THE RELATIONSHIP BETWEEN REHEARSAL STRUCTURE AND CONTEST RATINGS FOR HIGH SCHOOL BANDS

By

Justin W. Love

B.M.E., University of Kansas, 1997

Submitted to the graduate degree program in the Department of Music Education and Music Therapy and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Master of Music Education.

Chairperson Dr. Christopher M. Johnson

Martin J. Bergee

Robert E. Foster

Date Defended: April 6, 2012

The Thesis Committee for Justin W. Love
certifies that this is the approved version of the following thesis:

THE RELATIONSHIP BETWEEN REHEARSAL STRUCTURE AND CONTEST RATINGS

FOR HIGH SCHOOL BANDS

Chairperson Dr. Christopher M. Johnson

Date approved: April 6, 2012

Abstract

The purpose of this study was to determine if the rating received by the band at a state music contest can be predicted by examining the amount of rehearsal time high school band directors allocate to various rehearsal components. Secondly, the study sought to determine if the inclusion of specific warm-up activities can predict a band's contest rating. Lastly, the level of importance band directors place upon certain warm-up activities was compared to the frequency with which they include those warm-ups in regular rehearsals. For this study 47 high school band directors in Kansas completed the Rehearsal Structure Questionnaire (RSQ) via an internet based survey program. Survey responses were compared to the respondents' 2011 Kansas State High School Activities Association State Large Group Music Festival ratings. Stepwise multiple regression analysis identified three models that contributed to the variance in contest ratings. Years of experience and the inclusion of breathing exercises predicted higher contest ratings, while the number of courses taught and amount of time spent on non-musical tasks predicted lower contest ratings. Demographic attributes of the participant sample do not match the general population of band directors in Kansas. This combined with the relatively low sample size makes results difficult to generalize to all high school band settings. The findings, however, do show that rehearsal structure and choice of rehearsal activities do play a small role in ratings at music festivals. Further investigation into the effectiveness of rehearsal structure and various warm-up activities is warranted.

Acknowledgements

Thanks to Chris Johnson, Martin Bergee, and Bob Foster for all of your advice and assistance.

Thanks to Lois Elmer for all of your wisdom and guidance through this process.

Thanks to Bee, Jordan, and MacKinnon for all of your patience and support over the past couple of years.

Thanks to Sydney for being a constant inspiration and motivation.

TABLE OF CONTENTS

Page

CHAPTER 1

Introduction

Each year, high school musicians participate in various music festivals and contests where they receive performance critiques along with scores, ratings, and in some instances rankings. Whether fair or not, these contest and festival results are often viewed as an overall assessment of the ensemble's musical achievement for the year, and by extension, the effectiveness of the high school band director as an educator. Consequently, many of the sessions presented at music conferences and articles in professional publications detail rehearsal techniques to help band directors successfully prepare their students for contest. These techniques are often based on common practice, and while these methods are often effective, they have not always been subjected to empirical study.

Numerous studies, books, and articles discuss the merits and problems of participation in music contests. Ideally, contest participation should be a means to evaluate the musical growth of a school band and its student members during the school-year. The exercises and music rehearsed and performed during the course of the year should be selected to improve performance skills and enhance students' musicality. One criticism of music contests, however, is that non-musical outcomes including prestige, student self-esteem, and extrinsic rewards are the primary motivating factors for band contest participation. A secondary concern is that the reliability and accuracy of contest adjudicators is at times suspect, and that the ratings earned at contests are less a reflection of the musical performance and more a reflection of non-musical factors. Regardless, research shows that students participating in high scoring bands at contests

demonstrate higher levels of musical achievement than those in bands receiving lower contest ratings (Worthy, 2003).

Despite the ongoing debate over music contests, the growing prevalence of festivals and contests in the band world since the 1920's allows a fairly safe assumption that music educators will participate in such events for the foreseeable future. Those directors choosing to participate in contests and festivals would naturally wish to select musical exercises and rehearsal formats that have a greater chance of attaining higher contest ratings. The added benefit would then be overall improvement in musical achievement of their band students.

Larry Blocher (2002) stated, "What the teacher/conductor does in each rehearsal is what the students get." It suggests the overall musical achievement of band, choir, and orchestra students relies entirely on the music educator's design and implementation of daily rehearsals. What a school band director chooses to do in rehearsal and how they organize those activities will determine the overall musical achievement of the group. Therefore careful consideration of all rehearsal activities and the rehearsal format are important.

Price (1983, 1992) and Duke (1994) have devoted much research to breaking the rehearsal setting into discrete parts. These investigations largely focused on the specific interactions between teachers and students. The results of these studies showed that the pace of rehearsals and format of specific teacher–student interactions contribute to the success of students. They did not, however, examine the effectiveness of specific techniques used throughout the rehearsals, nor did they calculate the amount of time spent on individual techniques.

Brand (1985) stated that effective music teachers possess strong skills in musicianship, classroom and rehearsal management, and the ability to relate lesson objectives to student interests and needs. Many of the techniques used in school band rehearsals are accepted as common practice or "tradition." Young band directors often model and adapt the musical exercises and methods of their own school band directors. Studies of methods for teaching rhythm are well-documented, however, examinations of many of the other traditional rehearsal activities such as playing long tones; practicing scales; performing chorales; and using method books are very seldom, if ever, seen.

A typical band rehearsal incorporates three components, chiefly the warm-up, literature rehearsal, and non-music related activities. The warm-up period of a band rehearsal is often dedicated to musical exercises and activities designed to develop fundamental playing techniques and skills necessary to perform the musical literature being worked on later in the rehearsal. According to Edward Lisk (1991),

> The beginning of every rehearsal is the most critical area in the development of a superior band program. The traditional term *"warm-up,"* generally implies the physical aspects of performance with brief attention to the *mental readiness* for effective rehearsal productivity.

The connection, if any, between the amounts of time spent on warm-ups, literature rehearsal, and non-musical tasks and musical achievement ought to be examined. While it is generally understood that the overall purpose of a rehearsal is to prepare music for performance and to develop music performance skills, it is important to understand which of these rehearsal components and musical exercises provides the greatest musical benefit. The rehearsal planning

process can become much more efficient when band directors better understand which techniques are most effective and how frequently they should be utilized.

CHAPTER 2

Review of Literature

Introduction

The purpose of this study was to determine if the manner in which band directors structure daily rehearsals could predict the rating or score received by a school band in a music festival or contest. The following review examined previous research into the components of rehearsals, rehearsal organization, director behaviors, history and merits of music contests, concerns about music contests, and rehearsal factors that influence contest ratings. The findings and methodologies of these previous research studies greatly influenced the format and scope of the current investigation.

Rehearsal Components

The day-to-day format of school music ensemble rehearsals will change depending on upcoming performances, school structure, and goals of the instructor. There are, however, several components found in a typical rehearsal. Manfredo (2006) described the components of a typical school band rehearsal as being set-up (organization of equipment and music for the rehearsal), instrument tuning, warm-up activities, rehearsal of literature, sight-reading and other comprehensive music activities, announcements, and tear-down of equipment. These same components were often identified and measured throughout the literature (Brendell, 1996; Goolsby, 1996; Jagow, 2003).

Common practice for school ensembles is to include a warm-up period, often near the beginning of a rehearsal. Gillis (2008) states that a warm-up should prepare the musician both

physically and mentally for the rehearsal. The activities used to accomplish this goal vary with the type of performance medium. Campbell (2008) and McHenry, Johnson, and Foster (2009) found that an aerobic activity followed by vocalizations was an effective warm-up procedure for choral rehearsals. For instrumental students, warm-ups often included reinforcement of correct posture, hand position, embouchure, intonation, and use of air support (Gillis). While warm-ups help students prepare physically, Russell (2006) found that string students still experienced discomfort when playing, despite a physical warm-up period. Silvey (2007) described breathing exercises as being a critical phase of the warm-up process to help develop tone production. Recent publications have even addressed the importance of developing quality breathing technique to enhance the performance of tone and dynamics (Pilafian & Sheridan, 2002).

Following the physical warm-up of the instrument or voice, bands and orchestras often spend a period of time tuning their instruments. Cavitt (2004) described a specific sequence to develop intonation. Some band directors also used singing to develop intonation and pitch accuracy among their students (Wolbers, 2002).

Following warm-up and tuning, school music ensemble rehearsals often dedicate time to developing and refining musical performance skills. Directors often incorporate rhythm reading and sight-reading activities. Common practice includes the use of either method books or musical excerpts to teach music reading skills. The largest improvement in sight-reading came from the use of musical excerpts (Price, Blanton, & Parrish, 1998). Conductors also used various rhythmic and scalar patterns to reinforce rhythmic performance (Grant, 2002, 2006).

In addition to the warm-up and skill exercises described above, band directors often incorporated several other types of warm-ups and skill development exercises. Williams and King (2006) advocated including long tones, warm-up sets, technical exercises, articulation

exercises, chorales, and tuning exercises in their list of a typical rehearsal setting. Directors also included strategies to develop tone quality, balance, blend, intonation, rhythm, tempo, articulation, facility, dynamics, melodic shape, accents, or attacks and releases (Bauer,1993).

Some directors also included exercises and activities designed to help students further develop their overall musicianship. In his 1973 article, *Blueprint for Band,* Garofalo urged music educators to incorporate activities and lessons designed to develop comprehensive musicianship. Garofalo felt that students should have an understanding of the melodic, harmonic, and formal structures of the music they were playing. He also stated that students should be able to understand the historical and biographical connections of the music and composers. Through these activities students would develop additional appreciation, discrimination, and attitudes towards music.

The other components of a rehearsal include practicing music for upcoming performances and essential non-musical tasks such as set-up, tear-down, and announcements. The inclusion of music literature rehearsal within a daily band class should be self-explanatory. The amount of time devoted to music rehearsal and the manner in which directors interact with their students during music rehearsal are discussed later in this chapter. There is also a significant amount of literature devoted to the amount of time spent on non-musical activities and their relationship to rehearsal and teacher effectiveness. The next section examines literature related to how the various rehearsal components are organized in band rehearsals.

Rehearsal Organization

Multiple studies examine the allotment of time to different rehearsal components. Brendell (1996) used video evaluations of choral rehearsals to determine percentages of

rehearsals dedicated to different activities. Sight-reading and warm-ups accounted for the majority of rehearsal time followed by set-up, literature instruction, and then other activities. Differences exist among teachers on how they organize rehearsal time depending on their experience level and age of students. Experienced teachers were more likely to rely on non-verbal communication, take longer breaks in-between rehearsal selections, and spend more rehearsal time on warm-up activities (Goolsby, 1996 & 1999). In contrast, college band directors spent nearly no time on warm-up activities, instead devoting most of the rehearsal time to literature performance and instruction (Jagow, 2003). Cox (1986) found that in both high school and collegiate settings the amount of time spent on non-musical instruction and rehearsal increases near upcoming performances. Researchers have further examined rehearsals in smaller detail.

Director Behaviors in Rehearsal

All teachers, regardless of subject area, plan activities and lessons to help their students learn and master the academic and social content presented in their courses. Research over time has identified specific teacher behaviors that are most effective in helping students attain academic success. Single (1991) identified three main aspects of effective teaching including teacher presentation, student response, and teacher feedback. Within each broad category Single delineated more specific teacher behaviors including rules, presentation of information, clarity of instruction, demonstration, questioning, wait time, guided practice, checking for understanding, following instructions, teacher approval / disapproval, and teacher reaction to student responses. Others have investigated the degree to which these aspects of effective teaching are utilized by music educators.

To understand how teaching behaviors impact student achievement Brophy (1979) advocated isolating specific interactions between educators and students to evaluate their effectiveness Later studies developed a methodology of dividing rehearsals into smaller frames or sequences of interactions to examine rehearsal effectiveness (Duke, 1994; Irwin, 2006; Price, 1983, 1992; Price & Byo, 2002; Yarbrough & Price, 1989). A rehearsal frame or sequence should consist of a teacher direction or presentation, followed by student performance or practice, and concluded by teacher feedback (Duke, 1994, Price, 1983, 1992, Yarbrough & Price, 1989).

Price (1983 & 1992) used the term teaching sequence to describe regular interactions during rehearsals. Price (1983) described three different teaching sequences in a series which included either a presentation of the task, instructions, student performance, and / or feedback. The largest student performance gains occurred in sequences which included teacher feedback. The benefits of specific feedback in rehearsal continue to be examined in the literature.

Yarbrough and Price (1989) reviewed videos of experienced and novice music teachers. They found that during a typical rehearsal, experienced teachers spent approximately one fourth of the rehearsal time providing musical information and feedback. They also noted that experienced teachers would give more disapproving behaviors than the novice teachers. Despite the reported gains in student achievement through the use of teacher feedback, it is still used very sparingly in rehearsal settings (Blocher, 1997).

Several factors have been found to impact the effectiveness of teacher instruction within these frames and sequences. The pace of a music rehearsal and the frequency of complete teaching sequences can influence a student's perception of rehearsal quality (Duke, Prickett, &

Jellison, 1998). The use of videos to observe teaching behaviors combined with training on lesson plan development, allowed teachers to develop faster pacing. This also led to more positive evaluations of teaching effectiveness (Lane, 2010). Depending on the level of the students, the quality of instruction and feedback contained within a teaching sequence may vary.

Blocher, Greenwood, and Shellahamer (1997) examined the rehearsal settings of middle and high school band directors. They looked for verbal instructions or feedback intended to help students develop broad musical concepts and transfers as opposed to the fixing the mechanics of the music being rehearsed. Blocher found that conceptual teaching activities were used less than 3% of the time in rehearsals. Conceptual teaching occurred just slightly more often in high school rehearsals than middle school. The amount of instruction contained within a sequence also varies depending on the students' age. College band directors were found to address multiple areas in rehearsal sequence, whereas high school directors would typically limit teaching sequences to one area of focus (Worthy, 2003).

In addition to the pacing and construction of teaching sequences, other director behaviors and traits influence the effectiveness of music rehearsals. Age and experience had been found to impact teaching effectiveness. Wagner and Strul (1979) noted that experienced elementary music teachers spent less time giving verbal instructions than did novice music educators. The instructor's personality influences students and community band members' impression of the effectiveness of instruction and quality of performance (Rowher, 2009). A hybrid approach of teacher directed activities combined with student directed activities attains more desirable levels of student achievement. Bazan (2007) found, however, that teachers tend to utilize teacher-directed activities and instruction far more than student-centered activities. Directors need to

account not only for the amount of time spent on specific rehearsal techniques, but also the pacing, format, and delivery of rehearsal components.

History and Merits of Music Contests

In 1923 the first National Band Contest was held in Illinois (Dykema, 1923). Very early on, contests began to utilize a system of ratings to describe and categorize the quality of music performances. Little has changed in the evaluation system first developed by Frank Beach at Emporia State University. Typically bands receive a rating of I (Superior), II (Excellent), III (Good), IV (Fair), and V (Poor) (Maddy, 1931). Since the music contest movement began in the 1920's, a debate has continued to linger among music educators over the value and rationale for participation in competitive music events (Austin, 1990).

Ostensibly high school music groups participate in festivals and contests to receive critiques of their performances and further develop as musicians. Studies have shown that factors other than musical achievement form the rationale for contest participation. Stamer (2006) found that younger high school choral students tend to be motivated by receiving rankings and scores as opposed to musical performance. For older students, Stamer found that making music became a stronger motivating factor. Students tended to place more importance on performance goals in preparation for a contest or competition as opposed to a regular concert performance (Sheldon, 1994). Choral directors reported that motivation of their students was the primary reason for participating in music contests (Battersby, 1994). Student attitude and motivation is only one motivating factor for contest participation.

Rogers (1982, 1984, & 1985) surveyed band directors, students, parents, and school principals from around the United States regarding the rationale and benefits of participating in

marching band contests. All of the respondents cited non-musical reasons for participating in marching contests, including increasing public perception of the band program; recruiting new band members; and teaching students responsibility, discipline, and self-esteem. LaRue (1986) reported similar findings in that students, parents, and directors cited primarily non-musical rationale such as the ability to positively contribute to a group and development of band spirit as desired outcomes for marching contest participation.

Student members of high school bands that frequently participated in competitions tend to equate high contest ratings with musical achievement (Hayslett, 1992). When surveyed, however, students in competitive bands do not necessarily feel that they have grown musically regardless of the ratings received.

Directors also vary in the level of importance placed on music festivals and competitions. The value of participation in marching band competitions tended to be based more on the director's personal philosophy of the purpose of marching bands rather than educational merit. Directors generally favored concert band competitions feeling that participating in such events helped build musicianship and character in their band students (Banister, 1992). Howard (1994) reported that band students found participation in concert band contests to be the most motivating and least stressful of the music competitions they attended each year. While the rationale of contest participation varies among school band directors, many express reservations about the contests themselves.

Music Contest Concerns

One often cited concern related to music contests was the reliability of adjudicators. Music festival judges were often experienced performers on their respective instruments. Other

judges were often chosen based on their perceived level of musicianship based on their expertise in non-performance music disciplines such as musicology or music theory. Fiske (1977, 1983) found that adjudicator performance proficiency and musical expertise did not ensure judge reliability. Fiske stated that to develop reliability as a judge that music festival judges need training in evaluating music performances. Brakel (2006) found that adjudicator training sessions held for the Indiana State School Music Association Instrumental Festivals improved inter-judge reliability from one year to the next.

Performance evaluations of large ensembles including concert bands, marching bands, choirs, and orchestras often employed multiple judges, whereas solo and ensemble festivals often utilized a single judge format. Fiske (1977) and Bergee (2003) found that having a larger number of judges did increase reliability. Even with larger judging panels, the format or adjudication forms may have hampered accurate evaluation of musical performances.

The forms or ballots used in festival or contest adjudication often reflected the judge's impression of a musical performance rather than an actual assessment of its merits (Latimer, 2007). Rubrics or other evaluation forms may have lumped multiple categories together. Other forms may have included multiple evaluation captions such as balance, blend, and intonation that all impacted one another inhibiting meaningful assessment of music performances (Latimer, Bergee, and Cohen, 2010). Directors did report that such rubrics and forms provided pedagogical value when used with students. Latimer cautioned, however, that rubrics for concert band evaluation ought to consider other research-based perspectives.

Band directors also noted concern over what seems to be a gradual inflation of ratings received at music festivals. Boeckman (2002) analyzed records and results of the Ohio Music

Education Association state music festival from 1951 through 2000. Boeckman found a gradual increase in the percentage of bands rated as I (Superior) or II (Excellent) and a decrease in the percentage of bands receiving lower ratings. Boeckman noted that grade inflation remains a topic of concern for educators in general, but has received little attention in the research literature as it pertains to music education.

Another complaint regarding band contests expressed by directors is that factors other than the actual musical performance can affect the rating or score. King and Burnsed (2009) found that in marching competitions the reliability between judges was consistent; however the size of the performing groups may have influenced the overall rating. A series of studies examined the various factors that influenced ratings at solo and ensemble festivals (Bergee, 2007; Bergee &McWhirter, 2005; Bergee & Platt, 2003; Bergee & Westfall, 2006). Non-music factors including time of day of the performance; size of school the student attends; and the type of performance medium influenced the overall rating. Hamann and Banister (1991) found that the amount of time spent in rehearsal with accompanist and the amount of private instruction a student received influenced solo contest ratings.

Large ensemble musical contest ratings may have more to do with overall ability of the group rather than the teacher's influence and teaching behaviors. Morrison, Price, Geiger, and Cornacchio (2009) found that the more expressive a conductor is the more expressive the ensemble is perceived as being. Price and Chang (2001, 2005; Price, 2006; Price & Byo, 2002) found no relationship with a director's expressiveness on stage and their band's contest scores. The actual score was more likely the result of training and practice during the daily rehearsals leading up to the contest rather than the conducting on stage. While certain complaints are beyond a band director's control, including time of performance and the size of their school;

directors can impact their band's contest rating by ensuring they are adequately prepared and trained for the performance.

Rehearsal Factors and Contest Ratings

Various factors of band rehearsals impacted contest scores and ratings. The overall atmosphere and classroom environment of a band program provided a foundation for contest success. Hamann, Mills, Bell, Daugherty, and Koozer (1990) surveyed band students using a Classroom Environment Scale Form and compared the results to music contest scores. Students from band programs with greater student involvement; more positive relationships among students; greater teacher support; and more order and organization often had higher contest ratings.

Specific teacher behaviors can impact the success of school bands at contests. Smith (1999) examined the rehearsals of several marching bands and categorized the types of behaviors exhibited by their directors. Smith found that higher scoring bands had directors who used faster pacing; gave specific positive and negative feebdack to students; exhibited teacher modeling; and had higher frequencies of student performance opportunities.

A primary factor affecting contest ratings is the musical ability of the students in the performing band. Montemayor (2006) stated that the existing skill level of the students in an ensemble may have more influence over the overall achievement of the group than the director's skill and behaviors. West (1985) found that band students who attain high festival or contest ratings in concert band or solo and ensemble events do tend to outperform peers with less contest success on standardized music assessments. The conclusion drawn from these studies is the

development of musicality in rehearsals will lead to higher scores in festivals and contests. Other research bears out this assumption.

The use of a comprehensive musicianship model in rehearsals led to overall gains in musical ability and higher contest ratings. As stated previously, the use of the comprehensive musicianship model in band rehearsals was proposed by Garofalo (1973) and later Blocher (2002). Garofalo and Whaley (1979) had two concert bands rehearse and perform the same piece of music. One ensemble rehearsed using a focus on performance skill development, while the other used a unit study that incorporated music terminology, formal analysis, rhythm studies, and harmonic analysis. The ensemble which used the unit study approach demonstrated higher overall gains in musical knowledge as compared to the ensemble that focused only on performance skills. The adjudication scores for the unit study band were also higher than the other ensemble.

The strategies and techniques used in daily rehearsals to teach musical skills and knowledge impact contest scores. Bauer (1993) developed a questionnaire that was distributed to multiple high school band directors and asked them to describe how they structure their rehearsals each week. Directors were asked about how frequently they used different types of rehearsal formats, including sectionals, guest clinicians, and recording evaluations. Directors were also asked about strategies they employed to address specific musical concepts including tone quality, balance, blend, intonation, rhythm, tempo, articulation, technique, dynamics, melodic contour, accents, and attacks / releases. Bauer then compared survey responses with the overall festival ratings received by participating bands at that year's district band contest.

Bauer found that the greater the amount of time spent in addressing issues of balance and intonation combined with a regular rhythmic counting system provided the highest indicators for success in contest settings. Bauer also found that while the frequency of sectional rehearsals, use of guest clinicians, and director and student analysis of rehearsal recordings are valid aspects of a band rehearsal, they alone did not have a significant impact on contest ratings. Recommendations were made that directors should use multiple methods and techniques in their rehearsals, but to produce the most gain and potential success in a short amount of time, directors ought to focus on balance, intonation, and utilization of a rhythm counting system. Bauer surveyed directors on how frequently they included such strategies each week, but he did not examine how much rehearsal time directors actually devoted to those techniques.

Purpose

The present study followed a similar line of inquiry to Bauer's research by examining the amount of rehearsal time allocated to different activities and their impact on contest ratings on a regular basis. This study also sought to fill a gap in the literature by examining the structure of high school band rehearsals rather than rehearsal characteristics.

The purpose of this study was to determine if a relationship exists between the structure of regular high school band rehearsals and music contest ratings by seeking the answers to three questions. First, do (a) selected demographic variables and (b) the manner in which high school band directors allocate rehearsal time to non-musical tasks, warm-ups, and music literature rehearsal predict the overall rating received at music festivals? Second, does the inclusion of specific warm-up activities in high school band rehearsals predict the band's festival rating?

Finally, does the frequency with which band directors utilize specific warm-up activities reflect the level of importance that directors place on such rehearsal techniques?

CHAPTER 3

Method

Pilot Study

A small pilot study was conducted prior to the primary investigation. The purpose of the pilot study was to determine the accessibility and functionality of the online survey instrument. Four band directors with high school teaching experience were asked to participate in the pilot study. Pilot study participants received a link to the online questionnaire via e-mail as outlined in the procedures that follow. All pilot study participants completed the survey with no difficulty and provided anecdotal comments stating that the questions were appropriate and instructions easy to follow. No data analysis was conducted as pilot study participants did not participate in an adjudicated festival over the past year or were no longer teaching at the high school level and analysis would not yield meaningful results.

