

Table 4.5: Active Respondent Subgroups’ average level of stress vs. selection of “lack of support” as stressor

<u>Active Respondents</u>	<u>Number of Respondents (310)</u>	<u>Chose “lack of support” as contributing stressor</u>	<u>Average Level of Stress at Work</u>
Subgroup 1	137	Yes	2.93
Subgroup 2	173	No	2.69

*Subgroup 1 contains active respondents that selected “lack of support” as a contributing stressor in question 17 of the survey. Subgroup 2 contains active respondents that did not select “lack of support” as a contributing stressor in question 17 of the survey.

Those active respondents that selected “lack of support from admin/teachers/parents” as a contributing stressor were on average 8% more stressed than active teachers that did not select “lack of support from admin/teachers/parents” as a contributing stressor. As a result of the correlation drawn between a perceived higher stress level and perceived lack of support, the finding that perceived lack of support can be used as an indicator of potential future teacher attrition as a result of heightening levels of stress.

The next section of the survey asked respondents to specify which of the four 21st-century stressors contributed most to their level of stress. The four 21st century stressors included “Decrease in funding for the Music Department Budget”, “Standardized Testing (decrease in instructional time for music students)”, “Increased scrutiny in teacher evaluation methods”, and “Technology Requirements (use of technology with the students as well as online grading systems and communication)”. Table 4.5: Percentage of Respondents vs. 21st Century Stressor shows the percent of respondents in each of the

categories of employment and which 21st century stressor they chose. The percent represents the subgroup of respondents under their matching employment status category.

Table 4.5: Percentage of Respondents vs. 21st Century Stressor

<u>21st Century Stressor</u>	<u>Percent of Active Respondents (310)</u>	<u>Percent of Resigned Respondents (11)</u>	<u>Percent of Retired Respondents (26)</u>
Decrease in Funding	23.23%	45.45%	7.69%
Standardized Tests	28.06%	18.18%	53.85%
Teacher Evaluation	33.23%	18.18%	38.46%
Technology	11.61%	18.18%	0.00%

The results from the collected data show active respondents to be most concerned with teacher evaluation (N=103, 33.23% of active respondents), resigned respondents to be most concerned with a decrease in funding for the music budget (N=5, 45.45% of resigned respondents), and retired respondents to be most concerned with standardized testing resulting in a decrease of instructional time (N=14, 53.85% of retired respondents). Interestingly, resigned respondents had the highest percentage of teachers

claiming technology to be their most common 21st century stressor, and those that retired had no respondents. This however contradicts the results found comparing age and level of experience and the emphasis of technology in the classroom in the next subsection of chapter 4, which shows a heightened level of perceived stress due to technology in teachers with more experience than teachers with less experience.

When compared to the data of all respondents, the 21st century stressor that was most commonly chosen was teacher evaluation, in all respondents (N=115, 33.14%) that aligned most closely with the responses from active teachers (N=103, 33.23%). Teacher evaluation was also listed at a higher frequency on the full list of contributing stressors than 59% of all other possible stressor selections.

It is clear that the 21st century stressors that were in question played an integrated role in the increased level of stress at work. Three out of four of the 21st century stressors listed in the overall contributing stressor survey question were selected the top 50% of all responses collected. It is possible that the 21st century stressor that did not appear in the top 50% of all responses collected was due to the fact that the survey was only offered online, and the 21st century stressor in question is the increased use of technology in the classroom. Perhaps due to the nature of the survey, the respondents felt more comfortable utilizing technology in their daily activities, and that translates well into the classroom environment.

Interesting trends can be uncovered when looking at the data in terms of frequency of coping mechanisms. A mixture of positive and negative coping mechanisms were intentionally combined together on the list offered to respondents. Looking at the

data in terms of Active respondents, the most frequent coping mechanism picked was “Watching TV/Netflix” (N=212, 68.39% of all active respondents), by almost a 2 to 1 margin as compared to resigned (N=4, 36.36% of all resigned respondents) and retired (N=9, 34.62% of all retired) respondents. Besides “prefer not to answer”, the coping mechanism with the lowest number of respondents was “smoking” across all categories, active (3.55% of all active respondents), resigned (0% of all resigned respondents), and retired (0% of all retired respondents). The reason for such low percentages for this coping mechanism could stem from it’s clandestine nature, it is possible that in the sample of respondents surveyed a number of teachers found it too personal an issue to respond truthfully. This can also extend to any of the coping mechanisms that may hold a negative connotation if associated with an individual, including the consumption of junk or comfort food and the consumption of alcohol. The consumption of alcohol was much more prevalent in the data collected from active respondents (N=101, 32.58% of all active respondents) versus resigned (N=2, 18.18% of all resigned) or retired (N=7, 26.92% of all retired).

Interestingly, the respondents that claimed to have resigned from the field of music education have the highest percentage of respondents that chose both “listen to music” and “play musical instrument/sing” most frequently. When comparing the act of listening to music, 81.82% (N=9) of all resigned respondents picked this coping mechanism by almost a 2 to 1 margin over active (N=130, 41.94% of all active respondents) and retired (N=11, 42.31% of retired) respondents. Similar results were mirrored for the “play musical instrument/sing” coping mechanism, where resigned respondents (N=8, 72.73%) reported almost a 2 to 1 margin over active (N=147, 47.42%

of all active respondents) and retired (N=10, 38.46% of all retired respondents). One explanation for the huge discrepancy in percentages for these two coping mechanisms may be that resigned respondents may be more active in performing on their instrument, either due to the benefits of stress relief or for artistic reasons. Those that resigned from the field of music education may find performance (and their related coping mechanisms) to be more agreeable for their current point in their lives. Active teachers may find it more difficult to maintain a position with a performing ensemble due to the nature of the workday hours, and retired teachers may experience depreciation in their ability to maintain a position with a performing ensemble due to physical ailments or their interests lying somewhere else.

Table 4.7: Employment Status and Coping Mechanisms

<u>Coping Mechanism</u>	<u>Percent of Active Respondents (310)</u>	<u>Percent of Resigned Respondents (11)</u>	<u>Percentage of Retired Respondents (26)</u>
Junk/Comfort Food	53.23%	54.55%	46.15%
Watching TV/Netflix	68.39%	36.36%	34.62%
Sleep	56.45%	36.36%	30.77%
Exercise	36.45%	27.27%	42.31%
Smoking	3.55%	0.00%	0.00%
Shopping	20.97%	9.09%	23.08%
Engage with Friends	40.32%	18.18%	26.92%

Alcohol	32.58%	18.18%	26.92%
Prayer	26.77%	9.09%	15.38%
Massage	24.19%	0.00%	3.85%
Listen to Music	41.94%	81.82%	42.31%
Play Musical Instrument/Sing	47.42%	72.73%	38.46%
Reading	39.03%	36.36%	30.77%
Journal	7.42%	27.27%	7.69%
Prefer not to answer	1.94%	9.09%	3.85%

Years of Experience

Much emphasis was placed on the interpretation of results from data collected in terms of years of experience. The data was broken down to compare teachers in the following ways: first year teachers versus all respondents, teachers with 0-5 years of experience versus those with 25 or more years of experience, and teachers with 0-14 years of experience versus those with 15 or more. The intention of these categorizations is to discover trends in what research tells us are the years in which are most frequently associated with teacher attrition, and to find solutions in the data from veteran teachers to form conclusions as to how to slow down teacher attrition and make the field of music education less stressful.

When breaking down the data to compare teachers with 0-5 years of experience versus those with 25 or more years of experience, the intention was to learn from the veteran teachers ways in which they manage their job to be less stressed. With nearly a 50% attrition rate of all teachers in the first 5 years of their careers, it becomes imperative to find ways in which to slow attrition. Table 4.8: 0-5 years vs. 25+ years of experience and average perceived levels of stress displays the data for respondents shows an increase in perceived stress on a non-work day to a work day of 32% (N=114) for all respondents with experience ranging from 0 to 5 years, and an increase in perceived stress of 36% (N=233) for all respondents with experience ranging from 25 to 35 plus years. Interestingly, the average perceived stress level of respondents with 5 years or less of experience was 6% higher than the average perceived level of stress on a non-work day from veteran teachers with 25 or more years of experience. One possible explanation for the heightened levels of stress on a non-work day for lesser-experienced teachers may be because of the amount of work they bring home with them and complete on a non-work day. This can include lesson planning, administrative duties, and mandatory teacher mentorship coursework for mentorship or induction programs that is compulsory for the new teacher but not for the veteran teacher.

Table 4.8: 0-5 years vs. 25+ years of experience and average perceived levels of stress

<u>Respondent Reported Years of Experience</u>	<u>Average Perceived Level of Stress at Work</u>	<u>Average Perceived Level of Stress on a non-work day</u>
5 years or less (114)	2.88	1.92
25 years or more (233)	2.80	1.72

When comparing the average levels of perceived stress between respondents with 0-14 years of experience versus those with 15 or more years of experience (as seen in Table 4.9: 0-14 years of experience vs. 15+ years of experience and average perceived levels of stress), similar results are found. The respondents with less years of experience (between 0 – 14 years, N=216) reported a higher perceived stress level both on a non-work day and at work as compared to the respondents with more experience (15 or more years, N=131), that reported lower perceived level of stress at work than those with 25 or more years of experience.

Table 4.9: 0-14 years of experience vs. 15+ years of experience and average perceived levels of stress

<u>Respondent Reported Years of Experience</u>	<u>Average Perceived Level of Stress at Work</u>	<u>Average Perceived Level of Stress on a non-work day</u>
0-14 years (216)	2.83	1.86
15 years or more (131)	2.77	1.78

As seen in Table 4.10: First year teacher vs. most experienced and average perceived levels of stress, first year teachers have one of the highest reported average perceived level of stress at work (N=15, average=2.80), but most significantly they have the highest perceived average level of stress on a non-work day than any other respondent (N=15, average=2.13). There is a positive correlation between heightened perceived level of stress on a workday and a non-work day from respondents in their first year of teaching. Again, this can be due to work related tasks being done at home on non-work days that veteran teachers either chose not to do or are not required to complete. Heightened levels of perceived stress on a workday and non-work day felt by first year teachers may also be due to the pressures of getting rehired for the next school year.