Participants

Participants for this investigation were music educators from the state of Kansas who taught high school band in the most recent academic year. Participants were solicited by announcements and fliers provided at a summer band convention as well as via a mass email sent to band directors across the state. The total number of collected responses was 79. Upon subsequent review of the surveys, 32 responses were eliminated due to failure to completely answer all questions; responses from middle school band directors; or due to duplicate submission of surveys. The final number of participants included in the data analysis was N=47.

Materials

The survey instrument for this study was the Rehearsal Structure Questionnaire (RSQ) developed by the author and loosely modeled on similar studies in the extant literature, chiefly

Bauer's Contest Preparation Questionnaire (1993). The RSQ can be found in Appendix B. Five band directors with over fifteen years of experience teaching band at the high school and collegiate levels reviewed the content of the RSQ to determine its validity. The band directors who reviewed the survey felt that the questions and possible responses of the RSQ covered the traditional components of rehearsals and the types of warm-up activities generally used in rehearsals. Reliability was established during a pilot study. Pilot study participant responses were accurate and reflected the intent of the survey.

The RSQ was developed using a commercially available online survey program and consisted of five sections. Part 1 included an introductory statement about the purpose of the survey. Part 2 asked participants to identify the structure of their rehearsal schedule as daily, a type of block schedule, or other format. Depending on a participant's response in Part 2 they were routed by the computer to slightly different versions of Part 3. In Part 3, participants were then asked to estimate how much time they typically dedicate to non-musical tasks and music literature in their rehearsals. Depending upon a participant's response to Part 2, survey questions were asked in terms of minutes per rehearsal for daily rehearsals and in percentages of a rehearsal for block schedules. For analysis all responses were converted into minutes of rehearsal per week for ease of comparison. In Part 4 participants were asked to estimate how frequently they incorporate various warm-up activities in their regular rehearsals. Participants then rated the level of importance they place upon including those warm-up activities in band rehearsals. Finally participants estimated the amount of time they spend on warm-ups in a typical rehearsal. Part 5 of the RSQ asked general questions about the participants' educational background, teaching responsibilities, and whether they participated in the state music contest.

In addition to the RSQ, the author obtained the most recent composite festival ratings for all high school bands in Kansas from the Kansas State High School Activities Association website. These ratings were compared to the subject's responses on the RSQ as outlined in the next section.

Procedure

The survey development program used to create the RSQ provided a permanent link to the survey in the form of a URL. The survey URL was provided to potential participants via three methods. First, several emails were sent to current and former high school band directors in Kansas though an internet-based discussion group. Secondly, a flier with a description of the project and the URL of the survey were distributed to attendees at the annual Kansas Bandmasters Association summer convention. Finally, additional participants were solicited during informal conversation and word of mouth during other professional meetings and events during the study period.

Participants were, at their own leisure, able to access the internet through a personal or work computer and use a web browser to navigate to the URL provided to them. Upon accessing the electronic survey program, participants were informed of their rights to participate in the study. Participants signified their willingness to participate by submitting their survey responses. During the first portion of the study period participants were able to complete the survey without responding to all questions. This was apparently due to a failure of the investigator to select a particular option requiring responses in the set-up of the survey. It was not noticed during the pilot study as pilot study respondents completed all questions. Consequently several responses were unusable for data analysis as indicated previously. This error was corrected so future respondents were required to submit answers to all questions.

At the beginning of the RSQ, subjects who taught more than one concert band were asked to consider rehearsals for only one of their ensembles when answering questions. At the end of the survey, those who taught more than one level of high school concert band were provided instructions and the opportunity to complete their survey for each additional ensemble they teach. No participants elected to retake the survey.

Responses from all participants were compiled in a data table in a commercial statistics program. State music festival ratings of the participant's schools were previously obtained by the author. Those ratings were added to the data table and included in the analysis of the results. The raw data can be found in Appendix F.

CHAPTER 4

Results

Demographics, Allocation of Rehearsal Time, and Festival Ratings

Through the RSQ the 47 survey participants reported their level of education; years of experience, teaching responsibilities, and school size (see Appendix C.) Additionally participants shared the overall format of their school's schedule and how they allocate that time (see Appendix D).

The mean number of years teaching experience for all participants was 18.87. 70.2% of participants reported having a master's degree or higher. 95.7% of the survey respondents teach at least one other class or have another scheduled duty in addition to teaching high school band. 78.7% of participants reported that one of their additional teaching responsibilities was directing an additional level of band.

Participants identified their school size according to their school's classification by the Kansas State High School Activities Association. School classifications range from 1A to 6A and is based upon total student enrollment in grades nine, ten, eleven, and twelve. Participant responses are included in Table 1 with comparisons to statewide totals.

Table 1

Size Classification of Participant's Schools

	Percentage		Count
School Class	Survey Participants	Statewide	Student Population
1A	4.3	27.7	14-99
2A	8.5	18.1	99-158
3A	23.4	18.1	162-254
4A	25.5	18.1	258-717
5A	17.0	9.0	720-1281
6A	21.3	9.0	1289-2308

Note. Statewide data source KSHSAA (2012).

The highest percentage of participants, 44.7%, reported that their schools utilize a schedule of daily classes of equal length. Most of the other participants reported using an alternating block schedule, 23.4%, or a modified block schedule 25.5%. All survey responses were converted to a total number of minutes per week for ease of comparison. 85.1% of participants reported receiving between 180 and 300 minutes of rehearsal time per week.

Directors estimated the percentage of each rehearsal that they spend on three different components, including non-musical tasks, warm-ups, and music literature rehearsal. 70.2% reported spending 10% or less of their regular rehearsals on non-musical tasks and activities. 68.1% indicated that they spend 10-20% of their rehearsals on warm-ups. 68.1% allocated 70% or more of their rehearsal time on rehearsing music literature for upcoming performances.

The rating system in Kansas utilizes five different categories ranging from I (Outstanding) to V (Poor). A higher numeric score indicates a lower quality musical performance, or a lower contest rating. Conversely, a lower numerical rating indicates a stronger

musical performance or higher contest rating. All participants' bands received a composite rating of III (Average) or above, and a summary of ratings can be found in Table 2.

Table 2

Composite Festival Ratings

	Percentage	
Rating	Survey Participants	Statewide Results
I (Outstanding)	57.4	38.8
II (Excellent)	27.7	39.2
III (Average)	14.9	20.0
IV (Fair)		1.6
V (Poor)		0.4
N	47	245

Note. Statewide results obtained from Festival Manager (2011).

Research Question 1: Do (a) selected demographic variables and (b) the manner in which high school band directors allocate rehearsal time to non-musical tasks, warm-ups, and music literature rehearsal predict the overall rating received at music festivals?

Two separate stepwise multiple regression analysis procedures were performed to determine which of the independent variables might predict the overall festival rating received by the participants' bands. The first analysis incorporated all of the demographic and rehearsal allocation data. The independent variables were schedule type; rehearsal minutes per week; percentage of rehearsal spent on non-musical tasks; percentage of rehearsal spent on music; percentage of rehearsal spent on warm-ups; education level; years of experience; school size; and number of other courses taught (see Table 3.)

Table 3

Summary of First Multiple Regression and Analysis of Variance

Multiple Regression

$R = .539$, $R^2 = .290$, $R^2_{adj} = .256$, $\Delta R^2 = .082$

Variable	B	SE	β	t	P
Other Courses Taught	.204	.084	.342	2.440	.019
Years Experience	-.018	.008	-.308	-2.201	.033

Analysis of Variance

	SS	MS	Df	F	P
Regression	6.708	3.354	2	8.589	.001
Residual	16.403	.391	42		

This model accounted for 25.6% (R^2_{adj}= .256) of the variance in contest ratings. For every additional course taught, results showed that contest ratings decreased by .204 (*B*=.204). For each year of experience reported, contest ratings increased by .018.

The second regression narrowed the variables to those directly related to allocation of rehearsal time, and included only the independent variables schedule type; total rehearsal minutes per week; percentage of rehearsal spent on non-musical tasks; percentage of rehearsal spent on music; and percentage of rehearsal spent on warm-ups (see Table 4).

Table 4

Summary of Second Multiple Regression and Analysis of Variance

Multiple Regression

$R = .373$, $R^2 = .139$, $R^2_{adj} = .120$, $\Delta R^2 = .139$

Variable	B	SE	β	T	p
% of Rehearsal Spent on Non-Musical Tasks	.410	.152	.373	2.700	.010

Analysis of Variance

	SS	MS	df	F	p
Regression	3.533	3.533	1	7.288	.010
Residual	21.936	.487	45		

Only 12.0% ($R^2_{adj} = .120$) of the variance in contest ratings can be attributed to the second model. The positive regression coefficient ($B = .410$) indicated that more time directors spent on non-musical tasks, the lower their contest ratings.

Research Question 2: Does the inclusion of specific warm-up activities used by high school band directors predict the band's festival rating?

RSQ participants were asked to estimate how frequently they incorporate various warm-up activities into their regular rehearsals. Warm-up activities included long tones; slurs; scales; method books; tuning; chorales; original exercises; sight-reading; listening exercises; written assignments; rhythm drills; articulation exercises; breathing and physical exercises; ear training; dynamics; balance and blend exercises; and singing. Participants used a five point scale to indicate frequency of usage as never, once in a while, at least once per week, most days, and everyday. A summary of band director responses is outlined in Table 5, and graphs illustrating

all responses can be found in Appendix E. Directors reported using long tones (51.1%), scales (66.0%), and tuning (68.1%) most frequently.

Table 5

Band Director's Reported Frequency of Selected Warm-up Activities

	Percentage of responses				
Warm-up	Never	Once in a While	Once / Week	Most Days	Everyday
Long Tones		19.1	10.6	19.1	51.1
Slurs	2.2	37.0	15.2	15.2	30.4
Scales		2.1	8.5	23.4	66.0
Method Book	13.0	19.6	8.7	21.7	37.0
Tuning		2.1	8.5	21.3	68.1
Chorale	4.3	17.4	19.6	30.4	28.3
Original Exercises	48.9	40.4	4.3	6.4	
Sight-Reading	8.5	40.4	31.9	12.8	6.4
Listening	15.2	43.5	23.9	13.0	4.3
Written Assignment	37.0	63.0			
Rhythm Drill	6.5	41.3	23.9	17.4	10.9
Articulation	4.3	25.5	25.5	25.5	19.1
Breathing	6.5	32.6	15.2	26.1	19.6
Ear Training	37.8	51.1	11.1		
Dynamics	4.3	41.3	19.6	21.7	13.0
Balance and Blend		13.0	23.9	28.3	34.8
Singing	8.5	48.9	14.9	17.0	10.6

All 17 warm-up activities were included in a stepwise multiple regression analysis with festival rating as the dependent variable. Only the model that included Breathing and Physical Exercises was found to contribute to the variance in festival ratings (see Table 6.)

Table 6

Summary of Warm-up Frequency Multiple Regression and Analysis of Variance

Multiple Regression

$R = .405$, $R^2 = .164$, $R^2_{adj} = .142$, $\Delta R^2 = .164$

Variable	B	SE	β	T	P
Breathing / Physical Exercise Freq.	-.229	.083	-.405	-2.763	.009

Analysis of Variance

	SS	MS	df	F	P
Regression	3.594	3.594	1	7.635	.009
Residual	18.357	.471	39		

While N = 47 for all responses, only 41 cases were included in this regression. Several responses were rejected as survey participants did not provide frequency ratings for all warm-up activities. This model accounted for 14.2% ($R^2_{adj} = .142$) of the variance in ratings. The negative regression coefficient ($B = -.229$) indicated that the more frequently directors incorporated breathing and physical exercises into their rehearsals, the higher their contest ratings.

Research Question 3: Does the frequency with which band directors utilize specific warm-up activities reflect the level of importance that directors place on such rehearsal techniques?

Participants were asked to rate how important they feel it is to include the warm-up activities outlined in the previous section during their regular rehearsals. The RSQ asked participants to rate each warm-up activity as not important, somewhat important, important, or extremely important. Graphs illustrating the frequencies and values reported by participants can be found in Appendix E, while a summary of band director responses is outlined in Table 7. Long tones, scales, tuning, chorales, and balance and blend exercises were rated as the most important. Participants also rated sight-reading, articulation, and dynamic exercises as important.

Table 7

Band Director's Value Rating of Selected Warm-up Activities

	Percentage of responses			
Warm-up	Not Important	Somewhat Important	Important	Extremely Important
Long Tones	2.2	6.5	26.1	65.2
Slurs		13.0	47.8	39.1
Scales		6.5	28.3	65.2
Method Book	4.3	32.6	34.8	28.3
Tuning		2.2	19.6	78.3
Chorale	2.2	6.7	40.0	51.1
Original Exercises	57.8	28.9	6.7	6.7
Sight-Reading		19.6	60.9	19.6
Listening		28.3	43.5	28.3
Written Assignment	35.6	55.6	6.7	2.2
Rhythm Drill		8.7	47.8	43.5
Articulation		8.7	52.2	39.1
Breathing		17.8	40.0	42.2
Ear Training	6.7	44.4	31.1	17.8
Dynamics	2.2	13.3	55.6	28.9
Balance and Blend		4.3	37.0	58.7
Singing	4.3	21.7	47.8	26.1

A paired samples t-test compared participants' frequency responses to their value responses. Significant differences were found between how frequently several warm-up activities were used versus the level of importance that directors place upon those exercises. These

included long tones t(45) = 3.985, $p<.001$; scales t(45) = 9.700, $p<.001$; method books t(44) = 3.708, $p<.001$; tuning t(45) = 7.591, $p<.001$; listening exercises t(44) = -3.473, $p<.001$; rhythm drills t(44) = -3.162, $p<.003$; ear training t(43) = -7.231, $p<.001$; balance and blend exercises t(44) = 2.387, $p<.021$; and sight-reading t(45) = -1.698, $p<.096$.

CHAPTER 5

Discussion

Summary

Results of this investigation show that the structure of regular high school band rehearsals and the choice of warm-up activities may have a limited ability to predict a band's music festival or contest rating. The discrepancy between warm-up activity frequency and director's value call into question the accuracy of some participant's responses. Some of these findings support previous studies; however, there are concerns as to how much generalization can be made to all high school band rehearsals.

Question 1: Demographics, Rehearsal Structure and Contest Ratings

Data analysis found that three variables, the number of additional courses taught; a director's years of experience; and the percentage of a rehearsal spent on non-musical tasks predicted a variance in contest ratings. Directors with additional teaching duties and those who spent additional time on non-musical tasks had lower festival ratings, while directors with more teaching experience tended to have higher contest ratings. Having additional courses to plan for certainly reduces the amount of time a director can spend preparing for band rehearsals. While all directors reported having some additional teaching responsibilities, those with lower festival ratings tended to have a greater variety of duties, including other subjects such as choir and general music.

Cox (1986) found that as performances neared directors did tend to spend more time on non-musical tasks. This presumably might be due to a need for directors to communicate schedule and logistical information regarding the performances to students. The finding in this

study, however, shows that increasing non-music task time in most rehearsals to decrease festival ratings. Certainly decreasing the amount of rehearsal time spent on music making and learning in favor of equipment set-up, announcements, and other tasks does not increase musical learning.

Much previous research shows that teaching behaviors of experienced teachers are generally more effective than those of novice teachers. Goolsby (1996 & 1999) found experienced teachers spent more time on music making activities. Yarbrough and Price's (1989) research also showed that experienced teachers used feedback and pacing more effectively. Increasing rehearsal efficiency over time through experimentation with different techniques and methodologies should hopefully lead to increased student musical knowledge and skill. The end result would be more musical and effective performances, especially in contest situations. Additionally the experience of preparing for festivals and a better understanding of the expectations of adjudicators by veteran band directors would likely benefit school bands as well. The finding that years of experience correlate to higher festival ratings seems to support the previous research and assumptions.

Question 2: Inclusion of Specific Warm-up Activities and Contest Ratings

The 17 different warm-up activities chosen for this study were selected by their presence in previous studies, existing publications for band (Williams and King, 1999), and the author's personal experience. While breathing and physical warm-ups are found most commonly in literature related to choral rehearsals, Silvey (2007) discusses their importance related to tone production for school bands. The overall amount of variance in festival ratings attributed to breathing exercises was fairly low. Given that ensemble and individual tone quality is often assessed at music contests, inclusion of some breathing exercises in band rehearsals should at least provide some benefit. While the other warm-up activities examined in this study were not

found to significantly impact festival ratings, their use for developing musicianship and technique still have value as found in other studies such as Bauer (1993).

Question 3: Warm-up Frequency versus Director Value

The discrepancy between the frequency with which participants reported using certain warm-up activities and the importance that band directors claim to place on those activities was somewhat surprising. While band directors may consider certain warm-ups as very important, they may not have time, or may not plan to allocate time to those activities on a regular basis. In some instances this discrepancy may be caused by other factors. 80.5% of directors stated that sight-reading is important or extremely important; however, only 19.2% of participants reported incorporating sight-reading most rehearsals or every rehearsal. In Kansas, sight-reading is not required at music festivals; therefore many directors may not take the time to incorporate sight-reading into rehearsals as frequently as they might otherwise. Additional investigation and insight into these discrepancies is certainly warranted.

Findings Related to Participant Demographics

In examining the demographic make-up of the RSQ participants several interesting trends were noted. While a comparison to the general population of band directors in Kansas was beyond the scope of this study, the participants' level of education and amount of experience seemed somewhat high. Veteran band directors are perhaps more likely to share their own experiences and insights whereas younger directors may have felt uncomfortable or unprepared to respond to a survey of this nature.

The participant group also disproportionately represents the size of schools found in Kansas. Some of the smallest schools in the state may not even have band programs, thereby eliminating potential survey participants. Larger schools and school districts may also have more

funding available to allow band directors to attend the summer convention where most participants were solicited.

Another trend noted in the demographic data was the generally high festival ratings of survey participants. Unfortunately directors of bands which generally receive low festival ratings may not take the time, nor be interested in participating in surveys and conferences to improve their individual teaching, thus eliminating themselves from the participant pool. Boeckman's (2002) finding of a general trend of contest rating inflation may also explain this trend. The statewide ratings do not follow a normal distribution, which is amplified in the participant responses.

Limitations and Strengths

The primary limitation of this study was the sample size. Given the large number of variables being examined, the participant size was below commonly accepted N sizes to provide meaningful results. An additional limitation to the study design was that band directors were asked to self-report the amount of time spent on various activities instead of a controlled observation. Using the rehearsal frame method developed by Duke (1994) to document the allocation of rehearsal time and type of warm-up activities used might provide more accurate results.

Despite these limitations, the design of the study highlights critical areas needing investigation to better understand how rehearsal structure and techniques impact contest ratings. The survey also identified unique trends among several band directors in Kansas.

Implications

While the present investigation does not easily lend itself to broad generalizations, the findings do support results of previous studies. The limited variation in contest ratings attributed to director experience, other teaching duties, and breathing exercises indicates that band directors should carefully consider rehearsal planning and techniques to optimize their effectiveness. Young directors ought to take advantage of opportunities to interact with and possibly observe rehearsals conducted by experienced directors, especially those with a strong record of attaining high contest ratings. Directors whose teaching responsibilities involve multiple courses and duties should be very careful in planning rehearsals to maximize the time they do have. Incorporating breathing exercises into regular warm-up routines certainly provides some benefits, and the likelihood of breathing exercises being detrimental to contest ratings is very small.

The present study was predicated on the assumption that music contest and festival ratings can serve as a measure of students' musical achievement over a period of time. Directors must decide whether or not participation in music festivals and contests meets the needs of their students. Regardless of contest participation, incorporating rehearsal techniques and teaching strategies that have been shown to improve contest ratings should translate into improved musical learning and performance quality by school bands. The results of this and other similar studies provides band directors with quantitative data illustrating which rehearsal techniques might provide the most benefit to their students' musical progress.

Additional studies of the allocation of rehearsal time and effectiveness of warm-up activities is certainly warranted. The growing emphasis on research-based instructional strategies in other subject areas necessitates that band directors carefully examine which rehearsal

techniques attain the greatest results. This investigation looked at a broad sampling of variables. Limiting future studies to related components, such as exercises related to tone production or intonation might provide for more meaningful results. This study's findings, however, do show that rehearsal structure and choice of rehearsal activities do play a small role in ratings at music festivals.

References

Austin, J.R. (1990). Competition: Is music education the loser? *Music Educators Journal, 76*(6), 21-25.

Banister, S. (1992). Attitudes of high school band directors toward the value of marching and concert band contests and selected aspects of the overall band program. *Missouri Journal of Research in Music Education, 29,* 49-57.

Battersby, S. (1994). The perceived benefits of competitions/contests for choral directors and students in the tri-state area. Ed.D. dissertation, Columbia University Teachers College, United States -- New York. Retrieved June 12, 2011, from Dissertations & Theses: Full Text.(Publication No. AAT 9511030).

Bauer, W. I. (1993). The relationship between rehearsal procedures and contest ratings for high school bands. *Contributions to Music Education, 20*, 32-44.

Bazan, D. E. (2007). Teaching and learning strategies used by student-directed teachers of middle school band. *Dissertations Abstracts International, 68* (05). (UMI No. 3264513).

Bergee, M. J. (2003). Faculty interjudge reliability of music performance evaluation. *Journal of Research in Music Education, 51*(2), 137-150.

Bergee, M. J. (2007). Performer, rater, ocassion, and sequence as sources of varilability in music performance assessment. *Journal of Research in Muisc Education, 55*(4), 344-358.

Bergee, M. J., & McWhirter, J. L. (2005). Selected influences on solo and small-ensemble festival ratings: replication and extension. *Journal of Research in Music Education, 53*(2), 177-190.

Bergee, M. J., & Platt, M. C. (2003). Influence of selected variables on solo and small-ensemble festival ratings. *Journal of Research in Music Education, 51*(4), 342-353.

Bergee, M. J., & Westfall, C. R. (2006). Stability of a model explaining selected extramusical influences of solo and small-ensemble festival ratings. *Journal of Research in Music Education, 54*(3), 247-256.

Blocher, L. (2002). Teaching for moments that matter. In R. Miles (Ed.), *Teaching Music through Performance in Band* (Vol. 4) (pp. 2-13). Chicago, Illinois, USA: GIA Publications, Inc.

Blocher, L., Greenwood, R., & Shellahamer, B. (1997). Teaching behaviors of middle school and high school band directors in the rehearsal setting. *Journal of Research in Music Education, 45*(3), 457-469.

Boeckman, J. (2002). Grade inflation in band contest ratings: A trend study. *Journal of Band Research, 38*(1), 25-36.

Brakel, T.D. (2006). Inter-judge reliability of the Indiana State School Music Associtaion High School Instrumental Festival. *Journal of Band Research, 42*(1), 59-69.

Brand, M. (1985). Research in music teacher effectiveness. *Update: Applicaitons of Research in Music Education, 3*(2), 14-16.

Brendell, J. K. (1996). Time use, rehearsal activity, and student off-task behavior during the initial minutes of high school choral rehearsals. *Journal of Research in Music Education, 44*(1), 6-14.

Brophy, J. E. (1979). Teacher behavior and its effects. *Journal of Educational Psychology, 71*, 733-750.

Burnsed, V., & King, S. (1987). How reliable is your festival rating? *Update: Applications of Research in Music Education 3*, 12-13.

Burnsed, V., Hinkle, D., & King, S. (1985). Performance evaluation reliability at selected concert band festivals. *Journal of Band Research, 21*(1), 22-29.

Campbell, J. E. (2008). A comparison of a hierarchichal vocal function warm-up regimen and a routine calisthenic warm-up procedure in the choral ensemble rehearsal. *Dissertation Abstracts International 69*(06). (UMI No. 3311121).

Cavitt, M. (2004). Information in rehearsal frames targeting intonation performance. *Journal of Band Research, 40*(1), 38-52.

Cox, J. (1986). Choral rehearsal time usage in a high school and a university: A comparative analysis. *Contributions to Music Education, 13*, 7-22.

Duke, R. A. (1994). Bringing the art of rehearsal into focus: the rehearsal frame as a model for prescriptive analysis of reheaersal conducting. *Journal of Band Research, 30*(1), 78-95.

Duke, R. A., Prickett, C. A, & Jellison, J. A. (1998). Empirical description of the pace of music instruction. *Journal of Research in Music Education, 46*(2), 265-280.

Dykema, P. (1923). The contest idea in music. *Music Supervisors' Journal, 10*(2), 14-62.

Festival Manager. (2011). Retrieved April 21, 2011, from Kansas State High School Activities Association: http://festivalmanager.com/kshsaa/src/top.htm

Fiske, H. E. (1977). Relationship of selected factors in trumpet performance adjudication reliability. *Journal of Research in Music Education, 25*, 256-263.

Fiske, H. E. (1983). Judging musical performances: Method or madness? *Update: Applications of Research in Music Education, 1*(3), 7-10.

Garofalo, R. J. (1973). Blueprint for band: We need sound curriculums, not just skilled performers. *Music Educators Journal, 60*(3), 38-42.

Garofalo, R. J., & Whaley, G. (1979). Comparison of the unit study and traditional approaches for teaching music through school band performance. *Journal of Research in Music Education, 27*(3), 137-142.

Gillis, G. (2008). Conductor responsibilities and rehearsal preparation. *The Canadian Music Educator, 49*(4), 36-39.

Goolsby, T. W. (1996). Time use in instrumental rehearsals: A comparison of experienced, novice, and student teachers. *Journal of Research in Music Education, 44*, 286-303.

Goolsby, T. W. (1999). A comparison of expert and novice music teachers' preparing identical band compositions: An operational replication. *Journal of Research in Music Education, 47*(2), 174-187.

Grant, D. (2002). Creative rhythmic warm ups for wind bands. *Canadian Winds*, 47-48.

Grant, D. (2006). Music makers: Band - Making the most of your rehearsal time: Creative warmups and rehearsal techniques. *Canadian Music Educator, 47*(4), 55-58.

Hamann, D. L., & Banister, S. (1991). Factors contributing to high school band students ratings at solo and ensemble festival. *Contributions to Music Education, 18*, 57-65.

Hamann, D.L., Mills, C., Bell, J., Daugherty, E., & Koozer, R. (1990). Classroom environment as related to contest ratings among high school performing ensembles. *Journal of Research in Music Education, 38*(3), 215-224.

Hayslett, D. (1992). The effect of band contest participation upon band members' perceptions of contest rating importance, musical achievement and self-worth. *Dialogue in Instrumental Music Education, 16*(2), 12-18.

Howard, K. K. (1994). A survey of Iowa high school band students' self-perceptions and attitudes toward types of music contests. Ph.D. dissertation, The University of Iowa, United States -- Iowa. Retrieved June 12, 2011, from Dissertations & Theses: Full Text.(Publication No. AAT 9433638).

Irwin, D. R. (2006). The rehearsal frame as an instructional tool in choral music education: A comparison of expert and novice choral conductors' perception of effective teaching. *Dissertation Abstracts International 68* (04). (UMI No. 3259138).

Jagow, S. (2003). Rehearsal structures of college wind-band conductors. *Canadian Winds*, 32-34.

King, S. E., & Burnsed, V. (2009). A study of the reliability of adjudicator ratings at the 2005 Virginia band and orchestra directors association state marching band festivals. *Journal of Band Research, 45*(1), 27-32.

KSHSAA. (2012). Retrieved February 11, 2012, from Kansas State High School Activities Association: http://www.kshsaa.org/Public/PDF/Classifications11.pdf

Lane, J. S. (2010). An analysis of relationships between lesson planning training and rehearsal pacing of undergraduate instrumental music education majors in practice teaching settings. *Journal of Band Research, 46*(1), 52-65.

LaRue, P. J. (1986). A study to determine the degree of consensus regarding outcomes of band participation and the competitive elements in band program among band directors, band members, and members of parent booster groups. Educat.D. dissertation, University of Illinois at Urbana-Champaign, United States -- Illinois. Retrieved June 12, 2011, from Dissertations & Theses: Full Text.(Publication No. AAT 8623347).

Latimer, M. E. (2007). Adjudicator reliability: A comparison of the use of authentic state festival choir and global score audition forms. *Bulletin for the Council for Research in Music Education, 34*, 67-82.

Latimer, M. E. Bergee, M.J., & Cohen, M. L. (2010). Reliability and perceived pedagogical utility of a weighted music performance assessment rubric. *Journal of Research in Music Education, 58*(2), 168-183.

Lisk, E. S. (1991). *Alternative Rehearsal Techniques* (3rd ed.). Ft. Lauderdale, Florida, USA: Meredith Music Publications.

Maddy, J. E. (1931). Eliminating contest evils. *Music Supervisor's Journal, 18*(1), 42-46.

Manfredo, J. (2006). Effective time managemnet in ensemble rehearsals. *Music Educators Journal, 93*(2), 42-46.

McHenry, M. A., Johnson, J., & Foster, B. (2009). The effect of specific versus combined warm-up strategies on the voice. *Journal of Voice, 23*(5), 572-576.

Montemayor, M. (2006). Rehearsal achievement in high school bands and its rlationship to performance quality, selected rehearsal procedures, and evaluations of teaching effectiveness. *Dissertation Abstracts international, 67*(11). (UMI No. 3241934).

Morrison, S. J., Price, H. E., Geiger, C. G., & Cornacchio, R. A. (2009). The effect of conductor expressivity on ensemble performance evaluation. *Journal of Research in Music Education, 57*(1), 37-49.

Pilafian, S. & Sheridan, P. (2002). *The Breathing Gym*. Gurnee, Illinois, USA: Windsong Press Ltd.

Price, H. E. (1983). The effect of conductor acadmiec task presentation, conductor reinforcement, and ensemble practice on performers' musical achievement, attentiveness, and attitude. *Journal of Research in Music Education, 31*(4), 245-257.

Price, H. E. (1992). Sequential patterns of music isntruction and learning to use them. *Journal of Research in Music Education, 40*(1), 14-29.

Price, H. E. (2006). Relationships amond conducting quality, ensemble performance quality, and state festival ratings. *Journal of Research in Music Education, 54*(3), pp. 203-214.

Price, H. E., & Byo, J. L. (2002). The science and psychology of music performance: Creative strategies for teaching and learning. Oxford, United Kingdom: Oxford University Press.

Price, H. E., & Chang, E. C. (2001). Conductor expressivity and ensemble performance: An exploratory investigation. *Contributions to Music Education, 28*(2), 9-20.

Price, H. E., & Chang, E. C. (2005). Conductor and ensemble performance expressivity and state festival ratings. *Journal of Research in Music Education, 53*(1), 66-77.

Price, H. E., Blanton, F., & Parrish, R. T. (1998). Effrects of two instructional methods on high school band students sight reading proficeiency, music performance, and attitude. *Update: Applications of Research in Music Education, 17*(1), 14-20.

Rogers, G. L. (1982). Attitudes of high school band directors, band members, parents, and principals toward marching band contests. *Dissertation Abstracts International, 43*(11) (UMI No. 8306179).

Rogers, G. L. (1984). Attitudes of high school band directors, band members, parents, and principals toward marching contests. *Update: Applications of Research in Music Education, 2*(4), 11-15.

Rogers, G. L. (1985). Attitudes of high school band directors and principals toward marching band contests. *Journal of Research in Music Education, 33*(4), 259-267.

Rowher, D. (2009). Perceived instructional needs of middle school and senior citizen band members. *Journal of Music Teacher Education, 18*(2), 62-73.

Russell, J. A. (2006). The influence of warm-ups and other factors on the perceived physical discomfort of middle school string students. *Contributions to Music Education, 33*(2), 89-109.

Sheldon, D. A. (1994). The effects of competitive versus noncompetitive performance goals on music students' ratings of band performances. *Bulletin for the Council of Research in Music Education, 121*, 29-41.

Silvey, B. A. (2007). Breathing your way to a better band. *School Band and Orchestra*, 54-56.

Single, N. (1991). A summary of research-based principles of effective teaching. *Update: Applications of Research in Music Education, 9*(2), 3-10.

Smith, J. W. (1999). Correlation of discrete and continuous contest ratings with marching band director rehearsal behaviors. *Dissertation Abstracts International 60*(09). (UMI No. 9946123).

Stamer, R. A. (2006). Changes in choral student perceptions of the music contest experience. *Update: Applications of Research in Music Education, 25*(1), 46-56.

Wagner, M. J., & Strul, E. P. (1979). Comparisons of beginning versus experienced elementary music educators in the use of teaching time. *Journal of Research in Music Education, 27*(2), 113-125.

West, J. (1985). The effect of performance success on the musical achivement of high school band students in four Florida counties. *Dissertation Abstracts International, 46*(04), 921.

Williams, R., & King, J. (2006). *Setting rehearsal priorities: Getting the most out of the warm-up routine.* Kansas Music Educator's Assoication In-Service Workshop. Neil A. Kjos Music Company.

Wolbers, M. (2002). Singing in the band rehearsal. *Music Educators Journal, 89*(2), 37-41.

Worthy, M. D. (2003). Rehearsal frame analysis of an expert wind conductor in high school vs college band rehearsals. *Belletin for the Council for Research in Music Education, 156*, 11-19.

Yarbrough, C., & Price, H. E. (1989). Sequential patterns of instruction in music. *Journal of Research in Music Educaiton, 37*(3), pp. 179-187.

APPENDICIES

APPENDIX A

Permission Letter from HSCL

KU RESEARCH & GRADUATE STUDIES
The University of Kansas

6/3/11
HSCL #19465

Justin Love
34225 W. 90th Circle
De Soto, KS 66018

The Human Subjects Committee Lawrence reviewed your research update application for project

19465 Love/Johnson (MEMT) The Relationship Between Rehearsal Structure and Contest Ratings for High School Bands

and approved this project under the expedited procedure provided in 45 CFR 46.110 (f) (7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

The Office for Human Research Protections requires that your consent form must include the note of HSCL approval and expiration date, which has been entered on the consent form sent back to you with this approval.

1. At designated intervals until the project is completed, a Project Status Report must be returned to the HSCL office.

2. Any significant change in the experimental procedure as described should be reviewed by this Committee prior to altering the project.

3. Notify HSCL about any new investigators not named in original application. Note that new investigators must take the online tutorial at http://www.rcr.ku.edu/hscl/hsp_tutorial/000.shtml.

4. Any injury to a subject because of the research procedure must be reported to the Committee immediately.

5. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity. If you use a signed consent form, provide a copy of the consent form to subjects at the time of consent.

6. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.

Please inform HSCL when this project is terminated. You must also provide HSCL with an annual status report to maintain HSCL approval. Unless renewed, approval lapses one year after approval date. If your project receives funding which requests an annual update approval, you must request this from HSCL one month prior to the annual update. Thanks for your cooperation. If you have any questions, please contact me.

Sincerely,

Jan Butin
HSCL Associate Coordinator
University of Kansas

cc: Chris Johnson

Human Subjects Committee Lawrence
Youngberg Hall | 2385 Irving Hill Road | Lawrence, KS 66045-7563 | (785) 864-7429 | Fax (785) 864-5049 | www.rcr.ku.edu/hscl

Appendix B

Rehearsal Structure Questionnaire

Rehearsal Structure Questionnaire

Part 1: Information Statement and Consent

The Department of Music Education and Music Therapy at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty by simply closing your internet browser and exiting the survey program.

We are conducting this study to better understand the the structure of high school concert band rehearsals. This will entail your completion of a questionnaire. The questionnaire is expected to take approximately 15 minutes to complete.

The content of the questionnaire should cause no more discomfort than you would experience in your everyday life. Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of how band directors structure their concert band rehearsals. Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Completion of the survey and submission of your responses indicates your willingness to participate in this project and that you are at least age eighteen. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429, write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, or email mdenning@ku.edu.

Sincerely,

Justin W. Love
Principal Investigator - MEMT Graduate Student
Murphy Hall
University of Kansas
Lawrence, KS 66045
(913)424-2381
justin.love74@gmail.com

Christopher M. Johnson, Ph.D.
Faculty Supervisor
Department of Music Education and Music Therapy
Murphy Hall
University of Kansas
Lawrence, KS 66045
(785)864-9633
cmj@ku.edu

Approved by the Human Subjects Committee University of Kansas, Lawrence Campus (HSCL). Approval expires one year from 6/3/2011. HSCL #19465

Rehearsal Structure Questionnaire

Part 2: School Schedule Format

This survey will ask several questions about how you structure your concert band rehearsals. If you teach more than one concert band, please pick only one of your bands to base your answers on.

1. Select the item below that best describes the schedule used at your school. This refers to the normal daily or weekly schedule used for a majority of the school-year.

- ◯ Daily 6, 7, or 8 period schedule
- ◯ 4x4 Block (Daily classes; classes change each semester or trimester)
- ◯ A/B Alternating Block (3-4 classes per day; classes meet on alternating days)
- ◯ Modified Block Schedule (A combination of 6/7/8 period days and block days with 3 or 4 classes)
- ◯ Other (please specify)

Rehearsal Structure Questionnaire

Part 3: Daily Rehearsal Structure

The next portion of this survey asks questions about how you structure your daily band rehearsals. Please use your best estimate when answering questions.

1. Which amount of time below most closely matches the length of your daily rehearsals?

- ◯ 90 minutes
- ◯ 80 minutes
- ◯ 70 minutes
- ◯ 60 minutes
- ◯ 50 minutes
- ◯ 45 minutes
- ◯ 40 minutes or less

2. How much time during a typical rehearsal do you estimate you spend on non-musical tasks? (Taking roll, set-up / tear-down; announcements, passing out music, etc.)?

- ◯ 5 minutes or less
- ◯ 5-10 minutes
- ◯ 10-15 minutes
- ◯ 15 minutes or more

3. How much time during a typical rehearsal do you estimate you spend rehearsing music for upcoming performances?

- ◯ 15 minutes or less
- ◯ 15-20 minutes
- ◯ 20-30 minutes
- ◯ 30-40 minutes
- ◯ 40-50 minutes
- ◯ 50-60 minutes
- ◯ 60 minutes or more

Rehearsal Structure Questionnaire

Part 4: Warm-ups

The next set of questions asks about warm-up exercises and activities you incorporate into your band rehearsals.

1. How frequently do you actually include the following warm-up exercises and activities in your rehearsals?

	Every Rehearsal	Most rehearsals in a week	At least once per week	Once in a while	Never
Long Tones	◯	◯	◯	◯	◯
Lip Slurs / Arpeggios	◯	◯	◯	◯	◯
Scales / Scale Studies	◯	◯	◯	◯	◯
Method / Technique Books	◯	◯	◯	◯	◯
Tuning	◯	◯	◯	◯	◯
Chorales	◯	◯	◯	◯	◯
Original Exercises (Composed or written by yourself)	◯	◯	◯	◯	◯
Sight-Reading	◯	◯	◯	◯	◯
Listening Exercises	◯	◯	◯	◯	◯
Written or Reading Assignments	◯	◯	◯	◯	◯
Rhythm Counting / Rhythm Drills	◯	◯	◯	◯	◯
Articulation Exercises	◯	◯	◯	◯	◯
Breathing Exercises / Physical Warm-ups	◯	◯	◯	◯	◯
Ear Training / Dictation Exercises	◯	◯	◯	◯	◯
Dynamic Exercises	◯	◯	◯	◯	◯
Balance / Blend Exercises	◯	◯	◯	◯	◯
Singing	◯	◯	◯	◯	◯

Rehearsal Structure Questionnaire

2. In general, how important do you feel it is to include the following types of warm-up exercises and activities in rehearsals, regardless of frequency?

	Extremely Important	Important	Somewhat Important	Not Important
Long Tones	◯	◯	◯	◯
Lip Slurs / Arpeggios	◯	◯	◯	◯
Scales / Scale Studies	◯	◯	◯	◯
Method / Technique Books	◯	◯	◯	◯
Tuning	◯	◯	◯	◯
Chorales	◯	◯	◯	◯
Original Exercises (Composed or written by yourself)	◯	◯	◯	◯
Sight-Reading	◯	◯	◯	◯
Listening Exercises	◯	◯	◯	◯
Written or Reading Assignments	◯	◯	◯	◯
Rhythm Counting / Rhythm Drills	◯	◯	◯	◯
Articulation Exercises	◯	◯	◯	◯
Breathing Exercises / Physical Warm-ups	◯	◯	◯	◯
Ear Training / Dictation Exercises	◯	◯	◯	◯
Dynamic Exercises	◯	◯	◯	◯
Balance / Blend Exercises	◯	◯	◯	◯
Singing	◯	◯	◯	◯

3. How much total time during a typical rehearsal do you spend on the exercises and activities listed in the previous two questions?

◯ 5 minutes or less

◯ 5-10 minutes

◯ 10-20 minutes

◯ 20 minutes or more

Rehearsal Structure Questionnaire

4. During a typical rehearsal, what percentage of rehearsal time do you estimate you spend on rehearsing music for an upcoming performance?

- ◯ 30% or less
- ◯ 30-40%
- ◯ 40-50%
- ◯ 50-60%
- ◯ 60-70%
- ◯ 70-80%
- ◯ 80% or more

Rehearsal Structure Questionnaire

Part 4: Warm-ups

The next set of questions asks about warm-up exercises and activities you incorporate into your band rehearsals.

1. How frequently do you actually include the following warm-up exercises and activities in your rehearsals?

	Every Rehearsal	Most rehearsals in a week	At least once per week	Once in a while	Never
Long Tones	◯	◯	◯	◯	◯
Lip Slurs / Arpeggios	◯	◯	◯	◯	◯
Scales / Scale Studies	◯	◯	◯	◯	◯
Method / Technique Books	◯	◯	◯	◯	◯
Tuning	◯	◯	◯	◯	◯
Chorales	◯	◯	◯	◯	◯
Original Exercises (Composed or written by yourself)	◯	◯	◯	◯	◯
Sight-Reading	◯	◯	◯	◯	◯
Listening Exercises	◯	◯	◯	◯	◯
Written or Reading Assignments	◯	◯	◯	◯	◯
Rhythm Counting / Rhythm Drills	◯	◯	◯	◯	◯
Articulation Exercises	◯	◯	◯	◯	◯
Breathing Exercises / Physical Warm-ups	◯	◯	◯	◯	◯
Ear Training / Dictation Exercises	◯	◯	◯	◯	◯
Dynamic Exercises	◯	◯	◯	◯	◯
Balance / Blend Exercises	◯	◯	◯	◯	◯
Singing	◯	◯	◯	◯	◯

Rehearsal Structure Questionnaire

2. In general, how important do you feel it is to include the following types of warm-up exercises and activities in rehearsals, regardless of frequency?

	Extremely Important	Important	Somewhat Important	Not Important
Long Tones	◯	◯	◯	◯
Lip Slurs / Arpeggios	◯	◯	◯	◯
Scales / Scale Studies	◯	◯	◯	◯
Method / Technique Books	◯	◯	◯	◯
Tuning	◯	◯	◯	◯
Chorales	◯	◯	◯	◯
Original Exercises (Composed or written by yourself)	◯	◯	◯	◯
Sight-Reading	◯	◯	◯	◯
Listening Exercises	◯	◯	◯	◯
Written or Reading Assignments	◯	◯	◯	◯
Rhythm Counting / Rhythm Drills	◯	◯	◯	◯
Articulation Exercises	◯	◯	◯	◯
Breathing Exercises / Physical Warm-ups	◯	◯	◯	◯
Ear Training / Dictation Exercises	◯	◯	◯	◯
Dynamic Exercises	◯	◯	◯	◯
Balance / Blend Exercises	◯	◯	◯	◯
Singing	◯	◯	◯	◯

3. What is the total percentage of a typical rehearsal that you spend on the exercises and activities listed in the previous two questions?

◯ 10% or less

◯ 10-20%

◯ 20-30%

◯ 30% or more

Rehearsal Structure Questionnaire

Part 5: Demographic Information

The last set of questions asks you some basic information about your background and teaching responsibilities. Your responses are used only to organize and compare data collected from all respondents. No identifiable information from this section will be used in the final presentation of this study.

1. Please type the name of the school at which you taught band during the past school year.

2. Check the circle next to your school's KSHSAA Classification from this year

- ◯ 1A
- ◯ 2A
- ◯ 3A
- ◯ 4A
- ◯ 5A
- ◯ 6A
- ◯ Junior High or Middle School

3. Mark the circle next to the answer that best describes your level of education

- ◯ Bachelor's Degree
- ◯ Bachelor's Degree plus additional hours
- ◯ Master's Degree
- ◯ Master's Degree plus additional hours
- ◯ Doctorate or Specialist Degree

4. How many years have you taught music professionally (full-time and part-time experience)?

5. How many concert bands are you responsible for teaching?

- ◯ 1
- ◯ 2
- ◯ 3 or more

Rehearsal Structure Questionnaire

6. Of the concert bands you teach, which group did you base your answers on?

- ◯ I teach only one concert band
- ◯ Top or select concert band
- ◯ Second concert band
- ◯ Third concert band

7. In addition to band, please indicate what other courses / subjects you teach in your position. (Check all that apply.)

- ☐ Choir
- ☐ General Music (any grade level)
- ☐ Music Appreciation
- ☐ Music Theory
- ☐ Other level of band (beginning band; junior high / middle school, etc.)
- ☐ Other non-music subject area(s)
- ☐ Non-instructional duties (Ex.: In-School Suspension, Study Hall)
- ☐ No other duties

8. Did you take at least one of your concert bands to the KSHSAA State Large Group Music Festival this year?

- ◯ Yes
- ◯ No

Rehearsal Structure Questionnaire

Thanks!

Thank-you for your participation!

If you teach more than one concert band and would be willing to take this survey again, please open a new web browser after clicking on submit and enter the survey link again.

If you would like a copy of the research paper when finished, please contact me at justin.love74@gmail.com.

Again, your assistance with this project is greatly appreciated!

Appendix C

RSQ Demographic Response Graphs and Tables

Figure C1. RSQ participant's years of experience.

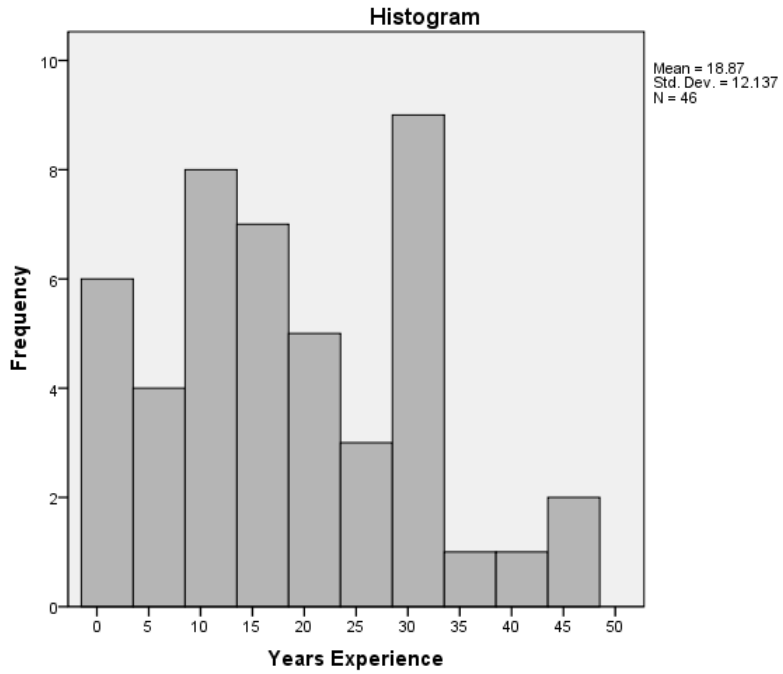


Figure C2. RSQ participant's education level.