Table 4.10: First year teachers vs. most experienced and average perceived levels of stress

<u>Respondent Reported Years of Experience</u>	<u>Average Perceived Level of Stress at Work</u>	<u>Average Perceived Level of Stress on a non-work day</u>
First year teachers (15)	2.80	2.13
Teachers with 35+ years (23)	2.74	1.70

The percentage increase in level of stress seen in Tables 4.11 A-C compares the average level of perceived stress on a non-work day and average level of perceived stress on a work day using the aforementioned Formula 4.2: Percentage increase of stress between two sets of data to calculate the difference. Respondents that reported to be first year teachers (N=15, 22.3% increase) received the lowest calculated increase between non-work day and workday, as compared to those with 25 or more years of teaching (N=233, 36% increase) that received the highest calculated increase. There is a positive correlation between stress levels of first year teachers as compared to the negative correlation between stress levels of those with 25 or more years of teaching. This can be explained by the first year teachers stressors carrying over into their non-work day life, and veteran teachers (those with 25 or more years of experience) approaching retirement age are reporting lower levels of stress and higher levels of relaxation that correspond with the act of retirement.

**Tables 4.11: Years of Experience and Percentage increase in perceived stress levels
from non-work day to work day**

Table 4.11.A: First Year Teachers vs. Teachers with 35+ years of experience

<u>Respondent Reported Years of Experience</u>	<u>Percent increase in perceived level of stress from a non-work day to work day</u>
First year teachers (15)	22.3%
Teachers with 35+ years (23)	34.7%

**Table 4.11.B: Teachers with 0-14 years of experience vs. teachers with 15+
years of experience**

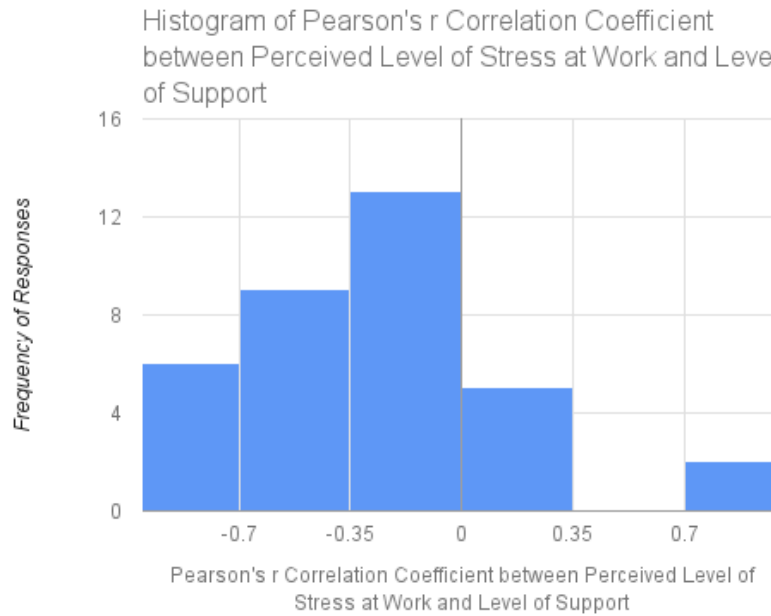
<u>Respondent Reported Years of Experience</u>	<u>Percent increase in perceived level of stress from a non-work day to work day</u>
0-14 years (216)	32.3%
15 years or more (131)	33.0%

**Table 4.11.C: Teachers with 0-5 years of experience vs. teachers with 25+
years of experience**

<u>Respondent Reported Years of Experience</u>	<u>Percent increase in perceived level of stress from a non-work day to work day</u>
5 years or less (114)	32.0%
25 years or more (233)	36.0%

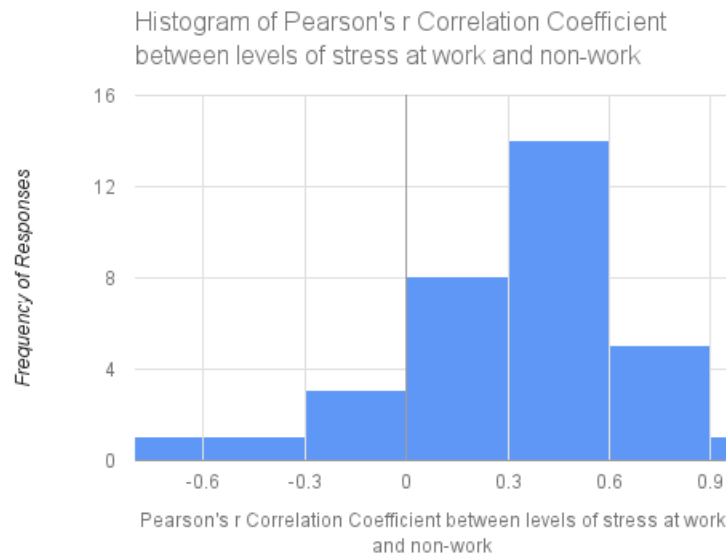
Appendix F, Table F.1: Years of Experience, Number of Respondents, Pearson's r calculations breaks down the data by individual years of experience reported by all respondents. From this breakdown, average perceived level of stress at work was compared to the average of the perceived levels of support (from administration, colleagues, and community) to obtain the Pearson's r correlation coefficient. As seen in Graph 4.1: Histogram of Pearson's r Correlation Coefficient between Perceived Level of Stress at Work and Level of Support, the majority of respondents most frequently had a negative Pearson's r correlation coefficient. As mentioned in the breakdown of data between the categories of employment status, a very strong negative correlation between perceived level of stress at work and perceived level of support was found, meaning the higher the perceived level of stress, the lower the perceived level of support reported, and vice versa. This is evident in the frequency of negative r coefficients graphed in Graph 4.1.

Graph 4.1: Histogram of Pearson's r Correlation Coefficient between Perceived Level of Stress at Work and Level of Support



Using the data found in Appendix F, Table F.1, average perceived level of stress at work was compared to the average of the perceived level of stress on a non-work day to obtain the Pearson's r correlation coefficient. As seen in Graph 4.2: Histogram of Pearson's r Correlation Coefficient between Perceived Levels of Stress, a slightly positive correlation can be seen in all the majority of respondents between levels of stress. Those that reported a higher perceived level of stress at work were somewhat more likely to report a higher perceived level of stress on a non-work day as well.

Graph 4.2: Histogram of Pearson's r Correlation Coefficient between Perceived Levels of Stress



When looking at the data in terms of perceived level of support from administration, colleagues, and community, interesting trends were uncovered. Tables 4.12.A-C: Years of Experience and Average Perceived Levels of Support break the information down through a series of three comparisons; first year teachers (N=15) versus veteran teachers with 35 or more years of experience (N=23) in Table 4.12.A, teachers with less than 14 years of experience (N=216) versus teachers with 15 or more years of experience (N=131) in Table 4.12.B, and teachers with 5 years or less of experience (N=114) versus teachers with 25 years or more of experience (N=233) in Table 4.12.C.

Interestingly, first year teachers reported the highest average of perceived level of support from administration (N=15, average=3.33) versus the lowest average of perceived level of support from respondents with 15 years or more of experience (N=131,

average=2.04), a significant decrease of 43%. One justification for this result may be that new teachers experiencing their first year of teaching must go through a district mandated (sometimes State mandated) new teacher induction or mentorship program, which involves the new teacher being paired up with a more veteran and tenured (when applicable) teacher. This may result in an increased favorable perception of support from administration made by the first year teacher. Alarming, this favorable perception of support from administration drops by 12.67% (N=98, average=2.95) when compared to years 2-5 of teaching. When comparing those teachers in their first year of teaching to teachers in their 5th year of teaching, the average perceived level of support from administration drops by a staggering 24.67% (N=17, average 2.59). It is made clear from the comparison made using this surveyed data that while the average of all perceived levels of support decreases slightly from first year teachers to teachers in their 5th year of teaching, there is a significant drop in perceived support from administration. This finding will be the target of recommendations in Chapter 5.

Tables 4.12.A-C: Years of Experience and Average Perceived Levels of Support

Table 4.12.A: First Year Teachers vs. Veteran Teachers and Average Perceived Levels of Support

<u>Respondent Reported Years of Experience</u>	<u>Average Perceived Level of Support from Administration</u>	<u>Average Perceived Level of Support from Colleagues</u>	<u>Average Perceived Level of Support from Community</u>	<u>Average of All Perceived Levels of Support</u>
First year teachers (15)	3.33	3.07	2.87	3.09
Teachers with 35+ years (23)	3.22	2.87	3.26	3.12

Table 4.12.B: 0-14 Years of Experience Teachers vs. Teachers with 15+ years of Experience and Average Perceived Levels of Support

<u>Respondent Reported Years of Experience</u>	<u>Average Perceived Level of Support from Administration</u>	<u>Average Perceived Level of Support from Colleagues</u>	<u>Average Perceived Level of Support from Community</u>	<u>Average of All Perceived Levels of Support</u>
0-14 years (216)	3.04	2.85	2.89	2.93
15 years or more (131)	2.04	2.85	3.09	2.96

Table 4.12.C: Less than 5 years of Experience Teachers vs. Teachers with 25+ years of Experience and Average Perceived Levels of Support

<u>Respondent Reported Years of Experience</u>	<u>Average Perceived Level of Support from Administration</u>	<u>Average Perceived Level of Support from Colleagues</u>	<u>Average Perceived Level of Support from Community</u>	<u>Average of All Perceived Levels of Support</u>
5 years or less (114)	3	2.85	2.87	2.91
25 years or more (233)	2.85	2.82	3.04	2.9

It is encouraging to see a high level of perceived support from colleagues from respondents that are first year teachers (N=15, average= 3.07). While the averages from first year teacher respondents were some of the highest, it is interesting to note that respondents with 35 years or more of teaching experience have the highest average of all levels of support (N=23, average =3.12).

Table G.1: Type of Contributing Stressor and Number of Respondents in Appendix G compares the categories of years of experience and the percentage of respondents in each category that chose from the list of contributing stressors. The majority of respondents in their first year of teaching (N=15, Response= 66.67%) picked “lost prep/lunch time” most frequently of all stressors. Lost prep/lunch time trends highest in frequency in subgroups of first year teacher, 0-5 years of experience, and 0-14 years of experience (51.85% - 66.67%), and significantly reduces in frequency in

respondents with 35+ years of experience (N=23, frequency=21.74%). First year teachers also reported “Duty outside of the classroom (IE. Bus duty, hall monitor, lunch duty, bathroom duty, etc)” highest in frequency (N=15, Response=66.67%). The data shows that this stressor is only heightened in frequency the first year of teaching, and it is reduced in frequency by 28.07% within the first 5 years of teaching. Teachers with 35 years or more of experience (N=23) picked two out of the four tracked 21st century stressors as contributing stressors with the most frequency of respondents in their years of experience category, decreased funding and standardized testing (both at a response rate of 52.17%).