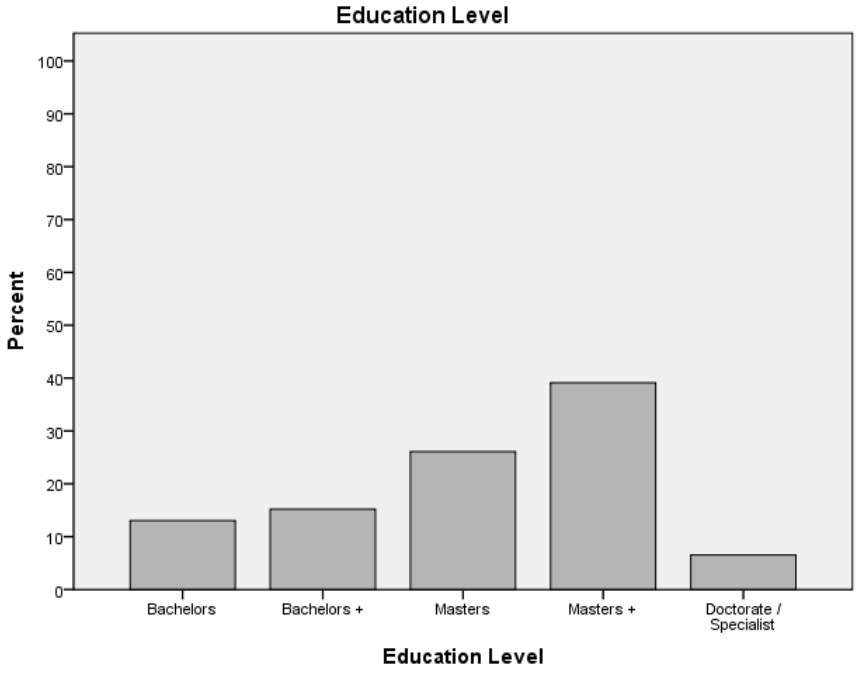


Figure C3. RSQ participant's school size.

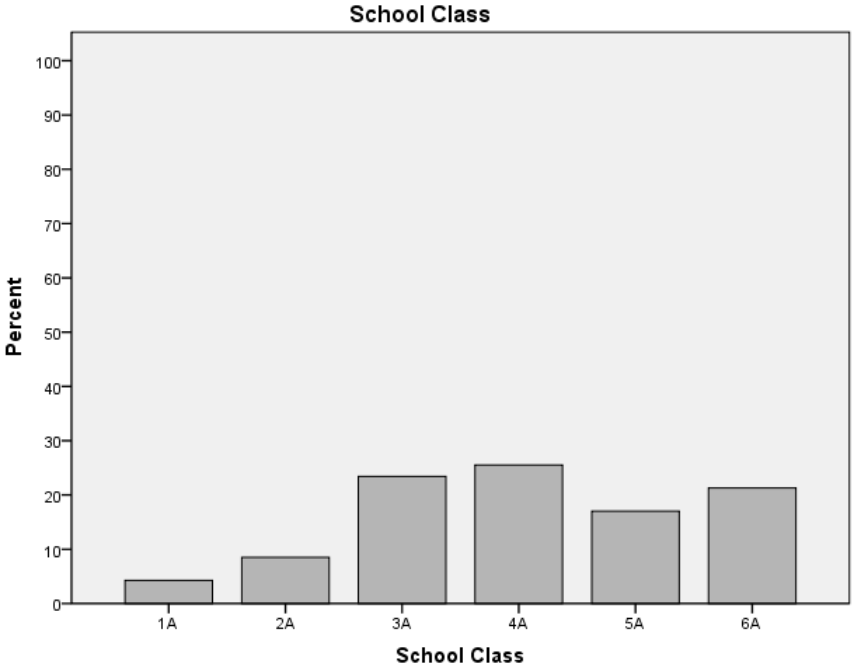


Figure C4. RSQ participant's number of other courses taught.

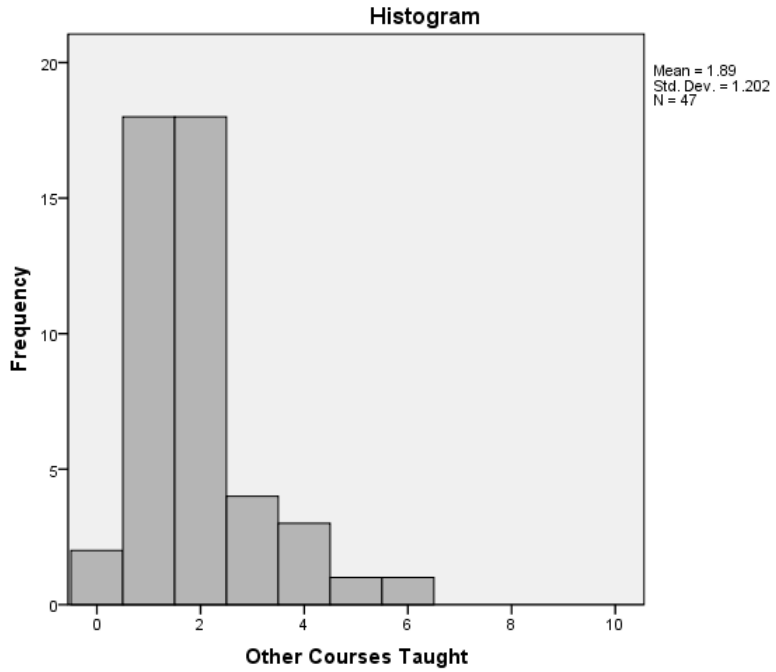
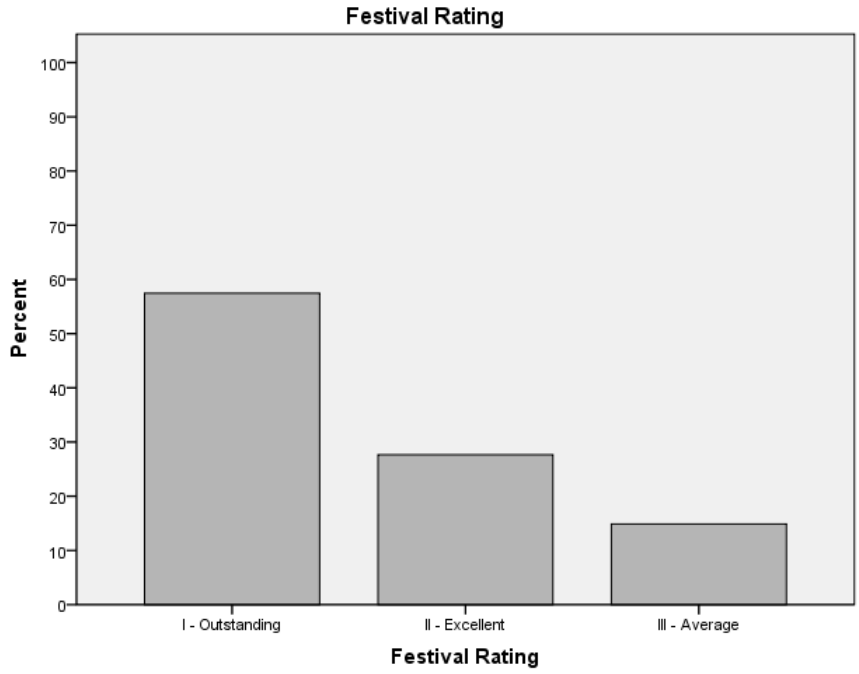


Table C1

Types and Percentages of Other Duties

Other Duties	n	Percentage
Choir	7	14.9
General Music	10	21.3
Music Appreciation	12	25.5
Music Theory	11	23.4
Other Level of Band	37	78.7
Non-Music Class	4	8.5
Non-Instructional Duty	3	6.4
No Other Duties	2	4.3

Figure C5. RSQ participant's festival ratings.



Appendix D

Figures Illustrating Participant Rehearsal Schedules and Time Allocation

Figure D1. RSQ participant schedule types.

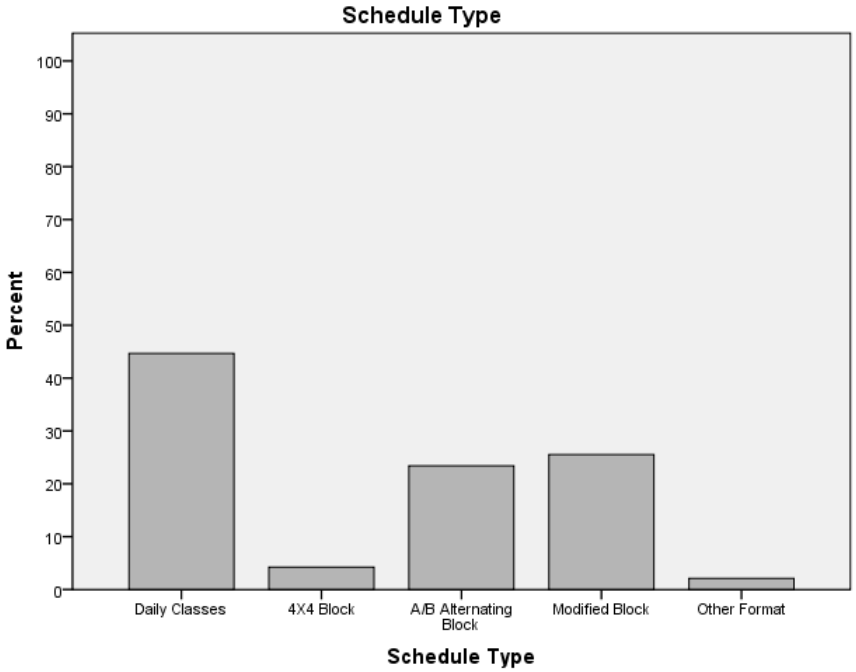


Figure D2. RSQ participant rehearsal minutes per week.

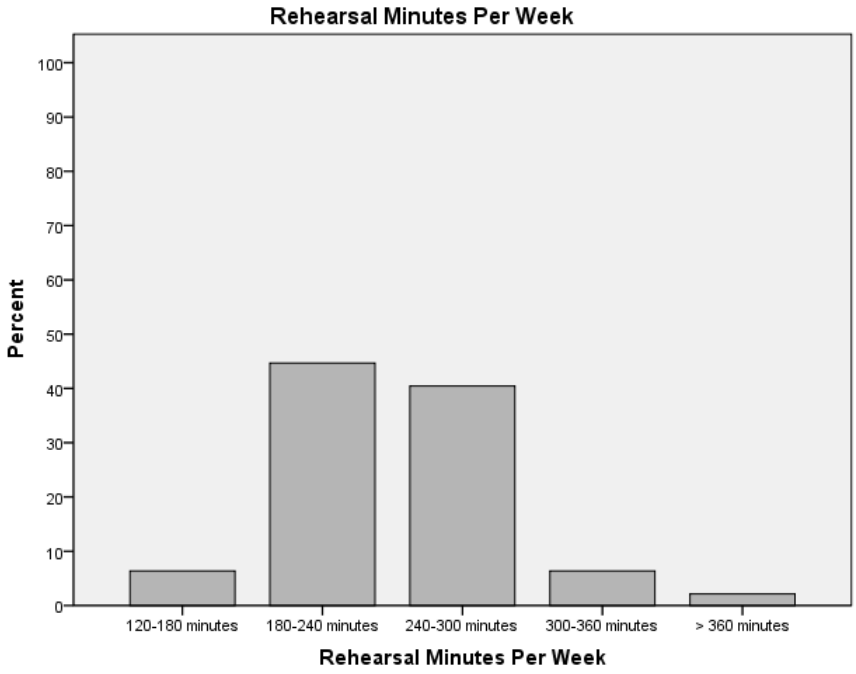


Figure D3. RSQ participant % of rehearsal spent on non-musical tasks.

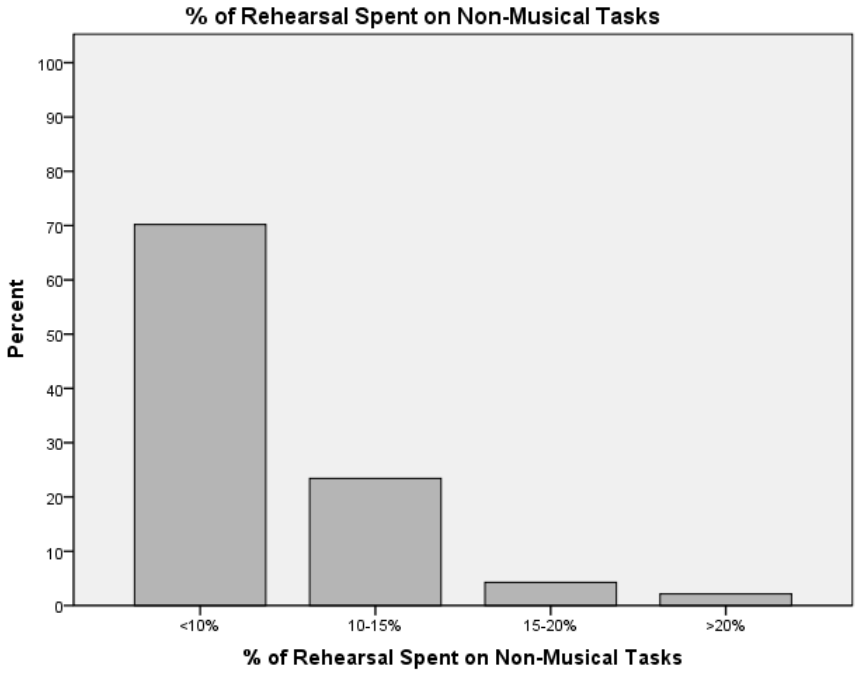


Figure D4. RSQ participant % of rehearsal spent on music literature rehearsal.

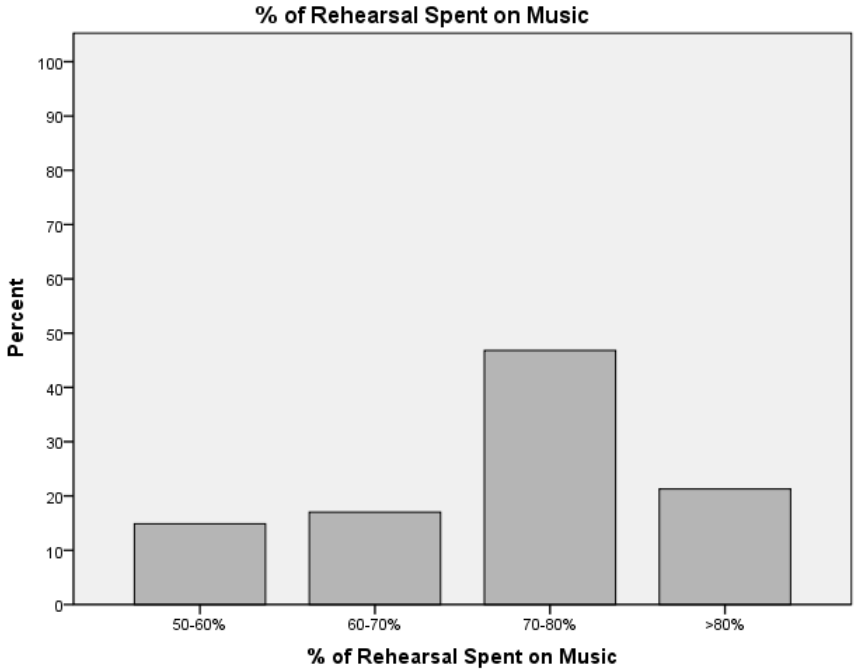
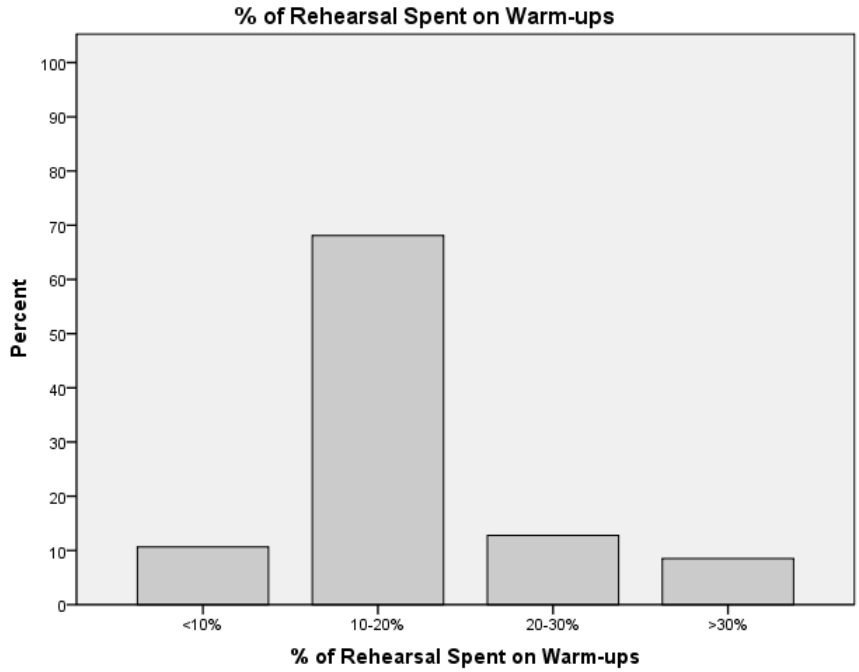


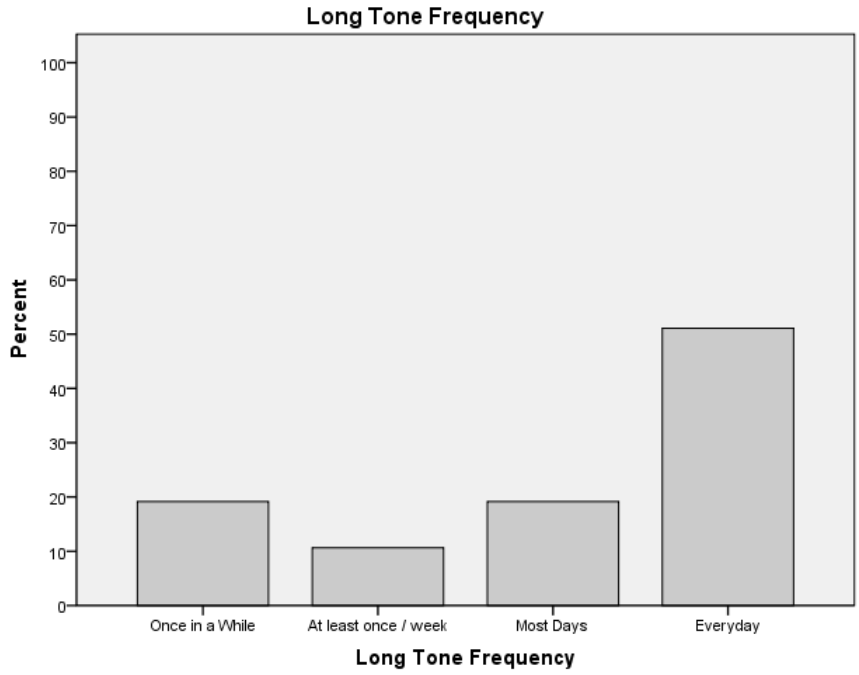
Figure D5. RSQ participant % of rehearsal spent on warm-ups.



Appendix E

Graphs of Frequency of Warm-up Use and Participants' Value of Warm-ups

Figure E1: Comparison of long-tone frequency and value



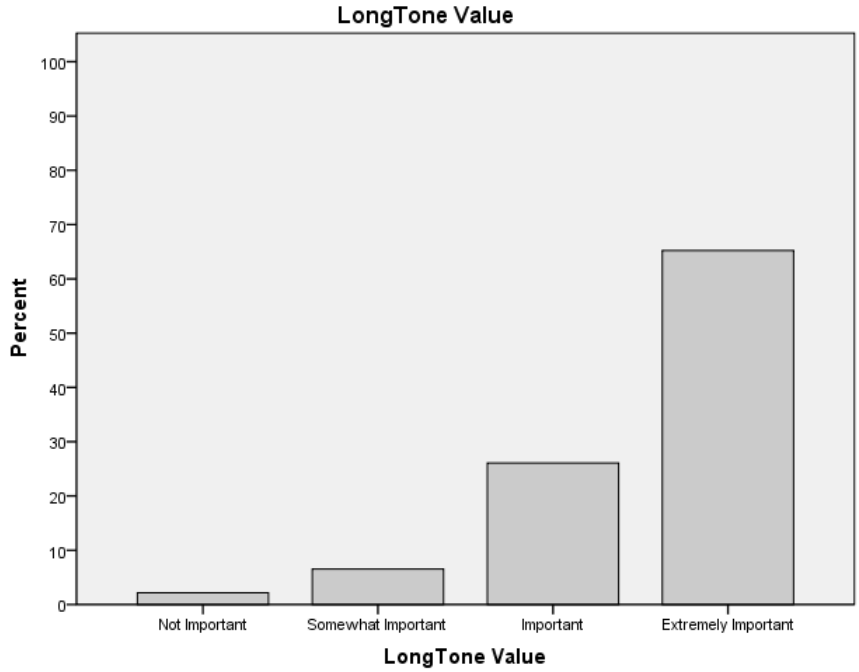
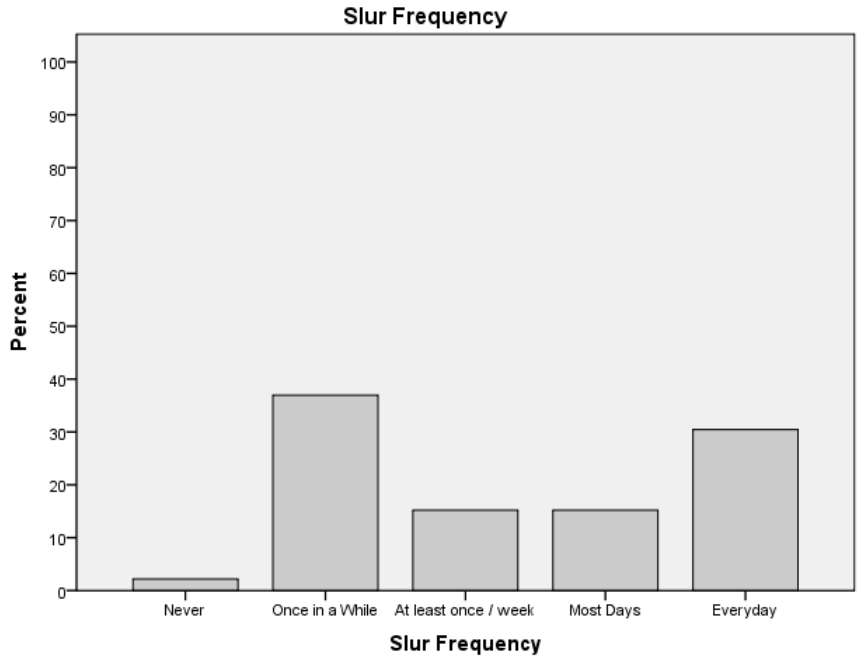


Figure E2: Comparison of slur frequency and value



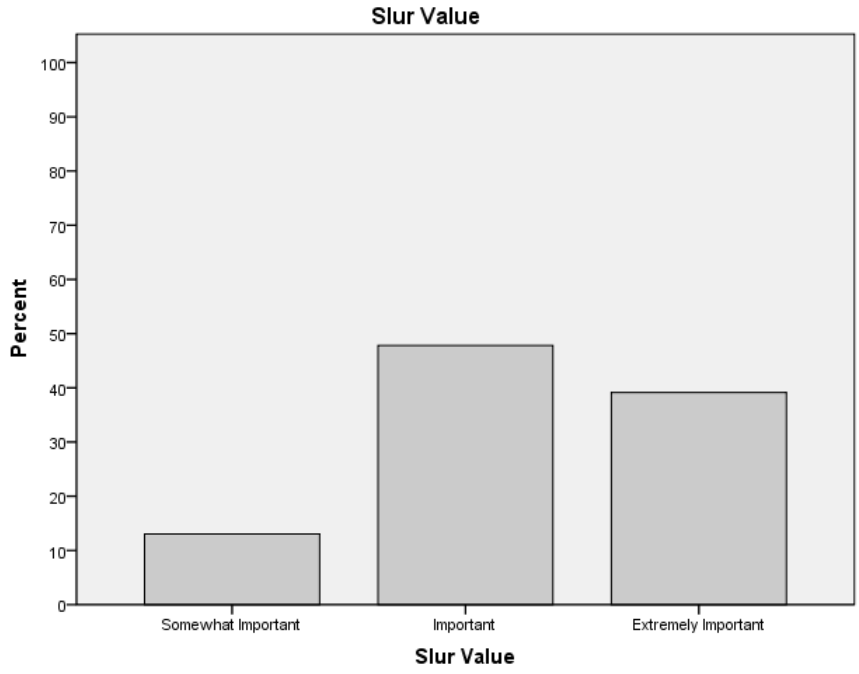
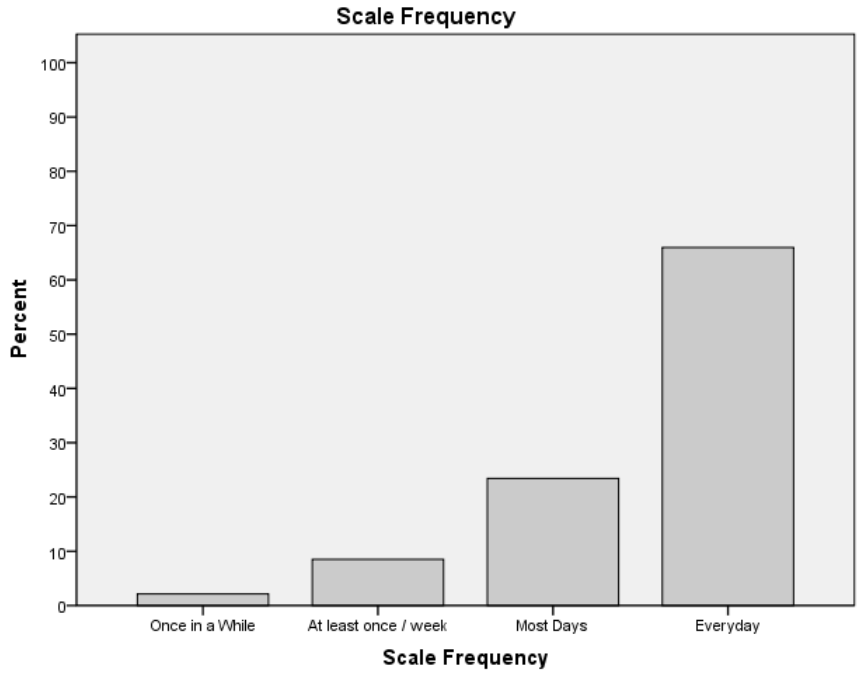