It is worth noting that respondents that have taught for 15 or more years (N=131) reported “too much paperwork” as their biggest contributing stressor, at 54.20%, 59.49% for respondents with 25 or more years of experience (N=79), and 52.17% for respondents having taught 35 or more years (N=23). In contrast to this result, respondents in their first year of teaching represented the lowest percentage of respondents claiming “too much paperwork” as a stressor (N=15, Response=26.67%). There is a strong correlation between more years of experience and a higher percentage of respondents picking “too much paperwork” as a contributing stressor.

The highest frequency of respondents picking “concert” as a contributing stressor resulted from 56.14% of all respondents with less than 5 years of experience (N=114). This is likely due to the fact that respondents with less than 5 years of experience are working hard to be rehired and obtain tenure (if applicable), and see the concert as a culmination of their progress during the school year. Referring back to Table 4.8: 0-5 years vs. 25+ years of experience and average perceived levels of stress, it can be

determined that this grouping of respondents is the most highly stressed on average at work. A positive correlation can be seen in individuals with 5 years or less of experience regarding higher average levels of stress at work and the “concert” as a contributing stressor.

In terms of 21st century stressors, increased emphasis on technology in the classroom was picked at the lowest frequency in all years of experience categories, lowest of which was the respondents reporting to be first year teachers (N=15, Response=13.33%). This is to be expected, as training on the university level in teacher education programs have an increased emphasis on the use of technology in the classroom. Table 4.13: 21st Century Stressors and Years of Experience displays the referenced data. Interestingly, first year teachers reported the lowest frequency of respondents concerned about “teacher evaluations” as a contributing stressor (N=15, Response=20%). When compared to the data for respondents with 0-5 years of experience, the response frequency more than doubles to 46.49% (N=114). This can be due to teachers becoming more concerned about their chance of being rehired in the subsequent years leading to their tenure (if applicable).

Teachers with 25 years or more of experience reported the highest frequency of standardized testing as a contributing stressor (N=79, Response= 54.43%) as compared to all other categories of years of experience. As mentioned previously, the potential of lost instructional time due to the nature of the standardized testing schedules may have an impact on concert preparation and lead to a higher perceived stress level. Teachers with 25 years or more of experience also reported the highest frequency percentage of “decreased music budget” as a contributing stressor (N=79, Response= 56.96%) as

compared to all other categories of years of experience. It is important to note that this 21st century stressor was the only contributing stressor that received at least 50% of all respondent responses.

Table 4.13: 21st Century Stressors and Years of Experience

<u>Type of Stressor</u>	<u>Percent of First Year Teacher Respondents</u> <u>15</u>	<u>Percent of Respondents with 0-5 years of Experience</u> <u>114</u>	<u>Percent of Respondents with 0-14 years of experience</u> <u>216</u>	<u>Percent of Respondents with 15 years or more of experience</u> <u>131</u>	<u>Percent of Respondents with 25 or more years of experience</u> <u>79</u>	<u>Percent of Respondents with 35+ years of experience</u> <u>23</u>
Decreased Music Budget	53.33%	54.39%	50.93%	54.20%	56.96%	52.17%
Standardized Testing	26.67%	49.12%	45.37%	47.33%	54.43%	52.17%
Teacher Evaluations	20.00%	46.49%	41.20%	36.64%	41.77%	30.43%
Technology	13.33%	20.18%	18.52%	19.08%	20.25%	17.39%

Respondents were asked to respond to the influence of each of the four 21st-century stressors on their overall average level of stress on a 4 point Likert scale. When looking at Table 4.14: Average Perceived Level of Stress from 21st Century Stressors and Years of Experience, a positive increase of 15.67% can be seen in the use of technology in the classroom as contributing to the overall level of stress from first year teacher respondents (N=15, Response=1.53) to respondents with 35 or more years of experience

(N=23, Response=2.00). There is a positive correlation between more years of experience and higher perceived level of stress from use of technology in the classroom. Similarly, there is a positive increase of 11.33% in regards to standardized testing stress levels between first year teachers (N=15, Response= 2.27) and respondents with 35 years or more of experience (N=23, Response= 2.61). There is a positive correlation between more years of experience and higher perceived level of stress from standardized testing.

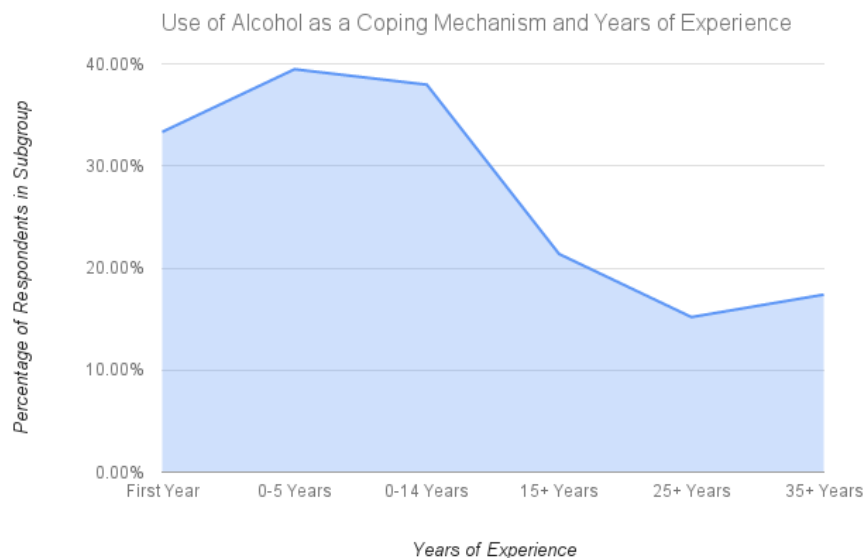
Table 4.14: Average Perceived Level of Stress from 21st Century Stressors and Years of Experience

<u>21st Century Stressor</u>	<u>First Year Teacher (N=15)</u>	<u>Respondents with 0-5 Years of Experience (N=114)</u>	<u>Respondents with 0-14 Years of Experience (N=216)</u>	<u>Respondents with 15+ Years of Experience (N=131)</u>	<u>Respondents with 25+ Years of Experience (N=79)</u>	<u>Respondents with 35+ Years of Experience (N=23)</u>
Technology	1.53	1.75	1.69	1.9	1.94	2
Standardized Testing	2.267	2.5	2.4	2.44	2.49	2.61
Decreased Budget	2.6	2.65	2.5	2.46	2.38	2.26
Teacher Evaluation	2.53	2.66	2.6	2.66	2.63	2.39

The analysis of coping mechanism data through the lens of years of experience produced interesting results in terms of trends in stress levels. Table H.1: Coping Mechanisms vs. Years of Experience can be found in Appendix H: Coping Mechanisms

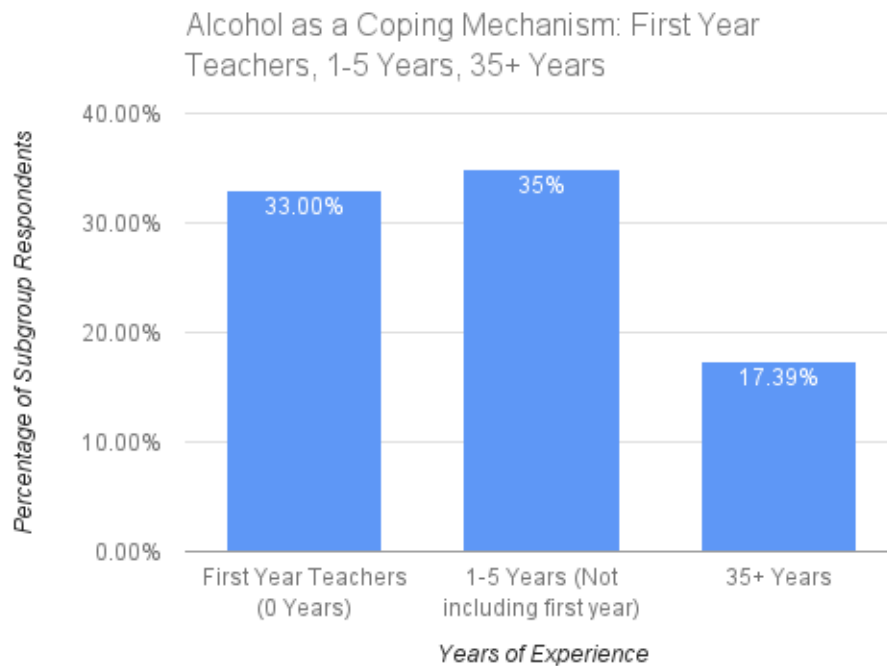
and Years of Experience. At first glance, it seems that every subgroup of respondents categorized by years of experience most frequently chose “Watching TV/Netflix” as one of their coping mechanisms for stress relief. In first year teacher respondents, this was the highest in frequency, at 93.33% (N=15), and the lowest in respondents with 35 or more years of experience, at 52.17% (N=23). The mixture of positive and negative coping mechanisms became important in terms of linking respondents answers to levels of stress in different points in their careers, uncovering certain coping mechanisms as predictors of stress management. When specifically looking at use of alcohol as a coping mechanism by years of experience, it is evident there is a correlation between more years of experience and lower percentages of respondents in subgroups. See Graph 4.3: Use of Alcohol as a Coping Mechanism and Years of Experience.