Figure E3: Comparison of scale frequency and value



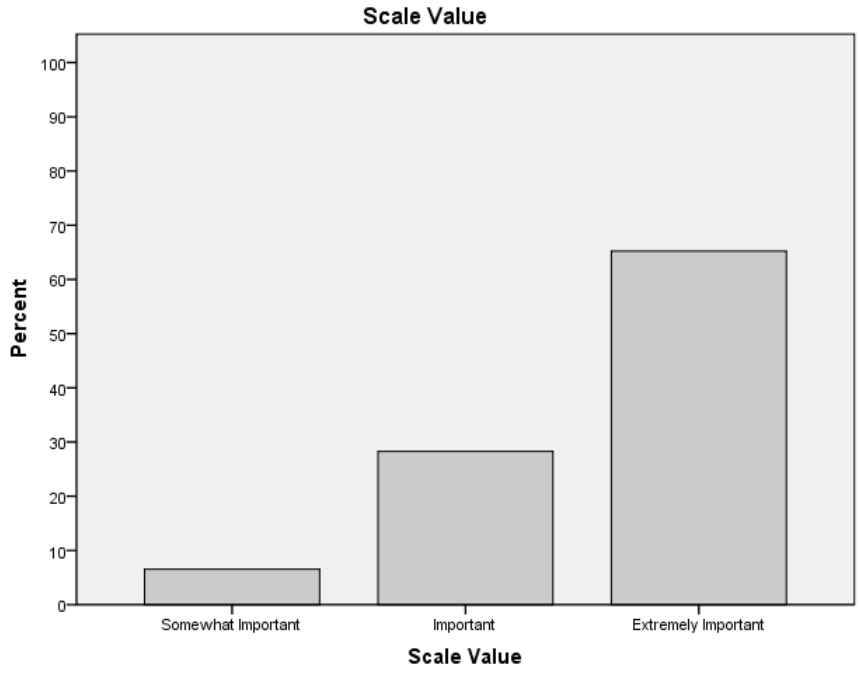
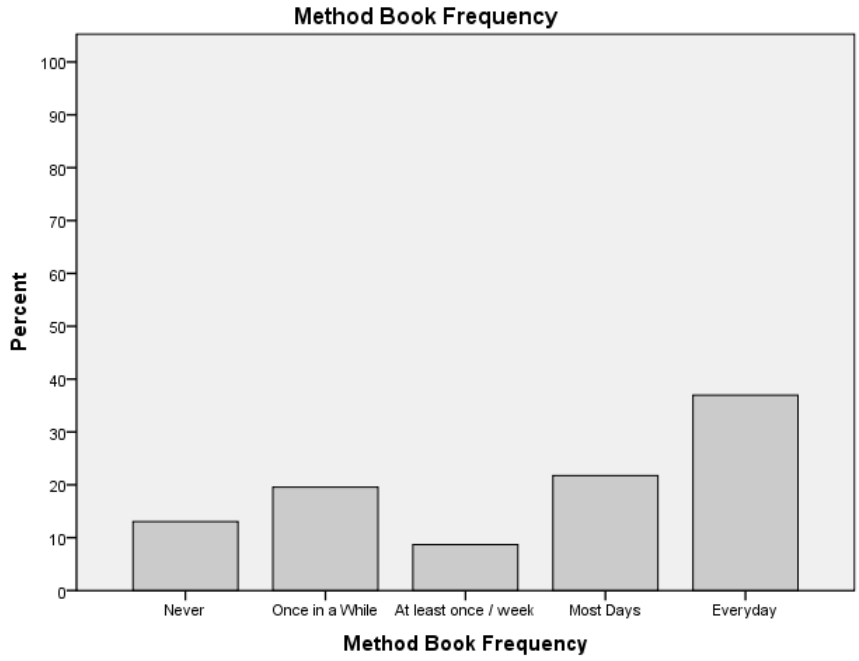


Figure E4: Comparison of method book frequency and value



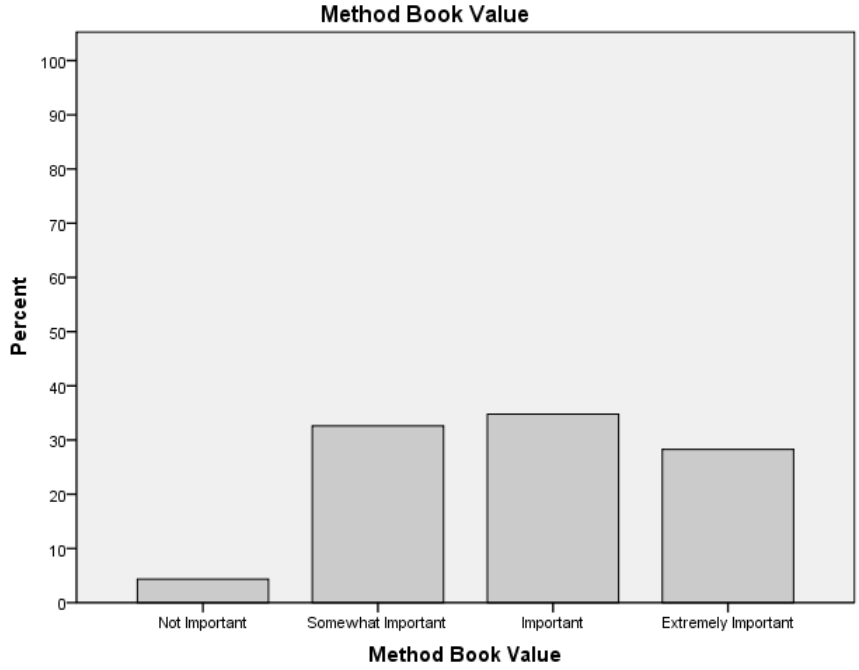
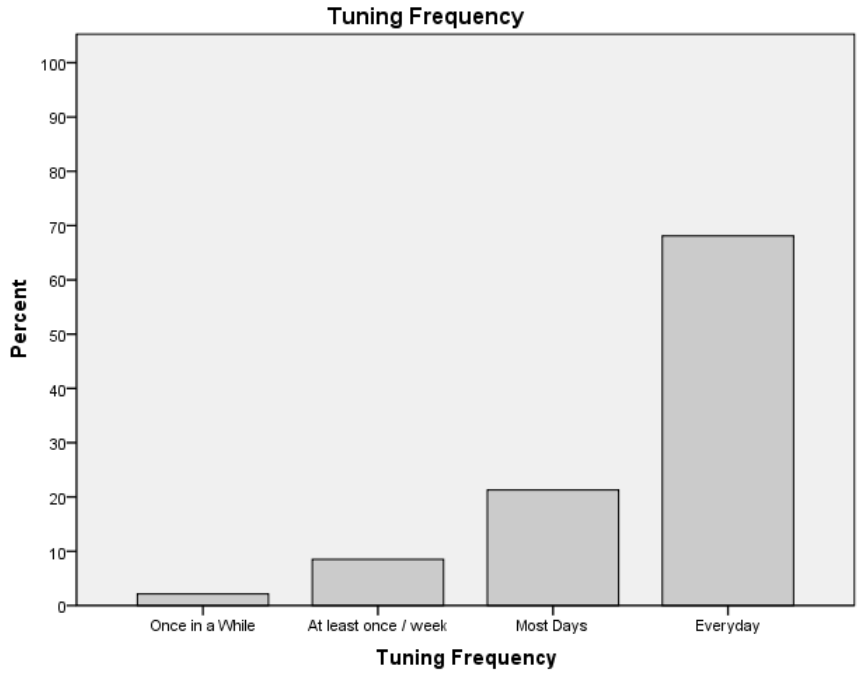


Figure E5: Comparison of tuning frequency and value.



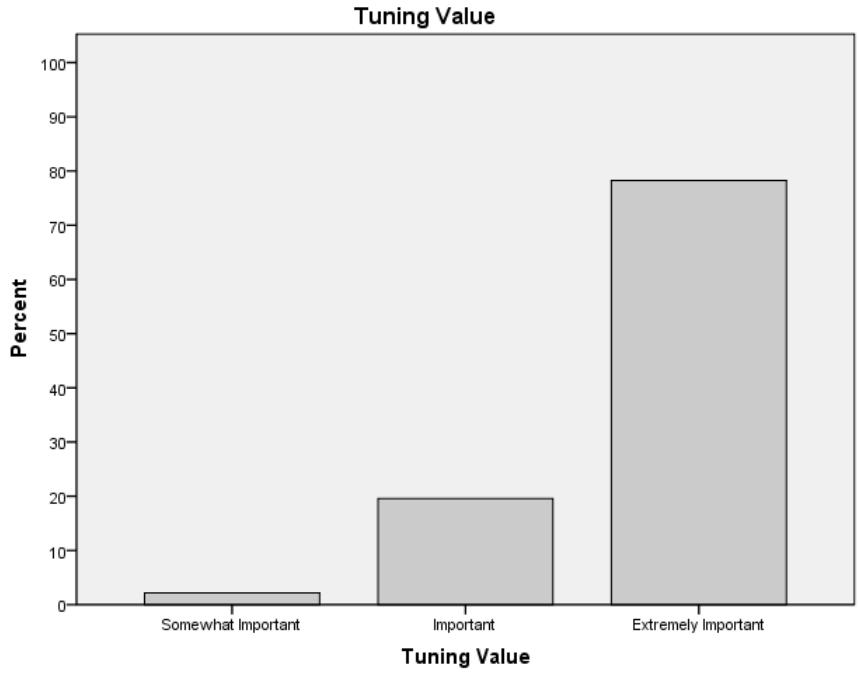
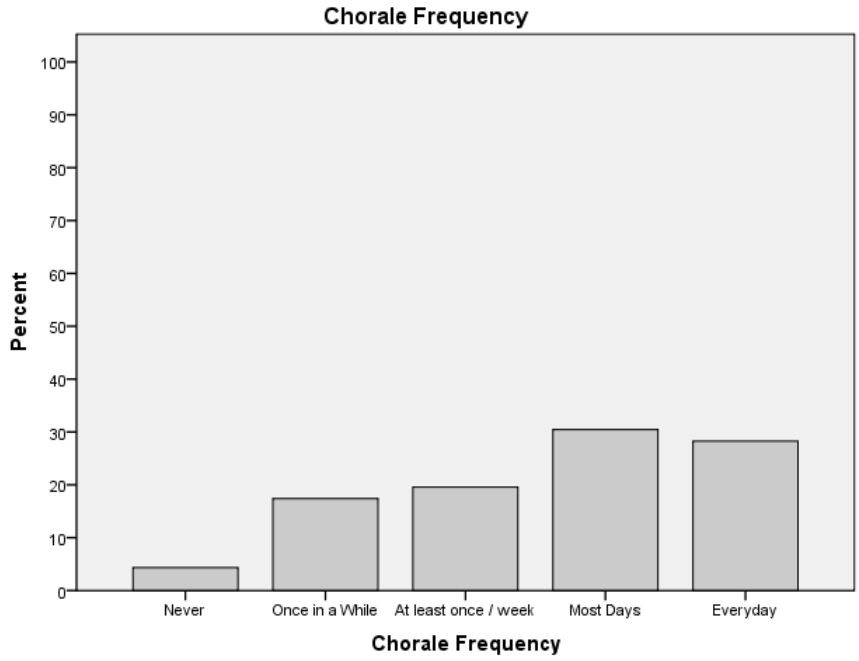


Figure E6: Comparison of chorale frequency and value.



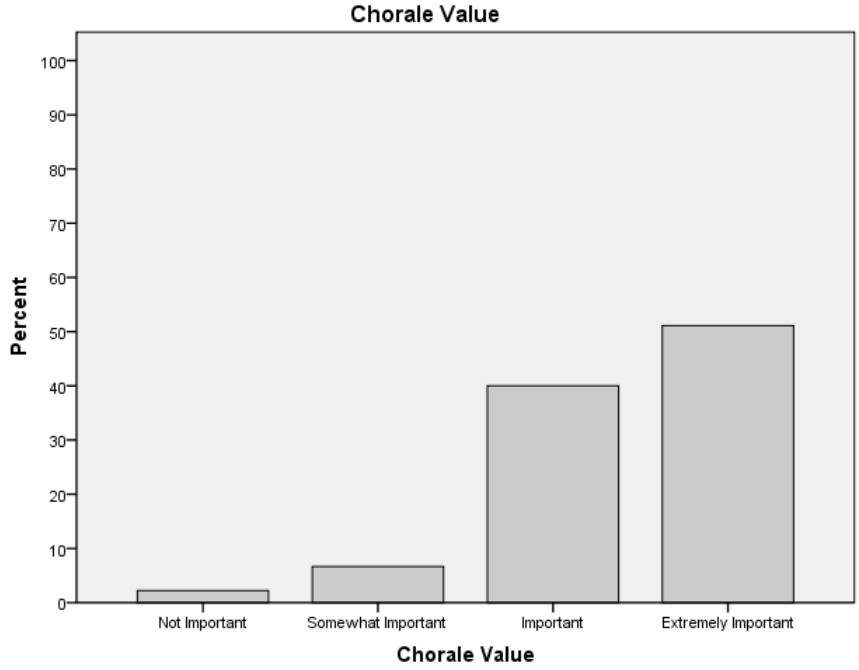
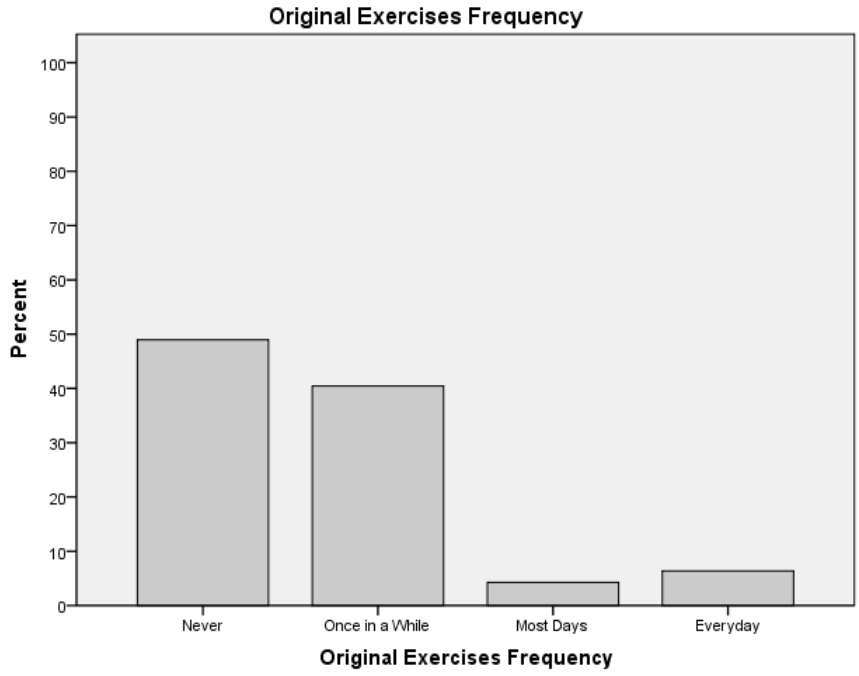


Figure E7: Comparison of original exercise frequency and value.



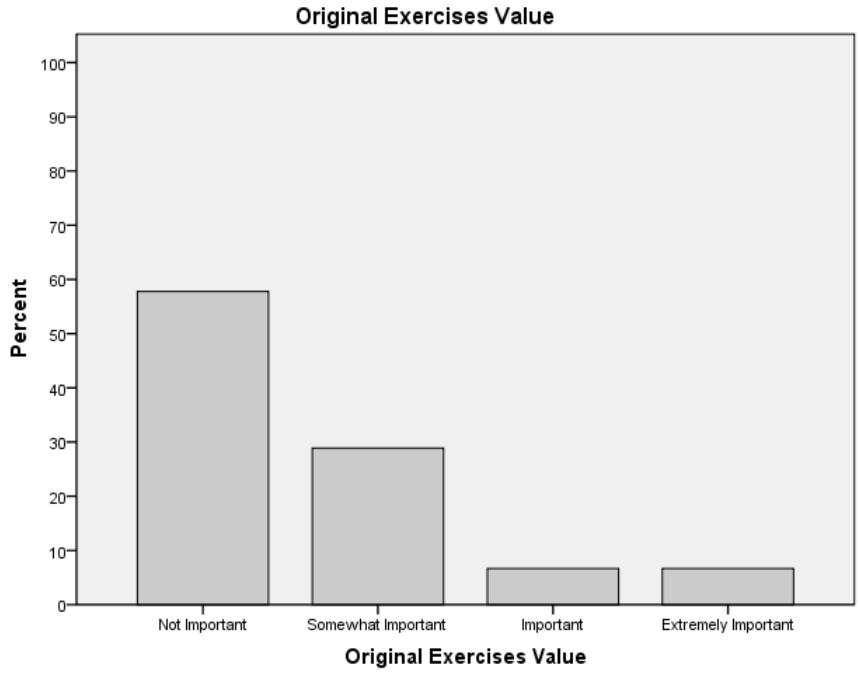
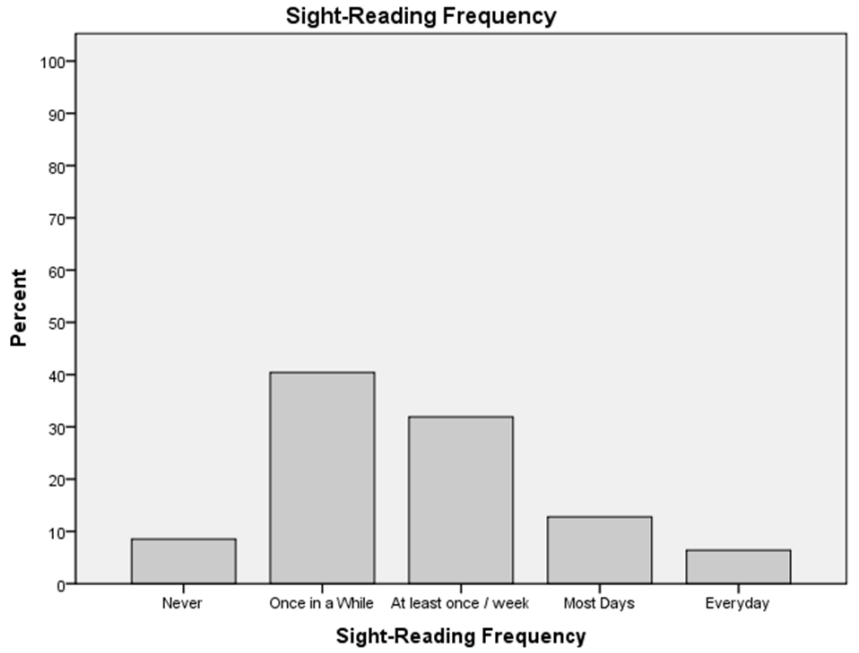


Figure E8: Comparison of sight-reading frequency and value.



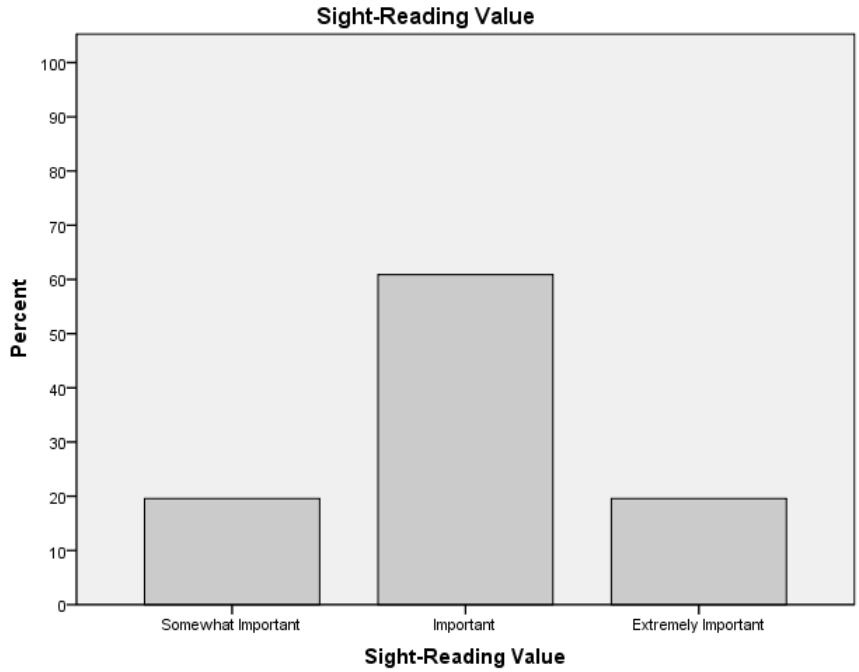
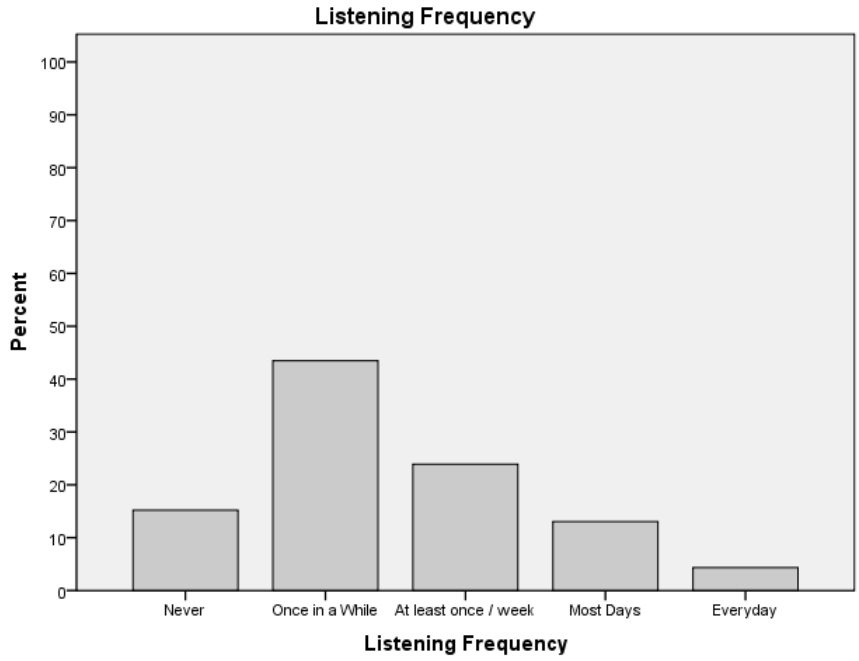


Figure E9: Comparison of listening frequency and value.