Graph 4.3: Use of Alcohol as a Coping Mechanism and Years of Experience



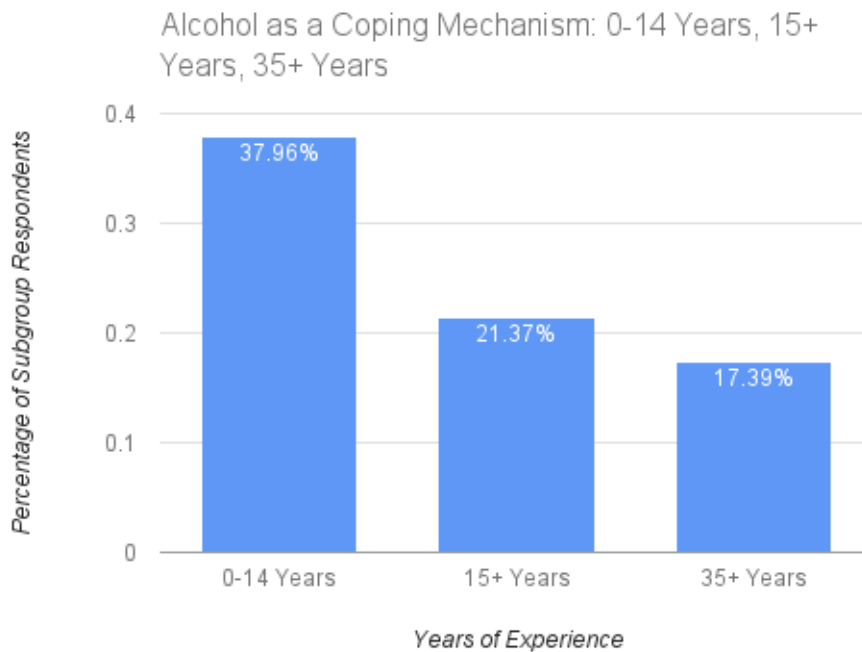
Interestingly, the level of frequency alcohol was selected as a coping mechanism between respondents in their first 5 years of teaching and those with 35 or more years of experience is nearly halved. See Graph 4.4: Alcohol as a Coping Mechanism: First Year Teachers, 1-5 Years, 35+ Years.

Graph 4.4: Alcohol as a Coping Mechanism: First Year Teachers, 1-5 Years, 35+ Years



In Graph 4.5: Alcohol as a Coping Mechanism: 0-14 Years, 15+ Years, 35+ Years, a similar trend can be found in the severe reduction of alcohol use as the years of experience increases.

Graph 4.5: Alcohol as a Coping Mechanism: 0-14 Years, 15+ Years, 35+ Years



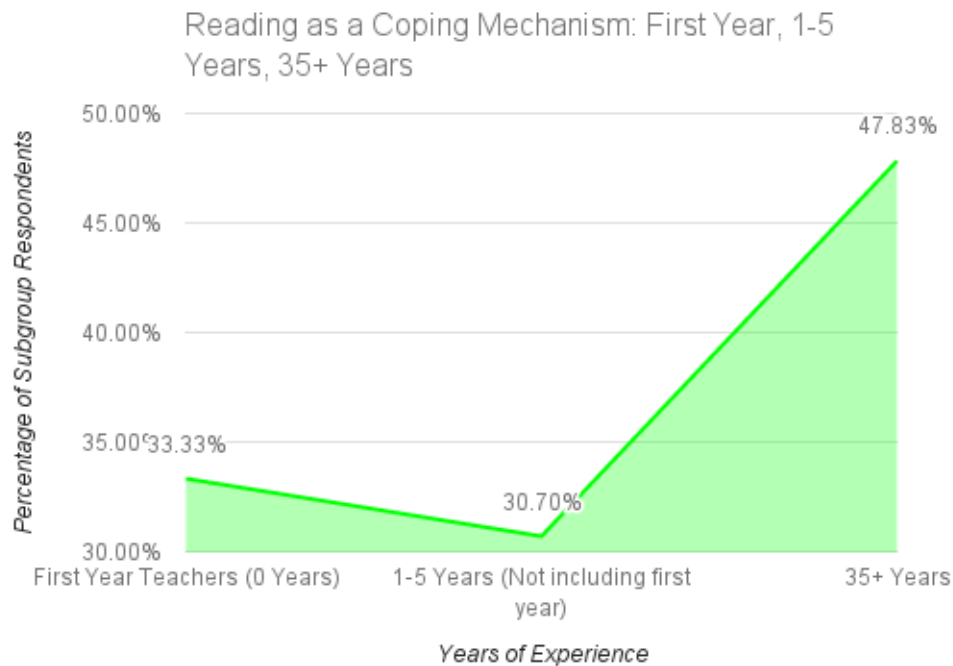
While increased alcohol consumption may negatively impact respondent health, there are a number of coping mechanisms that were presented to respondents as options for coping mechanisms. One of interest is the act of reading as a coping mechanism. When looking at Table 4.15: Years of Experience and Perceived Average Levels of Stress, the perceived average stress level on a workday is similar between first year respondents and those that have 35 years or more of experience (2% difference). Most interesting is the difference in perceived average levels of stress on a non-work day as compared between these two subgroups, a difference of 14.3%.

Table 4.15: Years of Experience and Perceived Average Levels of Stress

<u>Years of Experience</u>	<u>Perceived Average Level of Stress on a Work Day</u>	<u>Perceived Average Level of Stress on a Non-Work Day</u>
First Year Teachers (0 Years of Experience) N=15	2.8	2.13
35 or more Years of Experience N=23	2.74	1.7

When comparing coping mechanisms and stress levels between first year respondents, respondents with 1 to 5 years of experience (not including first year respondents), and those with 35 or more years of experience, reading as a coping mechanism proved to have positive effect. When looking at the data seen in Graph 4.6: Reading as a Coping Mechanism: First Year, 1-5 Years, 35+ Years, those with 1-5 years of experience (N=98) not including first year respondents have the lowest frequency in respondents in the subgroup that picked reading as a coping mechanism (Response=30.70%), as compared to the frequency for respondents with 35 years or more experience, which increased by 17.13% to 47.83% (N=23). Because this is seen more frequently in veteran teachers, it is possible there is a link between reading as a coping mechanism and lower levels of perceived stress.

Graph 4.6: Reading as a Coping Mechanism: First Year, 1-5 Years, 35+ Years



Breaking down the data further, Tables 4.16-4.20 show coping mechanisms used by respondents with 35 or more years of experience with a stress level 2 or less (Table 4.16), 35 or more years of experience with a stress level of 3 to 4 (Table 4.17) as compared to first year teacher respondents with a stress level of 2 or less (Table 4.18) and first year teacher respondents with a stress level of 3 to 4 (Table 4.19). This can all be compared to the data collected by all respondents, as seen in Table 4.20: Coping Mechanisms as Compared to Stress Levels in all Respondents.

Table 4.16: Coping Mechanisms for Veteran Teachers Stress Level 2 or Below

<u>35+ Years of Experience: Stress level at work 2 or less</u> (N=7)	<u>Percentage of Respondents</u> (N=7)
Engage with friends	57%
Play Musical instrument/sing	43%
Reading	43%
Listen to Music	43%
Watching TV/Netflix	29%
Exercise	29%
Junk/Comfort Food	29%
Massage	14%
Prayer	14%
Journal	14%
Sleep	14%

Table 4.17: Coping Mechanisms for Veteran Teachers Stress Level 3 to 4

<u>35+ Years of Experience: Stress level at work 3 or more</u> (N=16)	<u>Percentage of Respondents</u> (N=16)
Junk/Comfort Food	56%
Watching TV/Netflix	50%
Engage with friends	50%
Reading	44%
Listen to Music	38%
Exercise	38%
Sleep	31%
Alcohol	25%
Play Musical Instrument/Sing	25%
Shopping	25%
Prayer	19%

Massage	13%
Journal	6%

When comparing respondents with 35 years or more of experience and varying stress levels, the less stressed individuals (perceived stress level at work 2 or less) reported a higher frequency of responses for “playing musical instrument/sing” and “listen to music”, and a lower frequency of responses for “alcohol” and “junk/comfort food”. In contrast, respondents with 35 or more years of experience and higher levels of perceived stress (stress level 3 or 4) reported a higher frequency of responses for “alcohol”, “sleep”, and “Watch TV/Netflix”, and a lower frequency of responses for “engage with friends”, “play musical instrument/sing” and “listen to music”.

Table 4.18: Coping Mechanisms for First Year Teachers Stress Level 2 or Below

<u>First Year Teachers: Stress level at work 2 or less</u> (N=4)	<u>Percentage of Respondents</u> (N=4)
Listen to Music	100%
Watching Tv/Netflix	75%
Sleep	75%
Engage with friends	50%
Play Musical instrument/sing	50%
Exercise	25%
Junk/Comfort Food	25%
Massage	25%
Journal	25%

Table 4.19: Coping Mechanisms for First Year Teachers Stress Level 3 or 4

<u>First Year Teachers: Stress Level at work 3 or more</u> (N=11)	<u>Percentage of Respondents</u> (N=11)
Watching TV/Netflix	91%
Sleep	91%
Engage with friends	73%
Junk/Comfort Food	64%
Listen to Music	64%
Reading	45%
Alcohol	36%
Play Musical Instrument/Sing	36%
Exercise	27%
Shopping	27%
Prayer	18%

When comparing respondents in their first year of teaching and varying stress levels, the less stressed individuals (perceived stress level at work 2 or less) reported a significantly higher frequency of responses for “playing musical instrument/sing” and “listen to music”, and a lower frequency of responses for “alcohol” and “junk/comfort food”. In contrast, respondents in their first year of teaching and higher levels of perceived stress (stress level 3 or 4) reported a significantly higher frequency of responses for “alcohol”, “sleep”, and “Watch TV/Netflix”, and a lower frequency of responses for “engage with friends”, “play musical instrument/sing” and “listen to music”.

Similar trends can be seen in the responses to coping mechanisms from all respondents, the more stressed the respondent, the more frequently they imbibe in alcohol and junk/comfort food. Refer to Table 4.20: Coping Mechanisms as Compared to Stress Levels in all Respondents for a further breakdown of data. The higher stressed individuals reported to smoking more as well. It is recommended to those individuals that have a higher perceived level of stress at work decrease their frequency of said negatively perceived coping mechanisms and replace them with healthier options such as reading, engaging with friends, exercise, and most importantly an increase in playing their musical instrument or singing.

A positive correlation is apparent between lower levels of perceived work stress and higher frequency of using playing an instrument/singing as a coping mechanism.

Table 4.20: Coping Mechanisms as Compared to Stress Levels in all Respondents

<u>Coping Mechanism</u>	<u>Average Perceived Stress Level at Work: 1-2 (N=110)</u>	<u>Average Perceived Stress Level at Work: 3-4 (N=237)</u>
Alcohol	23.63%	35.44%
Junk/Comfort Food	35.45%	60.76%
Smoking	1.82%	3.80%
Watching TV/Netflix	64.55%	64.98%
Engage with Friends	33.64%	40.93%
Reading	40%	37.55%
Sleep	44.55%	58.23%
Play musical instrument/sing	46.36%	48.10%
Listen to music	38.18%	45.57%
Exercise	36.36%	36.71%

Prayer	27.27%	24.48%
Shopping	16.36%	22.78%
Massage	15.45%	13.08%
Journal	10%	7.17%

CHAPTER 5:

Conclusion

It is evident through research that prolonged stress is detrimental to the mental and physical wellbeing of humans. Educators have one of the most stressful jobs in the work force, and encounter eustress and distress on a daily basis. The level of intensity and the frequency of said occupational stressors among other additional variables determine the rate of degradation of ones mental and physical health. A strong correlation can be seen in teachers specifically with high reported stress levels and high CES-D scores (Center for Epidemiologic Studies Depression Scale).

As previously mentioned in Chapter 2, heightened occupational stress can lead to more frequent illness causing increased teacher absenteeism, some of which are anxiety, depression, panic attacks, PTSD, eating disorders, excessive dependence on alcohol or drugs, hypertension, chronic fatigue, heart disease, strokes, migraines, and peptic ulcers, which directly impact teacher effectiveness in the classroom. When educators are not at peak efficiency, the quality of their instruction suffers, and student growth is negatively impacted.

The research explored in Chapter 2 emphasized the changes in brain chemistry due to stress. Levels of cortisol and glucocorticoids increase as perceived stress levels increase, which is proven to have a significant impact on memory function, and can create further problems with the transfer of knowledge from short term to long term memory.

The research discussed in Chapter 2 facilitated the narrative formed by the analysis of data collected in the survey. A very clinical approach was taken when analyzing the collected data, and interesting correlations were discussed in Chapter 4. Pearson's r Correlation Coefficient (PPMCC) was used to chart the intensity of correlations between data sets.

The author's study of 347 individuals included respondents from 38 U.S. States, in varying stages of their careers (active, resigned, retired), with various job descriptions and years of experience that collectively created a database of information from which all information was drawn and tables were formed. The collected data provided the opportunity to cross correlate between datasets to come to conclusions regarding indicators of heightened levels of stress and burnout, and whether these stressors were 21st century in nature.

It can be concluded that a subset of respondents with heightened perceived levels of stress at work also had the lowest average of perceived levels of support from administration, colleagues, and the community. A very strong correlation (Pearson's r Correlation Coefficient= -0.71) was uncovered specifically for those respondents reporting to have resigned from the field of Music Education and their perceived levels of stress at work and perceived level of support. Additionally, the majority of this subgroup of respondents also picked "lack of support from admin/teachers/parents" as one of their leading contributing stressors (Response Percentage of Subgroup=72.73%). This significant correlation resulted in the author examining the subgroup of respondents reporting to be active in the field of music education that also chose "lack of support from admin/teachers/parents" as one of their leading contributing stressors. This subgroup of

active respondents had an 8% higher perceived level of stress response than the subgroup of active respondents that did not choose “lack of support from admin/teachers/parents” as a contributing stressor. It was determined that lack of support can be used as an indicator of potential future teacher attrition as a result of heightened levels of stress.

Additionally, as a result from the data collected by survey, it was found that teacher evaluation was the most commonly chosen 21st century stressor from active teacher respondents. Teacher evaluation was also listed at a higher frequency on the full list of contributing stressors than 59% of all other possible stressor selections.

By analyzing the data through the lens of years of experience, this study proved that the respondents with experience ranging from 0 to 5 years (those of which have the most alarming rate of teacher attrition at nearly 50% by year 5) have an increased perceived level of stress at work over their veteran respondents with 25 or more years of experience. In terms of their perceived level of support from administration, colleagues, and the community, first year teachers reported one of the highest averages of perceived level of support, the highest being respondents with 35 years or more of teaching experience. A significant decrease in perceived level of support of 43% was found when comparing first year teachers to those with 15 or more years of experience.

Additionally, when comparing first year teachers to respondents with 5 years of teaching experience, the average of perceived support from administration alone drops by 24.67%. While the average of all perceived levels of support decreases slightly from first year teachers to teachers in their 5th year of teaching, there is a significant drop in perceived support from administration specifically.

The reported use of alcohol amongst respondents had a strong correlation to the average perceived level of stress they experienced. It was found that 15.61% more first year teachers admitted to using alcohol as a coping mechanism as compared to their veteran counterparts with 35 or more years of experience. Additionally, the first year teacher respondent subset reported experiencing a higher level of stress both on a workday and non-workday, and a slightly lower level of perceived support from administration, colleagues, and parents than veteran teachers with 35 or more years of experience. Therefore, alcohol use can be perceived in two ways: it can be a more popular coping mechanism for those that are more stressed, and it can be a coping mechanism that is potentially less effective at reducing levels of stress as compared to other coping mechanisms.

It is evident that lower levels of support are related to higher levels of stress, and that this may lead to teacher attrition. Because of this, a few recommendations can be made to counteract this drop in perceived level of support, and to help lower perceived levels of stress to help slow down teacher attrition.

Mentorship and new teacher induction programs when implemented effectively have a positive impact on new teachers. As of this writing, there are 21 U.S. States that do not have a statewide requirement for new teachers to be involved in a mandated mentorship or induction program. Additionally, the states that do require a form of mentorship or induction program do not require it to extend past the first year of teaching (Goldrick 5). This reinforces the noted trend discovered from responses in the author's survey, perceived level of support drops significantly between first year teachers to second year teachers through to teachers with 5 years of experience, resulting in a 24.

67% reduction of averaged perceived level of support. It is recommended that teacher mentorship or induction programs are mandated in all 50 U.S. States, and they extend past the first completed year of teaching. In addition, it is recommended that school districts evaluate their professional development offerings to better suit the new educator. Recent graduates from teacher colleges are increasingly more comfortable with the use of technology in the classroom, and are less bothered by stressors addressed in college than their veteran counterparts. If professional development catered to the new teacher in terms of content that is not redundant and is meaningful, it may help reduce the level of stress, and further increase the perceived level of support by administration.

Additionally, it is recommended that teacher colleges extend their support to recent graduates of their education programs during their transitional first year of teaching. An increased mandated support system will result in higher perceived levels of support from first year teachers, thereby potentially reducing their level of perceived stress in the workplace.

If stress is reduced, more effective teaching can take place, resulting in a higher level of satisfaction from educators, administration, parents, and most importantly the students. This will help slow the rate of teacher attrition, and result in quality teachers remaining in the field for longer careers.

Music educators have one of the toughest most stressful jobs and are leaving the field at an increasing rate. The world would be a better place if we can get back to what really matters most; sharing the music we love with generations of the young and talented.

Appendix A: The Many Hats of a Band Director



Appendix B: Questionnaire/Survey

Graduate Thesis Questionnaire

This survey will be used for research purposes to support my thesis for my Masters Degree in Music Education. If you would care to share any additional information regarding your position, please email me at jhorne@uarts.edu . Thank you so much for your time!

THESIS Psychological Study of 21st Century Occupational Stressors and their Impact on the Music Educator

ABSTRACT The purpose of this impact study is to identify occupational stressors encountered in the field of music education. This philosophical and empirical study will uncover the physiological, biological, and emotional implications of said stressors on the music educator. This investigation will survey music educators to guide the discovery of trends in occupational environment and stressors.

The music educator in the 21st century has a multitude of responsibilities that previous educators did not have. Many of these responsibilities lie outside the realm of education, and can require additional training, practice, and time. The field of education is changing at an unprecedented pace, and educators feel pressured to catch up to the latest technology standards (which have led to new requirements for communication, grading, and teaching techniques), to comply with more rigid teacher evaluation methods, and to cope with the loss of instructional time due to standardized tests, in addition to other stressors. These chronic stressors can have a psychological impact on the music educator.

This study seeks to uncover if stress can upset the neurological balance that allows for a music educator to function in their work environment to their fullest potential. Evidence collected by survey will determine if there is a correlation between heightened stress in the work environment and each of the following factors: years of formal teaching experience, subject area (general music, choir, band, orchestra), age range of students, number of students, geographical location, school district economic classification, and extracurricular responsibilities.

Jennifer Horne

B.MEd, Temple University

M.MEd Candidate, University of the Arts

1. Select your age range:
(Mark only one)

- ☐ 21-25
- ☐ 26-30
- ☐ 31-35
- ☐ 36-40
- ☐ 41-45
- ☐ 46-50
- ☐ 51-55
- ☐ 56-60
- ☐ 61-65
- ☐ 65 and older

2. Select your gender:
(Mark only one)

- ☐ Male
- ☐ Female
- ☐ Other
- ☐ Prefer not to answer

3. In what US State is/was the MAJORITY of your employment in the field of education:
(Mark only one)

- ☐ AL ☐ AK ☐ AZ ☐ AR ☐ CA ☐ CO ☐ CT ☐ DE ☐ FL ☐ GA ☐ HI ☐ ID
- ☐ IL ☐ IN ☐ IA ☐ KS ☐ KY ☐ LA ☐ ME ☐ MD ☐ MA ☐ MI ☐ MN ☐ MS
- ☐ MO ☐ MT ☐ NE ☐ NV ☐ NH ☐ NJ ☐ NM ☐ NY ☐ NC ☐ ND ☐ OH ☐ OK
- ☐ OR ☐ PA ☐ RI ☐ SC ☐ SD ☐ TN ☐ TX ☐ UT ☐ VT ☐ VA ☐ WA ☐ WV
- ☐ WI ☐ WY

4. In what type of educational institution have you spent the MAJORITY of your teaching career:
(Mark only one)

- ☐ Public School
- ☐ Private School
- ☐ Charter School

**5. Select the number of COMPLETED years of teaching:
(Mark only one)**

- ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6 ☐7 ☐8 ☐9 ☐10 ☐11
☐12 ☐13 ☐14 ☐15 ☐16 ☐17 ☐18 ☐19 ☐20 ☐21 ☐22 ☐23
☐24 ☐25 ☐26 ☐27 ☐28 ☐29 ☐30 ☐31 ☐32 ☐33 ☐34 ☐35
☐ More than 35 years

**6. What is your current employment status in the field of Education:
(Mark only one)**

- ☐ Active
☐ Retired
☐ Resigned from the field of education (not retired)

The following questions are in regards to your CURRENT teaching position. If you are retired, or have resigned from the field of education, please answer the following questions about your most recent position.