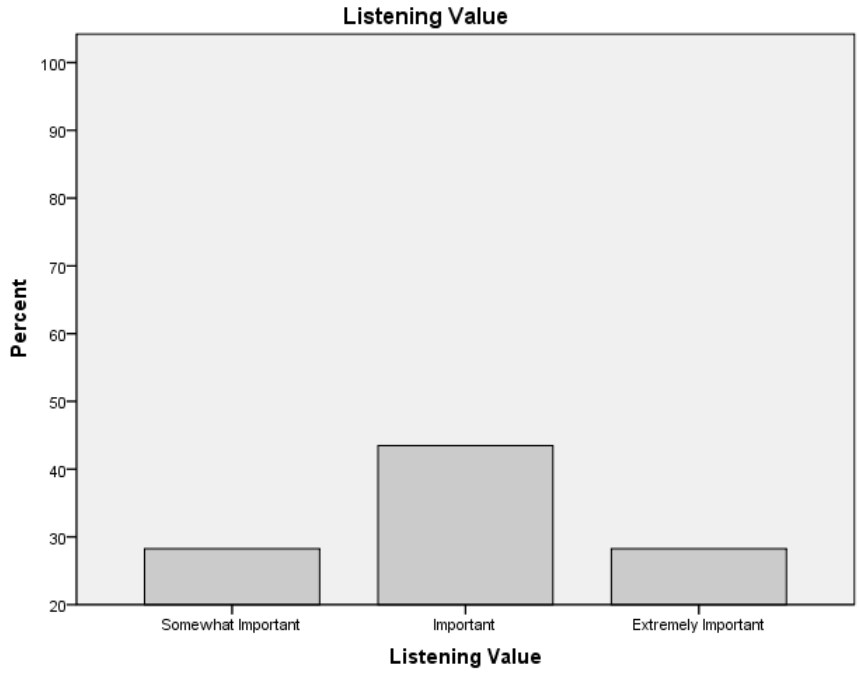
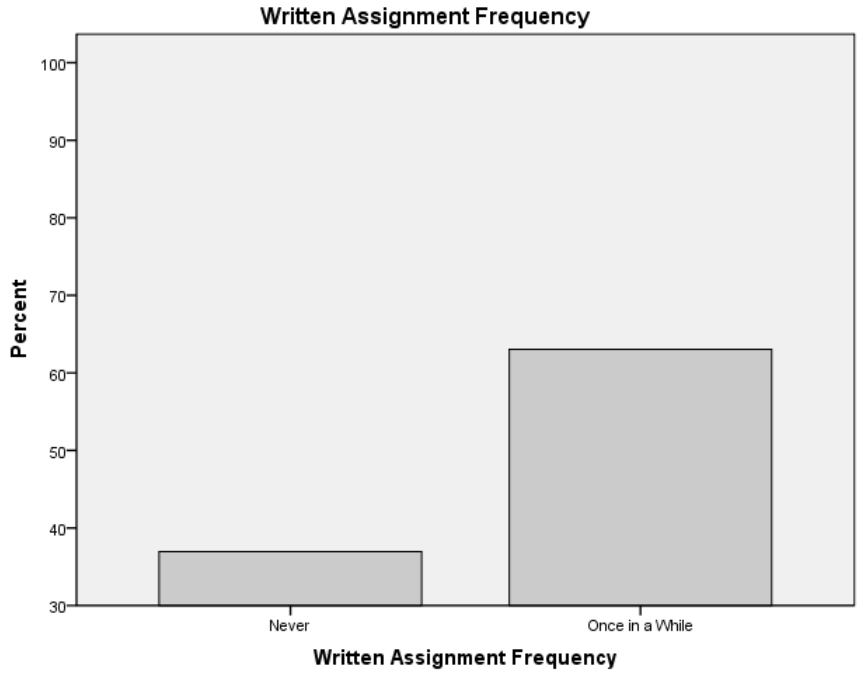


Figure E10: Comparison of written assignment and value.



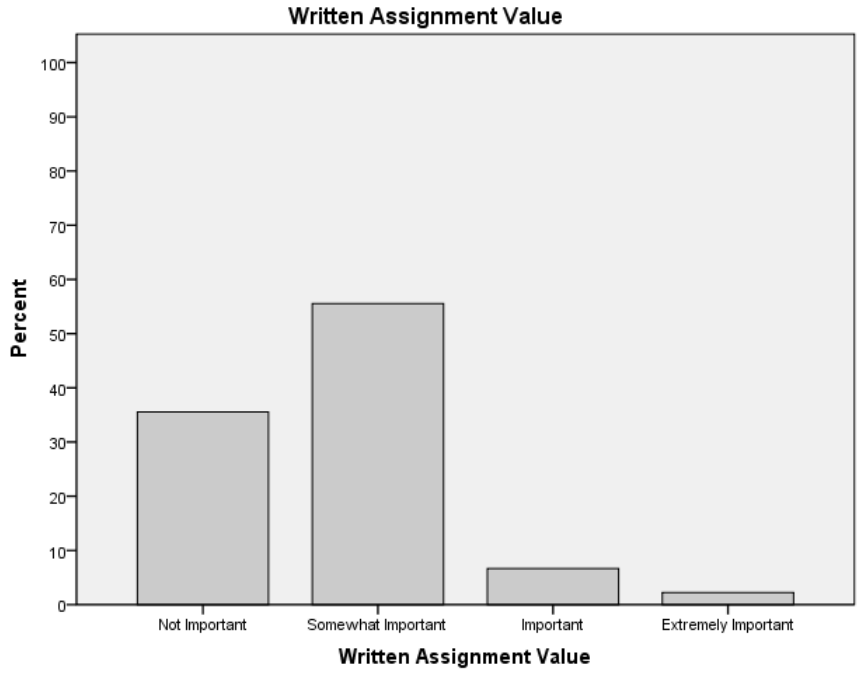
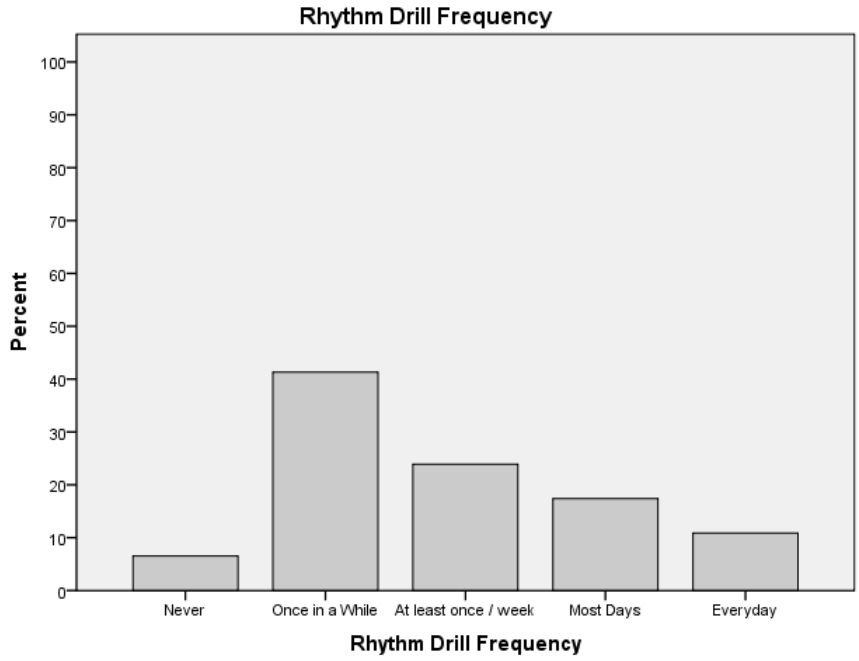


Figure E11: Comparison of rhythm drill frequency and value.



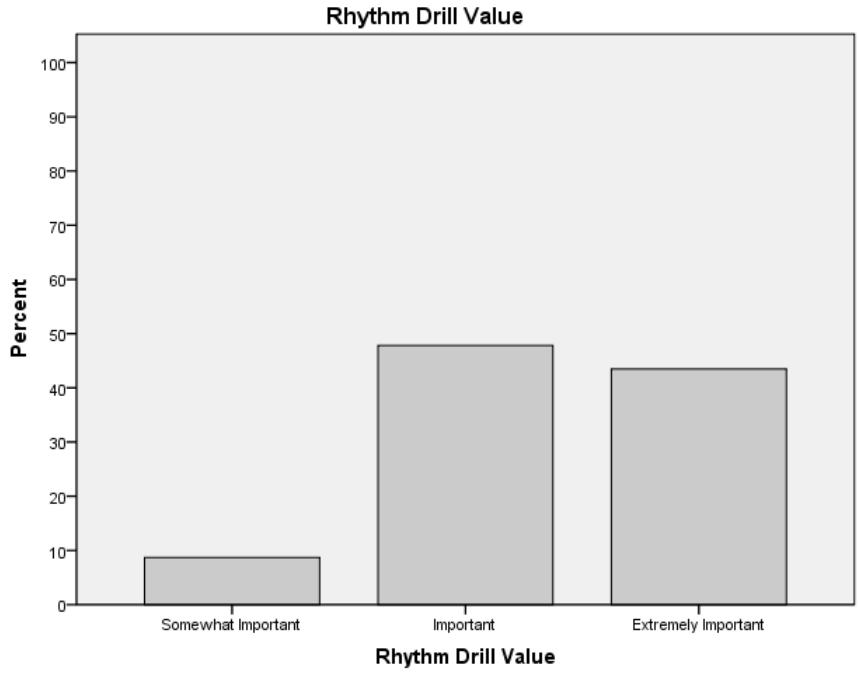
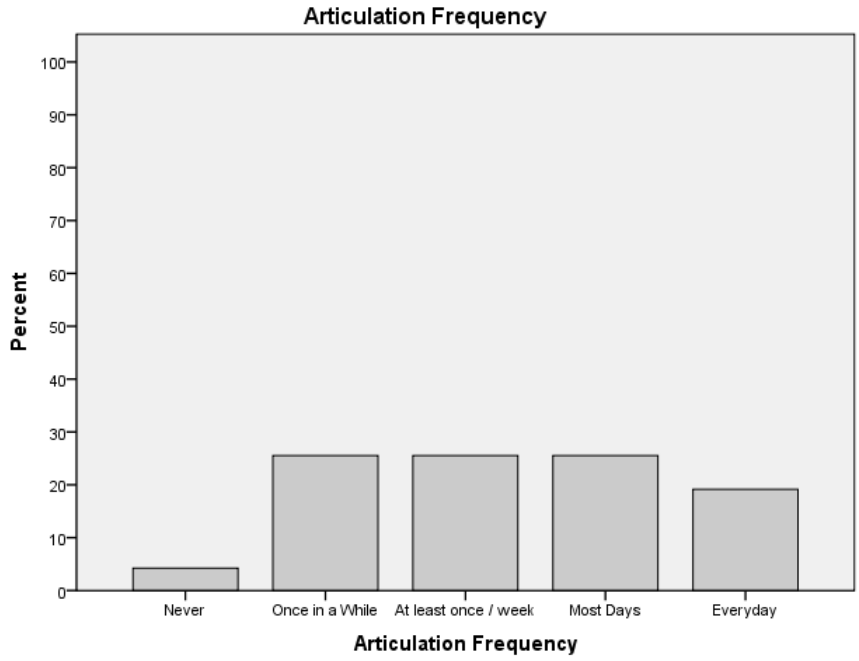


Figure E12: Comparison of articulation frequency and value.



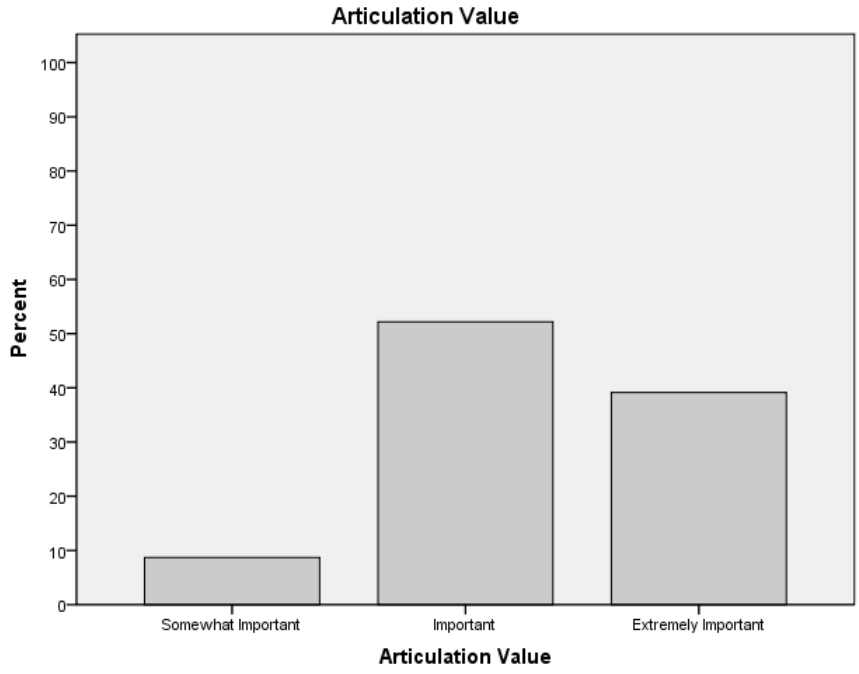
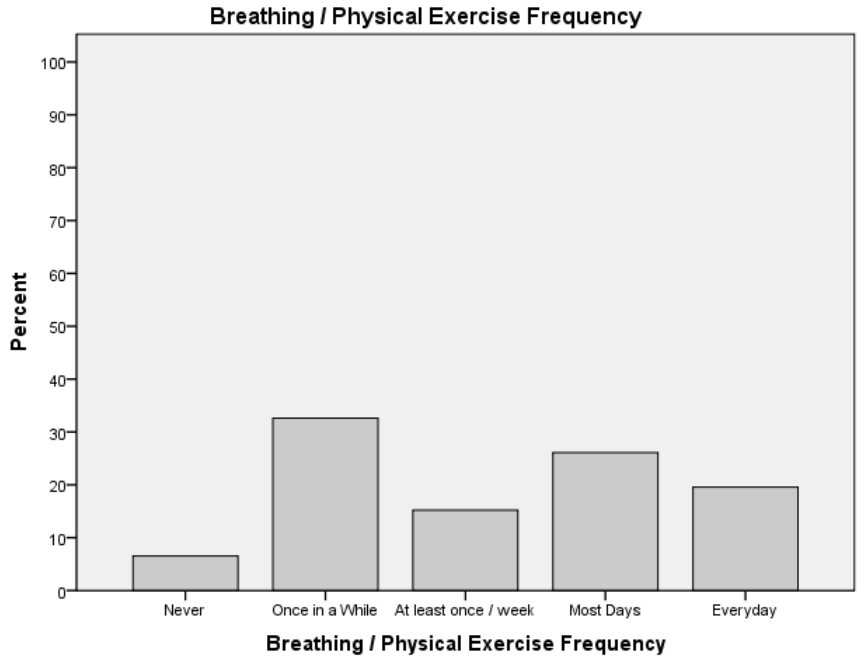


Figure E13: Comparison of articulation frequency and value.



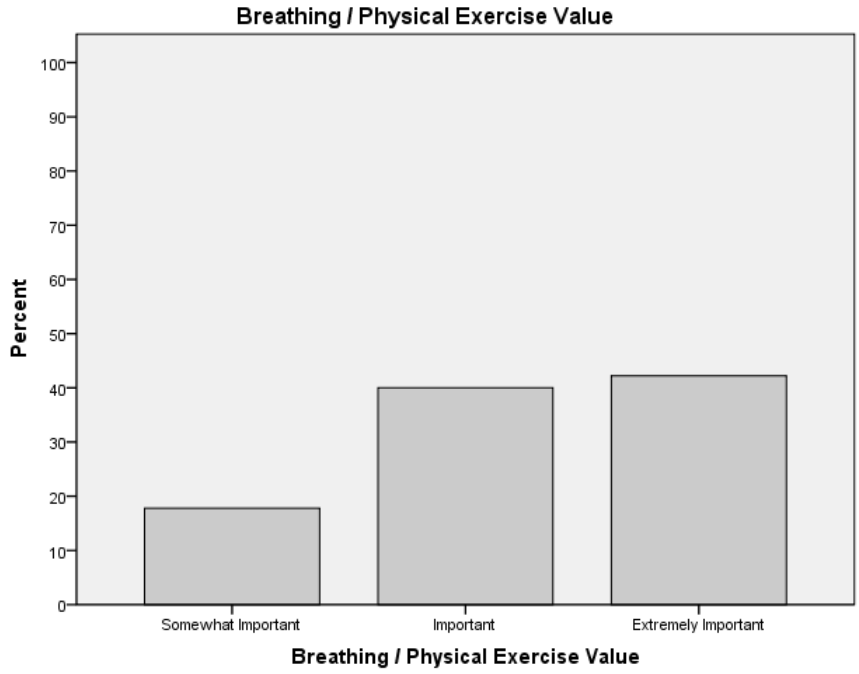
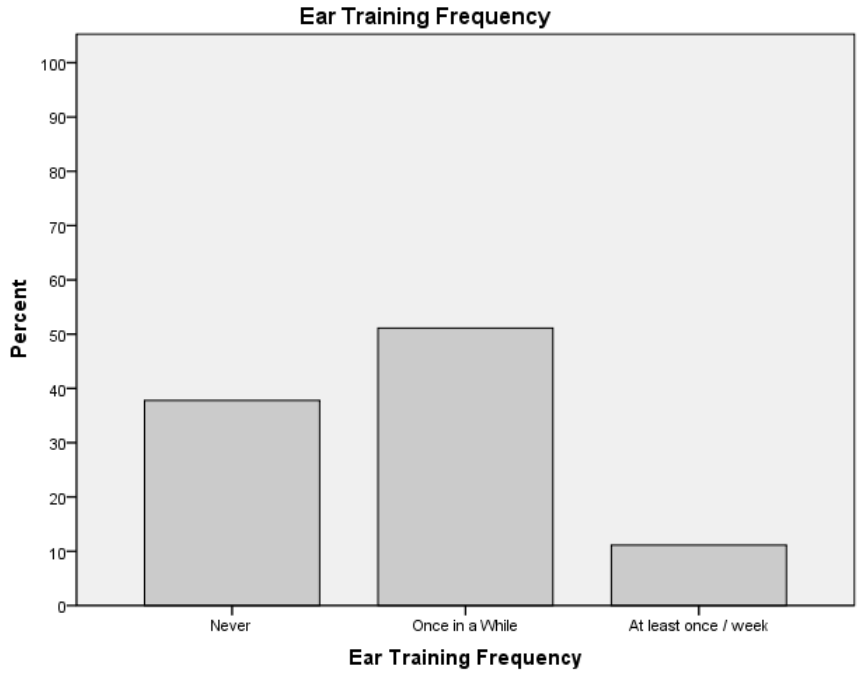


Figure E14: Comparison of ear training frequency and value.



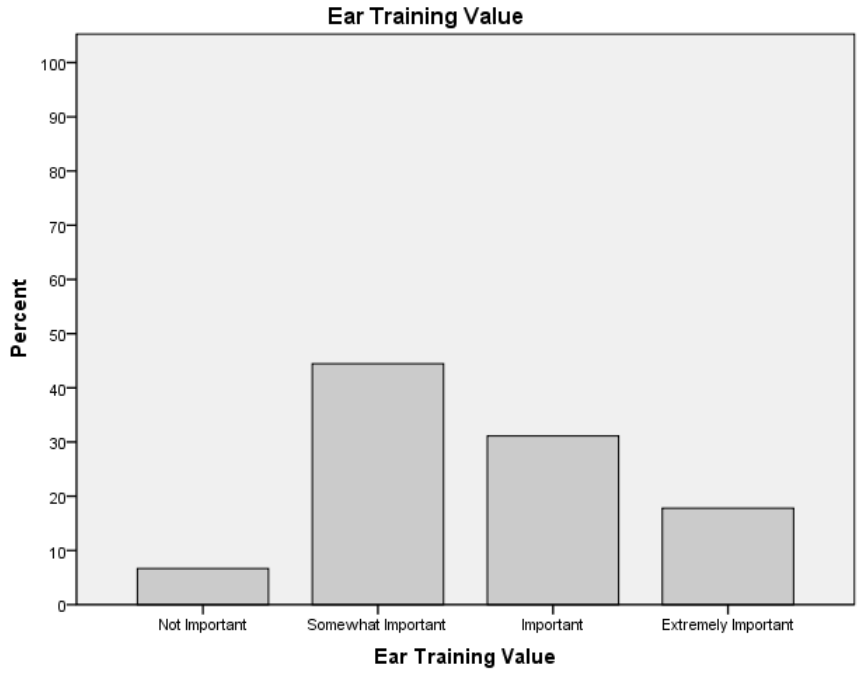
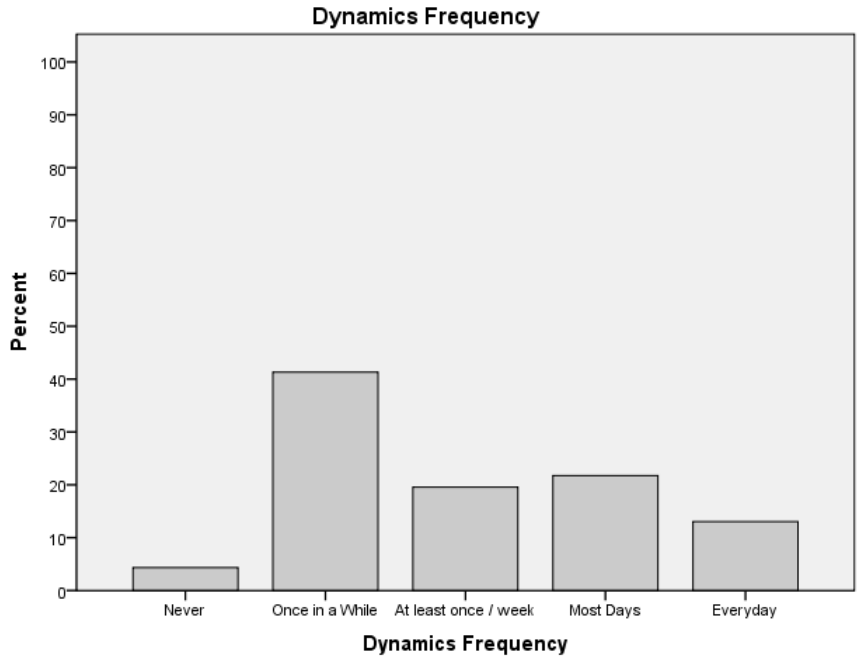


Figure E15: Comparison of dynamics frequency and value.



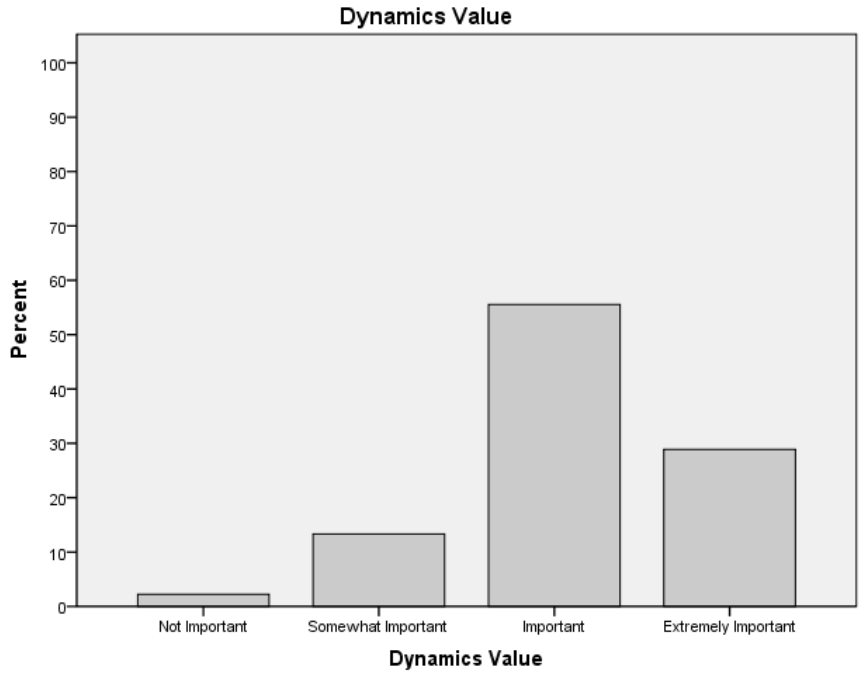
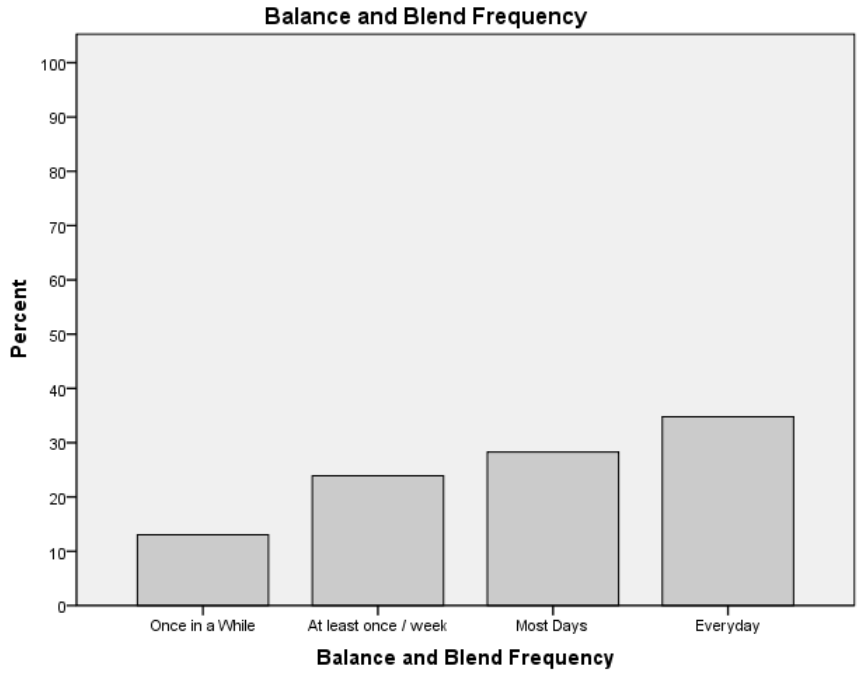


Figure E16: Comparison of balance and blend frequency and value.



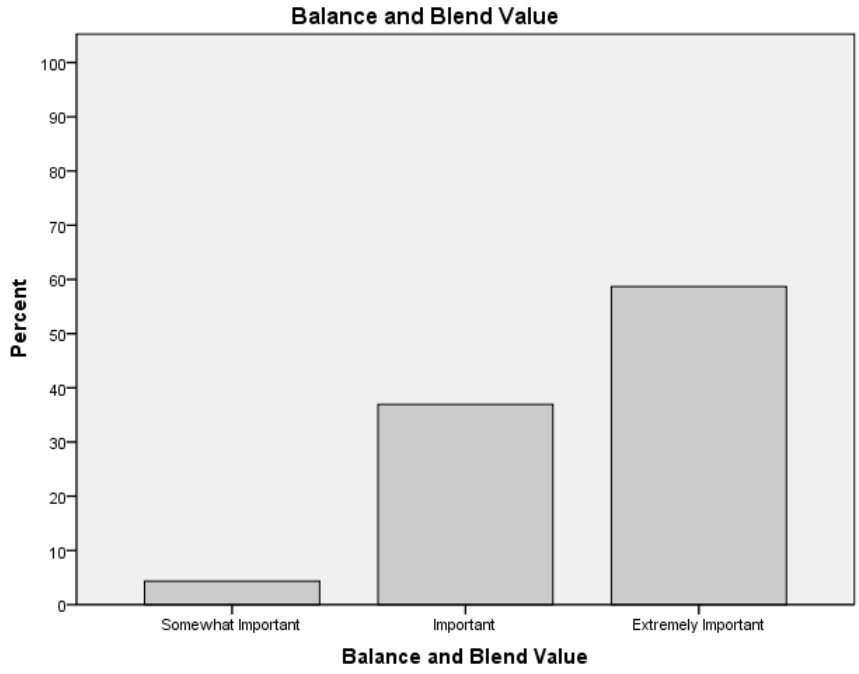
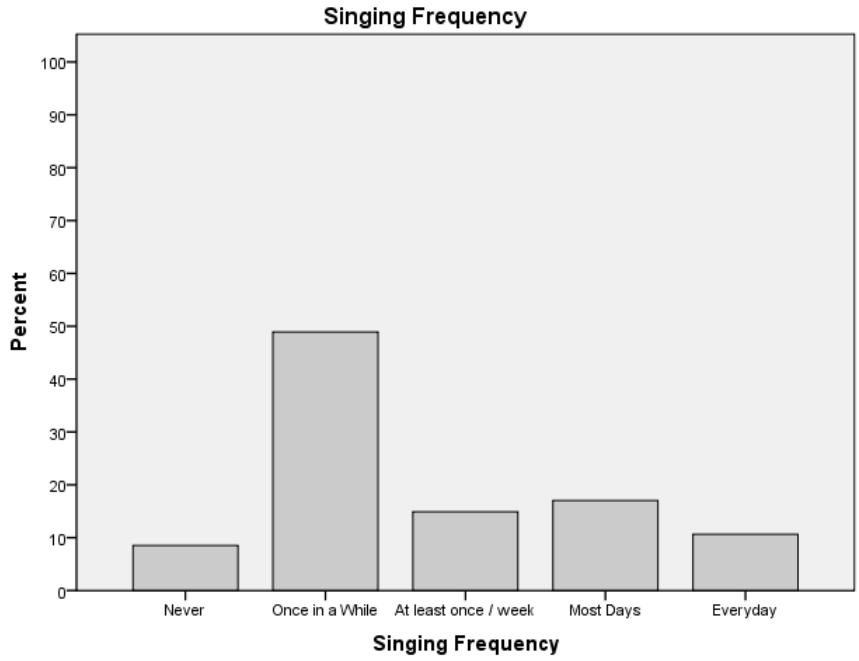
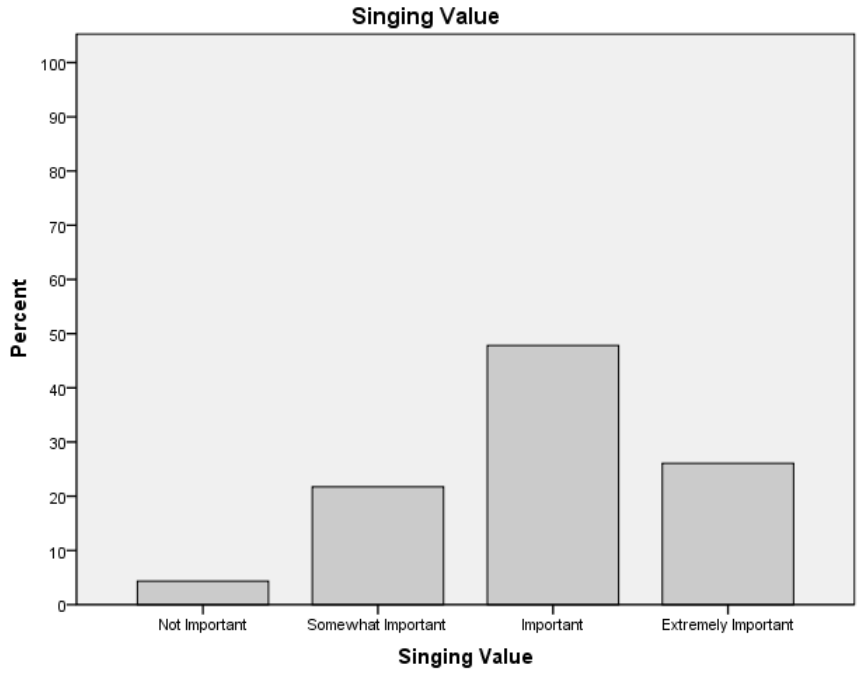


Figure E17: Comparison of singing frequency and value.





Appendix F

Raw Data

RespondentID	ScheduleType	RehearsalMinutes	MinutesWeek
1654345397	A/B Alternating Block		180-240 minutes
1652867366	Daily Classes	50 minutes	240-300 minutes
1644423270	A/B Alternating Block		180-240 minutes
1640879545	Daily Classes	45 minutes	180-240 minutes
1640575231	A/B Alternating Block		240-300 minutes
1640319799	A/B Alternating Block		180-240 minutes
1640225025	Daily Classes	50 minutes	240-300 minutes
1640204320	Modified Block		180-240 minutes
1640178458	Modified Block		240-300 minutes
1639663638	Modified Block		240-300 minutes
1639458527	Modified Block		180-240 minutes
1639273518	Daily Classes	45 minutes	180-240 minutes
1639234346	Daily Classes	50 minutes	240-300 minutes
1639178091	Modified Block		180-240 minutes
1639168864	Daily Classes	45 minutes	180-240 minutes
1639140400	A/B Alternating Block		180-240 minutes
1639139504	Daily Classes	50 minutes	240-300 minutes
1639116786	Modified Block		240-300 minutes
1639112849	A/B Alternating Block		120-180 minutes
1639105721	Modified Block		180-240 minutes
1639102705	Daily Classes	50 minutes	240-300 minutes
1639097313	Daily Classes	50 minutes	240-300 minutes
1639092217	Daily Classes	50 minutes	240-300 minutes
1639088803	Daily Classes	45 minutes	180-240 minutes
1639084171	Daily Classes	50 minutes	240-300 minutes
1493438447	Other Format		300-360 minutes
1489305063	Daily Classes	60 minutes	300-360 minutes
1486969221	Daily Classes	60 minutes	300-360 minutes
1486480638	Daily Classes	45 minutes	180-240 minutes
1485589946	4X4 Block	50 minutes	240-300 minutes
1485119990	Daily Classes	45 minutes	180-240 minutes
1484986107	Daily Classes	50 minutes	240-300 minutes
1483604733	A/B Alternating Block		180-240 minutes
1483414916	A/B Alternating Block		180-240 minutes
1482919994	A/B Alternating Block		120-180 minutes
1482838966	Daily Classes	50 minutes	240-300 minutes
1482598860	Daily Classes	50 minutes	240-300 minutes
1482546291	A/B Alternating Block		180-240 minutes
1482441339	Modified Block		240-300 minutes
1482436781	Modified Block		180-240 minutes
1482428825	Daily Classes	50 minutes	240-300 minutes
1482408815	Modified Block		240-300 minutes
1482278989	A/B Alternating Block		180-240 minutes
1482275197	Daily Classes	45 minutes	180-240 minutes
1482239066	Modified Block		120-180 minutes
1482215950	4X4 Block	80 minutes	> 360 minutes
1688994144	Modified Block		180-240 minutes

RespondentID	NonMusicPct	MusicPct	WarmUpPct
1654345397	<10%	>80%	10-20%
1652867366	<10%	70-80%	10-20%
1644423270	10-15%	70-80%	<10%
1640879545	10-15%	70-80%	10-20%
1640575231	<10%	>80%	10-20%
1640319799	<10%	70-80%	10-20%
1640225025	<10%	70-80%	10-20%
1640204320	<10%	60-70%	>30%
1640178458	<10%	60-70%	10-20%
1639663638	10-15%	>80%	10-20%
1639458527	<10%	>80%	10-20%
1639273518	>20%	70-80%	<10%
1639234346	15-20%	70-80%	<10%
1639178091	10-15%	70-80%	10-20%
1639168864	<10%	70-80%	10-20%
1639140400	10-15%	50-60%	10-20%
1639139504	<10%	50-60%	20-30%
1639116786	<10%	>80%	>30%
1639112849	<10%	70-80%	>30%
1639105721	10-15%	70-80%	10-20%
1639102705	10-15%	70-80%	10-20%
1639097313	<10%	>80%	20-30%
1639092217	<10%	50-60%	>30%
1639088803	<10%	60-70%	10-20%
1639084171	10-15%	70-80%	20-30%
1493438447	<10%	70-80%	10-20%
1489305063	<10%	50-60%	10-20%
1486969221	<10%	70-80%	10-20%
1486480638	<10%	50-60%	10-20%
1485589946	<10%	70-80%	10-20%
1485119990	<10%	70-80%	10-20%
1484986107	10-15%	70-80%	20-30%
1483604733	<10%	>80%	10-20%
1483414916	<10%	>80%	10-20%
1482919994	<10%	>80%	10-20%
1482838966	15-20%	70-80%	10-20%
1482598860	<10%	50-60%	20-30%
1482546291	10-15%	60-70%	<10%
1482441339	<10%	70-80%	10-20%
1482436781	<10%	60-70%	10-20%
1482428825	<10%	>80%	10-20%
1482408815	<10%	70-80%	<10%
1482278989	10-15%	60-70%	10-20%
1482275197	<10%	50-60%	10-20%
1482239066	<10%	60-70%	20-30%
1482215950	<10%	60-70%	10-20%
1688994144	<10%	70-80%	10-20%

RespondentID	Rating	Education	Years	Classification
1654345397	I - Outstanding	Masters +	33	6A
1652867366	I - Outstanding	Masters	32	2A
1644423270	III - Average	Masters +		5A
1640879545	I - Outstanding	Bachelors +	26	4A
1640575231	II - Excellent	Masters	16	4A
1640319799	I - Outstanding	Bachelors	3	3A
1640225025	II - Excellent	Bachelors	3	3A
1640204320	I - Outstanding	Bachelors +	4	5A
1640178458	I - Outstanding	Masters +	25	6A
1639663638	I - Outstanding	Masters	18	6A
1639458527	I - Outstanding	Masters +	30	6A
1639273518	III - Average	Bachelors	1	3A
1639234346	III - Average	Bachelors	9	1A
1639178091	I - Outstanding	Doctorate / Specialist	33	4A
1639168864	II - Excellent	Bachelors +	12	3A
1639140400	III - Average	Masters	3	3A
1639139504	III - Average	Masters	15	4A
1639116786	I - Outstanding	Masters +	29	6A
1639112849	I - Outstanding	Masters +	13	5A
1639105721	I - Outstanding	Masters	20	4A
1639102705	II - Excellent	Masters +	20	4A
1639097313	II - Excellent	Masters +	45	5A
1639092217	II - Excellent	Doctorate / Specialist	7	6A
1639088803	II - Excellent	Bachelors	3	4A
1639084171	II - Excellent	Masters	9	4A
1493438447	II - Excellent	Masters	15	3A
1489305063	I - Outstanding	Masters +	25	4A
1486969221	I - Outstanding	No Response	29	5A
1486480638	I - Outstanding	Masters +	35	2A
1485589946	I - Outstanding	Bachelors +	33	3A
1485119990	I - Outstanding	Masters	17	3A
1484986107	II - Excellent	Bachelors +	22	3A
1483604733	I - Outstanding	Masters +	16	2A
1483414916	II - Excellent	Bachelors +	7	4A
1482919994	I - Outstanding	Masters +	10	6A
1482838966	I - Outstanding	Masters +	30	3A
1482598860	I - Outstanding	Masters	21	5A
1482546291	III - Average	Masters +	9	3A
1482441339	I - Outstanding	Bachelors +	45	2A
1482436781	III - Average	Masters	22	4A
1482428825	I - Outstanding	Masters +	31	6A
1482408815	II - Excellent	Masters	18	5A
1482278989	I - Outstanding	Masters +	13	4A
1482275197	I - Outstanding	Masters +	10	1A
1482239066	I - Outstanding	Doctorate / Specialist	43	6A
1482215950	I - Outstanding	Masters +	6	6A
1688994144	II - Excellent	Bachelors	2	5A

RespondentID	TeachingDuties	NumBands	WhichBand
1654345397	0	3 or more	2nd Band
1652867366	2	1	Top or Only Band
1644423270	1	1	Top or Only Band
1640879545	2	3 or more	Top or Only Band
1640575231	1	1	Top or Only Band
1640319799	2	1	Top or Only Band
1640225025	4	1	Top or Only Band
1640204320	1	2	Top or Only Band
1640178458	1	1	Top or Only Band
1639663638	1	3 or more	Top or Only Band
1639458527	1	3 or more	2nd Band
1639273518	3	3 or more	2nd Band
1639234346	4	3 or more	Top or Only Band
1639178091	1	1	Top or Only Band
1639168864	2	1	Top or Only Band
1639140400	6	2	Top or Only Band
1639139504	1	1	Top or Only Band
1639116786	0	1	Top or Only Band
1639112849	3	2	Top or Only Band
1639105721	1	1	Top or Only Band
1639102705	2	3 or more	Top or Only Band
1639097313	1	1	Top or Only Band
1639092217	2	1	Top or Only Band
1639088803	1	1	Top or Only Band
1639084171	2	1	Top or Only Band
1493438447	2	1	Top or Only Band
1489305063	2	1	Top or Only Band
1486969221	1	1	Top or Only Band
1486480638	2	1	Top or Only Band
1485589946	2	1	Top or Only Band
1485119990	1	3 or more	Top or Only Band
1484986107	3	3 or more	Top or Only Band
1483604733	2	1	Top or Only Band
1483414916	1	3 or more	Top or Only Band
1482919994	2	3 or more	Top or Only Band
1482838966	2	1	Top or Only Band
1482598860	1	3 or more	Top or Only Band
1482546291	5	1	Top or Only Band
1482441339	2	1	Top or Only Band
1482436781	2	2	Top or Only Band
1482428825	1	2	Top or Only Band
1482408815	1	3 or more	Top or Only Band
1482278989	4	3 or more	Top or Only Band
1482275197	3	1	Top or Only Band
1482239066	2	3 or more	2nd Band
1482215950	1	1	2nd Band
1688994144	2	1	2nd Band

RespondentID	WULTFq	WUSLFq	WUSCFq	WUMTHDFq
1654345397	Everyday	Everyday	Everyday	Never
1652867366	Once in a While	Everyday	Everyday	At least once / week
1644423270	Once in a While	Once in a While	Most Days	Never
1640879545	Everyday	At least once / week	Most Days	Once in a While
1640575231	Most Days	Never	Everyday	Everyday
1640319799	Everyday	Once in a While	Most Days	Once in a While
1640225025	Most Days	Most Days	Most Days	Most Days
1640204320	Everyday	At least once / week	Everyday	Everyday
1640178458	Everyday	Everyday	Everyday	At least once / week
1639663638	Everyday	Once in a While	Most Days	Most Days
1639458527	Once in a While	Once in a While	Most Days	Most Days
1639273518	Once in a While	Once in a While	Everyday	Never
1639234346	Most Days	Once in a While	Everyday	Never
1639178091	At least once / week	At least once / week	Most Days	Everyday
1639168864	Everyday	Everyday	Everyday	Most Days
1639140400	Everyday	Everyday	At least once / week	Everyday
1639139504	Everyday	Everyday	Everyday	Everyday
1639116786	Everyday	Everyday	Everyday	Once in a While
1639112849	Everyday	Everyday	Everyday	Everyday
1639105721	Most Days	Once in a While	Everyday	Everyday
1639102705	At least once / week	Once in a While	Everyday	Once in a While
1639097313	Everyday	Everyday	Everyday	Everyday
1639092217	Once in a While	Once in a While	Everyday	At least once / week
1639088803	At least once / week	At least once / week	Most Days	Most Days
1639084171	Most Days	Once in a While	Everyday	Most Days
1493438447	Everyday	Once in a While	Everyday	Everyday
1489305063	Everyday	At least once / week	At least once / week	Once in a While
1486969221	Everyday	Everyday	Everyday	No Response
1486480638	Most Days	Most Days	Everyday	Everyday
1485589946	Everyday	Once in a While	Everyday	Most Days
1485119990	Once in a While	Once in a While	Most Days	Most Days
1484986107	At least once / week	Once in a While	Most Days	Once in a While
1483604733	At least once / week	Most Days	Everyday	Everyday
1483414916	Once in a While	Once in a While	Once in a While	Never
1482919994	Everyday	Everyday	Everyday	Everyday
1482838966	Everyday	Most Days	Everyday	Most Days
1482598860	Most Days	Most Days	At least once / week	Once in a While
1482546291	Once in a While	Once in a While	Everyday	At least once / week
1482441339	Everyday	Once in a While	Everyday	Never
1482436781	Once in a While	At least once / week	Everyday	Everyday
1482428825	Most Days	Most Days	Most Days	Everyday
1482408815	Most Days	At least once / week	At least once / week	Once in a While
1482278989	Everyday	Most Days	Everyday	Most Days
1482275197	Everyday	Everyday	Everyday	Everyday
1482239066	Everyday	No Response	Everyday	Once in a While
1482215950	Everyday	Everyday	Everyday	Everyday
1688994144	Everyday	Everyday	Everyday	Everyday

RespondentID	WUTUNEFq	WUCHORFq	WUEXFq	WUSRFq
1654345397	Everyday	Never	Everyday	Most Days
1652867366	Everyday	Everyday	Never	Once in a While
1644423270	Everyday	Never	Never	Never
1640879545	Everyday	At least once / week	Once in a While	At least once / week
1640575231	Everyday	Everyday	Once in a While	Once in a While
1640319799	Everyday	At least once / week	Once in a While	Most Days
1640225025	Everyday	Once in a While	Never	At least once / week
1640204320	Everyday	At least once / week	Once in a While	At least once / week
1640178458	Everyday	Most Days	Never	Once in a While
1639663638	Everyday	Most Days	Once in a While	Once in a While
1639458527	Everyday	Once in a While	Never	At least once / week
1639273518	At least once / week	Once in a While	Once in a While	Never
1639234346	At least once / week	Once in a While	Never	Most Days
1639178091	Everyday	Most Days	Once in a While	Once in a While
1639168864	Everyday	Most Days	Never	At least once / week
1639140400	Everyday	At least once / week	Once in a While	Never
1639139504	Everyday	Everyday	Everyday	At least once / week
1639116786	Everyday	Once in a While	Never	At least once / week
1639112849	Everyday	Everyday	Most Days	Most Days
1639105721	Everyday	Most Days	Never	At least once / week
1639102705	Everyday	Once in a While	Never	Once in a While
1639097313	Everyday	Everyday	Everyday	Everyday
1639092217	Everyday	Most Days	Once in a While	At least once / week
1639088803	Most Days	At least once / week	Never	Once in a While
1639084171	Most Days	Most Days	Never	Never
1493438447	Everyday	Everyday	Never	Once in a While
1489305063	Everyday	At least once / week	Once in a While	Once in a While
1486969221	Most Days	Everyday	Once in a While	Once in a While
1486480638	Everyday	Everyday	Never	At least once / week
1485589946	Most Days	Most Days	Most Days	At least once / week
1485119990	Everyday	Most Days	Once in a While	At least once / week
1484986107	Most Days	Once in a While	Never	Once in a While
1483604733	At least once / week	Most Days	Once in a While	At least once / week
1483414916	Most Days	Most Days	Never	Most Days
1482919994	Everyday	Everyday	Never	At least once / week
1482838966	Everyday	At least once / week	Once in a While	Once in a While
1482598860	Most Days	Most Days	Once in a While	Once in a While
1482546291	Everyday	At least once / week	Never	Once in a While
1482441339	Everyday	No Response	Never	At least once / week
1482436781	Most Days	Once in a While	Never	Once in a While
1482428825	Most Days	At least once / week	Never	Once in a While
1482408815	Everyday	Most Days	Once in a While	Once in a While
1482278989	Everyday	Everyday	Once in a While	Everyday
1482275197	Once in a While	Everyday	Never	Once in a While
1482239066	Everyday	Everyday	Once in a While	Everyday
1482215950	At least once / week	Everyday	Once in a While	Once in a While
1688994144	Most Days	Most Days	Never	Most Days