**7. Select your CURRENT (or most current) US State of employment in the field of education:
(Mark only one)**

- ☐AL ☐AK ☐AZ ☐AR ☐CA ☐CO ☐CT ☐DE ☐FL ☐GA ☐HI ☐ID
☐IL ☐IN ☐IA ☐KS ☐KY ☐LA ☐ME ☐MD ☐MA ☐MI ☐MN ☐MS
☐MO ☐MT ☐NE ☐NV ☐NH ☐NJ ☐NM ☐NY ☐NC ☐ND ☐OH ☐OK
☐OR ☐PA ☐RI ☐SC ☐SD ☐TN ☐TX ☐UT ☐VT ☐VA ☐WA ☐WV
☐WI ☐WY

**8. Name the city/town that most closely identifies your most recent position:
Example: Cherry Hill**

.....

9. What grade level do you teach?
(Check all that apply)

- ☐ Kindergarten
- ☐ 1st Grade
- ☐ 2nd Grade
- ☐ 3rd Grade
- ☐ 4th Grade
- ☐ 5th Grade
- ☐ 6th Grade
- ☐ 7th Grade
- ☐ 8th Grade
- ☐ 9th Grade
- ☐ 10th Grade
- ☐ 11th Grade
- ☐ 12th Grade
- ☐ Other:

10. What type of music classes do you teach?
(Check all that apply)

- ☐ Elementary General Music
- ☐ Elementary Chorus
- ☐ Elementary Band
- ☐ Elementary Orchestra
- ☐ Middle School Band
- ☐ Middle School Orchestra
- ☐ Middle School Chorus
- ☐ Middle School General Music
- ☐ High School Band
- ☐ High School Orchestra
- ☐ High School Chorus
- ☐ Music Appreciation
- ☐ Music Theory
- ☐ Marching Band
- ☐ Musical Theatre
- ☐ Drumline
- ☐ Music Technology
- ☐ Itinerant Instrumental Lessons
- ☐ Select Band (auditioned group)

- ☐ Select Choir (auditioned group)
- ☐ Select Orchestra (auditioned group)
- ☐ Guitar
- ☐ Handbells
- ☐ Other:

**11. What is the approximate number of students you teach in ONE YEAR
(general music/elective classes included):
(Include all grade levels and electives, mark only one)**

- ☐ 1-25
- ☐ 26-50
- ☐ 51-100
- ☐ 101-150
- ☐ 151-200
- ☐ 201-250
- ☐ 251-300
- ☐ 301-305
- ☐ 306-350
- ☐ more than 350

**12. How supported do you feel by your administrators?
(Mark only one)**

	1	2	3	4	
No support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of support

**13. How supported do you feel by other teachers in your building(s)?
(Mark only one)**

	1	2	3	4	
No support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of support

14. How supported do you feel by the community?
(Mark only one)

	1	2	3	4	
No support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of support

21st Century Stressors

This section seeks to identify trends in 21st century education and their impact on the educator. Reminder: The results from this will not be used to identify specific educators/workplaces. All responses collected will be used in an anonymous fashion, please answer truthfully!

15. On a daily basis, what is your average level of stress during school hours?
(Mark only one)

	1	2	3	4	
No stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of stress

16. On average, what is your level of stress on a non-work day?
(Mark only one)

	1	2	3	4	
No stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of stress

17. Select all of the contributing stressors you experience in the workplace:
(Select all that apply)

- ☐ Lack of support from admin/teachers/parents
- ☐ Unclear goals from principal, administrator, other music teachers
- ☐ Lack of coordination among the music department in terms of curriculum
- ☐ Too much paperwork
- ☐ Lost prep/lunch time

- ☐ Duty outside of the classroom (IE. Bus duty, hall monitor, lunch duty, bathroom duty, etc)
- ☐ Not enough money in the music budget
- ☐ Poor quality musical equipment/instruments in disrepair
- ☐ No music room
- ☐ Inability to regulate schedules
- ☐ Decreased instructional time due to standardized testing
- ☐ Teacher Evaluations
- ☐ Increased emphasis on Technology
- ☐ Changing State Standards (adoption of Common Core)
- ☐ Concerts
- ☐ Recruitment
- ☐ Extracurricular responsibilities
- ☐ Other:

18. Select the 21st century factor that MOST contributes to your level of workplace stress:
(Mark only one)

- ☐ Standardized testing (decrease in instructional time for music students)
- ☐ Decrease in funding for the Music Department Budget
- ☐ Increased scrutiny in teacher evaluation methods
- ☐ Technology Requirements (use of technology with the students as well as online grading systems and communication)

19. How much does the increased emphasis on Technology use in the classroom influence your level of stress?
(Mark only one)

	1	2	3	4	
No influence on stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of influence on stress

20. How much does Standardized Testing influence your level of stress?
(Mark only one)

	1	2	3	4	
No influence on stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of influence on stress

21. How much does Music Department Budget influence your level of stress?
(Mark only one)

	1	2	3	4	
No influence on stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of influence on stress

22. How much does your district's method of Teacher Evaluation influence your level of stress?
(Mark only one)

	1	2	3	4	
No influence on stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Highest level of influence on stress

23. What are your methods of coping with your stress?
(Select all that apply)

- ☐ Junk/Comfort Food
- ☐ Watching TV/Netflix
- ☐ Sleep
- ☐ Exercise
- ☐ Smoking
- ☐ Shopping
- ☐ Engage with friends
- ☐ Alcohol
- ☐ Prayer
- ☐ Massage
- ☐ Listen to music
- ☐ Play musical instrument/sing
- ☐ Reading
- ☐ Journal
- ☐ Prefer not to answer
- ☐ Other:

Appendix C: U.S. State with Majority of Respondent Employment

<u>State</u>	<u>Number of Respondents</u>	<u>Percent of Respondents</u>
NJ	79	22.8
PA	77	22.2
NY	17	4.9
IL	16	4.6
MD	15	4.3
OH	15	4.3
NC	12	3.5
CA	11	3.2
FL	10	2.9
MO	10	2.9
GA	6	1.7
IN	6	1.7
MI	6	1.7
CT	5	1.4
TN	5	1.4
VA	5	1.4

AZ	4	1.2
KS	4	1.2
MA	4	1.2
MN	4	1.2
SD	4	1.2
TX	4	1.2
WI	4	1.2
AR	2	0.6
CO	2	0.6
IA	2	0.6
KY	2	0.6
ME	2	0.6
NE	2	0.6
NH	2	0.6
NV	2	0.6
VT	2	0.6
AL	1	0.3
OR	1	0.3
SC	1	0.3

WA	1	0.3
WV	1	0.3
WY	1	0.3

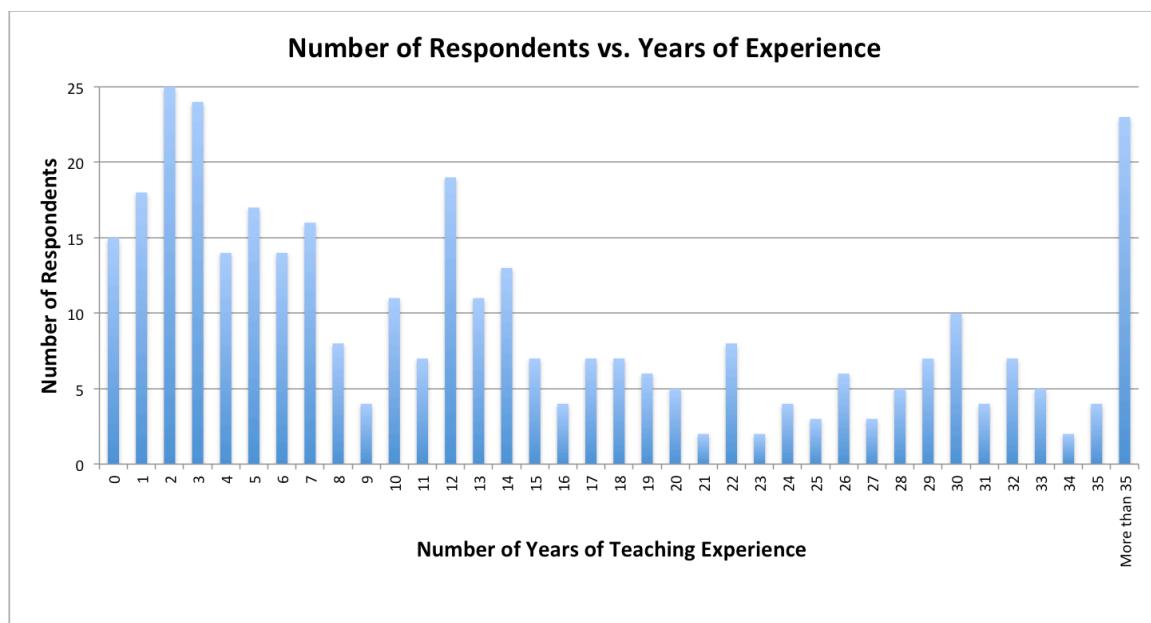
Appendix D: Years of Completed Teaching Experience

Table D.1: Years of Completed Teaching Experience

<u>Years of Experience</u>	<u>Number of Respondents</u>	<u>Percent of Respondents</u>
0	15	4.3
1	18	5.2
2	25	7.2
3	24	6.9
4	14	4.0
5	17	4.9
6	14	4.0
7	16	4.6
8	8	2.3
9	4	1.2
10	11	3.2
11	7	2.0
12	19	5.5
13	11	3.2
14	13	3.7
15	7	2.0
16	4	1.2
17	7	2.0
18	7	2.0
19	6	1.7
20	5	1.4
21	2	0.6
22	8	2.3
23	2	0.6
24	4	1.2
25	3	0.9
26	6	1.7
27	3	0.9

28	5	1.4
29	7	2.0
30	10	2.9
31	4	1.2
32	7	2.0
33	5	1.4
34	2	0.6
35	4	1.2
More than 35	23	6.6

Chart D.1: Number of Respondents vs. Years of Experience



Appendix E: Contributing Stressors

Table E.1: Type of Contributing Stressor and Number of Respondents

<u>Type of Stressor</u>	<u>Number of Respondents</u>	<u>Percent of Total Stressor Responses</u>	<u>Percent of Respondents</u>
Not enough money in the music budget	181	8.20%	52.16%
Too much paperwork	176	7.97%	50.72%
Lost prep/lunch time	166	7.52%	47.84%
Lack of support from admin/teachers/parents	161	7.29%	46.40%
Concerts	161	7.29%	46.40%
Decreased instructional time due to standardized testing	160	7.25%	46.11%
Teacher Evaluations	137	6.21%	39.48%
Inability to regulate schedules	136	6.16%	39.19%
Duty outside of the classroom (IE. Bus duty, hall monitor, lunch duty, bathroom duty, etc)	131	5.94%	37.75%
Poor quality musical equipment/instruments in disrepair	122	5.53%	35.16%
Extracurricular responsibilities	108	4.89%	31.12%
Lack of coordination among the music department in terms of curriculum	103	4.67%	29.68%
Changing State Standards (adoption of common Core)	102	4.62%	29.39%