RespondentID	WULISTFq	WUWrittFQ	WURHYFq	WUARTICFq
1654345397	Most Days	Never	Once in a While	At least once / week
1652867366	Once in a While	Once in a While	At least once / week	At least once / week
1644423270	Never	Never	Never	Never
1640879545	At least once / week	Once in a While	At least once / week	Most Days
1640575231	Never	Never	Once in a While	Everyday
1640319799	Most Days	Once in a While	At least once / week	At least once / week
1640225025	At least once / week	Never	Once in a While	At least once / week
1640204320	Everyday	Once in a While	Everyday	Everyday
1640178458	At least once / week	Once in a While	At least once / week	At least once / week
1639663638	Once in a While	Once in a While	Once in a While	Once in a While
1639458527	Once in a While	Once in a While	Once in a While	Once in a While
1639273518	Once in a While	Once in a While	Once in a While	At least once / week
1639234346	Never	Never	Once in a While	Once in a While
1639178091	Once in a While	Never	At least once / week	At least once / week
1639168864	At least once / week	Once in a While	Most Days	Once in a While
1639140400	Never	Once in a While	Once in a While	Once in a While
1639139504	At least once / week	Never	Everyday	Everyday
1639116786	Once in a While	Once in a While	Once in a While	Everyday
1639112849	At least once / week	Once in a While	At least once / week	Everyday
1639105721	At least once / week	Once in a While	Most Days	Most Days
1639102705	Most Days	Never	Most Days	Most Days
1639097313	No Response	No Response	No Response	At least once / week
1639092217	At least once / week	Once in a While	Most Days	Most Days
1639088803	Once in a While	Once in a While	Once in a While	At least once / week
1639084171	Never	Never	Never	Once in a While
1493438447	Never	Once in a While	At least once / week	Most Days
1489305063	At least once / week	Never	Once in a While	Once in a While
1486969221	Once in a While	Never	At least once / week	Most Days
1486480638	At least once / week	Never	Everyday	Everyday
1485589946	At least once / week	Once in a While	Most Days	Most Days
1485119990	Most Days	Never	Once in a While	Most Days
1484986107	Most Days	Once in a While	At least once / week	Most Days
1483604733	Once in a While	Once in a While	Most Days	Most Days
1483414916	Once in a While	Never	Never	Never
1482919994	Once in a While	Once in a While	Everyday	Everyday
1482838966	Once in a While	Never	Once in a While	At least once / week
1482598860	Once in a While	Once in a While	Once in a While	Once in a While
1482546291	Once in a While	Once in a While	Most Days	Once in a While
1482441339	Once in a While	Once in a While	Once in a While	Once in a While
1482436781	Once in a While	Never	Everyday	Most Days
1482428825	Never	Never	At least once / week	At least once / week
1482408815	Once in a While	Once in a While	Once in a While	At least once / week
1482278989	Everyday	Once in a While	Most Days	Most Days
1482275197	Once in a While	Once in a While	Once in a While	Once in a While
1482239066	Most Days	Once in a While	Once in a While	Once in a While
1482215950	Once in a While	Once in a While	At least once / week	Everyday
1688994144	Once in a While	Once in a While	Once in a While	Everyday

RespondentID	WUPHYSFq	WUETFq	WUDYNFq
1654345397	Most Days	Never	At least once / week
1652867366	Once in a While	Once in a While	Most Days
1644423270	Never	Never	Once in a While
1640879545	At least once / week	Once in a While	Most Days
1640575231	Everyday	Once in a While	Once in a While
1640319799	At least once / week	At least once / week	Most Days
1640225025	Most Days	At least once / week	Most Days
1640204320	Everyday	Once in a While	At least once / week
1640178458	Most Days	Once in a While	Most Days
1639663638	Once in a While	Never	Once in a While
1639458527	Once in a While	Once in a While	Never
1639273518	Once in a While	Never	Once in a While
1639234346	Once in a While	Once in a While	At least once / week
1639178091	At least once / week	Once in a While	At least once / week
1639168864	Most Days	Never	Most Days
1639140400	Once in a While	Once in a While	Once in a While
1639139504	Everyday	At least once / week	Everyday
1639116786	Once in a While	No Response	Everyday
1639112849	At least once / week	Once in a While	Most Days
1639105721	Everyday	Never	At least once / week
1639102705	Most Days	Once in a While	Everyday
1639097313	No Response	No Response	No Response
1639092217	At least once / week	Never	Everyday
1639088803	Once in a While	Never	Once in a While
1639084171	Never	Never	Never
1493438447	Once in a While	Never	Once in a While
1489305063	Most Days	At least once / week	Once in a While
1486969221	Most Days	Once in a While	At least once / week
1486480638	Everyday	Once in a While	Everyday
1485589946	Most Days	Once in a While	Everyday
1485119990	Once in a While	Never	Most Days
1484986107	Once in a While	Once in a While	At least once / week
1483604733	At least once / week	Never	Once in a While
1483414916	Most Days	Once in a While	At least once / week
1482919994	Everyday	Once in a While	Once in a While
1482838966	At least once / week	Once in a While	At least once / week
1482598860	Most Days	Once in a While	Once in a While
1482546291	Never	Never	Most Days
1482441339	Most Days	Never	Once in a While
1482436781	Once in a While	Once in a While	Once in a While
1482428825	Everyday	Once in a While	Most Days
1482408815	Once in a While	Once in a While	Once in a While
1482278989	Everyday	Once in a While	Once in a While
1482275197	Once in a While	Never	Once in a While
1482239066	Most Days	At least once / week	Once in a While
1482215950	Everyday	Never	Once in a While
1688994144	Once in a While	Never	Once in a While

RespondentID	WUBalFQ	WUSingFq
1654345397	At least once / week	Once in a While
1652867366	Everyday	Most Days
1644423270	Once in a While	Never
1640879545	Everyday	Most Days
1640575231	Most Days	Once in a While
1640319799	Everyday	At least once / week
1640225025	Most Days	Never
1640204320	Everyday	Everyday
1640178458	Most Days	Once in a While
1639663638	At least once / week	Once in a While
1639458527	Once in a While	At least once / week
1639273518	Once in a While	Once in a While
1639234346	No Response	Once in a While
1639178091	Most Days	Once in a While
1639168864	Most Days	Once in a While
1639140400	Once in a While	Most Days
1639139504	Everyday	Everyday
1639116786	Everyday	At least once / week
1639112849	Everyday	Once in a While
1639105721	Everyday	At least once / week
1639102705	Everyday	At least once / week
1639097313	Most Days	Most Days
1639092217	Everyday	At least once / week
1639088803	At least once / week	Once in a While
1639084171	At least once / week	Once in a While
1493438447	At least once / week	Never
1489305063	Once in a While	Most Days
1486969221	Most Days	At least once / week
1486480638	Everyday	Everyday
1485589946	Everyday	Most Days
1485119990	Most Days	Once in a While
1484986107	At least once / week	Once in a While
1483604733	Once in a While	Once in a While
1483414916	At least once / week	Most Days
1482919994	Everyday	Everyday
1482838966	Everyday	Once in a While
1482598860	Most Days	Once in a While
1482546291	Most Days	Once in a While
1482441339	At least once / week	Never
1482436781	Most Days	Once in a While
1482428825	At least once / week	Once in a While
1482408815	At least once / week	Once in a While
1482278989	Everyday	Once in a While
1482275197	Most Days	Once in a While
1482239066	Everyday	Everyday
1482215950	Most Days	Most Days
1688994144	At least once / week	Once in a While

RespondentID	LTV	SLV	SCALEV
1654345397	Extremely Important	Extremely Important	Extremely Important
1652867366	Extremely Important	Extremely Important	Important
1644423270	Somewhat Important	Somewhat Important	Important
1640879545	Extremely Important	Important	Important
1640575231	Extremely Important	Somewhat Important	Extremely Important
1640319799	Important	Important	Extremely Important
1640225025	Extremely Important	Extremely Important	Extremely Important
1640204320	Extremely Important	Important	Extremely Important
1640178458	Extremely Important	Extremely Important	Extremely Important
1639663638	Extremely Important	Important	Important
1639458527	Not Important	Somewhat Important	Important
1639273518	Extremely Important	Extremely Important	Extremely Important
1639234346	Important	Important	Important
1639178091	Important	Important	Important
1639168864	Extremely Important	Extremely Important	Extremely Important
1639140400	Extremely Important	Extremely Important	Extremely Important
1639139504	Extremely Important	Extremely Important	Extremely Important
1639116786	Extremely Important	Extremely Important	Extremely Important
1639112849	Extremely Important	Extremely Important	Extremely Important
1639105721	Extremely Important	Somewhat Important	Extremely Important
1639102705	Important	Important	Extremely Important
1639097313	Extremely Important	Extremely Important	Extremely Important
1639092217	Important	Important	Extremely Important
1639088803	Important	Somewhat Important	Somewhat Important
1639084171	Extremely Important	Extremely Important	Extremely Important
1493438447	Extremely Important	Important	Extremely Important
1489305063	Extremely Important	Somewhat Important	Important
1486969221	Extremely Important	Extremely Important	Extremely Important
1486480638	Extremely Important	Extremely Important	Extremely Important
1485589946	Important	Important	Extremely Important
1485119990	Important	Important	Important
1484986107	Extremely Important	Important	Extremely Important
1483604733	Important	Important	Extremely Important
1483414916	No Response	No Response	No Response
1482919994	Important	Important	Extremely Important
1482838966	Extremely Important	Important	Important
1482598860	Extremely Important	Extremely Important	Extremely Important
1482546291	Somewhat Important	Important	Important
1482441339	Extremely Important	Important	Extremely Important
1482436781	Somewhat Important	Important	Extremely Important
1482428825	Important	Important	Important
1482408815	Important	Important	Somewhat Important
1482278989	Extremely Important	Extremely Important	Important
1482275197	Extremely Important	Extremely Important	Extremely Important
1482239066	Extremely Important	Important	Somewhat Important
1482215950	Extremely Important	Important	Extremely Important
1688994144	Extremely Important	Extremely Important	Extremely Important

RespondentID	MethodV	TuneV	ChoraleV
1654345397	Not Important	Extremely Important	Important
1652867366	Important	Extremely Important	Extremely Important
1644423270	Not Important	Extremely Important	Extremely Important
1640879545	Somewhat Important	Extremely Important	Important
1640575231	Somewhat Important	Extremely Important	Extremely Important
1640319799	Somewhat Important	Extremely Important	Important
1640225025	Extremely Important	Extremely Important	Extremely Important
1640204320	Somewhat Important	Important	Important
1640178458	Important	Extremely Important	Important
1639663638	Important	Extremely Important	Important
1639458527	Important	Important	Not Important
1639273518	Important	Extremely Important	Important
1639234346	Somewhat Important	Somewhat Important	Somewhat Important
1639178091	Extremely Important	Extremely Important	Important
1639168864	Extremely Important	Extremely Important	Extremely Important
1639140400	Important	Extremely Important	Important
1639139504	Extremely Important	Extremely Important	Extremely Important
1639116786	Important	Extremely Important	Extremely Important
1639112849	Extremely Important	Extremely Important	Extremely Important
1639105721	Important	Extremely Important	Extremely Important
1639102705	Somewhat Important	Extremely Important	Important
1639097313	Extremely Important	Extremely Important	Extremely Important
1639092217	Important	Extremely Important	Extremely Important
1639088803	Important	Important	Somewhat Important
1639084171	Extremely Important	Important	Extremely Important
1493438447	Important	Extremely Important	Extremely Important
1489305063	Somewhat Important	Extremely Important	No Response
1486969221	Somewhat Important	Extremely Important	Extremely Important
1486480638	Somewhat Important	Extremely Important	Extremely Important
1485589946	Extremely Important	Important	Important
1485119990	Important	Extremely Important	Extremely Important
1484986107	Important	Extremely Important	Important
1483604733	Extremely Important	Extremely Important	Important
1483414916	No Response	No Response	No Response
1482919994	Somewhat Important	Important	Somewhat Important
1482838966	Somewhat Important	Extremely Important	Important
1482598860	Important	Extremely Important	Extremely Important
1482546291	Important	Extremely Important	Important
1482441339	Somewhat Important	Extremely Important	Important
1482436781	Somewhat Important	Extremely Important	Important
1482428825	Extremely Important	Important	Important
1482408815	Somewhat Important	Extremely Important	Extremely Important
1482278989	Important	Extremely Important	Extremely Important
1482275197	Extremely Important	Extremely Important	Extremely Important
1482239066	Somewhat Important	Extremely Important	Extremely Important
1482215950	Extremely Important	Important	Extremely Important
1688994144	Extremely Important	Important	Extremely Important

RespondentID	ExerciseV	SRV	ListenV
1654345397	Extremely Important	Important	Important
1652867366	Somewhat Important	Important	Somewhat Important
1644423270	Not Important	Important	Extremely Important
1640879545	Not Important	Important	Somewhat Important
1640575231	Somewhat Important	Important	Important
1640319799	Somewhat Important	Extremely Important	Extremely Important
1640225025	Somewhat Important	Important	Extremely Important
1640204320	Not Important	Extremely Important	Extremely Important
1640178458	Not Important	Important	Important
1639663638	Somewhat Important	Important	Important
1639458527	Not Important	Somewhat Important	Somewhat Important
1639273518	Not Important	Important	Important
1639234346	Somewhat Important	Important	Somewhat Important
1639178091	Not Important	Somewhat Important	Somewhat Important
1639168864	Somewhat Important	Extremely Important	Extremely Important
1639140400	Not Important	Somewhat Important	Important
1639139504	Extremely Important	Extremely Important	Extremely Important
1639116786	Somewhat Important	Important	Important
1639112849	Extremely Important	Extremely Important	Extremely Important
1639105721	Not Important	Important	Somewhat Important
1639102705	Not Important	Important	Somewhat Important
1639097313	No Response	Extremely Important	Extremely Important
1639092217	Important	Important	Extremely Important
1639088803	Not Important	Somewhat Important	Somewhat Important
1639084171	Not Important	Important	Important
1493438447	Not Important	Important	Somewhat Important
1489305063	Not Important	Important	Important
1486969221	Not Important	Somewhat Important	Somewhat Important
1486480638	Not Important	Important	Important
1485589946	Important	Important	Important
1485119990	Somewhat Important	Important	Extremely Important
1484986107	Not Important	Important	Extremely Important
1483604733	Somewhat Important	Important	Important
1483414916	No Response	No Response	No Response
1482919994	Not Important	Important	Somewhat Important
1482838966	Somewhat Important	Important	Important
1482598860	Not Important	Somewhat Important	Important
1482546291	Not Important	Somewhat Important	Somewhat Important
1482441339	Not Important	Somewhat Important	Important
1482436781	Not Important	Important	Important
1482428825	Not Important	Important	Somewhat Important
1482408815	Important	Somewhat Important	Important
1482278989	Somewhat Important	Extremely Important	Extremely Important
1482275197	Not Important	Important	Important
1482239066	Somewhat Important	Extremely Important	Extremely Important
1482215950	Not Important	Important	Important
1688994144	Not Important	Extremely Important	Important

RespondentID	WriteV	RhythmV	ArticV
1654345397	Not Important	Somewhat Important	Important
1652867366	Somewhat Important	Important	Extremely Important
1644423270	Not Important	Important	Somewhat Important
1640879545	Not Important	Important	Extremely Important
1640575231	Not Important	Important	Extremely Important
1640319799	Not Important	Important	Important
1640225025	Important	Extremely Important	Extremely Important
1640204320	Somewhat Important	Extremely Important	Extremely Important
1640178458	Somewhat Important	Extremely Important	Important
1639663638	Somewhat Important	Extremely Important	Important
1639458527	Not Important	Somewhat Important	Somewhat Important
1639273518	Somewhat Important	Important	Important
1639234346	Somewhat Important	Important	Important
1639178091	Not Important	Important	Important
1639168864	Somewhat Important	Extremely Important	Important
1639140400	Somewhat Important	Important	Important
1639139504	Somewhat Important	Extremely Important	Extremely Important
1639116786	Important	Important	Important
1639112849	Extremely Important	Extremely Important	Extremely Important
1639105721	Somewhat Important	Extremely Important	Extremely Important
1639102705	Not Important	Important	Extremely Important
1639097313	No Response	Extremely Important	Extremely Important
1639092217	Somewhat Important	Extremely Important	Important
1639088803	Not Important	Somewhat Important	Important
1639084171	Not Important	Important	Important
1493438447	Somewhat Important	Extremely Important	Important
1489305063	Not Important	Important	Somewhat Important
1486969221	Not Important	Extremely Important	Extremely Important
1486480638	Somewhat Important	Extremely Important	Extremely Important
1485589946	Somewhat Important	Important	Extremely Important
1485119990	Somewhat Important	Important	Important
1484986107	Somewhat Important	Extremely Important	Extremely Important
1483604733	Somewhat Important	Extremely Important	Extremely Important
1483414916	No Response	No Response	No Response
1482919994	Somewhat Important	Important	Important
1482838966	Not Important	Important	Important
1482598860	Not Important	Extremely Important	Important
1482546291	Important	Extremely Important	Important
1482441339	Somewhat Important	Important	Important
1482436781	Somewhat Important	Extremely Important	Important
1482428825	Somewhat Important	Important	Important
1482408815	Not Important	Important	Important
1482278989	Somewhat Important	Extremely Important	Extremely Important
1482275197	Somewhat Important	Important	Important
1482239066	Somewhat Important	Somewhat Important	Somewhat Important
1482215950	Not Important	Extremely Important	Extremely Important
1688994144	Somewhat Important	Important	Extremely Important

RespondentID	PhysV	ETV	DYNV
1654345397	Important	Not Important	Important
1652867366	Important	Somewhat Important	Extremely Important
1644423270	Extremely Important	Not Important	No Response
1640879545	Important	Somewhat Important	Important
1640575231	Extremely Important	Important	Important
1640319799	Extremely Important	Important	Extremely Important
1640225025	Extremely Important	Important	Extremely Important
1640204320	Extremely Important	Important	Important
1640178458	Important	Important	Important
1639663638	Important	Somewhat Important	Important
1639458527	Somewhat Important	Somewhat Important	Not Important
1639273518	Extremely Important	Important	Extremely Important
1639234346	Important	Somewhat Important	Important
1639178091	Important	Somewhat Important	Important
1639168864	Extremely Important	Somewhat Important	Important
1639140400	No Response	Extremely Important	Somewhat Important
1639139504	Extremely Important	Extremely Important	Extremely Important
1639116786	Important	Somewhat Important	Important
1639112849	Extremely Important	Extremely Important	Extremely Important
1639105721	Extremely Important	Somewhat Important	Important
1639102705	Extremely Important	Somewhat Important	Extremely Important
1639097313	Extremely Important	No Response	Extremely Important
1639092217	Somewhat Important	Somewhat Important	Extremely Important
1639088803	Somewhat Important	Somewhat Important	Important
1639084171	Somewhat Important	Somewhat Important	Important
1493438447	Important	Somewhat Important	Important
1489305063	Important	Important	Somewhat Important
1486969221	Important	Important	Extremely Important
1486480638	Extremely Important	Extremely Important	Extremely Important
1485589946	Important	Somewhat Important	Important
1485119990	Important	Somewhat Important	Important
1484986107	Important	Extremely Important	Extremely Important
1483604733	Extremely Important	Somewhat Important	Important
1483414916	No Response	No Response	No Response
1482919994	Somewhat Important	Important	Somewhat Important
1482838966	Important	Extremely Important	Important
1482598860	Extremely Important	Important	Important
1482546291	Somewhat Important	Not Important	Important
1482441339	Extremely Important	Important	Important
1482436781	Important	Important	Somewhat Important
1482428825	Extremely Important	Somewhat Important	Important
1482408815	Somewhat Important	Somewhat Important	Somewhat Important
1482278989	Extremely Important	Extremely Important	Extremely Important
1482275197	Important	Important	Important
1482239066	Important	Important	Somewhat Important
1482215950	Extremely Important	Extremely Important	Important
1688994144	Somewhat Important	Somewhat Important	Important

RespondentID	BalV	SingV
1654345397	Important	Important
1652867366	Extremely Important	Important
1644423270	Important	Important
1640879545	Extremely Important	Important
1640575231	Extremely Important	Important
1640319799	Extremely Important	Important
1640225025	Extremely Important	Important
1640204320	Extremely Important	Extremely Important
1640178458	Extremely Important	Important
1639663638	Extremely Important	Important
1639458527	Somewhat Important	Important
1639273518	Extremely Important	Somewhat Important
1639234346	Important	Somewhat Important
1639178091	Important	Somewhat Important
1639168864	Extremely Important	Extremely Important
1639140400	Important	Extremely Important
1639139504	Extremely Important	Extremely Important
1639116786	Important	Important
1639112849	Extremely Important	Extremely Important
1639105721	Extremely Important	Important
1639102705	Extremely Important	Important
1639097313	Extremely Important	Extremely Important
1639092217	Extremely Important	Extremely Important
1639088803	Important	Important
1639084171	Important	Extremely Important
1493438447	Important	Somewhat Important
1489305063	Somewhat Important	Important
1486969221	Extremely Important	Extremely Important
1486480638	Extremely Important	Extremely Important
1485589946	Extremely Important	Important
1485119990	Extremely Important	Important
1484986107	Extremely Important	Important
1483604733	Important	Important
1483414916	No Response	No Response
1482919994	Important	Important
1482838966	Extremely Important	Not Important
1482598860	Extremely Important	Somewhat Important
1482546291	Extremely Important	Somewhat Important
1482441339	Important	Somewhat Important
1482436781	Important	Somewhat Important
1482428825	Important	Somewhat Important
1482408815	Extremely Important	Not Important
1482278989	Extremely Important	Extremely Important
1482275197	Important	Important
1482239066	Important	Extremely Important
1482215950	Extremely Important	Important
1688994144	Important	Somewhat Important

RespondentID	OtherChoir	OtherGeneral	OtherMusicApp	OtherMusicTheory
1654345397	No	No	No	No
1652867366	Yes	No	No	No
1644423270	No	No	No	No
1640879545	No	No	No	No
1640575231	No	No	No	No
1640319799	No	No	No	No
1640225025	Yes	Yes	No	No
1640204320	No	No	No	Yes
1640178458	No	No	No	No
1639663638	No	No	No	No
1639458527	No	No	No	No
1639273518	Yes	No	Yes	No
1639234346	Yes	Yes	Yes	No
1639178091	No	No	No	No
1639168864	No	No	No	Yes
1639140400	Yes	Yes	Yes	No
1639139504	No	No	No	No
1639116786	No	No	No	No
1639112849	No	No	Yes	Yes
1639105721	No	No	No	Yes
1639102705	No	Yes	No	No
1639097313	No	No	No	No
1639092217	No	Yes	Yes	No
1639088803	No	No	No	No
1639084171	No	No	Yes	No
1493438447	Yes	No	No	No
1489305063	No	No	No	Yes
1486969221	No	No	No	No
1486480638	No	No	No	No
1485589946	No	Yes	No	No
1485119990	No	Yes	No	No
1484986107	No	Yes	Yes	No
1483604733	No	Yes	No	No
1483414916	No	No	No	No
1482919994	No	No	Yes	Yes
1482838966	No	No	No	No
1482598860	No	No	No	No
1482546291	Yes	Yes	Yes	Yes
1482441339	No	No	No	No
1482436781	No	No	Yes	No
1482428825	No	No	Yes	No
1482408815	No	No	No	No
1482278989	No	No	No	Yes
1482275197	No	No	Yes	Yes
1482239066	No	No	No	Yes
1482215950	No	No	No	No
1688994144	No	No	No	Yes

RespondentID	OtherLevel	OtherNonMusic	OtherNonInstr	NoOther
1654345397	No	No	No	Yes
1652867366	Yes	No	No	No
1644423270	Yes	No	No	No
1640879545	Yes	No	No	No
1640575231	Yes	No	No	No
1640319799	Yes	No	No	No
1640225025	Yes	Yes	No	No
1640204320	No	No	No	No
1640178458	Yes	No	No	No
1639663638	Yes	No	No	No
1639458527	Yes	No	No	No
1639273518	Yes	No	No	No
1639234346	Yes	No	No	No
1639178091	Yes	No	No	No
1639168864	Yes	No	No	No
1639140400	Yes	Yes	Yes	No
1639139504	Yes	No	No	No
1639116786	No	No	No	Yes
1639112849	No	Yes	No	No
1639105721	No	No	No	No
1639102705	Yes	No	No	No
1639097313	Yes	No	No	No
1639092217	No	No	No	No
1639088803	Yes	No	No	No
1639084171	Yes	No	No	No
1493438447	Yes	No	No	No
1489305063	No	No	No	No
1486969221	Yes	No	No	No
1486480638	Yes	No	No	No
1485589946	Yes	No	No	No
1485119990	Yes	No	No	No
1484986107	Yes	No	No	No
1483604733	Yes	No	No	No
1483414916	Yes	No	No	No
1482919994	No	No	No	No
1482838966	Yes	Yes	No	No
1482598860	Yes	No	No	No
1482546291	Yes	No	No	No
1482441339	Yes	No	Yes	No
1482436781	Yes	No	No	No
1482428825	No	No	No	No
1482408815	Yes	No	No	No
1482278989	Yes	No	No	No
1482275197	Yes	No	No	No
1482239066	No	No	Yes	No
1482215950	Yes	No	No	No
1688994144	Yes	No	No	No