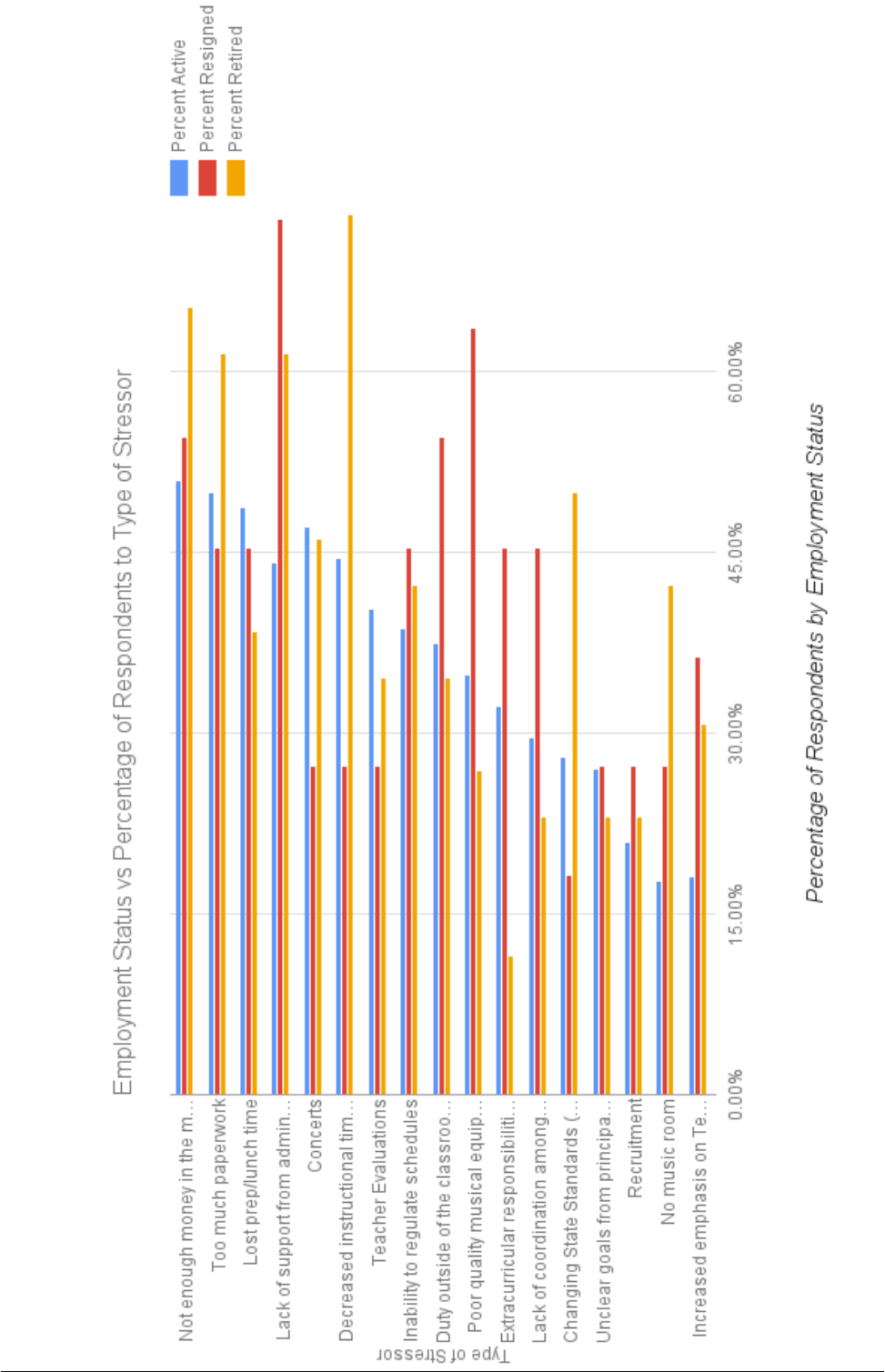
Unclear goals from principal, music administrator, other music teachers	93	4.21%	26.80%
Recruitment	74	3.35%	21.33%
No music room	69	3.13%	19.88%
Increased emphasis on Technology	65	2.95%	18.73%
Other	62	2.81%	17.87%

Table E.2: Type of Contributing Stressor as Compared to Employment Status

<u>Type of Stressor</u>	<u>Percent of Active Teachers</u>	<u>Percent of Resigned Teachers</u>	<u>Percent of Retired Teachers</u>
Lack of Support from admin/teachers/parents	44.19%	72.73%	61.54%
Unclear goals from principal, music administrator, other music teachers	27.10%	27.27%	23.08%
Lack of coordination among the music department in terms of curriculum	29.68%	45.45%	23.08%
Too much paperwork	50.00%	45.45%	61.54%
Lost prep/lunch time	48.71%	45.45%	38.46%
Duty outside of the classroom (IE. Bus duty, hall monitor, lunch duty, bathroom duty, etc)	37.42%	54.55%	34.62%

Not enough money in the music budget	50.97%	54.55%	65.38%
Poor quality musical equipment/instruments in disrepair	34.84%	63.64%	26.92%
No music room	17.74%	27.27%	42.31%
Inability to regulate schedules	38.71%	45.45%	42.31%
Decreased instructional time due to standardized testing	44.52%	27.27%	73.08%
Teacher Evaluations	40.32%	27.27%	34.62%
Increased emphasis on Technology	17.74%	27.27%	26.92%
Changing State Standards (adoption of Common Core)	28.06%	18.18%	50.00%
Concerts	47.10%	27.27%	46.15%
Recruitment	20.97%	27.27%	23.08%
Extracurricular responsibilities	32.26%	45.45%	11.54%

Chart E.1: Employment Status vs. Percentage of Respondents to Type of Stressor



Appendix F: Years of Experience Data

Table F.1: Years of Experience, Number of Respondents, Pearson's r calculations

<u>Respondent Reported Years of Experience</u>	<u>Number of Respondents</u>	<u>Average Perceived Level of Stress at Work</u>	<u>Pearson's r Correlation Coefficient between Perceived Level of Stress at Work and Level of Support</u>	<u>Pearson's r Correlation Coefficient between levels of stress at work and non-work</u>
0	15	2.8	-0.48	-0.22
1	18	2.78	-0.28	0.59
2	25	2.72	0.15	0.28
3	24	2.96	-0.25	0.28
4	14	2.86	-0.39	0.03
5	17	3.18	-0.22	0.55
6	14	2.86	-0.39	0.16
7	16	2.69	-0.18	-0.04
8	8	2.88	-0.34	0.36
9	4	2.75	-0.33	-0.58
10	11	2.73	-0.36	0.72
11	7	2.57	-0.22	0.54
12	19	2.84	-0.11	0.41
13	11	2.82	0.18	0.79
14	13	2.77	-0.43	0.18
15	7	3.14	0.3	0.3
16	4	2.75	-0.16	0.58
17	7	2.43	-0.13	0.65
18	7	2.71	-0.42	0.09
19	6	2.67	-0.93	could not be calculated
20	5	2.8	0.11	-0.8
21	2	2	could not be calculated	could not be calculated
22	8	2.75	-0.76	-0.22
23	2	3	could not be calculated	could not be calculated

24	4	2.75	0.76	0.52
25	3	2.67	1	0.95
26	6	3.17	-0.13	0.76
27	3	2.33	-0.94	0.5
28	5	3	-0.18	0
29	7	3	-0.7	0.42
30	10	2.8	0.02	0.19
31	4	3	-0.63	0.5
32	7	2.86	-0.47	0.42
33	5	2.4	-0.8	0.41
34	2	2.5	-1	could not be calculated
35	4	2.75	-0.97	0.64
35+	23	2.74	-0.32	0.3

Appendix G: Contributing Stressors and Years of Experience

Table G.1: Type of Contributing Stressor and Number of Respondents

<u>Type of Stressor</u>	<u>Percent of First Year Teacher Respondent s 15</u>	<u>Percent of Respondents with 0-5 years of Experience 114</u>	<u>Percent of Respondent s with 0-14 years of experience 216</u>	<u>Percent of Respondent s with 15 years or more of experience 131</u>	<u>Percent of Respondent s with 25 or more years of experience 79</u>	<u>Percent of Respondent s with 35+ years of experience 23</u>
Not enough money in the music budget	53.33%	54.39%	50.93%	54.20%	56.96%	52.17%
Too much paperwork	26.67%	47.37%	48.61%	54.20%	59.49%	52.17%
Lost prep/lunch time	66.67%	50.00%	51.85%	41.22%	41.77%	21.74%
Lack of support from admin/teachers/par ents	40.00%	47.37%	47.22%	45.04%	54.43%	39.13%
Concerts	40.00%	56.14%	51.39%	38.17%	37.97%	39.13%
Decreased instructional time due to standardized testing	26.67%	49.12%	45.37%	47.33%	54.43%	52.17%
Teacher Evaluations	20.00%	46.49%	41.20%	36.64%	41.77%	30.43%
Inability to regulate schedules	33.33%	35.09%	36.11%	44.27%	46.84%	47.83%
Duty outside of the classroom (IE. Bus duty, hall monitor, lunch duty, bathroom duty, etc)	66.67%	38.60%	39.35%	35.11%	34.18%	17.39%
Poor quality musical equipment/instrum ents in disrepair	40.00%	47.37%	39.35%	28.24%	26.58%	34.78%
Extracurricular responsibilities	33.33%	39.47%	34.26%	26.72%	24.05%	13.04%
Lack of coordination among the music department in terms of curriculum	53.33%	34.21%	32.87%	24.43%	16.46%	17.39%

Changing State Standards (adoption of common Core)	26.67%	29.82%	26.85%	33.59%	21.52%	30.43%
Unclear goals from principal, music administrator, other music teachers	53.33%	32.46%	29.63%	22.14%	20.25%	21.74%
Recruitment	20.00%	20.18%	22.69%	19.08%	16.46%	17.39%
No music room	13.33%	23.68%	19.91%	19.85%	21.53%	30.43%
Increased emphasis on Technology	13.33%	20.18%	18.52%	19.08%	20.26%	17.39%

Appendix H: Coping Mechanisms and Years of Experience

Table H.1: Coping Mechanisms vs. Years of Experience

<u>Type of Coping Mechanism</u>	<u>Percent of First Year Teacher Respondents 15</u>	<u>Percent of Respondents with 0-5 years of Experience 114</u>	<u>Percent of Respondents with 0-14 years of experience 216</u>	<u>Percent of Respondents with 15 years or more of experience 131</u>	<u>Percent of Respondents with 25 or more years of experience 79</u>	<u>Percent of Respondents with 35+ years of experience 23</u>
Watching TV/Netflix	93.33%	83.33%	72.22%	52.67%	50.63%	52.17%
Sleep	86.67%	71.05%	63.43%	38.17%	34.18%	26.09%
Junk/Comfort Food	53.33%	51.75%	51.39%	54.96%	55.70%	47.83%
Play musical instrument/singing	40.00%	61.40%	50.46%	42.75%	40.51%	34.78%
Listen to music	73.33%	58.77%	48.61%	34.35%	35.44%	43.48%
Engage with friends	66.67%	48.25%	43.98%	29.77%	29.11%	52.17%
Reading	33.33%	35.09%	38.43%	38.17%	39.24%	47.83%
Exercise	26.67%	42.98%	37.50%	35.11%	39.24%	43.48%
Alcohol	33.33%	39.47%	37.96%	21.37%	15.19%	17.39%
Prayer	13.33%	18.42%	27.31%	22.14%	25.32%	21.74%
Shopping	20.00%	24.56%	22.22%	18.32%	16.46%	17.39%
Massage	20.00%	14.04%	12.50%	16.03%	16.46%	13.04%
Journal	6.67%	8.77%	9.72%	5.34%	6.33%	8.70%
Smoking	6.67%	4.39%	3.70%	2.29%	1.27%	0.00%
Prefer not to answer	0.00%	0.00%	1.85%	3.05%	2.53%	0.00%

WORKS CITED

- Aquinas, P.G.. "Organisation Behaviour". Excell Books India, 2006. Print.
- Bogenschutz, John. "The Many Hats of a Band Director". *Tone Deaf Comics*. 2012. Web.
9 Jan. 2016. < [http://cdn.shopify.com/s/files/1/0152/1347/products/
Screen_Shot_2012-07-25_at_5.45.01_PM.png?v=1432242628](http://cdn.shopify.com/s/files/1/0152/1347/products/Screen_Shot_2012-07-25_at_5.45.01_PM.png?v=1432242628)>
- Bremner, J. Douglas. "Does Stress Damage the Brain?". *Society of Biological Psychiatry*. Biol Psychiatry (1999) 45:797-805. Web.
- "CPS Stats and Facts". *Chicago Public Schools*. December 2015. Web. 3 January 2016.
< http://cps.edu/About_CPS/At-a-glance/Pages/Stats_and_facts.aspx>
- DiSalvo, David. "How Stress Affects Your Mental Health" October 2012. Web. 29
March 2016. < [http://www.forbes.com/sites/daviddisalvo/2012/10/15/how-stress-
affects-your-mental-health/#1a2ab39115e6](http://www.forbes.com/sites/daviddisalvo/2012/10/15/how-stress-affects-your-mental-health/#1a2ab39115e6)>
- Ehrenberg, Ronald G., Ehrenberg, Randy A., Rees, Daniel I., Ehrenberg, Eric L. "School
District Leave Policies, Teacher Absenteeism, and Student Achievement:
Working Paper No. 2874". *National Bureau of Economic Research*. 1989. Web.
- Froehlich, Hildegard, Frierson-Campbell, Carol. *Inquiry in Music Education Concepts
and Methods for the Beginning Researcher*. New York: Routledge, 2013. Print.

Goldrick, Liam. "A 50-State Review of Policies on New Educator Induction and Mentoring". March 2016. Web. <<https://newteachercenter.org/wp-content/uploads/2016CompleteReportStatePolicies.pdf>>

Grohol, John M, Psy.D.. "What's the Purpose of the Fight or Flight Response?". *PsychCentral*. Dec. 2012. Web. 2 Jan. 2016. < <http://psychcentral.com/blog/archives/2012/12/04/whats-the-purpose-of-the-fight-or-flight-response/>>

Hamann, Donald L. "Burnout: How to Spot It, How to Avoid It." *Music Educators Journal* 77.2 (1990): 30. CrossRef. Web.

Hancock, Carl B. "Is the Grass Greener? Current and Former Music Teachers' Perceptions a Year After Moving to a Different School or Leaving the Classroom". *Journal of Research in Music Education*. 63(4) 421-438. 2016. Web. April 2016.

Hancock, Carl B. "Music Teachers at Risk for Attrition and Migration: An Analysis of the 1999-2000 Schools and Staffing Survey". *Journal of Research in Music Education*. 56.2 (2008) 130-144. Web.

Hancock, Carl B., Madsen, Clifford K. "Support for Music Education: A Case Study of Issues Concerning Teacher Retention and Attrition". *Arts Education Policy Review*. 104(1) 2002. Web. April 2016.

Heller, George N., and Radocy, Rudolf E. "Tips for Coping: The Music Educator and Stress". *Music Educators Journal* 69.4 (1982): 43, 62-63. CrossRef. Web.

Heston, Melissa L., Dedrick, Charles, Raschke, Donna, Whitehead, Jane. "Job Satisfaction among Band Directors". *Journal of Research in Music Education*. 44.4 (1996) 318-327. Web.

Hinds, Erika, Jones, Laura Backen, Gau, Jeffery M., Forrester, Kathleen K., Biglan, Anthony. "Teacher Distress and the Role of Experiential Avoidance". *Psychol Sch*. 2015 Mar: 52(3): 284-297. National Institutes of Health. Web.

Hollon, Steven D., Thase, Michael E., Markowitz, John C. "Treatment and Prevention of Depression" *Psychological Science in the Public Interest*. Nov. 2002 (3) no. 2 39-77. Web.

Jones, Patrick M. "Returning Music Education to the Mainstream: Reconnecting with the Community" The University of the Arts. Email. 2016.

Kenardy, De Young, Le Brocque & March. "Childhood Trauma Reactions: Tip Sheet Series: Teacher Self-Care". *Centre of National Research on Disability and Rehabilitation Medicine & The University of Queensland Australia*. 2011. Print.

Kowalski, Robin M., Limber, Susan P. “Psychological, Physical, and Academic Correlates of Cyberbullying and Traditional Bullying”. *Journal of Adolescent Health* 53 (2013) S13-S20. Web. <<http://dx.doi.org/10.1016/j.jadohealth.2012.09.018>>

Layton, Lyndsey. “Is the classroom a stressful place? Thousands of teachers say yes”. *The Washington Post*. May 12, 2015. Web. 9 January 2016. <https://www.washingtonpost.com/local/education/is-the-classroom-a-stressful-place-thousands-of-teachers-say-yes/2015/05/12/829f56d8-f81b-11e4-9030-b4732cafe81_story.html>

“Leading Causes of Death”. *CDC (Centers for Disease Control and Prevention)*. September 2015. Web. 2 January 2016. < <http://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm>>

McLeod, Saul A. “Likert Scale”. 2008. Web. May 7, 2016. < <http://www.simplypsychology.org/likert-scale.html>>

Miller, Raegen. “Teacher Absence as a Leading Indicator of Student Achievement”. *Center for American Progress*. Nov. 2012. Web. 3 Jan. 2016. <<https://www.americanprogress.org/issues/education/report/2012/11/05/40371/teacher-absence-as-a-leading-indicator-of-student-achievement/>>

Miller, Raegen T., Murnane, Richard J., Willett, John B. “Do Teacher Absences Impact Student Achievement? Longitudinal Evidence from One Urban School District: Working Paper 13356”. 2007. *National Bureau of Economic Research*. Web.

New Jersey Department of Education. “TeachNJ CAP Template and Sample CAP”. Web. March 2016. <<http://www.nj.gov/education/profdev/ipdp/TeacherCAPDocs.pdf>>

“Quality of Worklife Survey”. *AFT (American Federation of Teachers)*. May, 2015. Web. 2 January 2016. <<http://www.aft.org/sites/default/files/worklifesurveyresults2015.pdf>>

Schonfeld, Irvin Sam. “Psychological Distress in a Sample of Teachers”. *Journal of Psychology Interdisciplinary and Applied* 124.3 (1990): 321-338. ResearchGate. Web.

Siebert, Johanna. “Why Music Teachers Remain in the Profession: Conversations with Career Music Educators”. Eastman School of Music. November 2007. Web. Jan 2016.

Shellenback, Karen. “Child Care and Parent Productivity: Making the Business Case”. *Cornell Cooperative Extension Department of City and Regional Planning*. 2004. Web.

Sparks, Dinah, Ralph, John, Malkus, Nat. “Public School Teacher Autonomy in the Classroom Across School Years 2003-04, 2007-08, and 2011 – 12”. The U.S. Department of Education. December 2015 (NCES 2015-089). Web. 9 Jan 2016. <<http://nces.ed.gov/pubs2015/2015089.pdf>>

Stevens, David W., Sartain, Lauren, Allensworth, Elaine M., Levenstein, Rachel, Guiltinan, Shannon, Mader, Nick, Hanh Huynh, Michelle, Porter, Shanette. “Discipline Practices in Chicago Schools: Trends in the Use of Suspensions and Arrests”. The University of Chicago Consortium on Chicago School Research. March 2015. Web. 3 Jan 2016. <<https://consortium.uchicago.edu/sites/default/files/publications/Discipline%20Report.pdf>>

“Stress in America: The impact of discrimination”. Stress in America Survey. *American Psychological Association*. 2016. Web.

U.S. Department of Education, National Center for Education Statistics. “2015 Fast Facts” *Digest for Education Statistics*, 2013 (NCES 2015-011). 2016. Web. <<http://nces.ed.gov/fastfacts/display.asp?id=28>>

Veir, Carole A., Dagley, David L.. “Legal Issues in Teacher Evaluation Legislation: A Study of State Statutory Provisions”, 2002 *BYU Educ. & L.J.* 1 2002. Web. <<http://digitalcommons.law.byu.edu/elj/vol2002/iss1/2>>

Wise, Jeff. "Superhuman". *Scientific American*. Dec. 2009. Web. 2 Jan. 2016.

<<http://www.scientificamerican.com/article/extreme-fear-superhuman/>>

